KEY ENVIRONMENTAL INCORPORATED

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September 3, 2013

Ms. Raji Josiam
Remedial Project Manager
US Environmental Protection Agency - Region 6
1445 Ross Avenue, Suite 1200, 6SF-RA
Dallas, TX 75202

Re: Letter Report – TI Zone Delineation Investigation
South Cavalcade Superfund Site
Houston, Texas

Dear Ms. Josiam:

On behalf of Beazer East, Inc. (Beazer), one hard copy and one electronic copy of this Letter Report summarizing the site characterization activities to acquire current data to support the Technical Impracticability (TI) Zone delineation at the South Cavalcade Superfund Site located in Houston Texas (Figure 1) are provided. At a meeting among representatives of Beazer, U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) at EPA Region VI offices in Dallas, Texas on April 9, 2013, EPA informed Beazer that Region VI and EPA Headquarters personnel have determined that an amendment to the Record of Decision (ROD) for the Site, which incorporates a TI Waiver for groundwater remedial goals is appropriate. EPA and TCEQ stated that current data regarding the nature and extent of constituents of interest (COIs) in shallow zone and intermediate zone groundwater are needed to support the definition of the proposed limits of the TI Zones. Beazer agreed to implement the site characterization activities to acquire current data to support the definition of the TI Zones. This report presents the data acquired for those purposes

The scope of the investigation activities conducted was developed through collaborative efforts of representatives of Beazer, EPA and TCEQ, and finalized during two subsequent conference calls among the parties on April 10, 2013 and April 19, 2013. During the April 19, 2013 conference call, EPA requested that Beazer prepare a work plan describing the scope of the investigation and the methodologies to be utilized for its implementation. A draft work plan was submitted to EPA and TCEQ on May 1, 2013. EPA and TCEQ provided comments on the draft work plan on May 8, 2013. The work plan was revised to address EPA and TCEQ comments and was resubmitted on May 13, 2013. The revised work plan was approved by EPA on May 14, 2013.

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The primary purpose of the investigation conducted was to develop a comprehensive "snapshot" of the current nature and extent of COIs in groundwater. The snapshot of current conditions was obtained through the installation and sampling of several temporary monitoring wells, located predominantly along inferred preliminary TI Zone boundaries, concurrent with the sampling of existing monitoring wells and piezometers.

This Letter Report includes the following components:

- An overview scope of work and a discussion of its implementation;
- A summary of the investigation findings with respect to Site geology and observations of dense non-aqueous phase liquid (DNAPL) absence/presence,
- A summary of groundwater analytical results; and
- Proposed TI Zone Limits.

Also, included in this transmittal are the following:

- A figure showing the Site location (Figure 1);
- A figure (Site plan) depicting existing well locations and the locations of the temporary monitoring wells installed (Figure 2);
- A drawing depicting the locations of geologic cross-sections A-A' and B-B' with the pre-existing borings, wells, and piezometers and the borings completed in October 2012 (Figure 3);
- Cross-Sections A-A' and B-B' (Figures 4 and 5, respectively) depicting Site geology as well as the visual observations of the presence of creosote described as residual (e.g., oily residue, oil spots, staining), sheen or free product;
- Groundwater Potentiometric Surface Elevation Contour Maps for the Shallow Zone (Figure 6) and Intermediate Zone (Figure 7).
- Graphics depicting analytical results for groundwater samples obtained from the shallow and intermediate zones (Figures 8 thru Figure 13); and
- A figure showing the proposed TI Zone locations (North Area and South Area) for the Site (Figure 14).

Figures are included in Attachment A.

The field investigation was completed from May 20 through June 14, 2013, and in accordance with the May 2013 EPA-approved work plan. Specific tasks conducted include the following:

- Existing Monitoring Well Search, Inspection and Gauging
- Installation and Sampling of Temporary Monitoring Wells
- Existing Monitoring Well and Piezometer Sampling

The following presents the investigative activities and methodologies used.

The existing monitoring well search, inspection and gauging activities were completed May 20 through May 24, 2013. During the well search the following wells could not be located, MW-07, MW-08, MW-09, MW-16, MW-24, and MW-25. Monitoring wells MW-24 and MW-25 located in the north and wells MW-08, MW-09, and MW-16 located in the south could not be located during previous gauging events. It appears that monitoring well MW-07 (the shallow zone upgradient well for the southern section of the Site) was destroyed during the ongoing construction activities associated with the rail lines to the east of the Site. MW-11 the intermediate zone upgradient well in this area has been damaged and could not be sampled. The protective cover and well riser are bent over.

The installation and sampling of the temporary wells was conducted from May 21 through June 14, 2013. The temporary wells were sampled as soon as practicable following installation and expedited analyses of the samples were performed and results provided to EPA and TCEQ to allow for decisions to be made on the need to install additional wells at step out locations further downgradient. A total of 38 temporary wells were installed. Thirty-three (33) temporary monitoring wells were proposed (15 shallow and intermediate zone well clusters and three temporary intermediate zone wells) for installation and sampling in the Work Plan. Thirty-one (31) of the originally temporary wells were installed and sampled. The rationale for elimination of two of the originally proposed temporary wells is as follows:

Monitoring well OW-13 could not be located during the March/April 2011 sampling event. As a result, a shallow temporary monitoring well (DP13N-07S) was proposed for installation in the Work Plan. Because the existing shallow well OW-13 was located during the monitoring well search activity, the proposed shallow temporary well at this location was not installed and instead a groundwater sample was collected from OW-13.

The proposed intermediate well DP13S-05I (to be located southwest of the Site) was not installed since the groundwater sample from co-located temporary well DP13S-05S contained benzene and naphthalene concentrations greater than applicable groundwater criteria. As a result, a shallow and intermediate well cluster (DP13S-10S/I) was installed at a location further downgradient of DP13S-05S (see Figure 2).

Seven (7) "step out" temporary wells were installed during the investigation. As necessary, analytical results and the need for the installation of temporary wells at step out locations were communicated to EPA and TCEQ. Proposed step out locations were presented to EPA and TCEQ. EPA and TCEQ communicated their concurrence with the proposed step out locations via email. These emails are included as Attachment B. In addition to temporary well DPS13S-05S described above, three additional temporary wells installed in the southern portion of the investigation area (DP13S-02I, DP13S-06S, DP13S-06I), and one temporary well located in the northern area (DP13N-05I), had COI concentrations greater than applicable groundwater criteria. Therefore, additional temporary wells were installed downgradient of these locations as shown on Figure 2. Downgradient of DP13S-02I, another intermediate zone well (DP13S-12I) was installed and sampled. Downgradient and side-gradient of temporary well DP13S-06S and DP13S-06I, one well cluster (DP13S-13S/I) and one intermediate well (DP13S-11I) were installed and sampled, respectively. Downgradient of well DP13N-05I, one intermediate zone well DP13N-10I was installed and sampled.

The soil borings for the temporary wells were advanced into the subsurface using direct push techniques (e.g., Geoprobe®). Before any subsurface work was initiated, the Texas One Call System was contacted, and all underground utilities in the vicinity of the borings were marked. Some of the boring locations were adjusted slightly based on the utility locations. The shallow zone borings were advanced to the top of the clay unit, which ranged from 18.5 feet to 23 feet below ground surface (ft-bgs).

The intermediate zone borings for intermediate temporary wells were advanced down and into bottom of the intermediate zone, which ranged from 53 to 60 ft-bgs. However, prior to advancement of the soil borings into the intermediate water bearing zone, an isolation casing (3-inch I.D. Steel) was installed to prevent potential downward vertical migration from the shallow zone during sampling of the intermediate zone. The isolation casing was set into the underlying clay unit below the shallow water bearing sand unit. Prior to installation of the casing, pelletized bentonite was placed into the base of the boring (bottom one foot) and hydrated to ensure a competent seal at the base of the isolation casing.

Continuous soil cores were collected from all of the borings. The soils were classified by the field geologist according to the Unified Soil Classification System (USCS) and recorded. Photographs of the soil cores were taken. Documentation of DNAPL presence includes descriptions of odor, color, and qualitative degree of saturation (i.e., residual or free phase). The degree of impact, if any, was recorded on the boring logs on a depth-specific basis. A qualitative numeric scale was used to document the degree of impact, as follows:

0 – No observed DNAPL, stains, or odors
1 – Odor and/or Photo-Ionization Detector (PID) measurements above background
2 – Non-natural staining (color) or sheen
3 – Residual DNAPL (e.g., droplets, globules) observed (color)
4 – Apparent free phase DNAPL present

A photo-ionization detector (PID) was used to screen the soil core for volatile organic compounds (VOCs). Initially, each core was scanned along its length with the PID to identify any potentially impacted intervals. Then sections of the soil core were retained (zip-lock bags) in approximately two-foot intervals and head space analysis conducted.

Following the completion of a soil boring, a temporary monitoring well (one-inch inside diameter PVC pipe) was installed in each of the borings. The wells were completed with a natural sand pack (i.e., the formation was permitted to collapse around the well screen). Generally, 5-foot screen section was installed for the shallow temporary wells with the bottom of the screen set approximately six-inches below the interface between the sand unit and the underlying clay. For the intermediate zone temporary wells, the screen interval ranged from 10 to 15 feet in length with its base at least six-inches below the interface between the intermediate sand unit and the underlying clay layer. The temporary well logs are presented in Attachment C. All downhole drilling equipment was decontaminated between drilling locations.

Once a sufficient volume of water had entered the temporary well, micro-purging of the well using a peristaltic pump was conducted. If the well went dry in response to purging, the well was allowed to recover and the sample collected as soon practicable. Otherwise, the sample was collected after the parameter stabilization criteria specified in the Standard Operating Procedure (Attachment C of the work plan) had been attained or a minimum of three well volumes had been removed, whichever occurred first. Purge water was discharged into a bucket or similar container and visually inspected for any indication of impact. All purge water, drill cuttings and used personnel protective equipment (PPE) was containerized ion 55-gallon drums, characterized for waste profiling purposes and disposed off-site.

Shallow groundwater samples were collected using a peristaltic pump and dedicated Teflon tubing. To minimize agitation and aeration of the samples, they were obtained as follows: *1)* the tubing was crimped upstream of the pump; *2)* the tubing was then removed from the pump body, and *3)* the groundwater from the tubing was drained directly into the sample vials.

Intermediate zone groundwater samples were collected using low flow/micro-purge methods, similarly as previously discussed for the shallow zone temporary wells. The depth to groundwater in several of the intermediate zone wells dropped below 25 ft-bgs, thus precluded the use of a peristaltic pump for purging and/or sample collection. As a result, a bladder pump was used to collect the groundwater samples in these situations.

Field parameters including temperature, pH, conductivity, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured at the time of sample collection. These measurements were recorded on field sample log sheets (Attachment D). Observations during both purging and sampling regarding evidence of the potential presence of DNAPL (e.g., sheens, phase separation, spots, globules, color, etc.), if observed, were also recorded on the sample log sheets.

Groundwater samples were collected directly into pre-preserved, laboratory supplied containers, and placed immediately on ice. The samples were shipped to the lab and analyzed for the following constituents:

- Target Compound List (TCL) Volatile Organic Compounds (VOCs);
- TCL Semi-Volatile Organic Compounds (SVOCs); and
- Total and Dissolved Metals (arsenic, chromium, copper, lead, zinc), samples for dissolved metals were filtered in the field.

Once the temporary monitoring wells were sampled, they were decommissioned in accordance with *Administrative Rules of the Texas Department of Licensing and Regulation 16 Texas Administrative Code, Chapter 76.104: Technical Requirements – Standards for Capping and Plugging of Wells and Plugging Wells that Penetrate Undesirable Water or Constituent Zones*.

Temporary shallow zone monitoring wells were decommissioned as follows:

- The well screen and riser was completely removed from the borehole and the open borehole sealed using cement-bentonite grout, via pressure/tremie pipe method; and
- Each location restored with cement grout to original grade (0-1ft-bgs).

The decommissioning procedure for the intermediate zone wells were as follows:

- The well screen and riser was completely removed from the borehole and the open borehole sealed using cement-bentonite grout, via pressure/tremie pipe method;
- The temporary casing was then removed and the remaining open borehole grouted via a tremie pipe to the ground surface; and
- Each location was restored with cement grout to original grade (0-1ft-bgs).

After the temporary wells were abandoned the locations were surveyed. Plan locations and ground surface elevations for the temporary well locations were surveyed by Gruller Surveying, LLC, a professional land surveyor licensed in the state of Texas.

In conjunction of the temporary monitoring well installation/sampling, groundwater samples were collected from twenty-six existing monitoring wells/piezometers at the Site to supplement the data. Figure 2 shows the wells and piezometers sampled. The wells/piezometers sampled include the following:

Shallow Zone – Northern Area		**Shallow Zone – Southern Area**	
PZN-20	OW-08	MW-04	PZS-40
PZN-30	OW-09	MW-26	PZS-60
PZN-40	OW-13	PZS-30	
PZN-50	OW-14		
MW-01	OW-02		
MW-03	P-02N		
OW-07			

Monitoring wells MW-24 and MW-25 in the north and monitoring well MW-07 and MW-08 in the south could not be located, and thus were not sampled. Wells P-02N and OW-02 contained DNAPL and as stated in the approved work plan, therefore were not sampled.

Intermediate Zone – Northern Area		**Intermediate Zone – Southern Area**	
P-01	MW-12R	P-02R	MW-14R
P-04	OW-16	P-03R	
MW-10			

Sample collection activities at each well location were recorded on the Groundwater Sample Collection Record (Attachment C). Prior to sample collection, depth to water, depth to DNAPL (if present), and total depth were measured relative to an established measuring point with an oil-water interface indicator.

Groundwater purging and sampling was conducted in accordance with the Standard Operating Procedure included as Attachment C of the May 2013 Work Plan. The groundwater samples were collected in pre-preserved, laboratory-supplied containers and immediately placed on ice. The samples were shipped to the lab (Test America – Buffalo) and analyzed for TCL VOCs, TCL SVOCs, and total and dissolved metals (arsenic, chromium, copper, lead, zinc). Sample analyses was performed using EPA Method 8260B (for VOCs), 8270C Low Level (for SVOCs), and 6020 (for Total and Dissolved Metals). Samples for dissolved metals analyses were filtered in the field.

All reusable downhole equipment (i.e., pumps, cable, oil-water interface indicator) was decontaminated between sample locations by washing all surfaces with an Alconox® solution, followed by a deionized water rinse. All drill cuttings, used PPE, purge water and decontamination liquids were containerized for off-site disposal.

RESULTS

The results of the 2013 TI Zone Delineation Investigation are summarized as follows:

Monitoring Well Search and Inspection

The well inspection and gauging data are presented on the field data sheets and summary spreadsheet included in Attachment D. Monitoring wells MW-08, MW-09, MW-16, MW-24 and MW-25 could not be located during the 2011 groundwater sampling event. KEY/FTS personnel searched for these wells during this investigation and were not able to locate these wells. In addition, off-site upgradient wells MW-07 (shallow zone well to the southeast of the Site) and MW-11 (intermediate zone well to the east of the northern portion of the Site) could not be sampled during this investigation. Monitoring well MW-07 could not be located and MW-11 was found to be damaged. Monitoring well OW-13 which could not be located during the 2011 sampling event was located during the 2013 well search activity.

Groundwater Elevation Measurements

Depth to groundwater measurements were made in all accessible monitoring wells, piezometers and recovery wells on May 20 and 21, 2013. Groundwater potentiometric surface elevation contour maps for the shallow zone and intermediate zone are presented on Figure 6 and 7, respectively. Groundwater elevations, flow directions and horizontal hydraulic gradients are consistent with previous observations. Groundwater flow in the shallow zone in the northern portion of the Site is to the west under a horizontal hydraulic gradient of 0.0023 ft/ft. In the southern portion of the Site, groundwater flow is the west-southwest under a horizontal hydraulic gradient of 0.0046 ft/ft.

Groundwater elevation measurements in the intermediate zone show a potentiometric high in the vicinity of the groundwater treatment facility in the east-central section of the Site. Groundwater flow away from this potentiometric high area is to the northwest and southwest. Horizontal hydraulic gradients to the northwest and southwest are a 0.0103ft/ft and 0.0102 ft/ft, respectively. Consistent with previous findings the vertical gradient between shallow and intermediate zones is downward. The significant differences in potentiometric surface elevations between the shallow and intermediate zones are indicative of a low degree of hydraulic connectivity between the two hydrostratigraphic zones.

DNAPL Apparent Thickness Measurements

The monitoring well gauging and DNAPL apparent thickness measurement data show that DNAPL was not observed in monitoring wells beyond the previously defined limits. The measurements show very little accumulation in shallow zone wells. Of the shallow zone wells, only PZS-20, located in the vicinity of the former wood treating process area in southern portion of the Site, had a measureable thickness of DNAPL (3.20 feet). A trace of DNAPL (defined as DNAPL observed on the tip of the interface probe) was observed in three shallow wells (RWN-04, OW-02 and P-02N) in the vicinity of the former pond location in the Northern section of the Site.

In the southern section of the Site, three shallow wells (RWS-05, PZS-50 and OW-11) located in the vicinity of the former coal tar distillation plant location contained a trace of DNAPL. Shallow wells in the former wood treating process area that contained a trace of DNAPL include RWS-01, RWS-02, OW-10).

Measureable accumulations of DNAPL were observed in intermediate zone wells ITW-01, ITW-02, OW-19 and OW-20. Based on the heterogeneous and predominantly fine-grained soils that exist in the intermediate zone, the apparent DNAPL thicknesses measured in the intermediate zone wells are more likely a function of the vertical distance from the sandy seam from which the DNAPL enters the well to the bottom of the wells as opposed to the true DNAPL thickness in the formation. Well ITW-01 is located in the former pond location in the northern area and contained a DNAPL accumulation of 8.98 feet. Three intermediate zone wells located in the former wood treating area in the southwest corner of the Site contain a measurable thickness of DNAPL. DNAPL accumulations were measured in wells ITW-02, OW-19 and OW-20 at apparent thicknesses of 2.24 feet, 1.52 feet and 0.72 feet, respectively.

Groundwater Analytical Results

The groundwater water analytical results for the temporary wells and the existing wells are summarized on data tables presented in Attachment E. Electronic copies of the laboratory reports are included on the compact disc provided as Attachment F. Analytical results are depicted on Figure 8 through 13.

Figures 8 and 9 present organic (BTEX, Benzo(a)Pyrene and naphthalene) and dissolved metals data, respectively, for the shallow zone. Figures 10 and 11 present organic and dissolved metals data, respectively, for the intermediate zone.

Results for samples collected from pre-existing monitoring wells are comparable to historic concentrations; no expansion of the plumes is indicated. The total metals concentrations for samples obtained from the temporary wells are deemed to be not representative of groundwater quality based on the observed turbidity. Dissolved concentrations of metals in samples collected from the temporary wells do not indicate any site-related impacts.

All laboratory analytical reports were subjected to a data quality review as specified in the Work Plan. This review included an assessment of the following data or information:

- Data Completeness;
- Sample Holding Times
- Laboratory Blank Results
- Field Blank Results
- Surrogate Recoveries and
- Lab Control Sample Results

All sample analyses were completed within EPA-specified holding times. The data were determined to usable for the purpose of the investigation with some limited qualifications. Data qualifications, where applied, were attributable to the detection of low levels of COIs in field or laboratory blank samples. No results reported above regulatory criterion required rejection as a result of blank contamination. The results of the data quality review are included as Attachment G.

Results for the Northern Area and Southern Area are summarized below.

Northern Area

No organic COIs were detected in the shallow and intermediate zone samples collected from off-site wells located to the west (downgradient) of the Site (Figures 8 and 10). Dissolved metals concentrations in these samples were less than the remedial goals specified in the ROD (Figures 9 and 11). Concentrations of constituents in the on-site groundwater samples are consistent with historical data. Pentachlorophenol, though not a site-related constituent, was detected in one on-site well (RWN-04). The detection of benzene and naphthalene at concentrations greater than the ROD remedial goal for benzene and applicable comparison criteria (TCEQ Residential Protective Concentration Limit) for naphthalene in intermediate zone temporary well DP13N-05I led to the installation of additional on-site intermediate zone temporary well (DP13N-10I) to the southwest (Figure 10). No organic COIs were detected in the sample collected from this well and the inorganic COI concentrations were less than the ROD remedial goals. Other than the installation of DP13N-10I, no additional temporary well installations beyond those specified in the Work Plan were required to delineate the TI Zone in the northern area of the Site.

Southern Area

Detectable concentrations of organic COIs are generally limited in extent to downgradient areas in the vicinity of the DNAPL impacts. Detection of COIs at locations DP13S-02I, DP13S-05S and DP13S-06S/I, all located at the periphery of the previously defined source areas, led to the installation of temporary wells at “step out” locations further downgradient.

Pentachlorophenol was detected in two shallow temporary wells located to the west of the southern portion of the Site (DP13S-03S and DP13S-04S) at respective concentrations of 1 and 1.1 ug/l. The presence of pentachlorophenol in these samples is believed to be attributable to a source other than the South Cavalcade Site; potentially the treated power poles located along Elysian Street. Pentachlorophenol was not detected in any other southern area wells including existing monitoring well MW-26 which is located between the former wood treating area and temporary wells DP13S-03S and DP13S-04S

Proposed TI Zone Limits

Figures 12 and 13 show isoconcentration contours for benzene and naphthalene in the shallow and intermediate zones, respectively. These are the most mobile and prevalent of the volatile and semi-volatile creosote constituents. The benzene isoconcentration contours include a 5 ug/l contour which corresponds to the Federal MCL and ROD remedial goal. The naphthalene isoconcentration contours include a 490 ug/l contour and a 1,500 ug/l contour. These contours correspond to the TCEQ PCLs for residential and non-residential groundwater use.

The proposed TI limits were developed to ensure that all groundwater containing benzene concentrations greater than the ROD remedial goal and/or naphthalene concentrations greater than the PCL based on residential use is contained with the TI Zone. The proposed limits of the TI zones are defined in the downgradient (west) and sidegradient directions (north and south) by a series of temporary well locations where the analytical results show that no site-related impacts exist. In the upgradient direction, the TI Zones are defined by the Site property boundaries. The proposed limits of the TI Zones are shown on Figure 14.

CLOSING

Please feel free to call me or Mike Bollinger at Beazer with any questions or comments on this report.

Sincerely,

James Zubrow

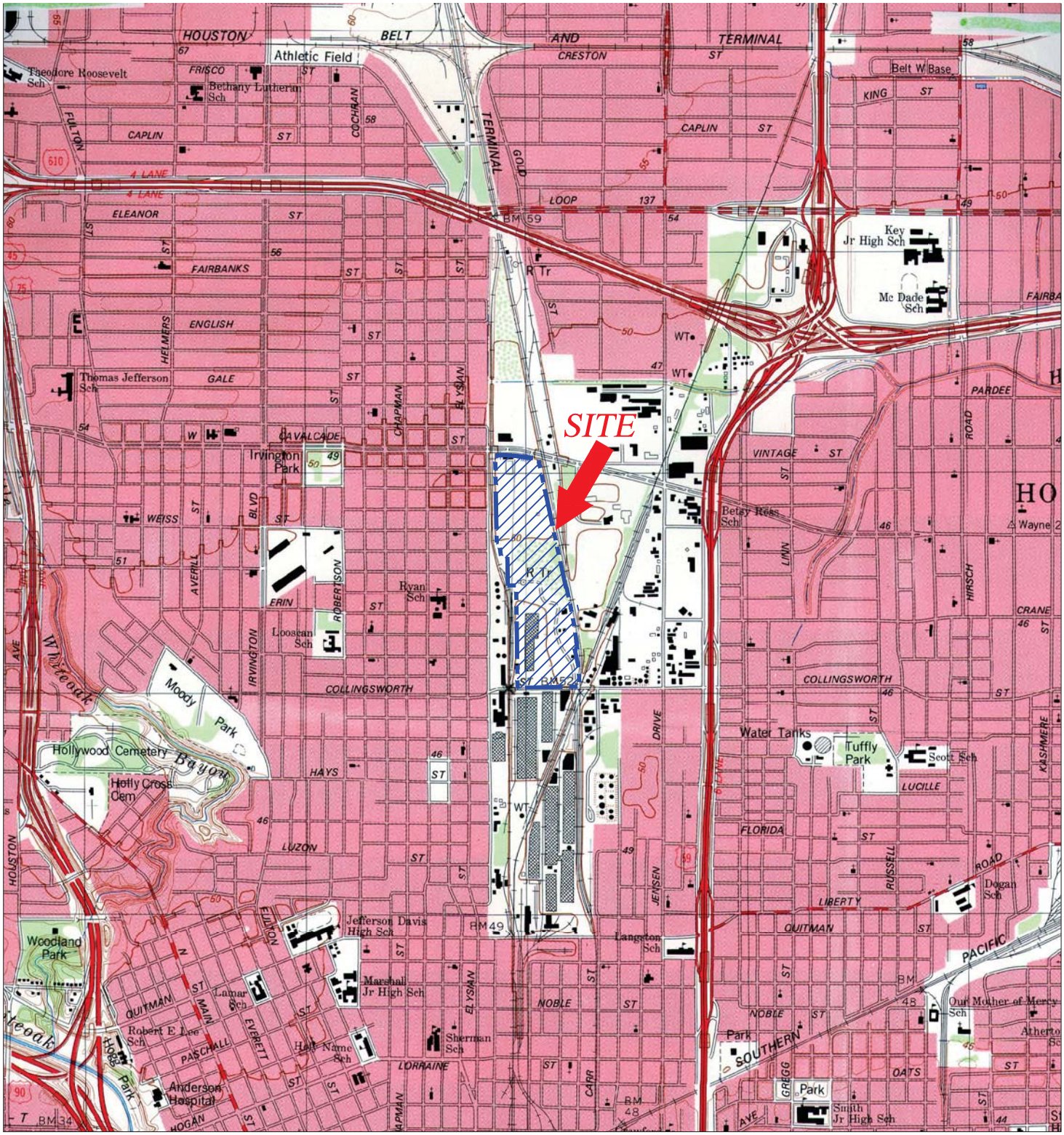
James Zubrow
Principal Hydrogeologist

Enclosures

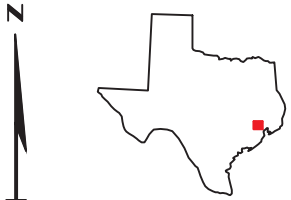
cc: C. Sanchez – EPA
M. Long – TCEQ
M. Bollinger – Beazer

ATTACHMENT A

FIGURES



TEXAS



QUADRANGLE LOCATION

REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE OF SETTEGAST, TEXAS – 1982

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC
PITTSBURGH, PENNSYLVANIA

DRWN: SCC	DATE: 08/12/13	KEY ENVIRONMENTAL INCORPORATED
CHKD: JSZ	DATE: 08/12/13	
APPD: JSZ	DATE: 08/12/13	
SCALE:	1" = 2000'	

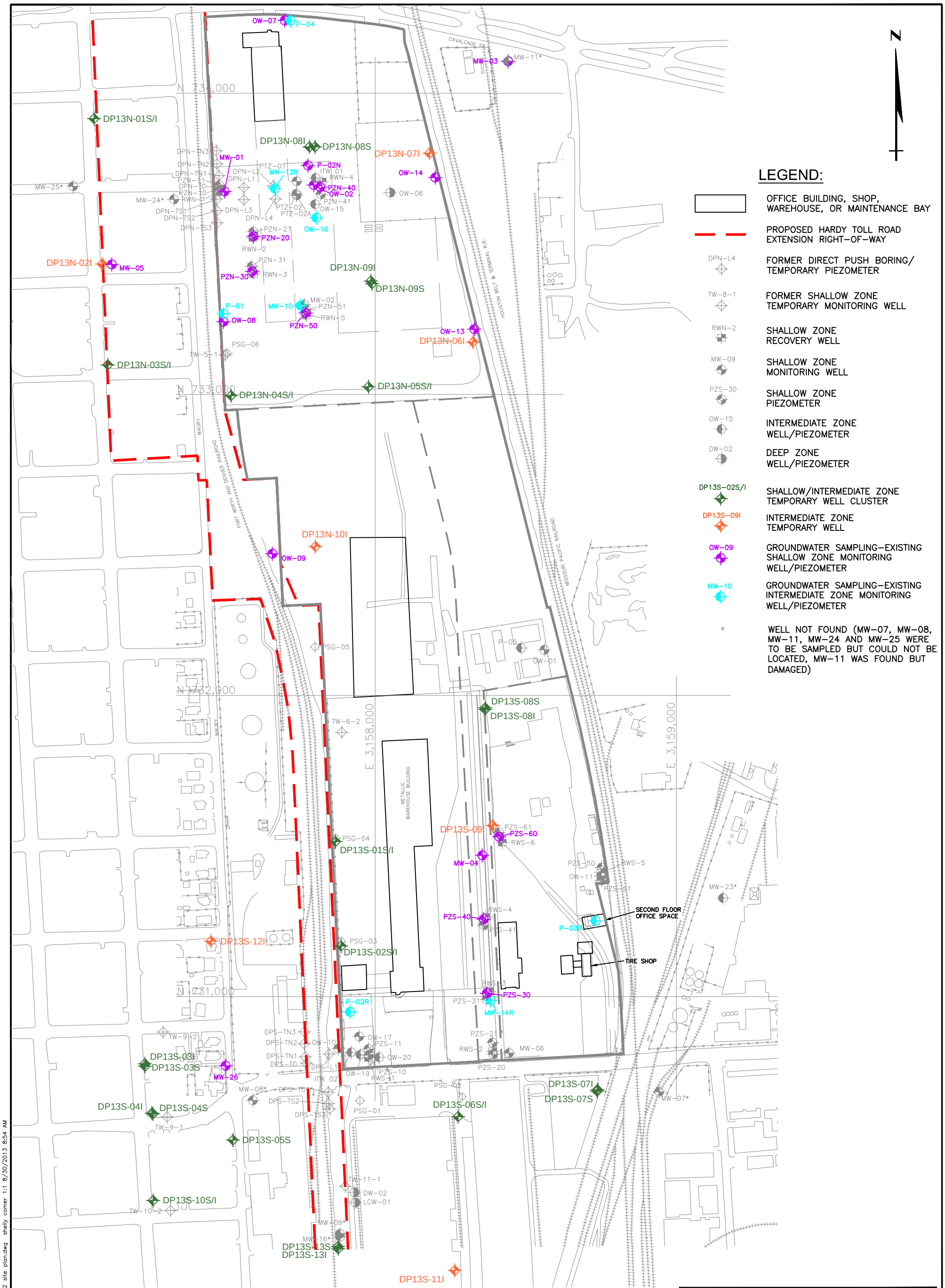
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

SITE LOCATION MAP

PROJECT NO: 13-665

FIGURE 1

y:\south cavalcade\13-665\2013 draft report\figure 1 site location map.dwg Last Saved By: Scomer 8/22/2013 8:20 AM Plotted By: Shelly Comer 8/26/2013 8:34 AM Scale: 1:1



REV #	DATE	DESCRIPTION	APPD

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
CHKD:	JSZ	DATE:	08/12/13
APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

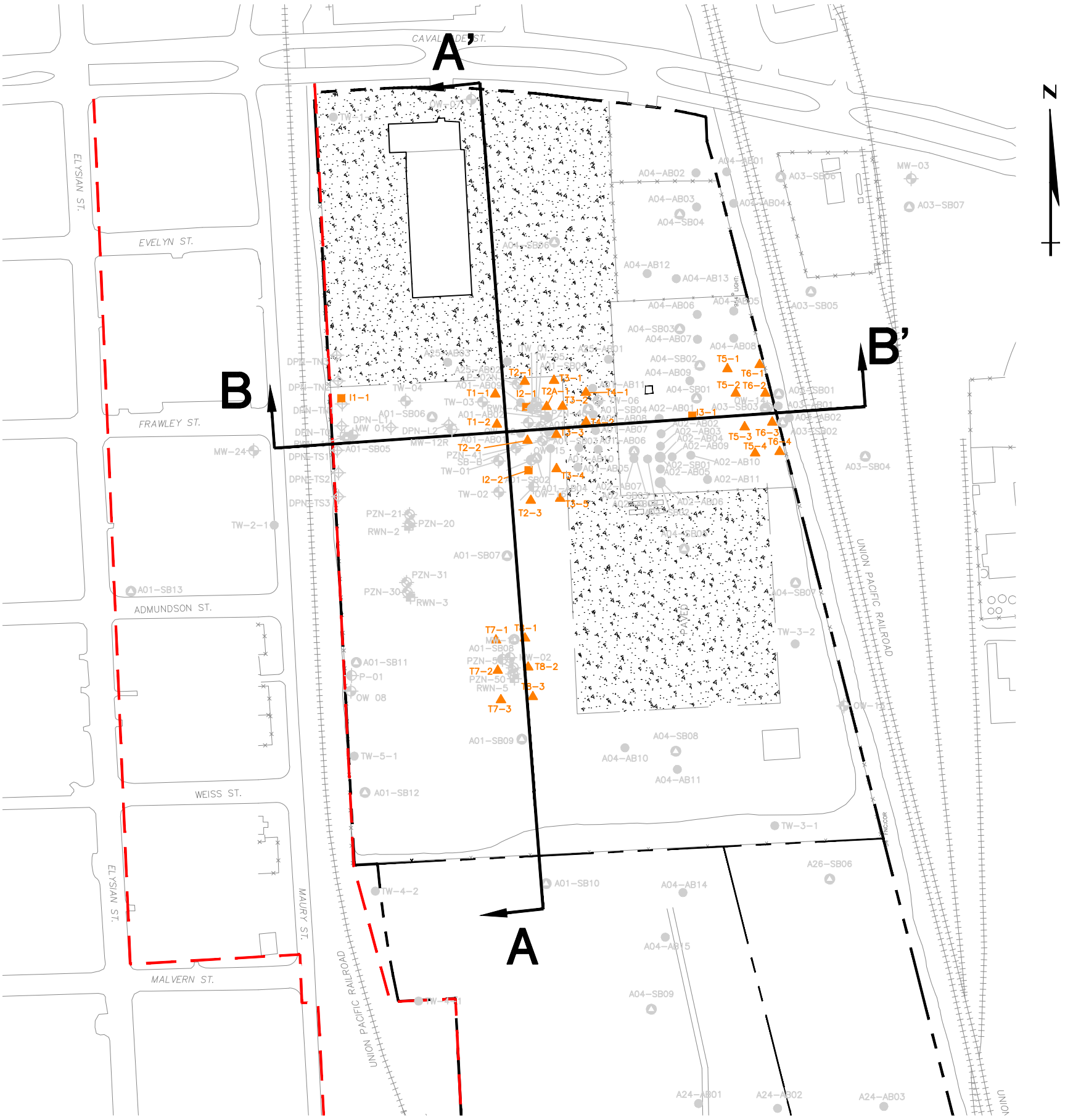
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

SITE PLAN

PROJECT NO: 13-665

FIGURE 2

y:\south cavalcade\13-665\2013 draft report\figure 2 site plan.dwg shelly comer 1:1 8/30/2013 8:54 AM



LEGEND

- SITE BOUNDARY
- PROPERTY BOUNDARIES
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT–OF–WAY
- AREAS COVERED WITH ASPHALT OR CONCRETE
- MW–12R P–01 — MONITORING WELL LOCATION
- DPN–L2 — DIRECT PUSH BORING/ PIEZOMETER LOCATION
- PZN–40 — PIEZOMETER LOCATION
- RWN–4 — RECOVERY WELL LOCATION
- AUGER BORING LOCATION (APPROX.)
- REMEDIAL INVESTIGATION SOIL BORING LOCATION
- 2012 DIRECT PUSH BORING LOCATION (SHALLOW ZONE)
- 2012 DIRECT PUSH BORING LOCATION (INTERMEDIATE ZONE)

LOCATION MAP

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: PROPOSED HARDY TOLL ROAD EXTENSION RIGHT–OF–WAY BASED ON HARDY CONNECTOR SCHEMATIC – FROM: US59/IH10 INTERCHANGE TO: HARDY TOLL ROAD/IH10/610 INTERCHANGE, DANNENBAUM ENGINEERING CORPORATION, 07/24/2009.

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

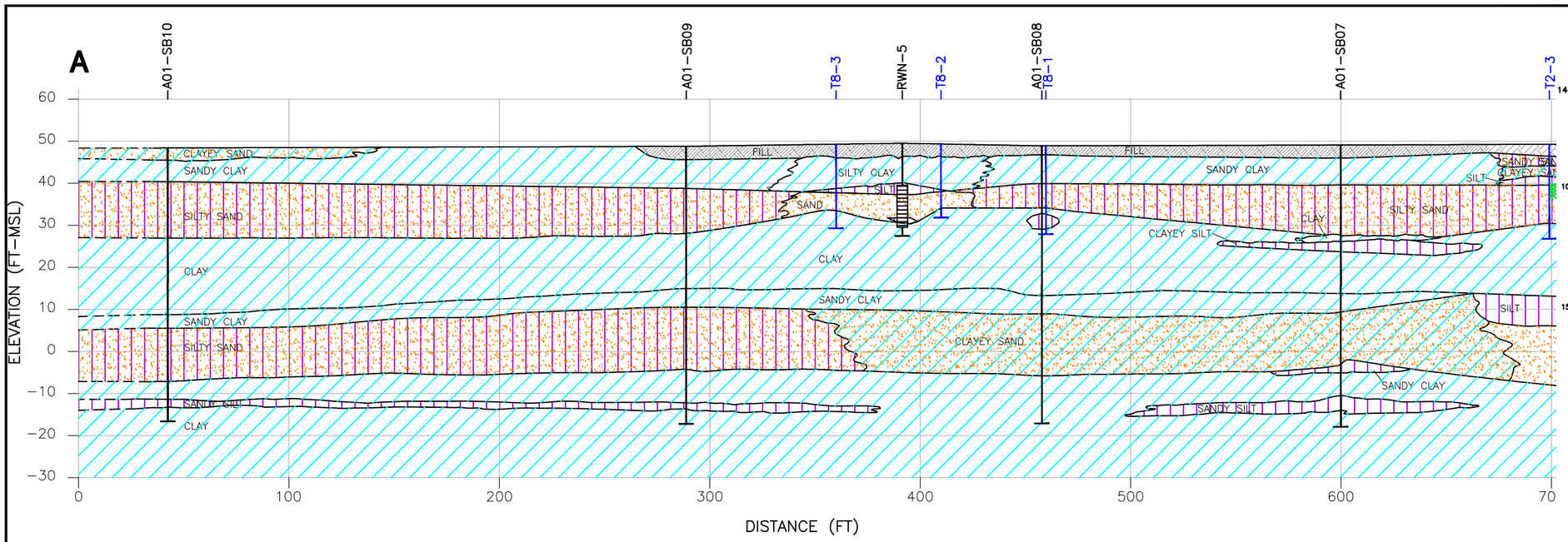
DRWN: SCC	DATE: 08/12/13	KEY ENVIRONMENTAL INCORPORATED
CHKD: JMV	DATE: 08/12/13	
APPD: JSZ	DATE: 08/12/13	
SCALE: AS SHOWN		

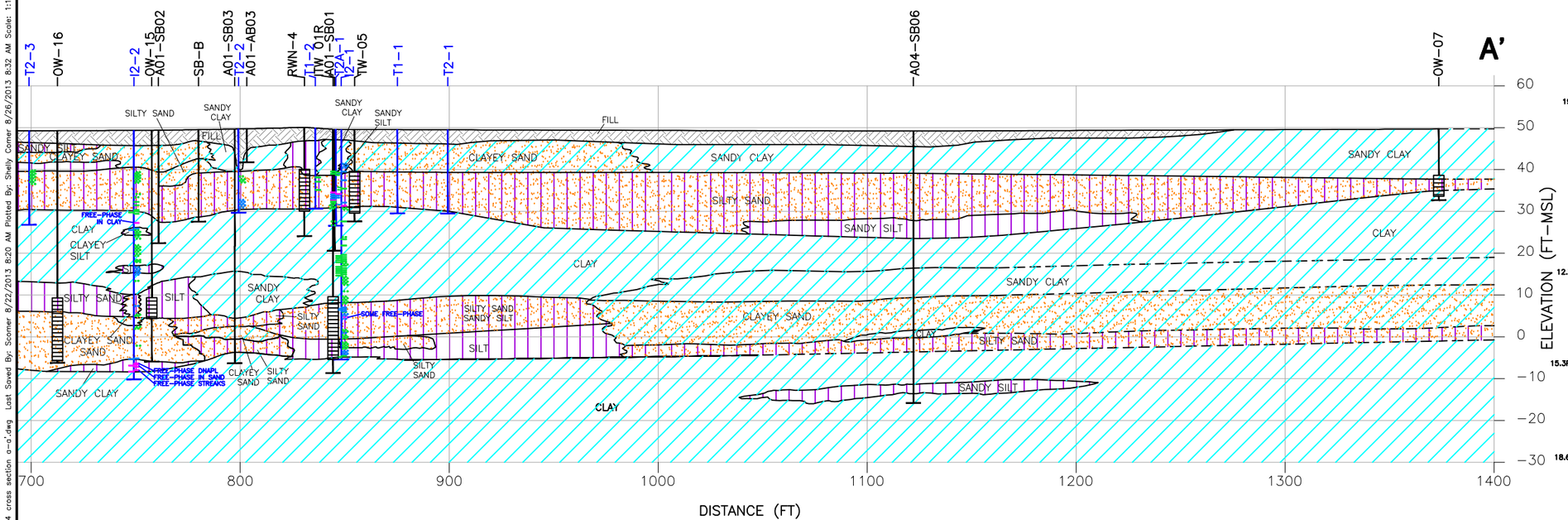
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

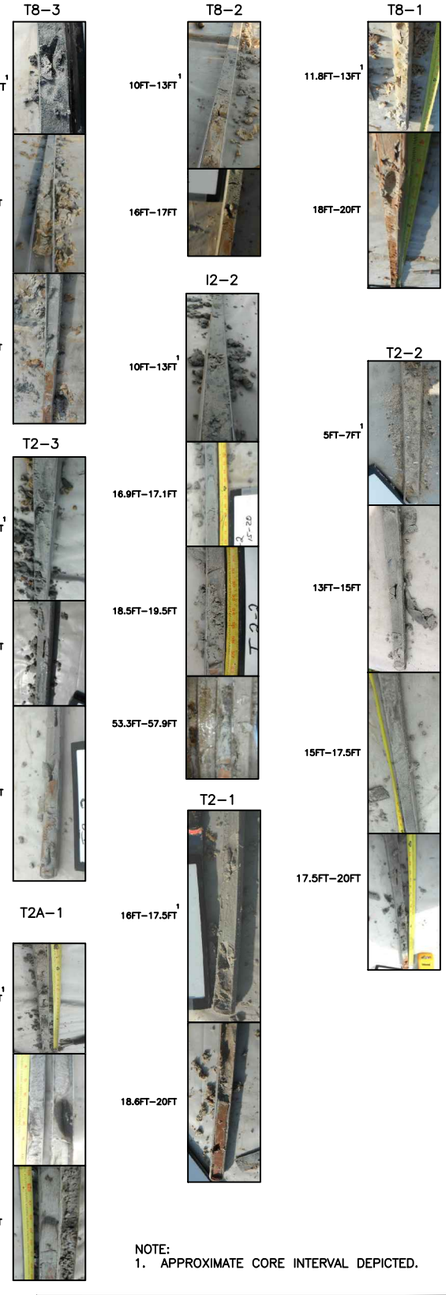
CROSS SECTION LOCATION MAP

PROJECT NO: 12–517
FIGURE 3

y:\south cavalcade\13-665\2013 draft report\figure 3 cross section location map.dwg Last Saved By: Scomer 8/23/2013 10:00 AM Plotted By: Shelly Comer 8/26/2013 8:33 AM Scale: 1:1







NOTE:
1. APPROXIMATE CORE INTERVAL DEPICTED.

LEGEND

- FILL
- SAND
- SILT, CLAYEY SILT
- SILTY SAND, SANDY SILT
- CLAY, SANDY CLAY, SILTY CLAY
- CLAYEY SAND
- DISCONTINUOUS SPOTS OR PATCHES OVER INTERVAL INDICATED
- THIN LENSES OF MATERIAL AT DEPTHS INDICATED
- OILY RESIDUE, OIL SPOTS, SOLIDIFIED TAR, STAINING
- SHEEN
- FREE PHASE DNAPL

NOTE:
THE CROSS SECTIONS ARE AN IDEALIZED REPRESENTATION OF STRATIGRAPHY AND VISUAL OBSERVATIONS. REFER TO BORING LOGS FOR DETAILED DESCRIPTIONS OF OBSERVATIONS.

V: 0 30 60 FEET
H: 0 60 120 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

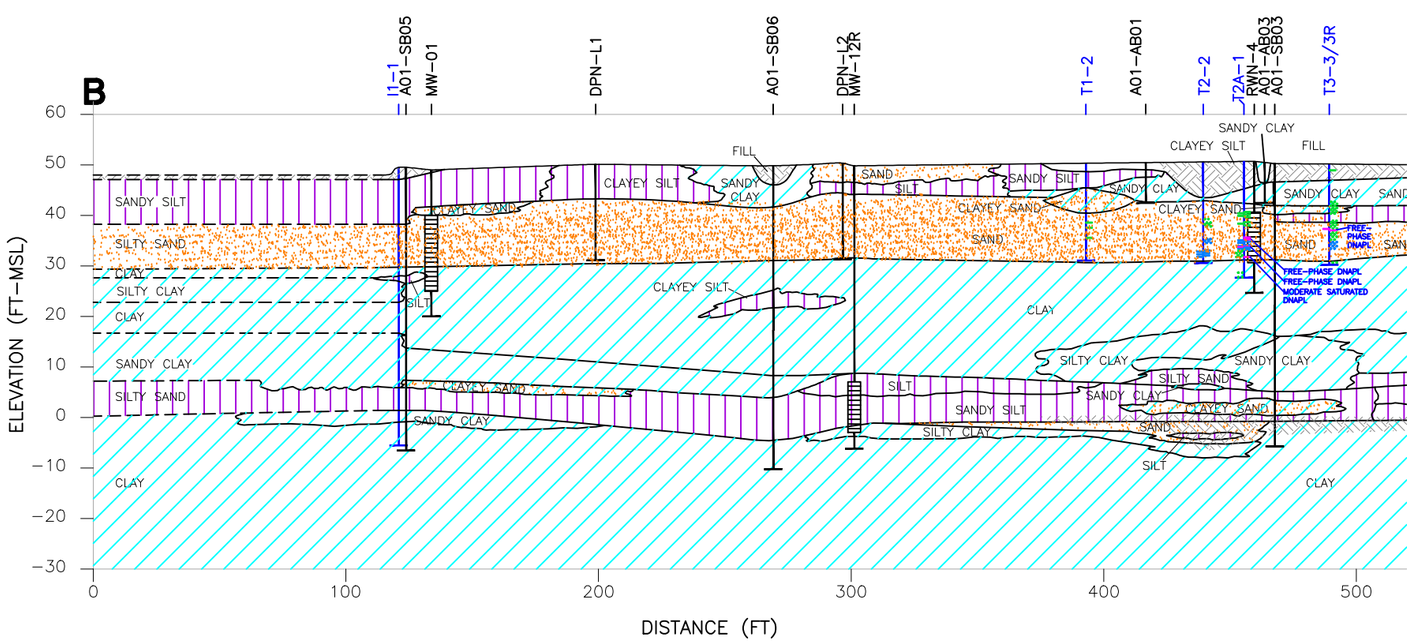
DRWN: SCC	DATE: 08/12/13	KEY ENVIRONMENTAL INCORPORATED
CHKD: JMV	DATE: 08/12/13	
APPD: JSZ	DATE: 08/12/13	
SCALE: AS SHOWN		

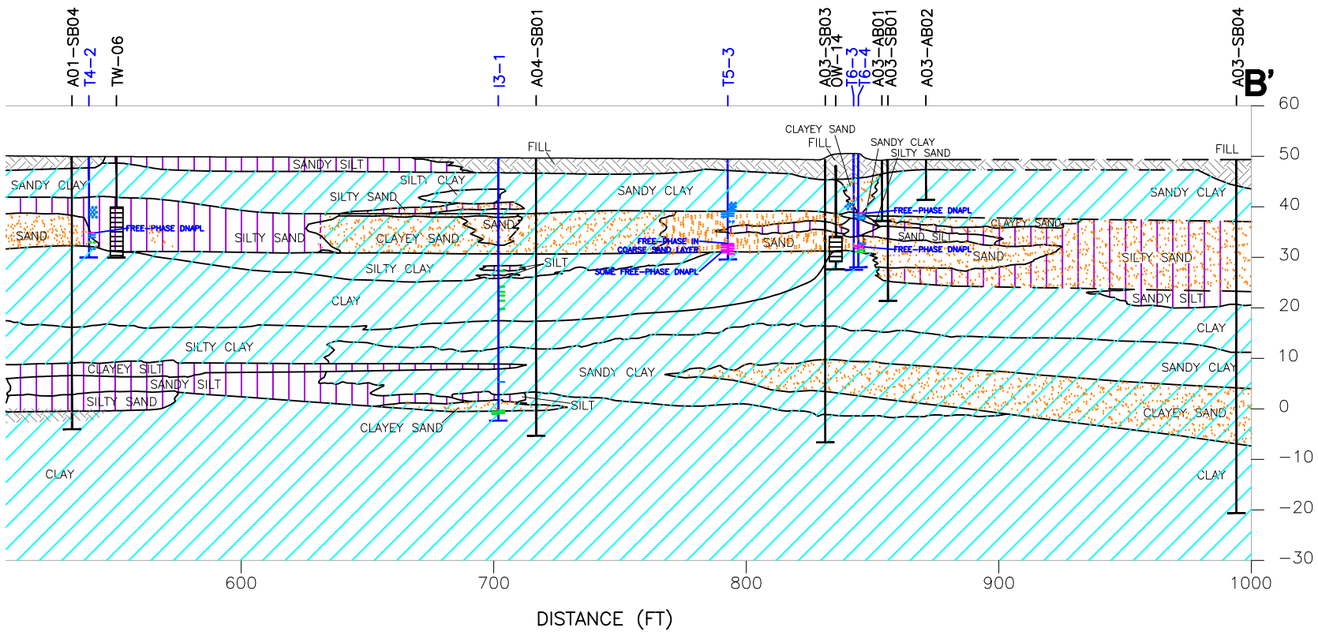
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

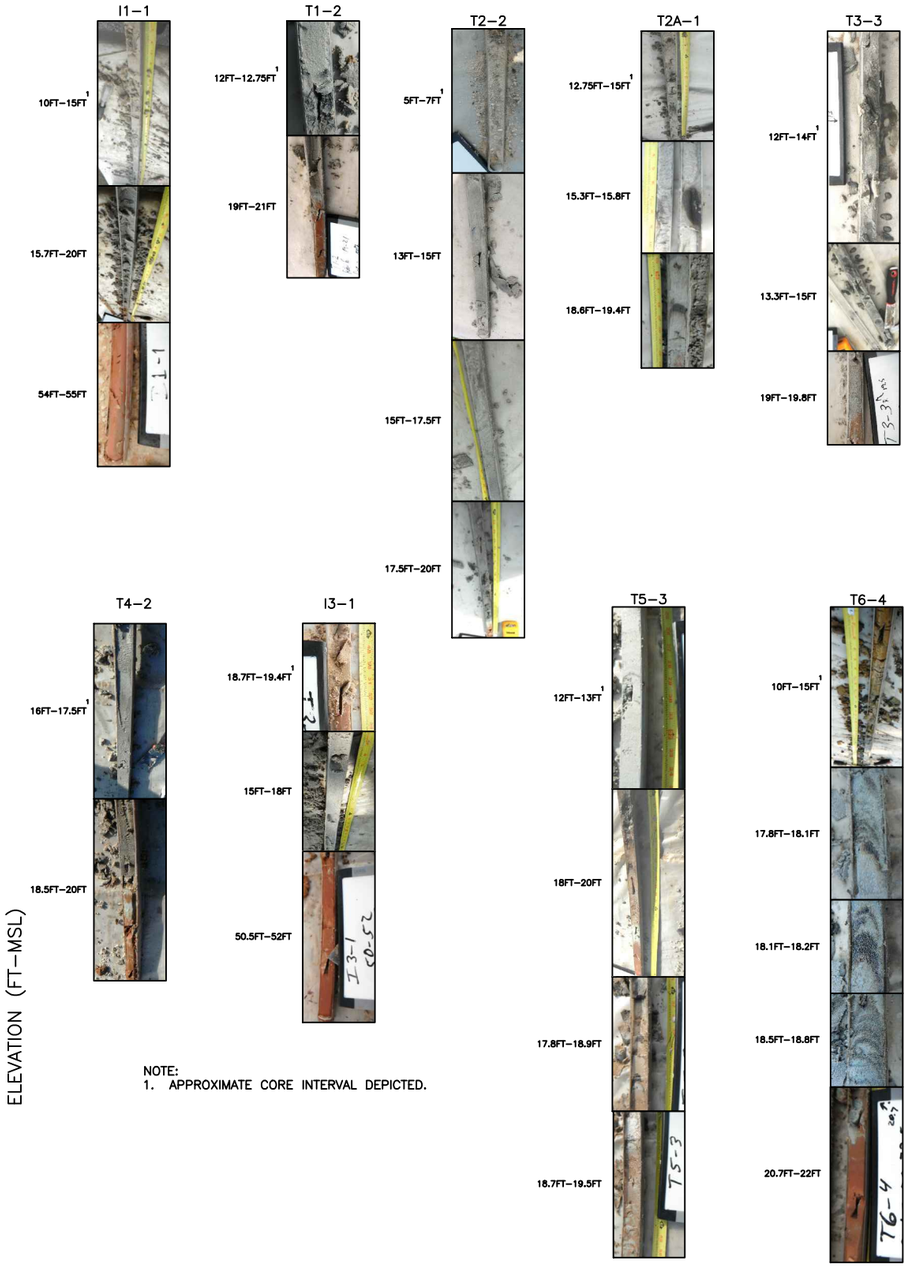
CROSS SECTION A-A' WITH PHOTOS

PROJECT NO: 12-517
FIGURE 4

y:\south cavalcade\13-665\2013 draft report\Figure 4 cross section a-a'.dwg Last Saved By: Scomer 8/22/2013 8:20 AM Plotted By: Shelly Comer 8/26/2013 8:32 AM Scale: 1:1







NOTE:
1. APPROXIMATE CORE INTERVAL DEPICTED.

LEGEND

- FILL
- SAND
- SILT, CLAYEY SILT, SANDY SILT
- SILTY SAND
- CLAY, SANDY CLAY, SILTY CLAY
- CLAYEY SAND
- DISCONTINUOUS SPOTS OR PATCHES OVER INTERVAL INDICATED
- THIN LENSES OF MATERIAL AT DEPTHS INDICATED
- OILY RESIDUE, OIL SPOTS, SOLIDIFIED TAR, STAINING
- SHEEN
- FREE PHASE DNAPL

NOTE:
THE CROSS SECTIONS ARE AN IDEALIZED REPRESENTATION OF STRATIGRAPHY AND VISUAL OBSERVATIONS. REFER TO BORING LOGS FOR DETAILED DESCRIPTIONS OF OBSERVATIONS.

V: 0 30 60 FEET
H: 0 60 120 FEET

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

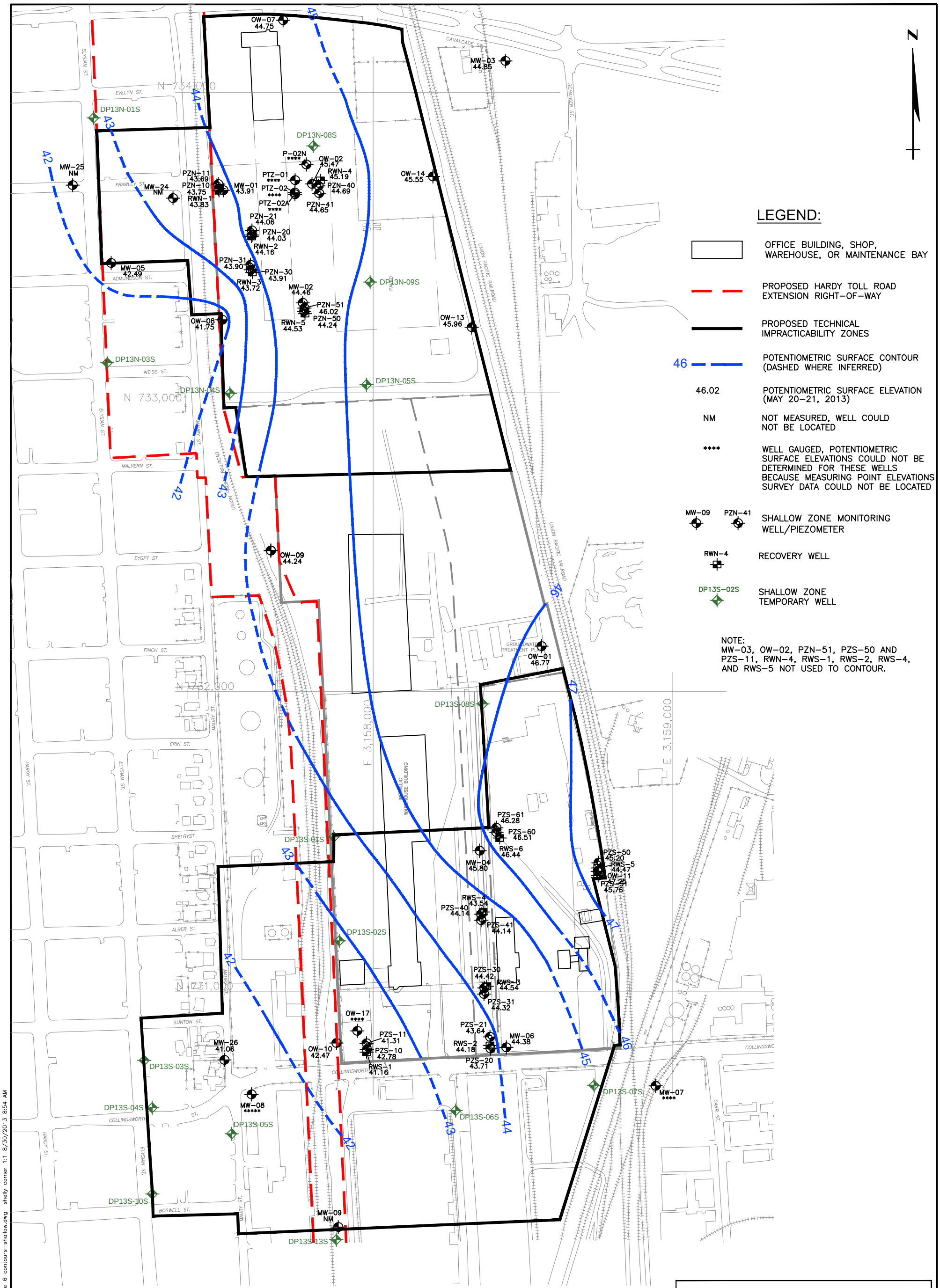
DRWN: SCC	DATE: 08/12/13	KEY ENVIRONMENTAL INCORPORATED	
CHKD: JMV	DATE: 08/12/13		
APPD: JSZ	DATE: 08/12/13		
SCALE: AS SHOWN			

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

CROSS SECTION B-B' WITH PHOTOS

PROJECT NO: 12-517
FIGURE 5

y:\south cavalcade\13-665\2013 draft report\figure 5 cross section b-b'.dwg Last Saved By: Scomer 8/22/2013 8:20 AM Plotted By: Shelly Comer 8/26/2013 8:32 AM Scale: 1:1



LEGEND:

- OFFICE BUILDING, SHOP, WAREHOUSE, OR MAINTENANCE BAY
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT-OF-WAY
- PROPOSED TECHNICAL IMPRACTICABILITY ZONES
- 46 — POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- 46.02 — POTENTIOMETRIC SURFACE ELEVATION (MAY 20-21, 2013)
- NM — NOT MEASURED, WELL COULD NOT BE LOCATED
- **** — WELL GAUGED, POTENTIOMETRIC SURFACE ELEVATIONS COULD NOT BE DETERMINED FOR THESE WELLS BECAUSE MEASURING POINT ELEVATIONS SURVEY DATA COULD NOT BE LOCATED
- MW-09 / PZN-41 — SHALLOW ZONE MONITORING WELL/PIEZOMETER
- RWN-4 — RECOVERY WELL
- DP13S-02S — SHALLOW ZONE TEMPORARY WELL

NOTE:
MW-03, OW-02, PZN-51, PZS-50 AND PZS-11, RWN-4, RWS-1, RWS-2, RWS-4, AND RWS-5 NOT USED TO CONTOUR.

0 300 600 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
CHKD:	JSZ	DATE:	08/12/13
APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

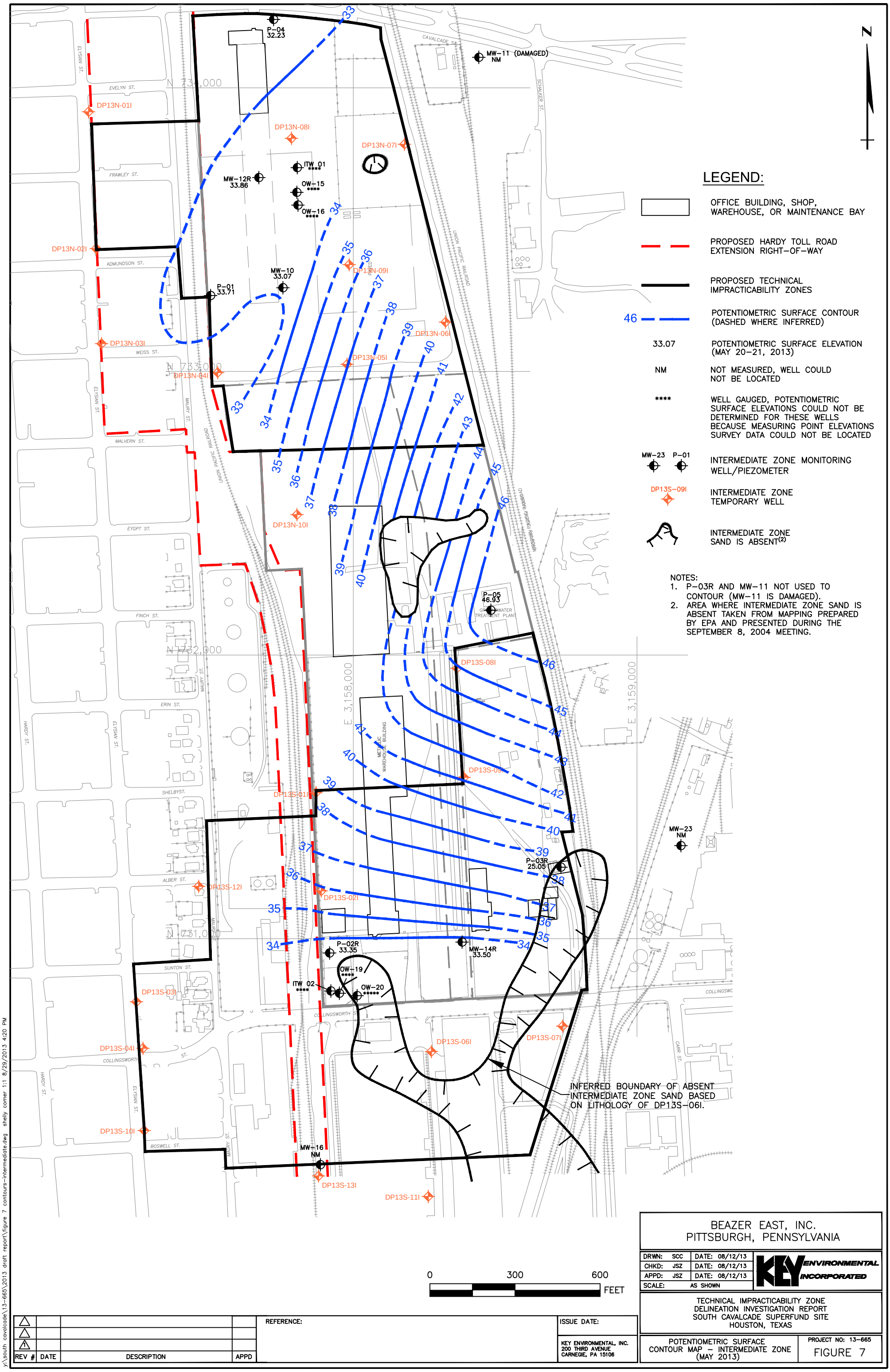
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

POTENTIOMETRIC SURFACE CONTOUR MAP - SHALLOW ZONE (MAY 2013)

PROJECT NO: 13-665

FIGURE 6

y:\south cavalcade\13-665\2013 draft report\figure 6 contours-shallow.dwg shelly comer 1:1 8/30/2013 8:54 AM



REV #	DATE	DESCRIPTION	APPD
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2			
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REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
CHKD:	JSZ	DATE:	08/12/13
APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

POTENTIOMETRIC SURFACE CONTOUR MAP – INTERMEDIATE ZONE (MAY 2013)

PROJECT NO: 13-665

FIGURE 7

y:\south cavalcade\13-665\2013 draft report\figure 7 contours-intermediate.dwg shelly comer 1:1 8/29/2013 4:20 PM

DP13N-01S	
Constituent	5/24/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

PZN-20	
Constituent	5/28/2013
Benzene	13
Ethylbenzene	44
Toluene	27
Xylene (total)	110
Benzo(a)pyrene	12 U
Naphthalene	8100

MW-05	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

PZN-30	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	1.2
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	6.2 U
Naphthalene	840

DP13N-03S	
Constituent	5/24/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

OW-08	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13N-04S	
Constituent	5/31/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

MW-01	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	2.5 U
Naphthalene	330

OW-07	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13N-08S	
Constituent	6/11/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	3.2
Benzo(a)pyrene	63 U
Naphthalene	1600

MW-03	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

OW-14	
Constituent	5/29/2013
Benzene	0.41 U
Ethylbenzene	14
Toluene	9.8
Xylene (total)	47
Benzo(a)pyrene	130 U
Naphthalene	3200

PZN-40	
Constituent	5/28/2013
Benzene	13
Ethylbenzene	53
Toluene	65
Xylene (total)	170
Benzo(a)pyrene	12 U
Naphthalene	11000

OW-13	
Constituent	5/29/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	2.6 B

DP13N-09S	
Constituent	6/7/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13N-05S	
Constituent	6/3/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

PZN-50	
Constituent	5/28/2013
Benzene	1.6 U
Ethylbenzene	21
Toluene	2.0 U
Xylene (total)	19
Benzo(a)pyrene	12 U
Naphthalene	3600

OW-09	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13S-01S	
Constituent	6/1/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.63 U
Naphthalene	0.31 U

PZS-40	
Constituent	5/30/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13S-02S	
Constituent	6/3/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	13 U
Naphthalene	6.3 U

DP13S-08S	
Constituent	6/3/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

PZS-60	
Constituent	5/29/2013
Benzene	0.82 U
Ethylbenzene	1.5 U
Toluene	1.0 U
Xylene (total)	1.3 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

MW-04	
Constituent	5/30/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

PZS-30	
Constituent	5/30/2013
Benzene	6.2
Ethylbenzene	3.3
Toluene	0.51 U
Xylene (total)	3.6
Benzo(a)pyrene	0.13 U
Naphthalene	140

DP13S-07S	
Constituent	5/29/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13S-06S	
Constituent	5/29/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	270

MW-26	
Constituent	5/24/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	1

DP13S-03S	
Constituent	5/21/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

DP13S-04S	
Constituent	5/21/2013
Benzene	2.1 U
Ethylbenzene	3.7 U
Toluene	2.6 U
Xylene (total)	3.3 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

DP13S-05S	
Constituent	5/24/2013
Benzene	12
Ethylbenzene	19
Toluene	22
Xylene (total)	58
Benzo(a)pyrene	1.2 U
Naphthalene	2400

DP13S-10S	
Constituent	6/4/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

DP13S-13S	
Constituent	6/12/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.65 U
Naphthalene	0.32 U

LEGEND:

- OFFICE BUILDING, SHOP, WAREHOUSE, OR MAINTENANCE BAY
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT-OF-WAY
- 2013 GROUNDWATER SAMPLE LOCATION
- RWN-2 — SHALLOW ZONE RECOVERY WELL
- MW-09 — SHALLOW ZONE MONITORING WELL
- PZS-30 — SHALLOW ZONE PIEZOMETER
- DP13S-02S — SHALLOW ZONE TEMPORARY WELL
- MW-12R P-05 — INTERMEDIATE ZONE MONITORING WELL/PIEZOMETER
- DP13S-09I — INTERMEDIATE ZONE TEMPORARY WELL
- TW-8-1 — FORMER SHALLOW ZONE TEMPORARY WELL
- DPN-L4 — FORMER DIRECT PUSH BORING/ TEMPORARY PIEZOMETER

0 300 600 FEET

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

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SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

SHALLOW ZONE-ORGANIC ANALYTICAL DATA

PROJECT NO: 13-665
FIGURE 8

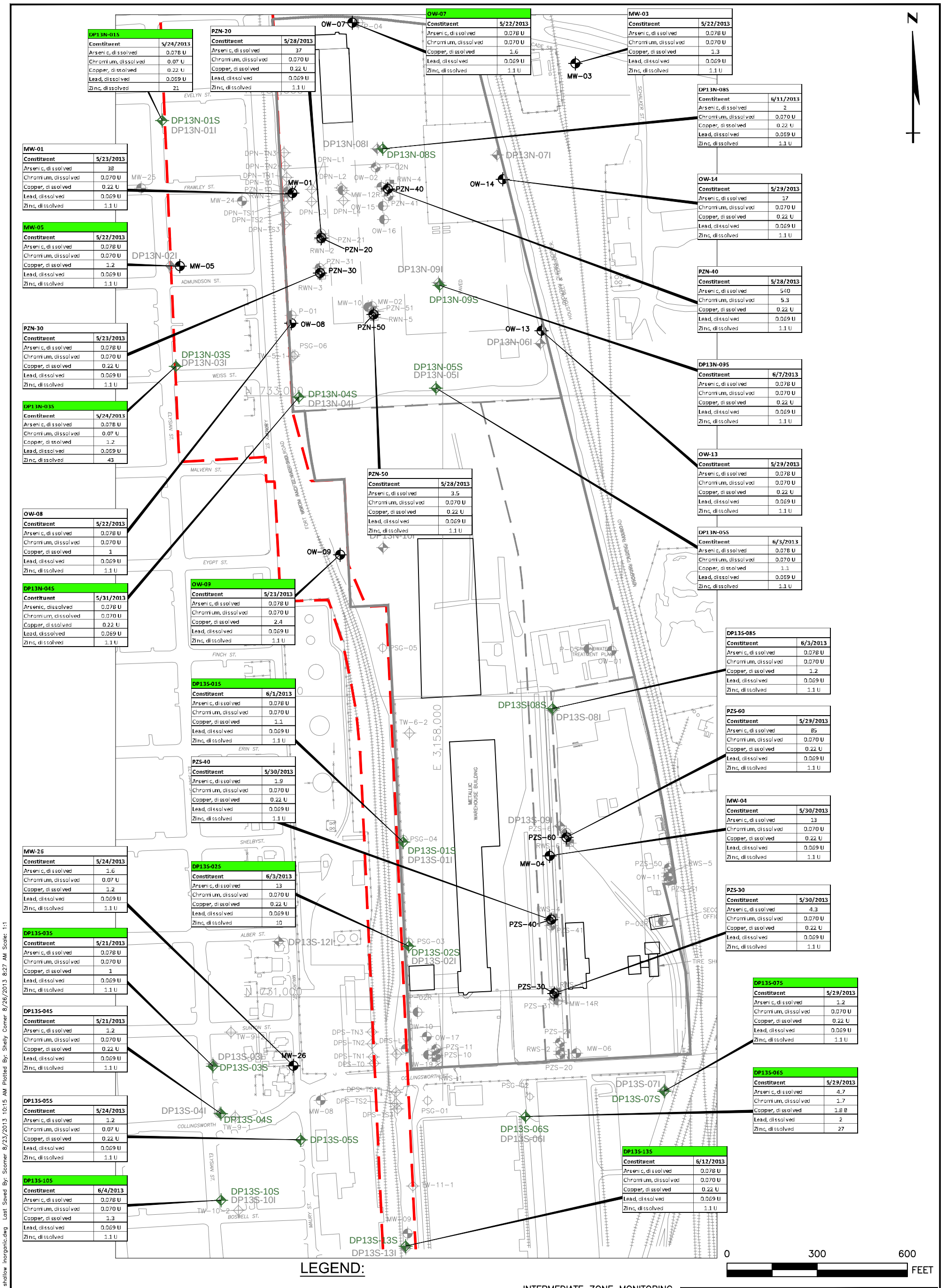
REV #	DATE	DESCRIPTION	APPD
1			

NOTES:
1. DP13N-03S — DATA USED TO DEFINE TI ZONE BOUNDARY.
2. ALL RESULTS REPORTED IN MICROGRAMS PER LITER (UG/L).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

y:\south cavalcade\13-665\2013 draft report\figure 8 shallow organic.dwg Last Saved By: Scomer 8/23/2013 10:13 AM Plotted By: Shelly Comer 8/26/2013 8:28 AM Scale: 1:1



DP13N-01S	
Constituent	5/24/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.07 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	21

PZN-20	
Constituent	5/28/2013
Arsenic, dissolved	37
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

OW-07	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.6
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

MW-03	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.3
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-08S	
Constituent	6/11/2013
Arsenic, dissolved	2
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

MW-01	
Constituent	5/23/2013
Arsenic, dissolved	38
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

OW-14	
Constituent	5/29/2013
Arsenic, dissolved	17
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

MW-05	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

PZN-40	
Constituent	5/28/2013
Arsenic, dissolved	540
Chromium, dissolved	5.3
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

PZN-30	
Constituent	5/23/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-09S	
Constituent	6/7/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-03S	
Constituent	5/24/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.07 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	43

OW-13	
Constituent	5/29/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

PZN-50	
Constituent	5/28/2013
Arsenic, dissolved	3.5
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-05S	
Constituent	6/3/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.1
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

OW-08	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

OW-09	
Constituent	5/23/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	2.4
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-08S	
Constituent	6/3/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-04S	
Constituent	5/31/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-01S	
Constituent	6/1/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.1
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

PZS-60	
Constituent	5/29/2013
Arsenic, dissolved	85
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

PZS-40	
Constituent	5/30/2013
Arsenic, dissolved	1.9
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

MW-04	
Constituent	5/30/2013
Arsenic, dissolved	13
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

MW-26	
Constituent	5/24/2013
Arsenic, dissolved	1.6
Chromium, dissolved	0.07 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-02S	
Constituent	6/3/2013
Arsenic, dissolved	13
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	10

PZS-30	
Constituent	5/30/2013
Arsenic, dissolved	4.3
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-03S	
Constituent	5/21/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-07S	
Constituent	5/29/2013
Arsenic, dissolved	1.2
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-04S	
Constituent	5/21/2013
Arsenic, dissolved	1.2
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-06S	
Constituent	5/29/2013
Arsenic, dissolved	4.7
Chromium, dissolved	1.7
Copper, dissolved	1.8 B
Lead, dissolved	2
Zinc, dissolved	27

DP13S-05S	
Constituent	5/24/2013
Arsenic, dissolved	1.2
Chromium, dissolved	0.07 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-13S	
Constituent	6/12/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-10S	
Constituent	6/4/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.3
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

LEGEND:

- OFFICE BUILDING, SHOP, WAREHOUSE, OR MAINTENANCE BAY
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT-OF-WAY
- 2013 GROUNDWATER SAMPLE LOCATION
- RWN-2 — SHALLOW ZONE RECOVERY WELL
- MW-09 — SHALLOW ZONE MONITORING WELL
- PZS-30 — SHALLOW ZONE PIEZOMETER
- DP13S-02S — SHALLOW ZONE TEMPORARY WELL
- MW-12R / P-05 — INTERMEDIATE ZONE MONITORING WELL/PIEZOMETER
- DP13S-09I — INTERMEDIATE ZONE TEMPORARY WELL
- TW-8-1 — FORMER SHALLOW ZONE TEMPORARY WELL
- DPN-L4 — FORMER DIRECT PUSH BORING/ TEMPORARY PIEZOMETER

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

NOTES:
1. DP13N-03S — DATA USED TO DEFINE TI ZONE BOUNDARY.
2. ALL RESULTS REPORTED IN MICROGRAMS PER LITER (UG/L).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
CHKD:	JSZ	DATE:	08/12/13
APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

SHALLOW ZONE-INORGANIC ANALYTICAL DATA

PROJECT NO: 13-665

FIGURE 9

y:\south cavalcade\13-665\2013 draft report\figure 9 shallow inorganic.dwg Last Saved By: Scomer 8/23/2013 10:15 AM Plotted By: Shelly Comer 8/26/2013 8:27 AM Scale: 1:1

MW-12R	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	5.3
Toluene	0.51 U
Xylene (total)	9.7
Benzo(a)pyrene	6.2 U
Naphthalene	1600

P-04	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.063 U

DP13N-08I	
Constituent	6/11/2013
Benzene	37
Ethylbenzene	36
Toluene	3.4
Xylene (total)	86
Benzo(a)pyrene	70 U
Naphthalene	8500

OW-15	
Constituent	5/28/2013
Benzene	12
Ethylbenzene	29
Toluene	8.8
Xylene (total)	45
Benzo(a)pyrene	12 U
Naphthalene	5700

DP13N-01I	
Constituent	5/28/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.64 U
Naphthalene	0.31 U

DP13N-07I	
Constituent	6/7/2013
Benzene	1.8
Ethylbenzene	24
Toluene	1
Xylene (total)	23
Benzo(a)pyrene	120 U
Naphthalene	7500

OW-16	
Constituent	5/29/2013
Benzene	30
Ethylbenzene	61
Toluene	30
Xylene (total)	110
Benzo(a)pyrene	120 U
Naphthalene	8300

DP13N-09I	
Constituent	6/11/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.68 U
Naphthalene	0.33 U

DP13N-02I	
Constituent	5/31/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

DP13N-05I	
Constituent	6/11/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.65 U
Naphthalene	0.32 U

MW-10	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	2.5 U
Naphthalene	170

DP13N-03I	
Constituent	5/28/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.64 U
Naphthalene	0.31 U

DP13N-05I	
Constituent	6/5/2013
Benzene	1
Ethylbenzene	23
Toluene	1.2
Xylene (total)	17
Benzo(a)pyrene	12 U
Naphthalene	4600

P-05	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

DP13N-04I	
Constituent	6/3/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.065 U

DP13S-08I	
Constituent	6/4/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.062 U

DP13N-10I	
Constituent	6/13/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.66 U
Naphthalene	0.33 U

DP13S-09I	
Constituent	6/5/2013
Benzene	2.1 U
Ethylbenzene	3.7 U
Toluene	2.6 U
Xylene (total)	3.3 U
Benzo(a)pyrene	0.14 U
Naphthalene	2.7

DP13S-01I	
Constituent	6/4/2013
Benzene	4.1 U
Ethylbenzene	7.4 U
Toluene	5.1 U
Xylene (total)	6.6 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.063 U

P-03R	
Constituent	5/30/2013
Benzene	1.3
Ethylbenzene	5.4
Toluene	7.3
Xylene (total)	20
Benzo(a)pyrene	0.14 U
Naphthalene	1000

DP13S-02I	
Constituent	6/5/2013
Benzene	12
Ethylbenzene	170
Toluene	39
Xylene (total)	270
Benzo(a)pyrene	14 U
Naphthalene	12000

MW-14R	
Constituent	5/30/2013
Benzene	220
Ethylbenzene	150
Toluene	13
Xylene (total)	170
Benzo(a)pyrene	12 U
Naphthalene	9100

DP13S-12I	
Constituent	6/12/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	1.3 U
Naphthalene	0.62 U

DP13S-05I	
Constituent	5/30/2013
Benzene	33
Ethylbenzene	100
Toluene	4
Xylene (total)	84
Benzo(a)pyrene	120 U
Naphthalene	11000

P-02R	
Constituent	6/6/2013
Benzene	7.8
Ethylbenzene	37
Toluene	4
Xylene (total)	26
Benzo(a)pyrene	6.3 U
Naphthalene	1300

DP13S-07I	
Constituent	5/30/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	38

DP13S-03I	
Constituent	5/22/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.063 U

DP13S-13I	
Constituent	6/13/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.68 U
Naphthalene	0.33 U

DP13S-04I	
Constituent	5/23/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.13 U
Naphthalene	0.065 U

DP13S-11I	
Constituent	6/13/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.15 U
Naphthalene	0.074 U

DP13S-10I	
Constituent	6/6/2013
Benzene	0.41 U
Ethylbenzene	0.74 U
Toluene	0.51 U
Xylene (total)	0.66 U
Benzo(a)pyrene	0.12 U
Naphthalene	0.061 U

0 300 600 FEET

LEGEND:

- OFFICE BUILDING, SHOP, WAREHOUSE, OR MAINTENANCE BAY
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT-OF-WAY
- 2013 GROUNDWATER SAMPLE LOCATION
- RWN-2 — SHALLOW ZONE RECOVERY WELL
- MW-09 — SHALLOW ZONE MONITORING WELL
- PZS-30 — SHALLOW ZONE PIEZOMETER
- DP13S-02S — SHALLOW ZONE TEMPORARY WELL
- MW-12R / P-05 — INTERMEDIATE ZONE MONITORING WELL/PIEZOMETER
- DP13S-09I — INTERMEDIATE ZONE TEMPORARY WELL
- TW-8-1 — FORMER SHALLOW ZONE TEMPORARY WELL
- DPN-L4 — FORMER DIRECT PUSH BORING/ TEMPORARY PIEZOMETER

REV #	DATE	DESCRIPTION	APPD
1			

NOTES:
1. DP13S-01I – DATA USED TO DEFINE TI ZONE BOUNDARY.
2. ALL RESULTS REPORTED IN MICROGRAMS PER LITER (UG/L).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
CHKD:	JSZ	DATE:	08/12/13
APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

INTERMEDIATE ZONE–ORGANIC ANALYTICAL DATA

PROJECT NO: 13–665

FIGURE 10

y:\south cavalcade\13-665\2013 draft report\figure 10 intermediate organic.dwg Last Saved By: Scorner 8/23/2013 10:19 AM Plotted By: Shelly Corner 8/26/2013 8:36 AM Scale: 1:1

MW-12R	
Constituent	5/23/2013
Arsenic, dissolved	21
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

P-04	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-08I	
Constituent	6/11/2013
Arsenic, dissolved	2.2
Chromium, dissolved	0.070 U
Copper, dissolved	1.5
Lead, dissolved	0.069 U
Zinc, dissolved	33

OW-15	
Constituent	5/28/2013
Arsenic, dissolved	12
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-01I	
Constituent	5/28/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.07 U
Copper, dissolved	2.8
Lead, dissolved	0.069 U
Zinc, dissolved	19

DP13N-07I	
Constituent	6/7/2013
Arsenic, dissolved	45
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	18

OW-16	
Constituent	5/29/2013
Arsenic, dissolved	8.4
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-02I	
Constituent	5/31/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.6
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-09I	
Constituent	6/11/2013
Arsenic, dissolved	2.4
Chromium, dissolved	0.070 U
Copper, dissolved	4.8
Lead, dissolved	0.069 U
Zinc, dissolved	15

MW-10	
Constituent	5/23/2013
Arsenic, dissolved	47
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13N-03I	
Constituent	5/28/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.07 U
Copper, dissolved	1.4
Lead, dissolved	0.069 U
Zinc, dissolved	11

DP13N-06I	
Constituent	6/11/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	3.8
Lead, dissolved	0.069 U
Zinc, dissolved	15

DP13N-05I	
Constituent	6/5/2013
Arsenic, dissolved	4.1
Chromium, dissolved	0.070 U
Copper, dissolved	1.1
Lead, dissolved	0.069 U
Zinc, dissolved	12

DP13N-04I	
Constituent	6/3/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	3.6
Lead, dissolved	0.069 U
Zinc, dissolved	15

DP13N-10I	
Constituent	6/13/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.7
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

P-05	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	2.7
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-08I	
Constituent	6/4/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	2.1
Lead, dissolved	0.069 U
Zinc, dissolved	13

DP13S-01I	
Constituent	6/4/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.7
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-09I	
Constituent	6/5/2013
Arsenic, dissolved	1.1
Chromium, dissolved	0.070 U
Copper, dissolved	5.1
Lead, dissolved	0.069 U
Zinc, dissolved	59

DP13S-02I	
Constituent	6/5/2013
Arsenic, dissolved	22
Chromium, dissolved	0.070 U
Copper, dissolved	1.1
Lead, dissolved	0.069 U
Zinc, dissolved	23

P-03R	
Constituent	5/30/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	5.1
Copper, dissolved	1.9
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-12I	
Constituent	6/12/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.9
Lead, dissolved	0.069 U
Zinc, dissolved	21

MW-14R	
Constituent	5/30/2013
Arsenic, dissolved	33
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

P-02R	
Constituent	6/6/2013
Arsenic, dissolved	47
Chromium, dissolved	0.070 U
Copper, dissolved	0.22 U
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-06I	
Constituent	5/30/2013
Arsenic, dissolved	15
Chromium, dissolved	0.07 U
Copper, dissolved	2.1
Lead, dissolved	0.069 U
Zinc, dissolved	220

DP13S-03I	
Constituent	5/22/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.4
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-07I	
Constituent	5/30/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.3 B
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-04I	
Constituent	5/23/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-13I	
Constituent	6/13/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	2.9
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-10I	
Constituent	6/6/2013
Arsenic, dissolved	1.1
Chromium, dissolved	0.070 U
Copper, dissolved	1.2
Lead, dissolved	0.069 U
Zinc, dissolved	1.1 U

DP13S-11I	
Constituent	6/13/2013
Arsenic, dissolved	0.078 U
Chromium, dissolved	0.070 U
Copper, dissolved	1.5
Lead, dissolved	0.069 U
Zinc, dissolved	12

N 734,000
N 733,000
N 732,000
N 731,000
E 3,158,000

0 350 700 FEET

LEGEND:

- OFFICE BUILDING, SHOP, WAREHOUSE, OR MAINTENANCE BAY
- PROPOSED HARDY TOLL ROAD EXTENSION RIGHT-OF-WAY
- 2013 GROUNDWATER SAMPLE LOCATION
- RWN-2 — SHALLOW ZONE RECOVERY WELL
- MW-09 — SHALLOW ZONE MONITORING WELL
- PZS-30 — SHALLOW ZONE PIEZOMETER
- DP13S-02S — SHALLOW ZONE TEMPORARY WELL
- MW-12R / P-05 — INTERMEDIATE ZONE MONITORING WELL/PIEZOMETER
- DP13S-09I — INTERMEDIATE ZONE TEMPORARY WELL
- TW-8-1 — FORMER SHALLOW ZONE TEMPORARY WELL
- DPN-L4 — FORMER DIRECT PUSH BORING/ TEMPORARY PIEZOMETER

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

NOTES:
1. DP13S-01I — DATA USED TO DEFINE TI ZONE BOUNDARY.
2. ALL RESULTS REPORTED IN MICROGRAMS PER LITER (UG/L).

ISSUE DATE:

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200 THIRD AVENUE
CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

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SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

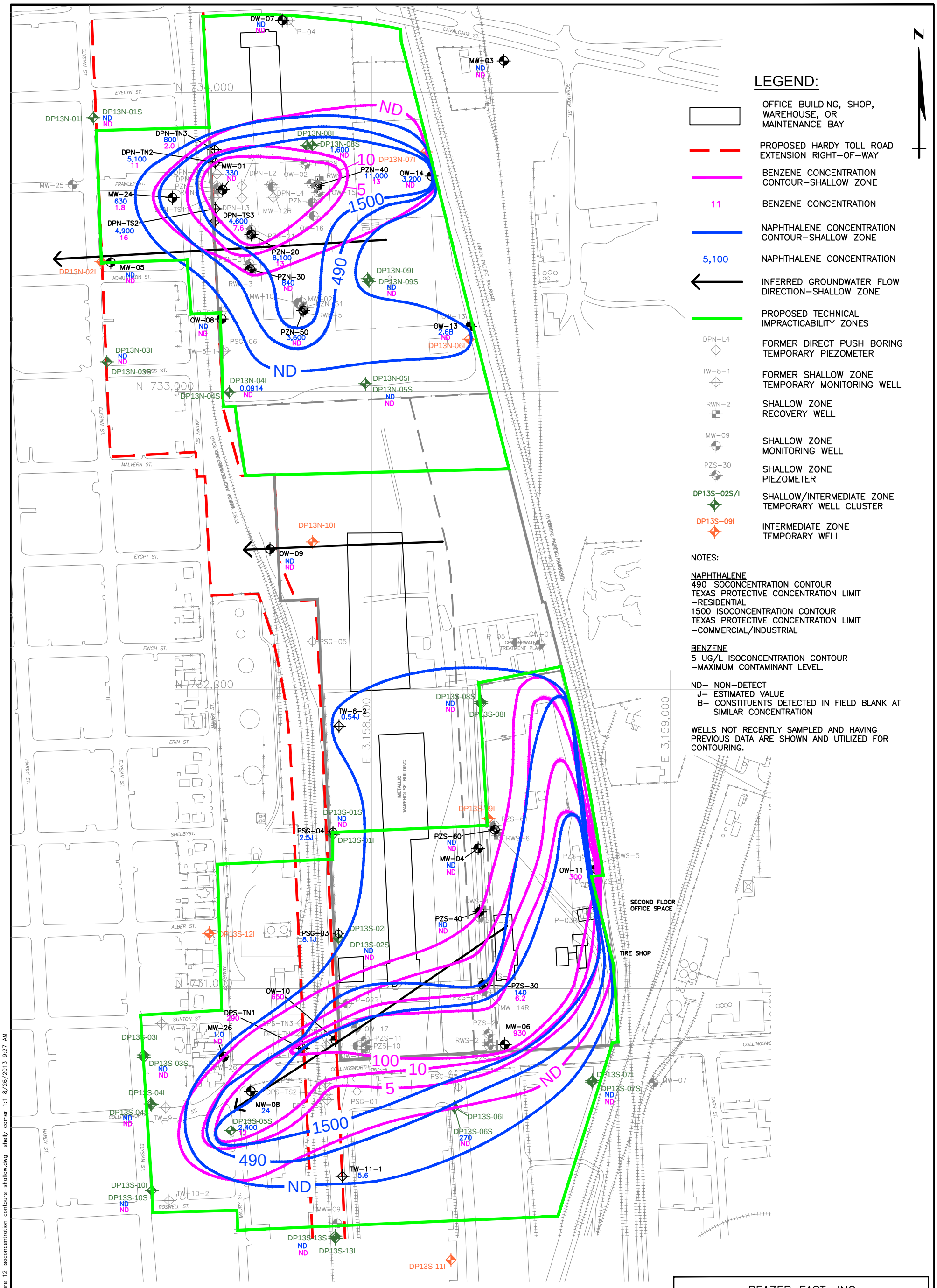
TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

INTERMEDIATE ZONE-INORGANIC ANALYTICAL DATA

PROJECT NO: 13-665

FIGURE 11

y:\south cavalcade\13-665\2013 draft report\figure 11 intermediate inorganic.dwg Last Saved By: Scorner 8/23/2013 10:21 AM Plotted By: Shelly Corner 8/26/2013 8:26 AM Scale: 1:1



y:\south cavalcade\13-665\2013 draft report\figure 12 isoconcentration contours-shallow.dwg shelly comer 1:1 8/26/2013 9:27 AM

REV #	DATE	DESCRIPTION	APPD
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ISSUE DATE:

KEY ENVIRONMENTAL, INC.
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BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

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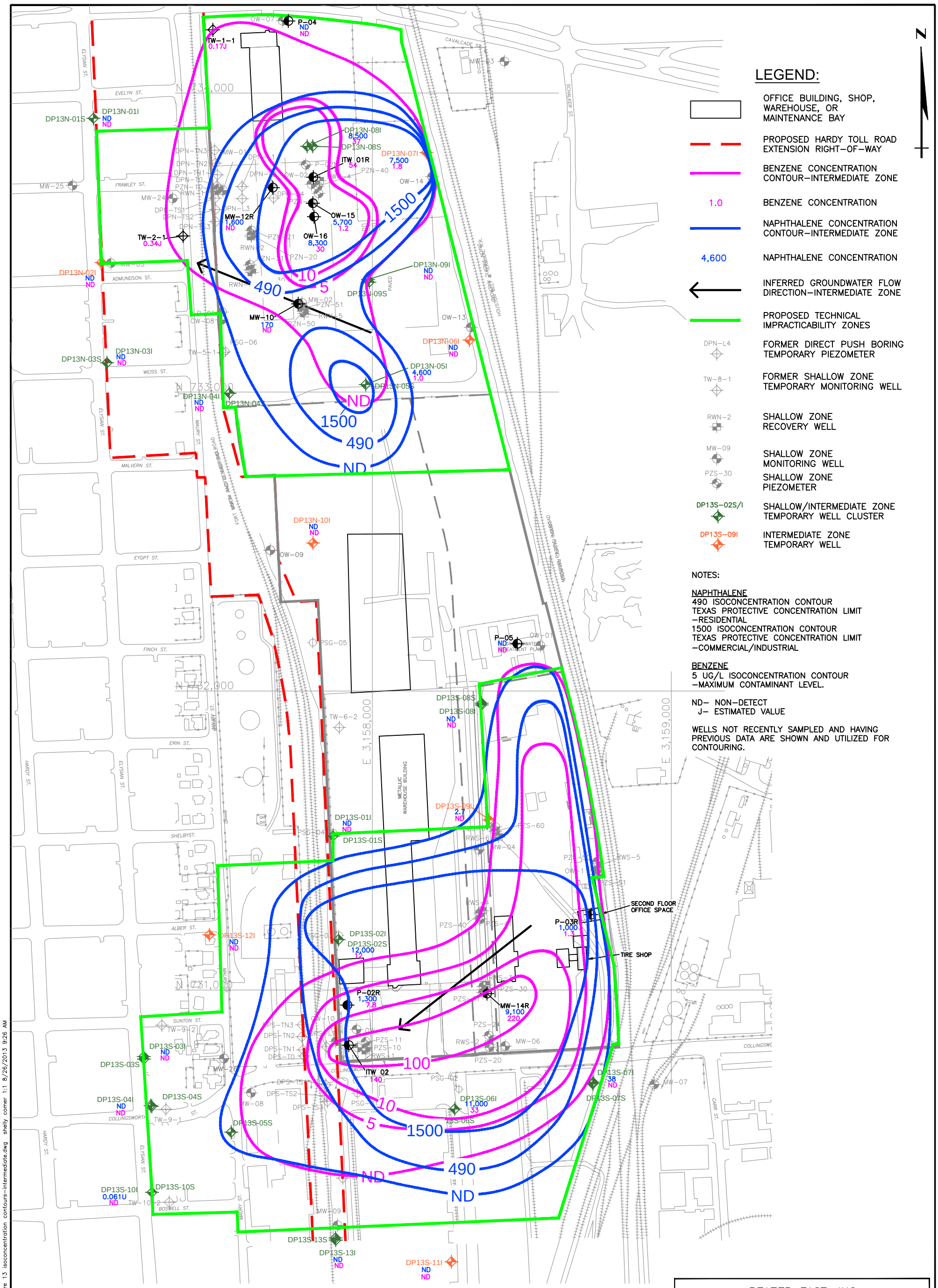
APPD:	JSZ	DATE: 08/12/13	
SCALE:	AS SHOWN		

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

BENZENE AND NAPHTHALENE ISOCONCENTRATION CONTOURS SHALLOW ZONE

PROJECT NO: 13-665

FIGURE 12



BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

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CHKD: JSZ	DATE: 08/12/13		
APPD: JSZ	DATE: 08/12/13		
SCALE: AS SHOWN			

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

BENZENE AND NAPHTAHLENE ISOCONCENTRATION CONTOURS INTERMEDIATE ZONE

PROJECT NO: 13-665

FIGURE 13

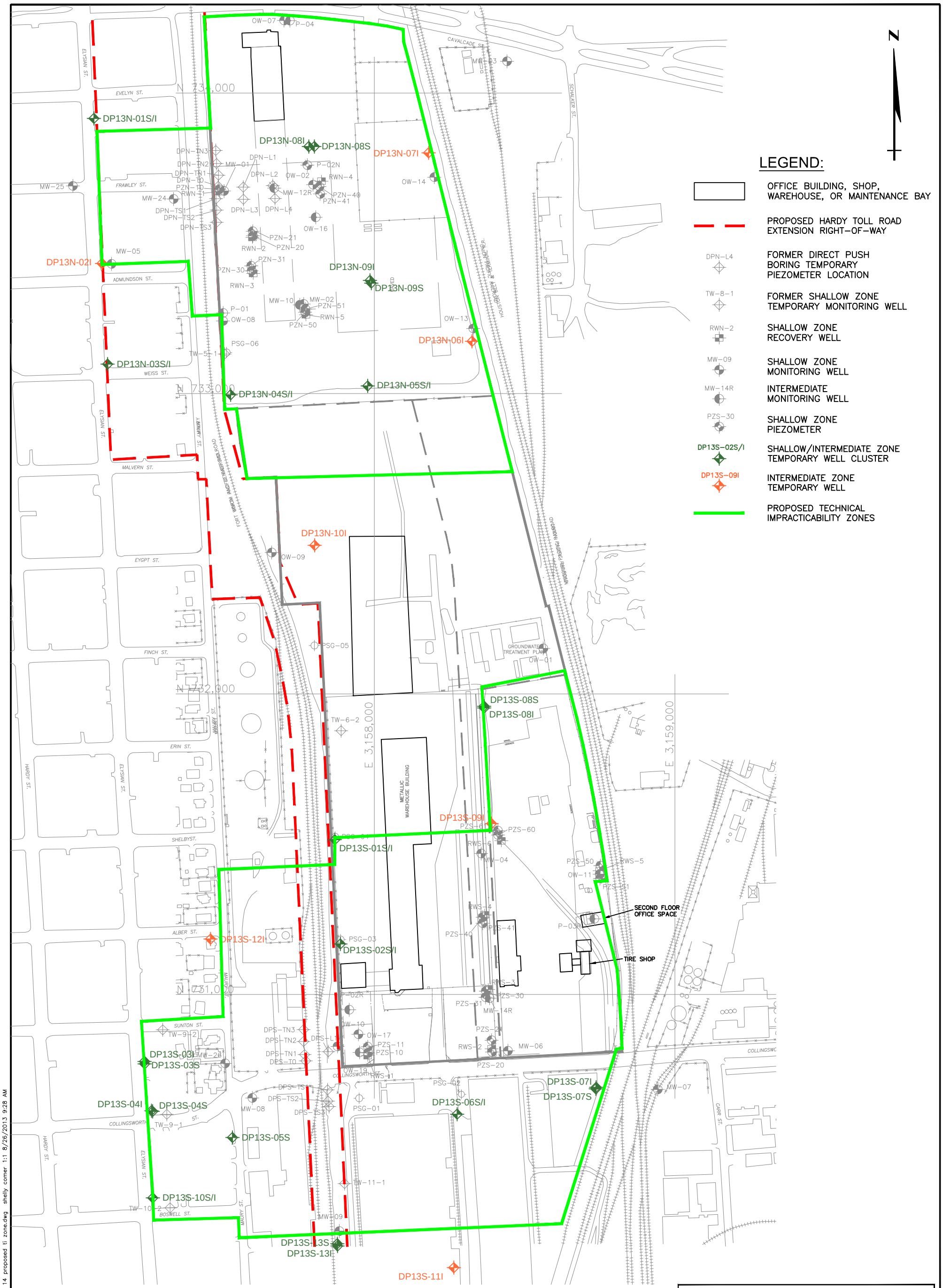
REV #	DATE	DESCRIPTION	APPD
1			

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

y:\south cavalcade\13-665\2013 draft report\figure 13 isoconcentration contours-intermediate.dwg shelly comer 1:1 8/26/2013 9:26 AM



REV #	DATE	DESCRIPTION	APPD
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REFERENCE:

ISSUE DATE:

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CARNEGIE, PA 15106

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE:	08/12/13
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APPD:	JSZ	DATE:	08/12/13
SCALE:	AS SHOWN		

KEY ENVIRONMENTAL INCORPORATED

TECHNICAL IMPRACTICABILITY ZONE
DELINEATION INVESTIGATION REPORT
SOUTH CAVALCADE SUPERFUND SITE
HOUSTON, TEXAS

PROPOSED TI ZONES

PROJECT NO: 13-665

FIGURE 14

y:\south cavalcade\13-665\2013 draft report\figure 14 proposed ti zone.dwg shelly comer 1:1 8/26/2013 9:28 AM

ATTACHMENT B

CORRESPONDENCE

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Tuesday, May 14, 2013 2:36 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz
Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Jim and Mike

Marilyn and I tried to reach both of you and got your voice mail and I left you both voice mail messages.

EPA and TCEQ concur with the changes made to the work plan.

EPA has an additional comment/clarification. *Section 2.2.2 in the Revised Work Plan indicates that groundwater samples will be shipped to the lab and analyzed for the analyte list which represents the constituents with remedial goals specified in the ROD and the complete list of EPA Priority Pollutant PAHs. It also indicates that sample analyses will be performed using EPA Method 8260B (for BTEX), 8270C Low Level (for PAHs), and 6020 (for Metals).* Upon discussion with other Remedial Project Managers within EPA, in order to establish the nature and extent of contaminants in groundwater, all the VOC results obtained using method 8260B and SVOC results obtained using method 8270C during the analysis of the above analyte list need to be reported to the EPA and the TCEQ. This is to ensure that any daughter product exceedances are accounted for as well in the evaluations. Please add a sentence in the Revised Work Plan to reflect this. As specified on page 25-2 of the Quality Assurance Manual (Appendix B of the Key Environmental Quality Assurance Project Plan (QAPP)) the report is to include Sample ID and Well ID cross reference sheet, Sample IDs, method used, Practical Quantitation Limits or Reporting limit, Method detection limits, Definition of Data qualifiers and reporting acronyms, and sample results.

I will send a letter with this comment also.

Please call me at 214-695-6825 if you wish to discuss these comments.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Monday, May 13, 2013 2:35 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz
Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Good Afternoon Everyone:

Attached is the revised TI Zone Delineation Work Plan for the South Cavalcade Site. The document is provided in tracked changes format to facilitate identification of the changes that were made in response to the May 8, 2013 EPA comment letter. The Work Plan Figures and a response to comment letter are also attached.

I will have our word processing personnel pull together a complete clean copy of the Work Plan for your files but I wanted to distribute the revisions for review as quickly as possible. If you have any questions or comments, please feel free to contact me or Mike Bollinger.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 08, 2013 4:48 PM
To: Mike.Bollinger@trmi.biz
Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky; Jim Zubrow
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Attached are EPA and TCEQ comments.....

Mike you will get the original in the mail. Others, this electronic copy in the only one that will be sent.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, May 02, 2013 7:09 AM
To: Josiam, Raji; marilyn.long@tceq.texas.gov; Mike.Bollinger@trmi.biz; Mike Valesky; Donna.Kopach@trmi.biz
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Good Morning:

Attached is the Quality Assurance Manual for the Test America Laboratory in Buffalo, New York. This laboratory has the capability to analyze for PAHs using the Low Level GC/MS method (EPA SW-846 Method 8270C). This document comprises Appendix B of the Key Environmental Quality Assurance Project Plan (QAPP) which is Appendix D to the draft Technical Impracticability Zone Work Plan that we submitted for review yesterday. Please contact me with any questions.

From: Jim Zubrow
Sent: Wednesday, May 01, 2013 3:09 PM
To: Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Mike Bollinger (Mike.Bollinger@trmi.biz); Mike Valesky; Donna (Pittsburgh) NA Kopach (Donna.Kopach@trmi.biz)
Subject: South Cavalcade - Draft TI Zone Delineation Work Plan

Good Afternoon Raji and Marilyn:

Attached for your review, is the draft TI Zone Delineation Work Plan for the South Cavalcade Site. If you feel a conference call would be beneficial in facilitating and expediting your review let us know and Mike Bollinger and I will make ourselves available. Thank You.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Wednesday, May 15, 2013 5:35 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz
Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky; Hueni, Camille
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Jim

I will forward the fact sheet as soon as I get the final version from our CIC folks.

Regarding the sampling, can you send us the TCL list for the SW-846 Methods that Test America uses for methods 8260B and 8270D (this has been revised, rev 4 2007) since each lab has their own TCL list. As long as the TCL list covers all of the COCs the TCL list can be used.

Also, based on Camille's experience with North Cavalcade Street Site (she is copied on this email) and the number of iterations they had to go through before their ROD Amendment was finalized here is something she wants us to check into to ensure we get the complete picture

- In particular, she wanted us to check for the reporting limits for benzo(a)pyrene and pentachlorophenol. Under 8270D, BAP has a quantitation limit of 10 ug/L (**however MCL = .2 ug/L**); pentachlorophenol has a 50 ug/L quantitation limit (**however MCL = 1 ug/L**). Pentachlorophenol can be hard to detect, but was finally detected at N. Cavalcade using other methods. At N. Cavalcade, pentachlorophenol was detected even in mid-to-low range naphthalene wells, and is also mobile. There will be other naphthalene-related constituents detected, and they can contribute to risk, so it is important that Beazer reports out all constituents and detections. (though in the past Beazer has indicated that pentachlorophenol was not part of the process analyzing for this will give us the data to prove that and eliminate that as a concern)

- She also recommends that the lab report out all analytes under the methods, underscore detections, and various detection levels, and data qualifiers. The metals list should be pretty standard across the board; ask to see that list and ask that all analytes for that method be reported out (not screened at this point).

If you would like to discuss this please let me know. Thanks.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [jzubrow@keyenvir.com]
Sent: Wednesday, May 15, 2013 10:17 AM
To: Josiam, Raji; Mike.Bollinger@trmi.biz
Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky
Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Good Morning Raji:

We will modify the work plan to indicate that the samples will be analyzed for Target Compound List (TCL) volatile organic compounds by EPA Method 8260B, TCL semi-volatile organic compounds by EPA Method 8270C. The list of metals to be analyzed will remain as is. Please confirm that the analyses for the TCL organic compounds is acceptable or in other words let us know if EPA or TCEQ would prefer that we run the analyses for a different listing of VOCs and SVOCs (e.g., priority pollutants).

Also, please forward a copy of the Fact Sheet once it is finalized. I would like for our field crew to have copies of the Fact Sheet with them in case they are approach by the public or media,. Thank you.

Regards:

Jim

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Sent: Wednesday, May 01, 2013 3:09 PM
To: Josiam, Raji (Donna.Kopach@trmi.biz)
Subject: South Cavalcade - Draft TI Zone Delineation Work Plan

Good Afternoon Raji and Marilyn:

Attached for your review, is the draft TI Zone Delineation Work Plan for the South Cavalcade Site. If you feel a conference call would be beneficial in facilitating and expediting your review let us know and Mike Bollinger and I will make ourselves available. Thank You.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Thursday, May 30, 2013 3:10 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim I have looked at the location and agree with the selection. Thanks for the update.

Raji Josiam
Remedial Project Manager
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Sent: Thursday, May 30, 2013 1:32 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Raji and Marilyn:

We received VOC results back from DP13S-05S yesterday. We had requested an extra quick turnaround on the analyses of this sample as Mike Valesky has observed indications of potential impact during drilling. The benzene concentration in this sample was reported as 12 ug/l which exceeds the MCL of 5 ug/l. The SVOC results will be available tomorrow morning but none the less we know now that we need to step out from the DP13S-05S location. Our proposed step out location DP13S-10S/I is shown on the attached figure. Mike V. and David Abshire have reviewed this location in the field and David indicated to Mike his agreement with our location selection. If you are in agreement also, please let me know ASAP so I can file the permit application with the City of Houston. Thanks.

Regards:

Jim

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 29, 2013 2:27 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Thanks for keeping us in the loop.

David Abshire should be at the site this week for a few days and next week for a few days.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

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Direct: 214-665-8529
Fax: 214-665-6660
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From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Wednesday, May 29, 2013 12:43 PM
To: Mike.Bollinger@trmi.biz; Josiam, Raji; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

I have to get you all caught up.

Thursday May 23

1) Drilled/sampled/installed DP13S-04I
2) Collected groundwater sample from DP13S-04I
3) Driller pulled and grouted wells DP13S-03S and DP13S-03I, via tremie method
4) Sampled wells OW-09, MW-10, MW-01, PZN-30, and MW-12R
5) Driller hand augers well location DP13S-05S to 6.5'
6) Driller hand augers well location DP13N-03S from 0-6.6 ft-bgs, no odors

Friday May 24

1) Drilled/sampled/installed DP13S-05S, DP13N-01S and DPN-03S
2) Collected groundwater samples from DP13S-05S, DP13N-01S and DPN-03S
3) Sampled existing well MW-26.

Tuesday May 28

1) Drilled/sampled/installed DP13N-01I and DP13N-03I
2) Collected groundwater samples from DP13N-01I and DP13N-03I
3) Sampled existing wells PZN-20, PZN-40, PZN-50 and OW-015.

Today we are installing the temporary wells on American Warehouses property.

From: Jim Zubrow
Sent: Thursday, May 23, 2013 4:41 PM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Sorry I am late getting this update out. Busy Day. Unfortunately, Wednesday was not as productive as we had hoped. The one driller called in sick and Fugro was unable to provide a replacement for him so we only had one rig in operation. Mike reports that inquiries from the public a few and far between. He said he has handed out about 4 fact sheets (one per day). He said today six people from the Department of State Health Services were on-site today and asked him a lot of questions.

Activities Completed – Wednesday May 22

1) Drilled and sampled DP13S-03I down to 55 ft, and installed temporary well.
2) Sampled Temporary Well DP13S-03I.
3) Drilled DP13S-04I down to 40 ft-bgs.
4) Groundwater samples were collected from existing monitoring wells OW-8, P-01, P-04, MW-03, MW-05, and OW-07.

Activities Planned for Thursday May 23, 2013

1) Complete and sample temporary well DPS-04I
2) Begin drilling at temporary well DPS13-05S
3) Tremie Grout DPS13-03S and DPS-03I
4) Continue sampling existing wells.

From: Jim Zubrow
Sent: Wednesday, May 22, 2013 9:33 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Activities Completed – Tuesday May 21

1) Drilled/installed two temporary well DP13S-03S and DP13S-04S.
2) Sampled temporary well DP13S-03S and DP13S-04S.
3) Drillers installed 3-inch temporary casing in well DP13S-03I and DP13S-04I.
4) Completed well gauging activities (Ryan should be sending/emailing gauging table today).

Activities Planned for Wednesday May 22, 2013

1) Complete temporary wells DPS13S-03I and DPS13S-04I
2) Sample temporary wells DPS13S-03I and DPS13S-04I
3) Begin drilling and temporary well installations at DP13N-01S/I and DP13N-03S/I
4) May sample some permanent wells in to keep technician busy until a temporary well is ready for sampling.

Contact me with any questions.

From: Jim Zubrow
Sent: Tuesday, May 21, 2013 9:26 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: Cavalcade Update

Activities Completed – Monday May 20

- Mobilized to the Site
- Mowing to facilitate access to north area wells.
- Met with property owners at Palletized Trucking and American Warehouses to review scope of work.
- Initiated Well Gauging
- Searched for Wells that previously could not be located. We did not locate any of the missing wells.

There is an issue with the MW-07 location. Our technician was not allowed to access the well to gauge it. Someone from the railroad ran him off of the property. We are going to try to get a name and contact from the railroad to discuss this.

Activities Planned for Tuesday May 21, 2013

- Complete gauging
- Drill and install temporary wells at locations DP13S-03S/I and DP13S-04S/I (Southwest of the Site).
- Sample temporary wells at locations DP13S-03S/I and DP13S-04S/I.

Contact me with any questions.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Friday, June 07, 2013 3:04 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim and Mike

I have discussed the plan with David and Marilyn and here are our collective thoughts. I will send a formal response once we have all come to an agreement.

- Proposal to install DP13S-11I and DP13S-12I (intermediates) only if the samples for the shallow for DP13S-06S and DP13S-02S locations come out clean - We are okay with this approach
- Proposal not to install DP13S-10I since DP13S-05I was clean – We are okay with approach
- DP13S-11I – We are okay with location
- DP13S-12I – We are okay with location
- Additional location west to southwest of MW-09 – both shallow and intermediate: Now that we have had to expand the TI area of evaluation one point of concern is the MW-09 corner. MW-09 was sampled in 1987 and indicated a naphthalene estimated value of 13 ug/L (the figure that was submitted indicates <40ug/L). TW-11-1 was sampled in 2005 and had naphthalene of 5.6 ug/L. Both of these are shallow wells. This area is downgradient of the site as well. Characterizing the current conditions in that corner will allow us to establish the TI boundary for that area for the shallow and intermediate zone.

Please let us know if you would like to discuss. Thanks. You can reach me at 214-695-6825.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

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From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, June 06, 2013 1:29 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Raji and Marilyn:

Please find attached showing two more proposed step out locations. We received data back from Intermediate Zone Temporary Well DP113S-06I located south of Collingsworth on American Warehouses property. Naphthalene was detected at 11,000 ug/l and benzene at 33 ug/l. Thus, we propose to install a temporary well (DP13S-11I) to the south of that well. We sampled Intermediate Zone Temporary Well DP13S-02I yesterday. Based on the observation of DNAPL

droplets on the sample tubing we are proposing to step out to the west to location DP13S-12I. At both locations impact was observed in the intermediate zone. We have not yet receive results for the shallow zone samples collected at these two locations but there was no evidence of impact observed in the shallow zone during the drilling or sampling activities. Assuming that the shallow sample results bear out the field observations and demonstrate that the shallow zone is clean at locations DP13S-2 and DP13S-6, KEY believes that only the intermediate zone would require sampling at the step out locations. Similarly recall that we installed shallow and intermediate wells at location DP13S-10 due to the shallow zone impacts observed at DP13S-05S. We have not yet installed intermediate zone well DP13S-05I because we believe that since that location is now within the proposed TI Zone, that a temporary well in the intermediate zone at that location is no longer necessary. Mike and I are available to go over all of this with you if that would be helpful. If you would like to discuss this, please advise us of a good time to give you a call. Thanks.

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4) Sampled wells OW-09, MW-10, MW-01, PZN-30, and MW-12R
5) Driller hand augers well location DP13S-05S to 6.5'
6) Driller hand augers well location DP13N-03S from 0-6.6 ft-bgs, no odors

Friday May 24

1) Drilled/sampled/installed DP13S-05S, DP13N-01S and DPN-03S
2) Collected groundwater samples from DP13S-05S, DP13N-01S and DPN-03S
3) Sampled existing well MW-26.

Tuesday May 28

1) Drilled/sampled/installed DP13N-01I and DP13N-03I
2) Collected groundwater samples from DP13N-01I and DP13N-03I
3) Sampled existing wells PZN-20, PZN-40, PZN-50 and OW-015.

Today we are installing the temporary wells on American Warehouses property.

From: Jim Zubrow
Sent: Thursday, May 23, 2013 4:41 PM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Sorry I am late getting this update out. Busy Day. Unfortunately, Wednesday was not as productive as we had hoped. The one driller called in sick and Fugro was unable to provide a replacement for him so we only had one rig in operation. Mike reports that inquiries from the public a few and far between. He said he has handed out about 4 fact sheets (one per day). He said today six people from the Department of State Health Services were on-site today and asked him a lot of questions.

Activities Completed – Wednesday May 22

1) Drilled and sampled DP13S-03I down to 55 ft, and installed temporary well.
2) Sampled Temporary Well DP13S-03I.
3) Drilled DP13S-04I down to 40 ft-bgs.
4) Groundwater samples were collected from existing monitoring wells OW-8, P-01, P-04, MW-03, MW-05, and OW-07.

Activities Planned for Thursday May 23, 2013

1) Complete and sample temporary well DPS-04I
2) Begin drilling at temporary well DPS13-05S
3) Tremie Grout DPS13-03S and DPS-03I
4) Continue sampling existing wells.

From: Jim Zubrow
Sent: Wednesday, May 22, 2013 9:33 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Activities Completed – Tuesday May 21

1) Drilled/installed two temporary well DP13S-03S and DP13S-04S.
2) Sampled temporary well DP13S-03S and DP13S-04S.
3) Drillers installed 3-inch temporary casing in well DP13S-03I and DP13S-04I.
4) Completed well gauging activities (Ryan should be sending/emailing gauging table today).

Activities Planned for Wednesday May 22, 2013

1) Complete temporary wells DPS13S-03I and DPS13S-04I
2) Sample temporary wells DPS13S-03I and DPS13S-04I
3) Begin drilling and temporary well installations at DP13N-01S/I and DP13N-03S/I
4) May sample some permanent wells in to keep technician busy until a temporary well is ready for sampling.

Contact me with any questions.

From: Jim Zubrow
Sent: Tuesday, May 21, 2013 9:26 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: Cavalcade Update

Activities Completed – Monday May 20

- Mobilized to the Site
- Mowing to facilitate access to north area wells.
- Met with property owners at Palletized Trucking and American Warehouses to review scope of work.
- Initiated Well Gauging
- Searched for Wells that previously could not be located. We did not locate any of the missing wells.

There is an issue with the MW-07 location. Our technician was not allowed to access the well to gauge it. Someone from the railroad ran him off of the property. We are going to try to get a name and contact from the railroad to discuss this.

Activities Planned for Tuesday May 21, 2013

- Complete gauging
- Drill and install temporary wells at locations DP13S-03S/I and DP13S-04S/I (Southwest of the Site).
- Sample temporary wells at locations DP13S-03S/I and DP13S-04S/I.

Contact me with any questions.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Friday, June 07, 2013 5:25 PM
To: Bollinger, Mike (Pittsburgh) USA; Jim Zubrow; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky; Sanchez, Carlos
Subject: RE: Cavalcade Update - Need Response

Ok thanks. Then you can use the location you have proposed for DP13S-13S/I.

Will put this all in a letter next week.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Bollinger, Mike (Pittsburgh) USA [mailto:Mike.Bollinger@TRMI.Biz]
Sent: Friday, June 07, 2013 4:18 PM
To: Josiam, Raji; Jim Zubrow; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky; Sanchez, Carlos
Subject: RE: Cavalcade Update - Need Response

Raji
Unfortunately, I think that location will fall in the Toll Road Right-of-way (red dashed lines on either side of the rail lines). The only way to move toward the west, I believe, would be to go all the way to the City of Houston ROW at Maury St. I think that may be too far west.

Michael W. Bollinger

Environmental Manager
Beazer East, Inc.
c/o Three Rivers Management, Inc. (Agent for Beazer East, Inc.)
Manor Oak One, Suite 200
1910 Cochran Road
Pittsburgh, PA 15220

(412) 208-8864 Office
(412) 208-8803 Fax
(412) 327-3362 Cell

Mike.Bollinger@TRMI.BIZ

Three Rivers Management, Inc., agent for Beazer East, Inc., Kaiser Cement, Inc. and others, is moving its office. Effective October 31, 2011, our new address will be:

Manor Oak One, Suite 200

1910 Cochran Road

Pittsburgh, PA 15220

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Friday, June 07, 2013 5:04 PM
To: Jim Zubrow; Bollinger, Mike (Pittsburgh) USA; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky; Sanchez, Carlos
Subject: RE: Cavalcade Update - Need Response

Jim

Take a look at the location I was proposing. It is slightly west of what you have (in blue). If it is going to be an access issue where you have it is fine. Please let me know. Thanks.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Friday, June 07, 2013 2:47 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Raji:

I have plotted the location of an additional well cluster in the vicinity of MW-09 and designated it DP13S-13S/I. Let us know what you think. Thanks. Have a great weekend.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Friday, June 07, 2013 3:04 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim and Mike

I have discussed the plan with David and Marilyn and here are our collective thoughts. I will send a formal response once we have all come to an agreement.

- Proposal to install DP13S-11I and DP13S-12I (intermediates) only if the samples for the shallow for DP13S-06S and DP13S-02S locations come out clean - We are okay with this approach
- Proposal not to install DP13S-10I since DP13S-05I was clean – We are okay with approach
- DP13S-11I – We are okay with location
- DP13S-12I – We are okay with location
- Additional location west to southwest of MW-09 – both shallow and intermediate: Now that we have had to expand the TI area of evaluation one point of concern is the MW-09 corner. MW-09 was sampled in 1987 and indicated a naphthalene estimated value of 13 ug/L (the figure that was submitted indicates <40ug/L). TW-11-1 was sampled in 2005 and had naphthalene of 5.6 ug/L. Both of these are shallow wells. This area is downgradient of the site as well. Characterizing the current conditions in that corner will allow us to establish the TI boundary for that area for the shallow and intermediate zone.

Please let us know if you would like to discuss. Thanks. You can reach me at 214-695-6825.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, June 06, 2013 1:29 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Raji and Marilyn:

Please find attached showing two more proposed step out locations. We received data back from Intermediate Zone Temporary Well DP113S-06I located south of Collingsworth on American Warehouses property. Naphthalene was detected at 11,000 ug/l and benzene at 33 ug/l. Thus, we propose to install a temporary well (DP13S-11I) to the south of that well. We sampled Intermediate Zone Temporary Well DP13S-02I yesterday. Based on the observation of DNAPL droplets on the sample tubing we are proposing to step out to the west to location DP13S-12I. At both locations impact was observed in the intermediate zone. We have not yet receive results for the shallow zone samples collected at these two locations but there was no evidence of impact observed in the shallow zone during the drilling or sampling activities. Assuming that the shallow sample results bear out the field observations and demonstrate that the shallow zone is clean at locations DP13S-2 and DP13S-6, KEY believes that only the intermediate zone would require sampling at the step out locations. Similarly recall that we installed shallow and intermediate wells at location DP13S-10 due to the shallow zone impacts observed at DP13S-05S. We have not yet installed intermediate zone well DP13S-05I because we believe that since that location is now within the proposed TI Zone, that a temporary well in the intermediate zone at that location is no longer necessary. Mike and I are available to go over all of this with you if that would be helpful. If you would like to discuss this, please advise us of a good time to give you a call. Thanks.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Thursday, May 30, 2013 3:10 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim I have looked at the location and agree with the selection. Thanks for the update.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, May 30, 2013 1:32 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Raji and Marilyn:

We received VOC results back from DP13S-05S yesterday. We had requested an extra quick turnaround on the analyses of this sample as Mike Valesky has observed indications of potential impact during drilling. The benzene concentration in this sample was reported as 12 ug/l which exceeds the MCL of 5 ug/l. The SVOC results will be available tomorrow morning but none the less we know now that we need to step out from the DP13S-05S location. Our proposed step out location DP13S-10S/I is shown on the attached figure. Mike V. and David Abshire have reviewed this location in the field and David indicated to Mike his agreement with our location selection. If you are in agreement also, please let me know ASAP so I can file the permit application with the City of Houston. Thanks.

Regards:

Jim

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 29, 2013 2:27 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Thanks for keeping us in the loop.

David Abshire should be at the site this week for a few days and next week for a few days.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Wednesday, May 29, 2013 12:43 PM
To: Mike.Bollinger@trmi.biz; Josiam, Raji; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

I have to get you all caught up.

Thursday May 23

1) Drilled/sampled/installed DP13S-04I
2) Collected groundwater sample from DP13S-04I
3) Driller pulled and grouted wells DP13S-03S and DP13S-03I, via tremie method
4) Sampled wells OW-09, MW-10, MW-01, PZN-30, and MW-12R
5) Driller hand augers well location DP13S-05S to 6.5'
6) Driller hand augers well location DP13N-03S from 0-6.6 ft-bgs, no odors

Friday May 24

1) Drilled/sampled/installed DP13S-05S, DP13N-01S and DPN-03S
2) Collected groundwater samples from DP13S-05S, DP13N-01S and DPN-03S
3) Sampled existing well MW-26.

Tuesday May 28

1) Drilled/sampled/installed DP13N-01I and DP13N-03I
2) Collected groundwater samples from DP13N-01I and DP13N-03I
3) Sampled existing wells PZN-20, PZN-40, PZN-50 and OW-015.

Today we are installing the temporary wells on American Warehouses property.

From: Jim Zubrow
Sent: Thursday, May 23, 2013 4:41 PM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Sorry I am late getting this update out. Busy Day. Unfortunately, Wednesday was not as productive as we had hoped. The one driller called in sick and Fugro was unable to provide a replacement for him so we only had one rig in operation. Mike reports that inquiries from the public a few and far between. He said he has handed out about 4 fact sheets (one per day). He said today six people from the Department of State Health Services were on-site today and asked him a lot of questions.

Activities Completed – Wednesday May 22

1) Drilled and sampled DP13S-03I down to 55 ft, and installed temporary well.
2) Sampled Temporary Well DP13S-03I.

3) Drilled DP13S-04I down to 40 ft-bgs.
4) Groundwater samples were collected from existing monitoring wells OW-8, P-01, P-04, MW-03, MW-05, and OW-07.

Activities Planned for Thursday May 23, 2013

1) Complete and sample temporary well DPS-04I
2) Begin drilling at temporary well DPS13-05S
3) Tremie Grout DPS13-03S and DPS-03I
4) Continue sampling existing wells.

From: Jim Zubrow
Sent: Wednesday, May 22, 2013 9:33 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Activities Completed – Tuesday May 21

1) Drilled/installed two temporary well DP13S-03S and DP13S-04S.
2) Sampled temporary well DP13S-03S and DP13S-04S.
3) Drillers installed 3-inch temporary casing in well DP13S-03I and DP13S-04I.
4) Completed well gauging activities (Ryan should be sending/emailing gauging table today).

Activities Planned for Wednesday May 22, 2013

1) Complete temporary wells DPS13S-03I and DPS13S-04I
2) Sample temporary wells DPS13S-03I and DPS13S-04I
3) Begin drilling and temporary well installations at DP13N-01S/I and DP13N-03S/I
4) May sample some permanent wells in to keep technician busy until a temporary well is ready for sampling.

Contact me with any questions.

From: Jim Zubrow
Sent: Tuesday, May 21, 2013 9:26 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: Cavalcade Update

Activities Completed – Monday May 20

- Mobilized to the Site
- Mowing to facilitate access to north area wells.
- Met with property owners at Palletized Trucking and American Warehouses to review scope of work.
- Initiated Well Gauging
- Searched for Wells that previously could not be located. We did not locate any of the missing wells.

There is an issue with the MW-07 location. Our technician was not allowed to access the well to gauge it. Someone from the railroad ran him off of the property. We are going to try to get a name and contact from the railroad to discuss this.

Activities Planned for Tuesday May 21, 2013

- Complete gauging
- Drill and install temporary wells at locations DP13S-03S/I and DP13S-04S/I (Southwest of the Site).
- Sample temporary wells at locations DP13S-03S/I and DP13S-04S/I.

Contact me with any questions.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Wednesday, June 19, 2013 3:51 PM
To: Mike Valesky
Cc: Sanchez, Carlos; Jim Zubrow; Mike.Bollinger@trmi.biz; Abshire, David; Marilyn Long
Subject: RE: Cavalcade Update - Need Response (Reply)

Thanks Mike.

Location DP13N-10I is acceptable.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Marilyn Long [mailto:marilyn.long@tceq.texas.gov]
Sent: Thursday, June 13, 2013 2:25 PM
To: Josiam, Raji
Cc: Sanchez, Carlos; Mike Valesky; Jim Zubrow; Mike.Bollinger@trmi.biz; Abshire, David
Subject: RE: Cavalcade Update - Need Response (Reply)

Raji,

I understand you are out of the office until the 19th and David is out of the office until the 17th & I was unable to contact Carlos. Based on your suggested alternative location, it is acceptable to the TCEQ.

Thank you,
Marilyn

Marilyn Czimer Long, P.G.
Texas Commission on Environmental Quality
MC-136
Superfund Section
Direct: 512-239-0761
email: Marilyn.Long@tceq.texas.gov

From: Mike Valesky [mailto:mvalesky@keyenvir.com]
Sent: Thursday, June 13, 2013 1:59 PM
To: Josiam, Raji; Jim Zubrow; Mike.Bollinger@trmi.biz; Marilyn Long; Abshire, David
Cc: Sanchez, Carlos
Subject: RE: Cavalcade Update - Need Response

Raji,

Naphthalene was detected in well DP13N-05I at a concentration of 4500 ppb, thus an additional intermediate well (DP13N-10I) will be stepped out and installed at the location shown on the attached drawing.

Contact Jim or me with any questions.

Regards, Mike

John M. Valesky
Senior Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Office (724) 533-7477
Cell (412) 780-9466

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Friday, June 07, 2013 5:04 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky; Sanchez, Carlos
Subject: RE: Cavalcade Update - Need Response

Jim

Take a look at the location I was proposing. It is slightly west of what you have (in blue). If it is going to be an access issue where you have it is fine. Please let me know. Thanks.

Raji Josiam
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US EPA Region 6
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From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Friday, June 07, 2013 2:47 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Raji:

I have plotted the location of an additional well cluster in the vicinity of MW-09 and designated it DP13S-13S/I. Let us know what you think. Thanks. Have a great weekend.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Friday, June 07, 2013 3:04 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim and Mike

I have discussed the plan with David and Marilyn and here are our collective thoughts. I will send a formal response once we have all come to an agreement.

- Proposal to install DP13S-11I and DP13S-12I (intermediates) only if the samples for the shallow for DP13S-06S and DP13S-02S locations come out clean - We are okay with this approach
- Proposal not to install DP13S-10I since DP13S-05I was clean – We are okay with approach
- DP13S-11I – We are okay with location
- DP13S-12I – We are okay with location
- Additional location west to southwest of MW-09 – both shallow and intermediate: Now that we have had to expand the TI area of evaluation one point of concern is the MW-09 corner. MW-09 was sampled in 1987 and indicated a naphthalene estimated value of 13 ug/L (the figure that was submitted indicates <40ug/L). TW-11-1 was sampled in 2005 and had naphthalene of 5.6 ug/L. Both of these are shallow wells. This area is downgradient of the site as well. Characterizing the current conditions in that corner will allow us to establish the TI boundary for that area for the shallow and intermediate zone.

Please let us know if you would like to discuss. Thanks. You can reach me at 214-695-6825.

Raji Josiam
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From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, June 06, 2013 1:29 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Raji and Marilyn:

Please find attached showing two more proposed step out locations. We received data back from Intermediate Zone Temporary Well DP113S-06I located south of Collingsworth on American Warehouses property. Naphthalene was detected at 11,000 ug/l and benzene at 33 ug/l. Thus, we propose to install a temporary well (DP13S-11I) to the south of that well. We sampled Intermediate Zone Temporary Well DP13S-02I yesterday. Based on the observation of DNAPL droplets on the sample tubing we are proposing to step out to the west to location DP13S-12I. At both locations impact was observed in the intermediate zone. We have not yet receive results for the shallow zone samples collected at these

two locations but there was no evidence of impact observed in the shallow zone during the drilling or sampling activities. Assuming that the shallow sample results bear out the field observations and demonstrate that the shallow zone is clean at locations DP13S-2 and DP13S-6, KEY believes that only the intermediate zone would require sampling at the step out locations. Similarly recall that we installed shallow and intermediate wells at location DP13S-10 due to the shallow zone impacts observed at DP13S-05S. We have not yet installed intermediate zone well DP13S-05I because we believe that since that location is now within the proposed TI Zone, that a temporary well in the intermediate zone at that location is no longer necessary. Mike and I are available to go over all of this with you if that would be helpful. If you would like to discuss this, please advise us of a good time to give you a call. Thanks.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Thursday, May 30, 2013 3:10 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update - Need Response

Jim I have looked at the location and agree with the selection. Thanks for the update.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Thursday, May 30, 2013 1:32 PM
To: Josiam, Raji; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Raji and Marilyn:

We received VOC results back from DP13S-05S yesterday. We had requested an extra quick turnaround on the analyses of this sample as Mike Valesky has observed indications of potential impact during drilling. The benzene concentration in this sample was reported as 12 ug/l which exceeds the MCL of 5 ug/l. The SVOC results will be available tomorrow morning but none the less we know now that we need to step out from the DP13S-05S location. Our proposed step out location DP13S-10S/I is shown on the attached figure. Mike V. and David Abshire have reviewed this location in the field and David indicated to Mike his agreement with our location selection. If you are in agreement also, please let me know ASAP so I can file the permit application with the City of Houston. Thanks.

Regards:

Jim

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 29, 2013 2:27 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz; marilyn.long@tceq.texas.gov; Abshire, David

Cc: Mike Valesky
Subject: RE: Cavalcade Update

Thanks for keeping us in the loop.

David Abshire should be at the site this week for a few days and next week for a few days.

Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]
Sent: Wednesday, May 29, 2013 12:43 PM
To: Mike.Bollinger@trmi.biz; Josiam, Raji; marilyn.long@tceq.texas.gov; Abshire, David
Cc: Mike Valesky
Subject: RE: Cavalcade Update

I have to get you all caught up.

Thursday May 23

1) Drilled/sampled/installed DP13S-04I
2) Collected groundwater sample from DP13S-04I
3) Driller pulled and grouted wells DP13S-03S and DP13S-03I, via tremie method
4) Sampled wells OW-09, MW-10, MW-01, PZN-30, and MW-12R
5) Driller hand augers well location DP13S-05S to 6.5'
6) Driller hand augers well location DP13N-03S from 0-6.6 ft-bgs, no odors

Friday May 24

1) Drilled/sampled/installed DP13S-05S, DP13N-01S and DPN-03S
2) Collected groundwater samples from DP13S-05S, DP13N-01S and DPN-03S
3) Sampled existing well MW-26.

Tuesday May 28

1) Drilled/sampled/installed DP13N-01I and DP13N-03I
2) Collected groundwater samples from DP13N-01I and DP13N-03I
3) Sampled existing wells PZN-20, PZN-40, PZN-50 and OW-015.

Today we are installing the temporary wells on American Warehouses property.

From: Jim Zubrow
Sent: Thursday, May 23, 2013 4:41 PM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long

(marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Sorry I am late getting this update out. Busy Day. Unfortunately, Wednesday was not as productive as we had hoped. The one driller called in sick and Fugro was unable to provide a replacement for him so we only had one rig in operation. Mike reports that inquiries from the public a few and far between. He said he has handed out about 4 fact sheets (one per day). He said today six people from the Department of State Health Services were on-site today and asked him a lot of questions.

Activities Completed – Wednesday May 22

1) Drilled and sampled DP13S-03I down to 55 ft, and installed temporary well.
2) Sampled Temporary Well DP13S-03I.
3) Drilled DP13S-04I down to 40 ft-bgs.
4) Groundwater samples were collected from existing monitoring wells OW-8, P-01, P-04, MW-03, MW-05, and OW-07.

Activities Planned for Thursday May 23, 2013

1) Complete and sample temporary well DPS-04I
2) Begin drilling at temporary well DPS13-05S
3) Tremie Grout DPS13-03S and DPS-03I
4) Continue sampling existing wells.

From: Jim Zubrow
Sent: Wednesday, May 22, 2013 9:33 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long (marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: RE: Cavalcade Update

Activities Completed – Tuesday May 21

1) Drilled/installed two temporary well DP13S-03S and DP13S-04S.
2) Sampled temporary well DP13S-03S and DP13S-04S.
3) Drillers installed 3-inch temporary casing in well DP13S-03I and DP13S-04I.
4) Completed well gauging activities (Ryan should be sending/emailing gauging table today).

Activities Planned for Wednesday May 22, 2013

1) Complete temporary wells DPS13S-03I and DPS13S-04I
2) Sample temporary wells DPS13S-03I and DPS13S-04I
3) Begin drilling and temporary well installations at DP13N-01S/I and DP13N-03S/I
4) May sample some permanent wells in to keep technician busy until a temporary well is ready for sampling.

Contact me with any questions.

From: Jim Zubrow
Sent: Tuesday, May 21, 2013 9:26 AM
To: Mike Bollinger (Mike.Bollinger@trmi.biz); Josiam, Raji (josiam.raji@epa.gov); Marilyn Long

(marilyn.long@tceq.texas.gov); Abshire, David (abshire.david@epa.gov)
Cc: Mike Valesky
Subject: Cavalcade Update

Activities Completed – Monday May 20

- Mobilized to the Site
- Mowing to facilitate access to north area wells.
- Met with property owners at Palletized Trucking and American Warehouses to review scope of work.
- Initiated Well Gauging
- Searched for Wells that previously could not be located. We did not locate any of the missing wells.

There is an issue with the MW-07 location. Our technician was not allowed to access the well to gauge it. Someone from the railroad ran him off of the property. We are going to try to get a name and contact from the railroad to discuss this.

Activities Planned for Tuesday May 21, 2013

- Complete gauging
- Drill and install temporary wells at locations DP13S-03S/I and DP13S-04S/I (Southwest of the Site).
- Sample temporary wells at locations DP13S-03S/I and DP13S-04S/I.

Contact me with any questions.

James Zubrow, P.G.
Principal Hydrogeologist
Key Environmental, Inc.
200 Third Avenue
Carnegie, PA 15106
Main (412) 279-3363
Direct (412) 428-9387
Mobile (412) 527-2356

ATTACHMENT C

TEMPORARY WELL LOGS

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-01I

DATE DRILLED: 5/28/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157066.96 N: 733915.53
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.9 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark brown Sandy SILT with some organics from 0.0-0.7' bgs, becoming grayish-brown in color below 2.5' bgs	100	0.0	0	Concrete
5			0.0	0	1" PVC Riser (Removed)
		100	0.0	0	Cement Bentonite Grout
10	Light gray Silty fine SAND with orange streaking throughout, dry, some light purplish-gray color from 10.0-10.3' bgs, moist below 10.3' bgs	50	0.0	0	
15		100	0.0	0	3" Temporary Casing (Removed)
	Reddish-orange Silty CLAY with some gray streaking throughout, stiff, moist, becoming very stiff below 21.6' bgs, orange coloration increasing with depth		0.0	0	Bentonite Seal
20		100	0.0	0	
	Orange Sandy SILT, moist		0.0	0	
25	Strong reddish-brown Silty CLAY, some to trace fine sand, few gray mottling lenses	100	0.0	0	

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-01I

DATE DRILLED: 5/28/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157066.96 N: 733915.53
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.9 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		below 28.5' bgs, sandy silt lense (1" thick) at 26.25' bgs and (2" thick) at 23.1' bgs, wet, trace gray mottling below 30.0' bgs increasing below 30.75' bgs, stiff, medium plasticity, moist, gray mottling increasing with depth below 31.7' bgs, becoming light gray with occasional orange mottling below 34.0' bgs	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0		2" Nominal Borehole
35		Light gray Silty fine SAND	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
		Light gray Silty CLAY with occasional orange mottling					
40		Light brown Sandy SILT, some to trace clay	40	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0		
45		Tan Silty CLAY with some red mottling, moist, some fine sand below 45.0' bgs, becoming reddish-brown below 48.75' bgs, stiff, with some coarse sand and gravel	55	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
50		Gray Sandy SILT, some to trace clay, wet	60	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0		
55		Strong reddish-brown CLAY, very stiff, moist					

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-01S

DATE DRILLED: 5/24/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157066.96 N: 733915.53
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.9 ft TOC: NA
TOTAL WELL DEPTH: 22 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT with some organics from 0.0-0.7' bgs, becoming grayish-brown in color below 2.5' bgs	100	0.0	0		Concrete
5				0.0	0		1" PVC Riser (Removed)
			100	0.0	0		Cement Bentonite Grout
10		Light gray Silty fine SAND with orange streaking throughout, dry, some light purplish-gray color from 10.0-10.3' bgs, moist below 10.3' bgs	50	0.0	0		2" Nominal Borehole
15			100	0.0	0		1" PVC Screen (10 slot) (Removed)
20		Reddish-orange Silty CLAY with some gray streaking throughout, stiff, moist, becoming very stiff below 21.6' bgs, orange coloration increasing with depth	100	0.0	0		
25		Orange Sandy SILT, moist		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-02I

DATE DRILLED: 5/31/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157094.02 N: 733432.81
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.5 ft TOC: NA
TOTAL WELL DEPTH: 51 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT with organic material throughout, becoming light brownish-gray in color and moist below 0.2' bgs	100	0.0	0		Concrete
5		Light brown Silty fine SAND with some orange streaking throughout, orange coloration increasing with depth, becoming dark gray in color and moist at 7.9' bgs, some orangish-brown streaks from 12.8-13.5' bgs	100	0.0	0		1" PVC Riser (Removed)
10			100	0.0	0		Cement Bentonite Grout
15		Light gray fine to medium SAND, saturated	50	0.0	0		3" Temporary Casing (Removed)
		Grayish-brown Sandy CLAY, soft, moist		0.0	0		
20		Dark reddish-brown Silty CLAY, stiff, moist, some gray streaking below 20.0' bgs	90	0.0	0		
25		Light brown Silty coarse SAND, moist	100	0.0	0		Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-02I

DATE DRILLED: 5/31/13

PROJECT INFORMATION	DRILLING INFORMATION
PROJECT: South Cavalcade	DRILLING CO: Fugro
SITE LOCATION: Houston, Texas	DRILLER: Mario Moya
PROJECT NO: 13665	DRILLING RIG: Geoprobe 2000
FIELD GEOLOGIST: Kyle Smith	DRILLING METHOD: Geoprobe
PROJECT MANAGER: Jim Zubrow	SAMPLING METHOD: 2" Discrete Sampler
COORDINATES: E: 3157094.02 N: 733432.81	ELEVATION: GND SURF: 49.5 ft TOC: NA
DATUM: NAD27/NAVD88	TOTAL WELL DEPTH: 51 ft
	TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	Completion Description
to ~37.5	Dark reddish-brown Silty CLAY, stiff, moist, some gray streaking throughout, saturated below 30.0' bgs, becoming soft and more gray in color at 36.1' bgs	100 (30–35)	2" Nominal Borehole
~37.5–49.5	Light gray Silty medium SAND, moist, with some light orange streaking below 40.0' bgs, becoming light brown and more fine sand below 45.0' bgs, some orange clay-like mottling from 46.5-46.8' bgs	100 (35–40); 100 (40–45); 100 (45–50)	1" PVC Screen (10 slot) (Removed)
49.5–55	Dark reddish-brown Silty CLAY, very stiff, moist, soft from 50.0-51.4' and 53.1-53.5' bgs	100 (50–55)	

Depth scale: 30, 35, 40, 45, 50, 55

PID: 0.0 (all readings, 26 values, approx. 29 to 54 ft bgs)

NAPL Rating: 0 (all readings, 27 values, approx. 28.5 to 54.5 ft bgs)

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-03I

DATE DRILLED: 5/28/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157112.58 N: 733097.92
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.2 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0				0.0	0		Concrete
			100	0.0	0		
				0.0	0		1" PVC Riser (Removed)
5				0.0	0		
		Dark brown Silty SAND, organic rich root material, dark to medium brown/gray below 0.25' bgs, some clay, clay content increasing with depth, lighter in color with depth, light gray Silty fine SAND with some orange streaking throughout below 6.0' bgs, dry, becoming slightly moist below 13.0' bgs, few organics from 11.5-12.0' bgs		0.0	0		
			15	0.0	0		Cement Bentonite Grout
10				0.0	0		
			50	0.0	0		
				0.0	0		
15				0.0	0		
		Orange and gray Clayey fine SAND, orange coloration and clay content increasing with depth	100	0.0	0		3" Temporary Casing (Removed)
				0.0	0		
20		Gray very Silty fine SAND, very moist		0.0	0		
		Orange and gray Clayey fine SAND, very moist	100	0.0	0		
				0.0	0		
				0.0	0		
25		Reddish-orange and gray Silty CLAY, stiff, moist, becoming very stiff with an increase in gray color below 27.5' bgs, decrease in moisture content with depth		0.0	0		Bentonite Seal
			80	0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-03I

DATE DRILLED: 5/28/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157112.58 N: 733097.92
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.2 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
				0.0	0		
30					0		
		NO RECOVERY	0				2" Nominal Borehole
35				0.0	0		
		Dark gray and light brown Silty CLAY, stiff, saturated		0.0	0		
				0.0	0		
		Light brown Clayey SILT, saturated	100	0.0	0		
				0.0	0		
40		Dark gray and light brown Silty CLAY, stiff, saturated		0.0	0		
				0.0	0		
		Light brown and gray Sandy CLAY, soft, moist, with an increase in sand content with depth	100	0.0	0		
				0.0	0		
		Light brown Silty fine SAND, moist		0.0	0		
45		Reddish-brown Silty CLAY, stiff, moist		0.0	0		
		Light brown and orange Silty Sandy CLAY, soft, moist		0.0	0		1" PVC Screen (10 slot) (Removed)
				0.0	0		
		Light brownish-gray Silty fine SAND, saturated	100	0.0	0		
				0.0	0		
50		Light brown and orange Silty Sandy CLAY, soft, moist, more clay content and reddish coloration with depth, less moisture with depth		0.0	0		
				0.0	0		
			100	0.0	0		
		Reddish-brown Silty CLAY, stiff, moist		0.0	0		
55							

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-03S

DATE DRILLED: 5/24/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157112.58 N: 733097.92
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.2 ft TOC: NA
TOTAL WELL DEPTH: 24 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Silty SAND, organic rich root material, dark to medium brown/gray below 0.25' bgs, some clay, clay content increasing with depth, lighter in color with depth, light gray Silty fine SAND with some orange streaking throughout below 6.0' bgs, dry, becoming slightly moist below 13.0' bgs, few organics from 11.5-12.0' bgs	100	0.0	0		Concrete
5			15	0.0	0		1" PVC Riser (Removed)
10			50	0.0	0		Cement Bentonite Grout
15		Orange and gray Clayey fine SAND, orange coloration and clay content increasing with depth	100	0.0	0		2" Nominal Borehole
20		Gray very Silty fine SAND, very moist	100	0.0	0		1" PVC Screen (10 slot) (Removed)
		Orange and gray Clayey fine SAND, very moist		0.0	0		
25		Reddish-orange and gray Silty CLAY, stiff, moist		0.0	0		

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-04I

DATE DRILLED: 6/1/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157521.81 N: 732995.9
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.5 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Medium to dark gray (brownish) Silty very fine SAND, trace clay, some organic root material in uppser 2", dry	90	0.0	0		Concrete
5		Brownish-gray and light brownish-gray Clayey SILT, some sand, moist	80	0.0	0		1" PVC Riser (Removed)
10		Light gray and brownish-gray Silty very fine SAND, coarser with depth, saturated below 10.5' bgs	80	0.0	0		Cement Bentonite Grout
15		Strong brown Sandy SILT, some clay, some to trace light to medium gray mottling, saturated, clay content increasing with depth	94	0.0	0		3" Temporary Casing (Removed)
20		Strong reddish-brown Silty CLAY, stiff, moist	90	0.0	0		Bentonite Seal
25		NO RECOVERY	0	0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-04I

DATE DRILLED: 6/1/13

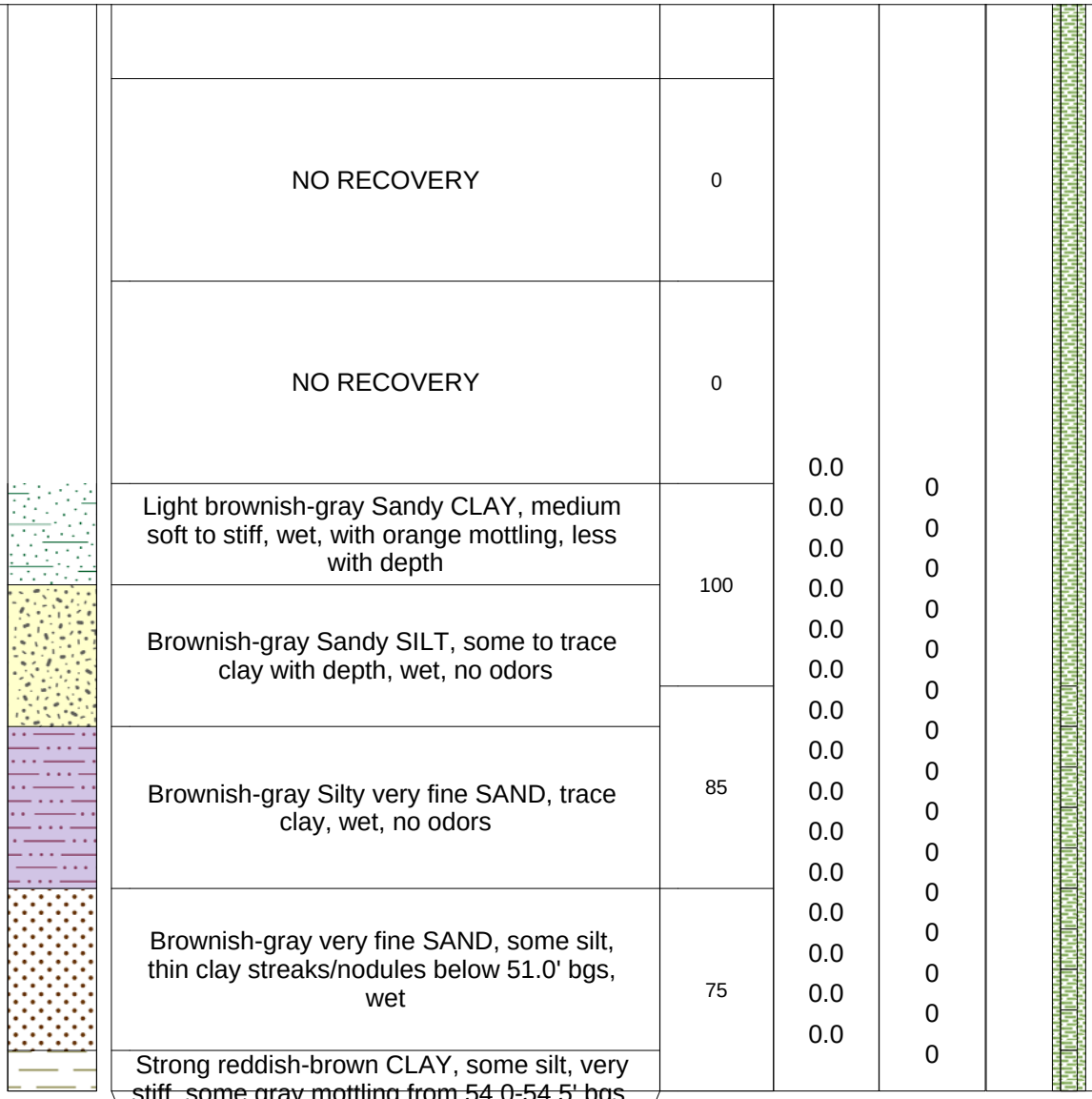
PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157521.81 N: 732995.9
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.5 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		NO RECOVERY	0	0.0	0		2" Nominal Borehole
35		NO RECOVERY	0	0.0	0		
40		Light brownish-gray Sandy CLAY, medium soft to stiff, wet, with orange mottling, less with depth	100	0.0	0		
		Brownish-gray Sandy SILT, some to trace clay with depth, wet, no odors		0.0	0		
45		Brownish-gray Silty very fine SAND, trace clay, wet, no odors	85	0.0	0		
		Brownish-gray very fine SAND, some silt, thin clay streaks/nodules below 51.0' bgs, wet	75	0.0	0		1" PVC Screen (10 slot) (Removed)
50				0.0	0		
				0.0	0		
				0.0	0		
55		Strong reddish-brown CLAY, some silt, very stiff, some gray mottling from 54.0-54.5' bgs, no odors		0.0	0		



NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-04S

DATE DRILLED: 5/31/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157521.81 N: 732995.9
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.5 ft TOC: NA
TOTAL WELL DEPTH: 22 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Medium to dark gray (brownish) Silty very fine SAND, trace clay, some organic root material in uppser 2", dry	90	0.0	0		Concrete
5		Brownish-gray and light brownish-gray Clayey SILT, some sand, moist	80	0.0	0		1" PVC Riser (Removed)
10		Light gray and brownish-gray Silty very fine SAND, coarser with depth, saturated below 10.5' bgs	80	0.0	0		Cement Bentonite Grout
15		Strong brown Sandy SILT, some clay, some to trace light to medium gray mottling, saturated, clay content increasing with depth	94	0.0	0		2" Nominal Borehole
20		Strong reddish-brown Silty CLAY, stiff, moist	90	0.0	0		1" PVC Screen (10 slot) (Removed)
25							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-05I

DATE DRILLED: 6/3/13

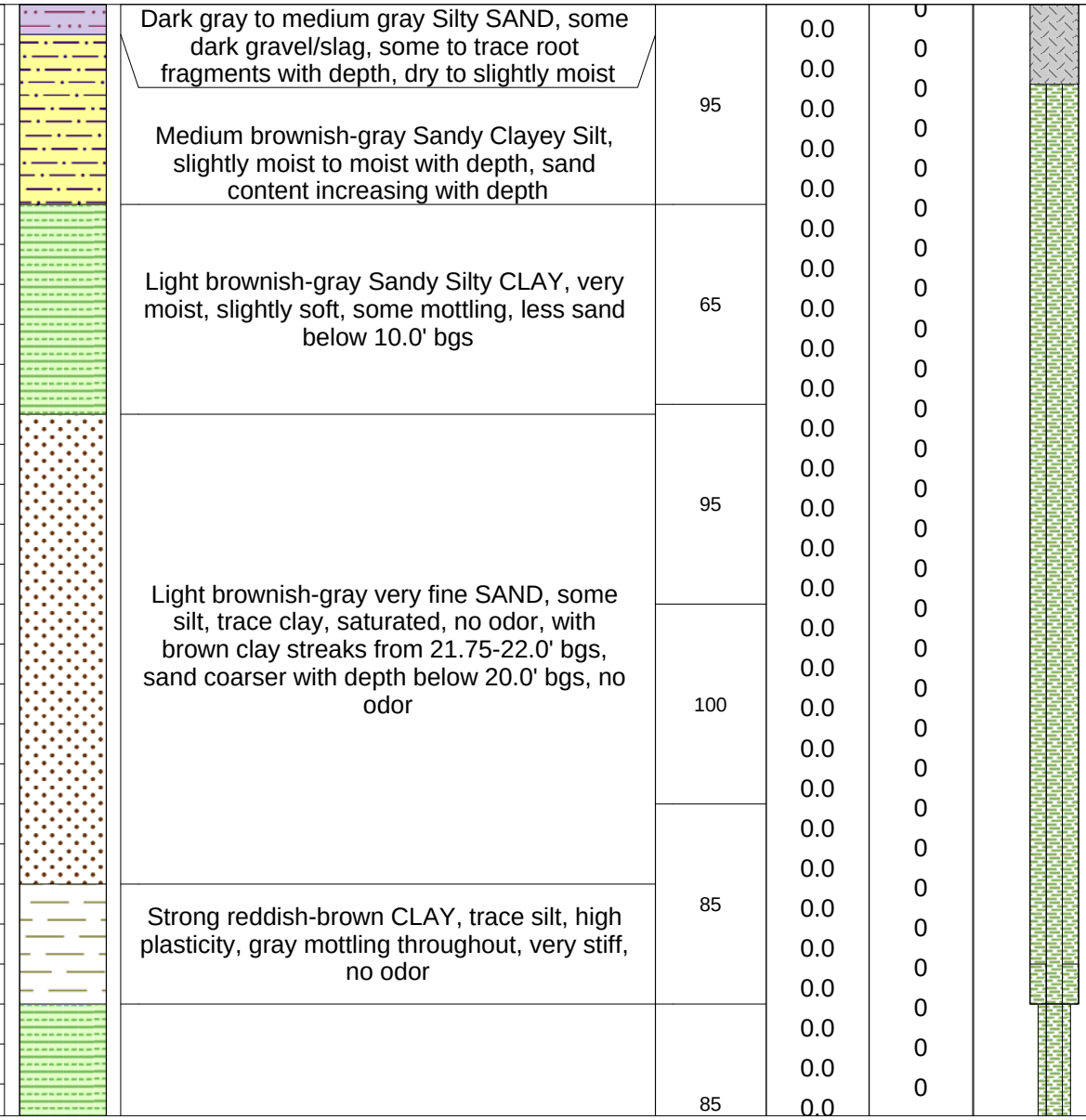
PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157977.81 N: 733025.1
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.0 ft TOC: NA
TOTAL WELL DEPTH: 45 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark gray to medium gray Silty SAND, some dark gravel/slag, some to trace root fragments with depth, dry to slightly moist	95	0.0	0	Concrete
	Medium brownish-gray Sandy Clayey Silt, slightly moist to moist with depth, sand content increasing with depth		0.0	0	1" PVC Riser (Removed)
5	Light brownish-gray Sandy Silty CLAY, very moist, slightly soft, some mottling, less sand below 10.0' bgs	65	0.0	0	Cement Bentonite Grout
10	Light brownish-gray very fine SAND, some silt, trace clay, saturated, no odor, with brown clay streaks from 21.75-22.0' bgs, sand coarser with depth below 20.0' bgs, no odor	95	0.0	0	
15		100	0.0	0	3" Temporary Casing (Removed)
20	Strong reddish-brown CLAY, trace silt, high plasticity, gray mottling throughout, very stiff, no odor	85	0.0	0	Bentonite Seal
25		85	0.0	0	



NOTES: 1" PVC riser removed and borehole filled with bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-05I

DATE DRILLED: 6/3/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157977.81 N: 733025.1
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.0 ft TOC: NA
TOTAL WELL DEPTH: 45 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Strong brown and reddish-brown Silty CLAY with gray mottling from 25.0-27.5' bgs, stiff, moist, high plasticity, occassional within silty streaks, trace fine gravel at 29.75' bgs, no odors, trace fine gravel/sand at 30.2' bgs (very thin streak), very stiff, medium/high plasticity, trace very thin black natural streaks below 30.2' bgs with gray mottling, trace to some with depth, medium gray in color with reddish-brown mottling below 34.75' bgs, some fine gravel below 35.0' bgs, orange mottling below 35.25' bgs, siltier/sandier with depth		0.0	0		
35			84	0.0	0		2" Nominal Borehole
40			62	0.0	0		
		Light brownish-gray CLAY	60	0.0	0		
		Strong brown and reddish-brown Silty CLAY		0.0	0		
45		Light brownish-gray very fine Sandy SILT, saturated, will liquify when shaken, no odors, coarser sand and content increasing with depth below 45.0' bgs	30	0.0	0		1" PVC Screen (10 slot) (Removed)
50		Gray Silty Clayey SAND, wet	65	0.0	0		
55		Strong reddish-brown Clay, stiff, moist		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-05S

DATE DRILLED: 5/31/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157977.81 N: 733025.1
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.0 ft TOC: NA
TOTAL WELL DEPTH: 22 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark gray to medium gray Silty SAND, some dark gravel/slag, some to trace root fragments with depth, dry to slightly moist	95	0.0	0		Concrete
		Medium brownish-gray Sandy Clayey Silt, slightly moist to moist with depth, sand content increasing with depth		0.0	0		1" PVC Riser (Removed)
5		Light brownish-gray Sandy Silty CLAY, very moist, slightly soft, some mottling, less sand below 10.0' bgs	65	0.0	0		Cement Bentonite Grout
10		Light brownish-gray very fine SAND, some silt, trace clay, saturated, no odor, with brown clay streaks from 21.75-22.0' bgs, sand coarser with depth below 20.0' bgs, no odor	95	0.0	0		2" Nominal Borehole
15			100	0.0	0		1" PVC Screen (10 slot) (Removed)
20		Strong reddish-brown CLAY, trace silt, high plasticity, gray mottling throughout, very stiff, no odor	85	0.0	0		
25							

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-06I

DATE DRILLED: 6/10/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158325.11 N: 733173.77
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.4 ft TOC: NA
TOTAL WELL DEPTH: 57.5 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Medium brown Sand with some fine gravel (slag/road base material) throughout, fill	90	0.0	0		Concrete
		Olive greenish-gray Silty CLAY, some fine gravel, stiff, moist, some fill		0.0	0		
		Medium to dark brown Silty very fine SAND, some clay, organic rich, moist, dark gray mottling throughout below 3.75' bgs, with an increase in clay content with depth		0.0	0		1" PVC Riser (Removed)
5				0.0	0		
		Light to medium grayish-brown Silty Clayey very fine SAND, moist, with orange mottling and few black specks (natural) throughout	65	0.0	0		Cement Bentonite Grout
				0.0	0		
10				0.0	0		
		Light gray to light brownish-gray Silty very fine SAND, trace clay, saturated, less clay with depth, several black streaks (natural) below 14.5' bgs	70	0.0	0		
				0.0	0		
15				0.0	0		
			100	0.0	0		3" Temporary Casing (Removed)
				0.0	0		
20		Light brownish-gray very fine to fine SAND, some silt, trace clay		0.0	0		
		Strong reddish-brown Silty CLAY with gray mottling, stiff, some to medium plasticity	66	0.0	0		
				0.0	0		
25		NO RECOVERY	0	0.0	0		Bentonite Seal
30							

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-06I

DATE DRILLED: 6/10/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158325.11 N: 733173.77
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.4 ft TOC: NA
TOTAL WELL DEPTH: 57.5 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
30–35	Strong reddish-brown Silty CLAY with gray mottling, stiff, some to medium plasticity, trace fine sand below 35.5' bgs, silt content increasing with depth, light brownish-gray below 37.5' bgs	80	0.0	0	2" Nominal Borehole
		74	0.0	0	
35–40			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
40–45	Light brownish-gray Clayey Sandy SILT, trace clay below 44.0' bgs, close to a silty very fine sand below 45.0' bgs, coarser sand with depth below 50.0' bgs, silt/clay content increasing with depth below 55.0' bgs	60	0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
45–50		80	0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
50–55		82	0.0	0	1" PVC Screen (10 slot) (Removed)
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
55–60	Strong reddish-brown Silty CLAY, very stiff, moist, gray mottling throughout	80	0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-07I

DATE DRILLED: 6/6/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158180.54 N: 733801.14
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.6 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Light brown and gray Silty coarse GRAVEL with some fine sand, dry	100	0.0 0.0 0.0 1.0 0.7	1 1 1 1 1		Concrete 1" PVC Riser (Removed)
5		Dark gray Sandy SILT, dry, odor present	100	2.1 3.3 4.7 8.2 8.1	1 1 1 1 1		Cement Bentonite Grout
10		Brownish-gray Clayey SILT, odor present	100	7.4 6.2 6.1 5.2 4.1	1 1 1 1 1		
15		Light gray Silty fine SAND, saturated, odor present, becoming darker in color with depth	100	3.2 3.1 4.0 2.7 2.5	1 1 1 1 1		3" Temporary Casing (Removed)
20		Brownish-gray Clayey SILT, odor present Dark reddish-brown Silty CLAY, stiff, moist, faint odor Brownish-gray Sandy Clayey SILT, moist	100	0.0 0.0 0.0 0.0 0.0	0 0 0 0 0		
25		Dark reddish-brown Silty CLAY, stiff, moist, faint odor below 25.0' bgs, more gray in color below 28.7' bgs	100	0.0 0.0 0.0 0.0	1 1 1 1		Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-07I

DATE DRILLED: 6/6/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158180.54 N: 733801.14
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.6 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Brown very Silty fine SAND, saturated	100	0.0 0.0 0.0 0.0 0.0	1 1 0 0 0		2" Nominal Borehole
35		Dark reddish-brown Silty CLAY, stiff, moist, some gray coloration below 34.3' bgs, soft with a faint odor below 35.0' bgs, small dark brown silt lens at 37.1' bgs, strong odor, PID (6.4 ppm)	100	1.2 0.4 6.4 5.2 1.3	0 1 1 1 1		
40		Light brown and gray Clayey SILT, moist, becoming more gray with depth, odor	60	1.4 2.1 2.4 3.3 3.2	1 1 1 1 1		
45		Gray Silty fine SAND with some brown streaks throughout, odor, some dark brown and black streaks from 46.5-47.2' bgs, black staining on glove, strong odor, PID (11.3 ppm), moist	100	9.4 9.9 11.3 9.6 4.2	2 2 1 1 1		1" PVC Screen (10 slot) (Removed)
50			60	11.2 8.3 4.6 4.0 2.7	1 1 1 1 1		
55		Dark reddish-brown Silty CLAY, stiff, moist			1		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-08I

DATE DRILLED: 6/10/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157782.03 N: 733821.94
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.8 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Asphalt		0.0	0		Concrete
		Dark brown Silty GRAVEL, loose, (fill-like material)	100	0.0	0		
5		Light brown Sandy SILT, dry, becoming brownish-gray in color below 6.2' bgs	100	0.0	0		1" PVC Riser (Removed)
10		Brown fine SAND, moist, saturated and gray in color below 10.0' bgs, sand becoming very fine below 12.2' bgs, faint odor at 18.7' bgs, no odor, no PID reading (0.0 ppm)	100	0.0	0		Cement Bentonite Grout
15			100	0.0	0		3" Temporary Casing (Removed)
20		Dark reddish-brown Silty CLAY, soft, moist, with some gray coloration throughout, becoming stiff below 20.6' bgs	100	0.0	0		
25		Light brown Clayey SILT, moist, faint odor,	100	0.0	0		Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-08I

DATE DRILLED: 6/10/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157782.03 N: 733821.94
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.8 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30	no PID reading (0.0 ppm) Dark reddish-brown Silty CLAY, soft, moist, with some gray coloration throughout, becoming stiff below 20.6' bgs		0.0	0		
			0.0	0		
			0.0	0		
			0.0	0		
	Light brown Clayey SILT, saturated, faint odor, no PID reading (0.0 ppm)	100	0.0	0		2" Nominal Borehole
			0.0	0		
			0.0	0		
35			0.0	0		
	Brownish-gray Silty CLAY, stiff, moist, very stiff below 37.8' bgs, faint odor, no PID reading (0.0 ppm)	100	0.0	0		
			0.0	0		
			0.0	0		
40			0.0	0		
			0.0	0		
		100	0.0	0		
			0.0	0		
			0.0	0		
45			0.0	0		
	Light gray and some brown very Silty fine SAND, moist, brown coloration increasing with depth below 45.7' bgs, faint odor present, some orangish-brown streaking below 48.2' bgs, slightly moist, some black staining (0.5" thick) at 52.2', 52.6', and 52.9' bgs, odor present	100	0.3	1		1" PVC Screen (10 slot) (Removed)
			0.4	1		
			1.2	1		
			1.4	1		
50			2.4	1		
			3.7	1		
		100	2.1	1		
			1.0	1		
	Dark reddish-brown Silty CLAY, stiff, moist, black staining (0.5" thick) at 54.1' bgs, odor present		0.2	1		
55						

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-08S

DATE DRILLED: 6/7/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157800.53 N: 733821.98
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.0 ft TOC: NA
TOTAL WELL DEPTH: 20 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Asphalt		0.0	0		Concrete
		Dark brown Silty GRAVEL, loose, (fill-like material)	100	0.0	0		
				0.0	0		1" PVC Riser (Removed)
5		Light brown Sandy SILT, dry, becoming brownish-gray in color below 6.2' bgs		0.0	0		
			100	0.0	0		Cement Bentonite Grout
				0.0	0		
10		Brown fine SAND, moist, saturated and gray in color below 10.0' bgs, sand becoming very fine below 12.2' bgs, faint odor at 18.7' bgs, no odor, no PID reading (0.0 ppm)		0.0	0		2" Nominal Borehole
			100	0.0	0		
				0.0	0		
15				0.0	0		1" PVC Screen (10 slot) (Removed)
			100	0.0	0		
				0.0	0		
20		Dark reddish-brown Silty CLAY, soft, moist, with some gray coloration throughout, becoming stiff below 20.6' bgs		0.0	0		
			100	0.0	0		
				0.0	0		
25				0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-09I

DATE DRILLED: 6/7/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157985.66 N: 733376.48
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.9 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Asphalt		0.0	0	Concrete
	Gray loose GRAVEL, (road base material), dry		0.0	0	
	Dark brown to black Silty GRAVEL with some sand, slag material (cinders), some silt, moist	100	0.0	0	1" PVC Riser (Removed)
5	Medium gray to dark greenish-gray Sandy SILT, some clay, wet		0.0	0	
	Medium brownish-gray and orangish-brown (mottling) Silty CLAY, some sandy silt, sand content increasing with depth	92	0.0	0	Cement Bentonite Grout
	Brownish-gray Silty very fine SAND, trace to some clay, moist, saturated below 10.25' bgs		0.0	0	
10		70	0.0	0	
	Light to medium brownish-gray very fine SAND, some silt, trace clay, orange mottling/streaks throughout, trace clay streaks/nodules throughout below 15.0' bgs		0.0	0	
15		100	0.0	0	3" Temporary Casing (Removed)
			0.0	0	
20	Light gray to medium gray Silty CLAY with reddish-brown streaks throughout, stiff, strong reddish brown in color below 21.0' bgs, some silt and very thin sand streaks below 24.0' bgs	74	0.0	0	
			0.0	0	
25	NO RECOVERY	0	0.0	0	Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-09I

DATE DRILLED: 6/7/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157985.66 N: 733376.48
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.9 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30	Strong reddish-brown and gray Silty CLAY, moist, very stiff, light to medium brownish-gray in color below 35.0' bgs, some to trace gravel, some sand, moist, sand content increasing with depth	100	0.0	0		2" Nominal Borehole
35		50	0.0	0		
40	Brownish-gray very fine Sandy SILT, trace clay, wet/saturated, no odors	50	0.0	0		
45		80	0.0	0		1" PVC Screen (10 slot) (Removed)
50	Brownish-gray Silty CLAY, soft, moist		0.0	0		
	Brownish-gray very fine Sandy SILT, grading into a clayey silt	86	0.0	0		
55	Strong reddish-brown and gray Silty CLAY, moist, very stiff, no odors		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-09S

DATE DRILLED: 6/7/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157989.77 N: 733367.49
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.9 ft TOC: NA
TOTAL WELL DEPTH: 22.25 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Asphalt	100	0.0	0		Concrete
		Gray loose GRAVEL, (road base material), dry		0.0	0		
		Dark brown to black Silty GRAVEL with some sand, slag material (cinders), some silt, moist		0.0	0		1" PVC Riser (Removed)
		Medium gray to dark greenish-gray Sandy SILT, some clay, wet		0.0	0		
5		Medium brownish-gray and orangish-brown (mottling) Silty CLAY, some sandy silt, sand content increasing with depth	92	0.0	0		Cement Bentonite Grout
				0.0	0		
		Brownish-gray Silty very fine SAND, trace to some clay, moist, saturated below 10.25' bgs		0.0	0		2" Nominal Borehole
10			70	0.0	0		
				0.0	0		
		Light to medium brownish-gray very fine SAND, some silt, trace clay, orange mottling/streaks throughout, trace clay streaks/nodules throughout below 15.0' bgs		0.0	0		
15			100	0.0	0		1" PVC Screen (10 slot) (Removed)
				0.0	0		
				0.0	0		
20		Light gray to medium gray Silty CLAY with reddish-brown streaks throughout, stiff, strong reddish brown in color below 21.0' bgs, some silt and very thin sand streaks below 24.0' bgs	74	0.0	0		
				0.0	0		
				0.0	0		
25				0.0	0		

NOTES: 1" PVC riser removed and borehole filled with bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-10I

DATE DRILLED: 6/13/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157801.69 N: 732494.78
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.5 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark brown Sandy SILT with heavy organic material from 0.0-0.2' bgs, becoming siltier and more gray in color with depth, slightly moist	100	0.0	0	Concrete
5	Light brownish-gray Clayey SILT, dry, with some sand below 4.2' bgs		0.0	0	1" PVC Riser (Removed)
	Light brown and gray Sandy SILT with some orange streaking throughout, moist, with some black streaking between 5.5-5.7', 6.3-6.6', and 8.2-8.6' bgs, no odor, no PID reading (0.0 ppm)	100	0.0	0	Cement Bentonite Grout
10	Gray very fine SAND, very moist	100	0.0	0	
	Reddish-brown Silty CLAY, soft, moist, with some gray streaking throughout		0.0	0	
15	Gray and light brown Sandy Clayey SILT, moist	100	0.0	0	3" Temporary Casing (Removed)
	Reddish-brown Silty Sandy CLAY, soft, moist, with some gray streaking throughout, saturated below 20.0' bgs		0.0	0	
20		100	0.0	0	
25		100	0.0	0	Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13N-10I

DATE DRILLED: 6/13/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157801.69 N: 732494.78
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.5 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Dark reddish-brown Silty CLAY, stiff, moist, some gray streaking throughout, some fine sand throughout below 33.9' bgs	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		2" Nominal Borehole
35		NO RECOVERY	0				
40		Gray and reddish-brown Sandy CLAY, soft, moist	60	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		
45		Light gray Silty coarse SAND, moist, becoming slightly moist below 45.0' bgs	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
50		Reddish-gray Sandy Silty CLAY, soft moist	60	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		
55		Dark reddish-brown Silty CLAY, stiff, moist					

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

BOREHOLE LOG: DP13S-01I

DATE DRILLED: 6/3/13

PROJECT INFORMATION	DRILLING INFORMATION
PROJECT: South Cavalcade	DRILLING CO: Fugro
SITE LOCATION: Houston, Texas	DRILLER: Mario Moya
PROJECT NO: 13665	DRILLING RIG: Geoprobe 2000
FIELD GEOLOGIST: Kyle Smith	DRILLING METHOD: Geoprobe
PROJECT MANAGER: Jim Zubrow	SAMPLING METHOD: 2" Discrete Sampler
COORDINATES: E: 3157868.59 N: 731514.96	ELEVATION: GND SURF: 47.4 ft TOC: NA
DATUM: NAD27/NAVD88	TOTAL WELL DEPTH: 53 ft
	TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0	Asphalt	100	0.0	0		Concrete
	Dark brown Silty GRAVEL (fill-like material)		0.4	1		
	Dark gray Sandy SILT with some black fill-like material throughout, faint odor at 2.0' bgs		0.0	0		1" PVC Riser (Removed)
5	Gray Clayey SILT, moist	60	0.0	0		
			0.0	0		
			0.0	0		
			0.1	1		
			0.3	1		Cement Bentonite Grout
	Dark gray Silty fine SAND, moist, turning light gray with some orange streaks throughout at 8.9' bgs, faint odor		0.1	1		
10			0.1	1		
		100	0.1	1		
			0.0	1		
	Light gray coarse SAND, saturated, with some brown streaks from 13.5-13.7' bgs, faint odor, several small black specks from 16.9-17.1' bgs, faint odor		0.1	1		
			0.1	1		
15			0.3	1		
			0.4	1		
		100	0.3	1		3" Temporary Casing (Removed)
			0.2	1		
			0.2	1		
20			0.1	1		
			0.2	1		
		100	0.0	0		
			0.0	0		
			0.0	0		
25			0.0	0		Bentonite Seal
	Reddish-brown Silty CLAY, stiff, moist, no odor below 22.0' bgs, with some gray streaking from 27.9-30-0' bgs, some fine	100	0.0	0		
			0.0	0		
			0.0	0		

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-01I

DATE DRILLED: 6/3/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157868.59 N: 731514.96
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.4 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		white silt layers from 31.5-31.6' and 33.4-33.5' bgs	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0		2" Nominal Borehole
35		Light brown Silty Sandy CLAY Brown Sandy SILT, moist					
40		Light brown and gray Silty CLAY, soft, moist, with some black streaking from 37.4-37.9' bgs, no odor, no PID reading (0.0 ppm), becoming reddish-brown and gray in color below 39.1' bgs	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0		
45		Brown Silty coarse SAND, saturated	100	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
50		Reddish-brown and gray Silty CLAY, stiff, moist, becoming brown and gray in color below 45.4' bgs, some black streaking from 46.3-46.6' bgs, no odor, no PID reading (0.0 ppm), turning reddish-brown in color below 48.9' bgs, becoming brownish gray and soft below 50.0' bgs with a black streak from 51.6-51.9' bgs, no odor, no PID reading (0.0 ppm), becoming reddish-brown, very stiff, moist below 52.5' bgs	90	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0		
55							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-01S

DATE DRILLED: 5/31/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157868.59 N: 731514.96
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.4 ft TOC: NA
TOTAL WELL DEPTH: 22 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Asphalt		0.0	0		
		Dark brown Silty GRAVEL (fill-like material)		0.4	1		Concrete
		Dark gray Sandy SILT with some black fill-like material throughout, faint odor at 2.0' bgs	100	0.0	0		
				0.0	0		1" PVC Riser
				0.0	0		(Removed)
5		Gray Clayey SILT, moist		0.0	0		
				0.0	1		Cement Bentonite
			60	0.1	1		Grout
		Dark gray Silty fine SAND, moist, turning light gray with some orange streaks throughout at 8.9' bgs, faint odor		0.3	1		
				0.1	1		2" Nominal
10				0.1	1		Borehole
				0.1	1		
			100	0.0	1		
		Light gray coarse SAND, saturated, with some brown streaks from 13.5-13.7' bgs, faint odor, several small black specks from 16.9-17.1' bgs, faint odor		0.1	1		
				0.1	1		
15				0.3	1		
				0.4	1		
			100	0.3	1		
				0.2	1		
				0.2	1		1" PVC Screen
20				0.1	1		(10 slot)
				0.2	1		(Removed)
		Reddish-brown Silty CLAY, stiff, moist, no odor below 22.0' bgs	100	0.0	0		
				0.0	0		
25				0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-02I

DATE DRILLED: 6/4/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157887.03 N: 731168.4
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.2 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Asphalt	100	0.0	0	Concrete
	Brown Silty GRAVEL (fill-like material)		0.0	0	
	Dark brown Sandy SILT with some black fill-like material throughout, odor		5.2	1	1" PVC Riser (Removed)
5	Dark gray Clayey SILT, moist, odor		4.1	1	
			2.6	1	
			1.2	1	
	Dark gray Sandy SILT, moist, faint odor at 6.2' bgs	100	3.1	1	Cement Bentonite Grout
			4.3	1	
	Light gray Silty fine SAND with some orange streaking throughout, faint odor		3.0	1	
10			2.7	1	
	Dark brown and gray Sandy SILT with some green streaks throughout, moist		2.2	1	
		100	1.2	1	
			1.5	1	
			2.1	1	
			2.1	1	
15	Dark green Silty fine SAND, moist, green coloration becoming gray at 12.0' bgs, saturated below 12.3' bgs, faint odor, some light green color returning at 17.6' bgs	50	3.4	1	3" Temporary Casing (Removed)
			2.1	1	
			1.2	1	
			1.5	1	
20			1.0	1	
			1.0	1	
	Dark reddish-brown Silty CLAY, stiff, moist, no odor below 22.0' bgs	100	0.5	1	
			0.0	0	
			0.0	0	
25			0.0	0	Bentonite Seal
	NO RECOVERY	0			
30					

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-02I

DATE DRILLED: 6/4/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157887.03 N: 731168.4
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.2 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
30	NO RECOVERY	0	0.0	1	2" Nominal Borehole
35	Dark brown and some gray Silty CLAY, soft, moist, faint odor, no PID reading (0.0 ppm), some dark gray to black coarse sand at 42.4' bgs, odor present	40	0.0	1	
			0.0	1	
			0.0	1	
			0.0	1	
40		100	0.3	1	1" PVC Screen (10 slot) (Removed)
			9.7	1	
			0.0	1	
			0.0	1	
			0.0	1	
45	Light brown Sandy SILT, moist	80	0.0	0	
	Dark reddish-brown Silty CLAY, soft, moist		0.0	0	
	Light brown Sandy SILT, moist		0.0	0	
	Light brown Silty fine SAND, moist		0.0	0	
			0.0	0	
50	Light brown Sandy SILT, moist		0.0	0	
			0.0	0	
		60	0.0	0	
			0.0	0	
			0.0	0	
55	Light brown Silty fine SAND, becoming gray in color below 54.2' bgs		0.0	0	1" PVC Screen (10 slot) (Removed)
			0.0	0	
		50	0.0	0	
			0.0	0	
			0.0	0	
60	Dark reddish-brown Silty CLAY, stiff, moist		0.0	0	

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-02S

DATE DRILLED: 5/31/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157887.03 N: 731168.4
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.2 ft TOC: NA
TOTAL WELL DEPTH: 23 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0	Asphalt	100	0.0	0		Concrete
	Brown Silty GRAVEL (fill-like material)		0.0	0		
	Dark brown Sandy SILT with some black fill-like material throughout, odor		5.2	1		1" PVC Riser (Removed)
5	Dark gray Clayey SILT, moist, odor		4.1	1		
			2.6	1		
			1.2	1		Cement Bentonite Grout
	Dark gray Sandy SILT, moist, faint odor at 6.2' bgs	100	3.1	1		
	Light gray Silty fine SAND with some orange streaking throughout, faint odor		4.3	1		
10			3.0	1		2" Nominal Borehole
	Dark brown and gray Sandy SILT with some green streaks throughout, moist		2.7	1		
			2.2	1		
		100	1.2	1		
			1.5	1		
			2.1	1		
15			2.1	1		
	Dark green Silty fine SAND, moist, green coloration becoming gray at 12.0' bgs, saturated below 12.3' bgs, faint odor, some light green color returning at 17.6' bgs	50	3.4	1		
			2.1	1		
			1.2	1		
			1.5	1		
20			1.0	1		1" PVC Screen (10 slot) (Removed)
		100	1.0	1		
	Dark reddish-brown Silty CLAY, stiff, moist, no odor below 22.0' bgs		0.5	0		
			0.0	0		
25			0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-03I

DATE DRILLED: 5/22/13

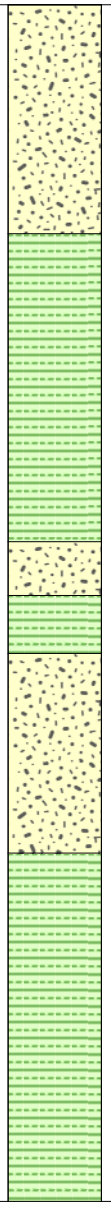
PROJECT INFORMATION

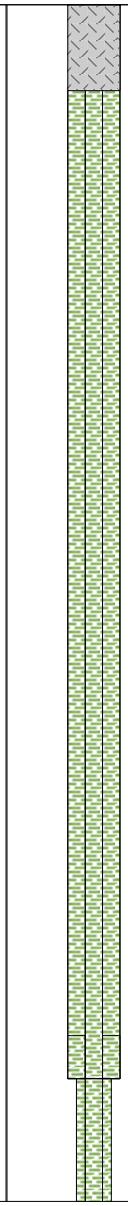
PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157235.43 N: 730777.08
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.2 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Light gray Sandy SILT, top 4" organic rich (root material), dry, soft, slightly moist to dry below 2.0' bgs, medium to stiff	100	0.0	0	Concrete
5	Medium brown Silty CLAY, some sand with occasional gray sandy silt seams/streaks, moist, no odors	100	0.0	0	1" PVC Riser (Removed)
10	Light brown to light gray Sandy SILT, some clay, very moist, no odors	100	0.0	0	Cement Bentonite Grout
15	Strong brown to reddish-brown Silty CLAY, stiff	80	0.0	0	3" Temporary Casing (Removed)
20	Light gray to light brown Sandy SILT, trace to some clay, very moist to wet, clay content increasing with depth	90	0.0	0	Bentonite Seal
25		85	0.0	0	





NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-03I

DATE DRILLED: 5/22/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157235.43 N: 730777.08
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.2 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Strong brown to reddish-brown Silty CLAY, stiff, very stiff below 20.0' bgs, soft from 36.5-40.0' bgs, some sand below 40.0' bgs	100	0.0	0		2" Nominal Borehole
35			30	0.0	0		
40		Light brown Sandy SILT, grading to very very fine Silty SAND with depth, saturated	100	0.0	0		1" PVC Screen (10 slot) (Removed)
45		Light brown Silty fine SAND, saturated, more silt below 46.0' bgs with occasional clay streak	100	0.0	0		
50			100	0.0	0		
55		Strong brown/reddish-brown Silty CLAY with gray mottling, very stiff, moist		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-03S

DATE DRILLED: 5/21/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157235.7 N: 730769.03
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.8 ft TOC: NA
TOTAL WELL DEPTH: 19 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Light gray Sandy SILT, top 4" organic rich (root material), dry, soft, slightly moist to dry below 2.0' bgs, medium to stiff	100	0.0	0	Concrete
5	Medium brown Silty CLAY, some sand with occasional gray sandy silt seams/streaks, moist, no odors	100	0.0	0	1" PVC Riser (Removed)
10	Light brown to light gray Sandy SILT, some clay, very moist, no odors	100	0.0	0	Cement Bentonite Grout
	Strong brown to reddish-brown Silty CLAY, stiff		0.0	0	2" Nominal Borehole
15	Light gray to light brown Sandy SILT, trace to some clay, very moist to wet, clay content increasing with depth	80	0.0	0	1" PVC Screen (10 slot) (Removed)
20	Strong brown to reddish-brown Silty CLAY, stiff, very stiff below 20.0' bgs	90	0.0	0	
25					

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-04I

DATE DRILLED: 5/23/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157258.3 N: 730613.29
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.6 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark brown Sandy SILT, organic rich material from 0.0-0.2' bgs, dry, some fine gravel from 0.20-0.45' bgs, some glass fragments at 0.70' bgs, turning grayish-brown in color at 3.5' bgs	100	0.0	0	Concrete
5	Grayish-brown Silty GRAVEL with some coarse yellowish-brown fill-like material throughout, light gray in color below 5.0' bgs		0.0	0	1" PVC Riser (Removed)
	Light brown and gray silty CLAY, soft, with some dark orange streaking throughout, dry, some coarse gravel between 10.0-11.0' bgs	100	0.0	0	Cement Bentonite Grout
10	Light gray Silty SAND, moist, becoming dry below 12.0' bgs		0.0	0	
	Gray Clayey SILT with dark red streaking throughout, turning light gray in color at 15.0' bgs, becoming moist below 16.0' bgs	100	0.0	0	3" Temporary Casing (Removed)
15	Orangish-red Silty CLAY, soft, moist		0.0	0	
20	Brown Silty fine SAND, saturated	100	0.0	0	
	Light brown and gray Silty CLAY with some orangish-red streaking throughout, moist		0.0	0	Bentonite Seal
25	Dark orange and red Sandy CLAY, soft, moist		0.0	0	
	Brown fine SAND with some orange and	60	0.0	0	

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-04I

DATE DRILLED: 5/23/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157258.3 N: 730613.29
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.6 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
		gray clay streaks throughout, very moist		0.0	0		
		Light brown Silty fine SAND, with some gray clay streaks throughout, very moist		0.0	0		
30				0.0	0		
		Dark orange and red Silty CLAY, soft, moist, with some gray clayey streaking below 34.0' bgs, becoming more gray in color below 36.5' bgs	90	0.0	0		2" Nominal Borehole
35				0.0	0		
			90	0.0	0		
40				0.0	0		
		Orangish-brown Clayey Silt, soft, saturated	100	0.0	0		
		Orangish-brown Silty CLAY with some dark gray streaking throughout, stiff, moist		0.0	0		
45				0.0	0		
		Light brown Silty fine SAND, moist, saturated below 50.0' bgs	90	0.0	0		1" PVC Screen (10 slot) (Removed)
50				0.0	0		
		Orangish-brown Sandy CLAY, stiff, moist	80	0.0	0		
		Reddish-brown Silty CLAY, stiff, moist		0.0	0		
55							

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-04S

DATE DRILLED: 5/21/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157262.35 N: 730611.15
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Doug Isenhart
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.6 ft TOC: NA
TOTAL WELL DEPTH: 23 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark brown Sandy SILT, organic rich material from 0.0-0.2' bgs, dry, some fine gravel from 0.20-0.45' bgs, some glass fragments at 0.70' bgs, turning grayish-brown in color at 3.5' bgs	100	0.0	0	Concrete
5	Grayish-brown Silty GRAVEL with some coarse yellowish-brown fill-like material throughout, light gray in color below 5.0' bgs	100	0.0	0	1" PVC Riser (Removed)
	Light brown and gray silty CLAY, soft, with some dark orange streaking throughout, dry, some coarse gravel between 10.0-11.0' bgs	100	0.0	0	Cement Bentonite Grout
10	Light gray Silty SAND, moist, becoming dry below 12.0' bgs	100	0.0	0	2" Nominal Borehole
	Gray Clayey SILT with dark red streaking throughout, turning light gray in color at 15.0' bgs, becoming moist below 16.0' bgs	100	0.0	0	1" PVC Screen (10 slot) (Removed)
15	Orangish-red Silty CLAY, soft, moist	100	0.0	0	
20	Brown Silty fine SAND, saturated	100	0.0	0	
	Light brown and gray Silty CLAY with some orangish-red streaking throughout, moist	100	0.0	0	
25					

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-05S

DATE DRILLED: 5/24/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157527.78 N: 730524.06
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.0 ft TOC: NA
TOTAL WELL DEPTH: 20 ft
TOTAL BORING DEPTH: 22 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark gray to black Silty SAND, some gravel/slag	100	0.0	0	Concrete
5	Dark gray to medium gray Sandy Silty CLAY, moist, odor, turning light to medium gray and brown below 5.0' bgs, moist to very moist, odor, no staining	80	0.0	0	1" PVC Riser (Removed); Cement Bentonite Grout; 2" Nominal Borehole
10	Greenish-gray Sandy Clayey SILT	60	0.0	0	
	Greenish-gray Silty CLAY		0.0	3	
15	Greenish-gray Silty very fine SAND with some residual-like product material from 13.55-13.75' bgs, stains gloves, no staining below 15.0' bgs, strong brown color below 15.2' bgs, greenish/pinkish-gray color below 16.9' bgs with a slight sheen, saturated, odor	96	0.0	1	1" PVC Screen (10 slot) (Removed)
20	Strong reddish-brown Silty CLAY, very stiff	100	0.0	2	
			0.0	1	
			0.0	0	
			0.0	0	
			0.0	0	
			0.0	0	

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-06I

DATE DRILLED: 5/29/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158275.51 N: 730601.73
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.7 ft TOC: NA
TOTAL WELL DEPTH: 50 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Asphalt		0.0	0	Concrete
	Light brown fine SILT with some loose gravel throughout		0.0	0	
	Light brown and dark gray Silty Sandy CLAY, very soft, dry, clay content increasing with depth	100	0.0	0	1" PVC Riser (Removed)
5			0.0	0	
	Light brown Sandy Silt with some small loose gravel throughout		0.0	0	
	Light brown Clayey SILT with some orange streaking throughout, with a white silty material at 7.6' bgs, some black streaking below 8.0' bgs, no odor, no PID reading (0.0 ppm)	80	0.0	0	Cement Bentonite Grout
			0.0	0	
10			0.4	1	
	Dark gray Sandy SILT with some orange streaking throughout, becoming more gray in color with depth, slightly moist, odor at 12.0' bgs	80	0.6	1	
			1.7	1	
			1.5	1	
			7.2	1	
15			6.8	1	
			8.1	1	
	Light brown and gray Silty SAND, dark gray to black streaking from 17.1-17.3' bgs, odor	80	8.5	1	3" Temporary Casing (Removed)
			6.3	1	
	Light gray very fine SILT		7.2	1	
			5.5	1	
20			4.1	1	
		10	4.9	1	
			4.0	1	
			9.2	1	
			8.1	1	Bentonite Seal
25	Dark reddish-brown Silty CLAY, stiff, moist, odor		8.0	1	
			7.9	1	
		10	6.3	1	

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-06I

DATE DRILLED: 5/29/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158275.51 N: 730601.73
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.7 ft TOC: NA
TOTAL WELL DEPTH: 50 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
30			4.2	1	2" Nominal Borehole
			4.6	1	
			3.2	1	
			3.1	1	
	Light brown Silty fine SAND, saturated, odor	50	1.5	1	
	Dark reddish-brown Silty CLAY, stiff, moist, odor		1.2	1	
35			14.2	1	
			35.1	1	
	Dark gray to black Sandy Silt, odor		42.1	1	
	Dark reddish-brown Silty CLAY, stiff, moist, odor	80	37.6	1	
	Dark gray to black Sandy Silt, odor		13.3	1	
	Dark reddish-brown Silty CLAY, stiff, moist, odor		1.2	1	
40	Light brown Sandy SILT, saturated, faint odor		0.4	1	
			0.0	1	
	Light brown and gray Silty CLAY, stiff, moist	90	0.1	1	1" PVC Screen (10 slot) (Removed)
			0.3	1	
45			0.0	0	
	Gray and brown very Silty fine SAND, moist	50	0.0	0	
			0.0	0	
			0.0	0	
50			0.0	0	
	Reddish-brown Silty CLAY, stiff, moist	80	0.0	0	
			0.0	0	
			0.0	0	
55			0.0	0	

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-06S

DATE DRILLED: 5/29/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158275.51 N: 730601.73
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 46.7 ft TOC: NA
TOTAL WELL DEPTH: 20 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Asphalt	100	0.0	0		Concrete
		Light brown fine SILT with some loose gravel throughout		0.0	0		
		Light brown and dark gray Silty Sandy CLAY, very soft, dry, clay content increasing with depth		0.0	0		1" PVC Riser (Removed)
5		Light brown Sandy Silt with some small loose gravel throughout	80	0.0	0		
		Light brown Clayey SILT with some orange streaking throughout, with a white silty material at 7.6' bgs, some black streaking below 8.0' bgs, no odor, no PID reading (0.0 ppm)		0.0	0		Cement Bentonite Grout
				0.0	0		
				0.0	0		
				0.0	0		
10				0.4	1		2" Nominal Borehole
		Dark gray Sandy SILT with some orange streaking throughout, becoming more gray in color with depth, slightly moist, odor at 12.0' bgs	80	0.6	1		
				1.7	1		
				1.5	1		
				7.2	1		
15				6.8	1		
		Light brown and gray Silty SAND, dark gray to black streaking from 17.1-17.3' bgs, odor	80	8.1	1		1" PVC Screen (10 slot) (Removed)
				8.5	1		
				6.3	1		
		Light gray very fine SILT		7.2	1		
20		Dark reddish-brown Silty CLAY, stiff, moist, odor	10	5.5	1		
				4.1	1		
				4.9	1		
				4.0	1		
				9.2	1		
25							

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-07I

DATE DRILLED: 5/29/13

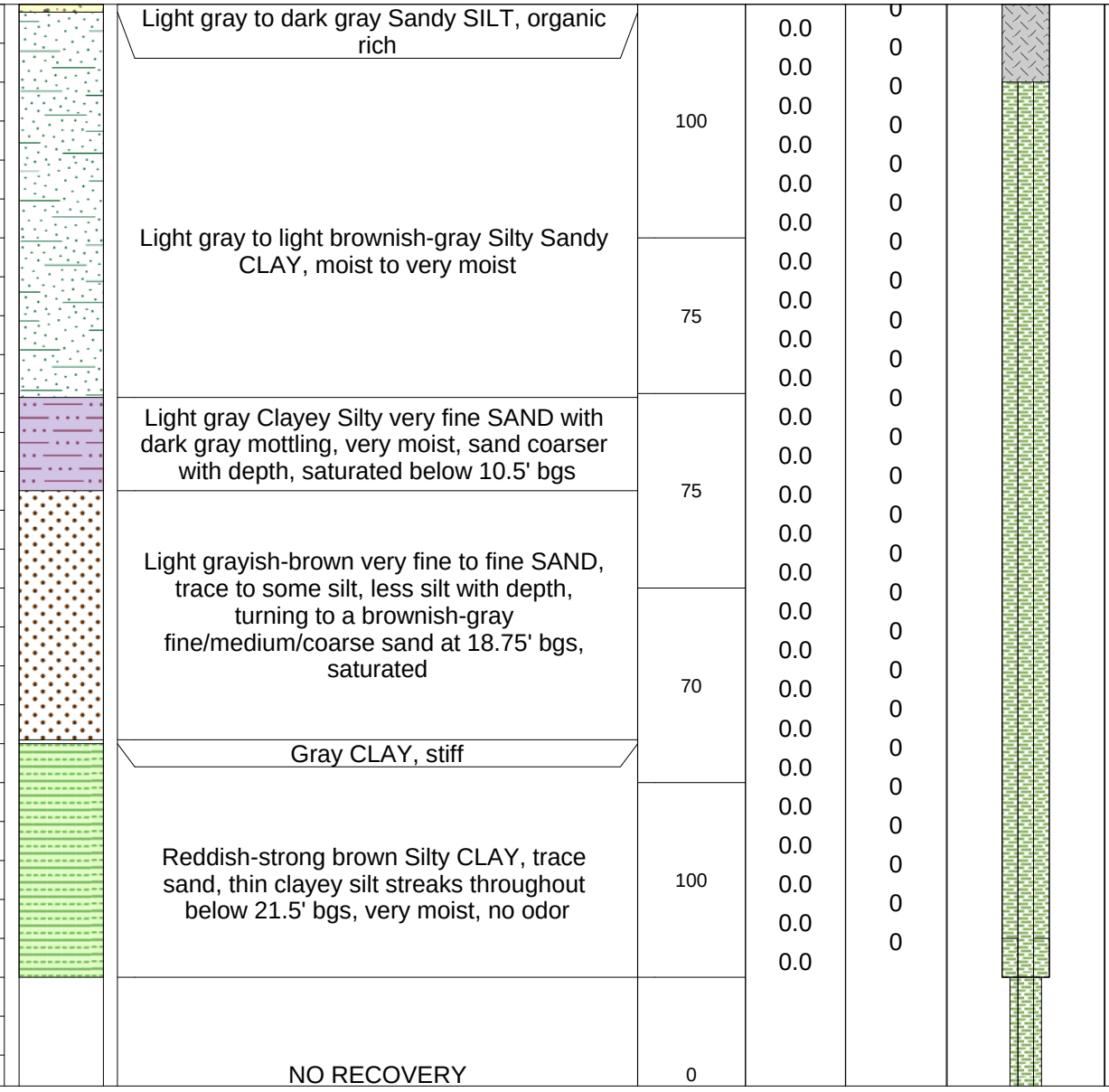
PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158737.94 N: 730691.35
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.9 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Light gray to dark gray Sandy SILT, organic rich	100	0.0	0	Concrete
5	Light gray to light brownish-gray Silty Sandy CLAY, moist to very moist	75	0.0	0	1" PVC Riser (Removed)
10	Light gray Clayey Silty very fine SAND with dark gray mottling, very moist, sand coarser with depth, saturated below 10.5' bgs	75	0.0	0	Cement Bentonite Grout
15	Light grayish-brown very fine to fine SAND, trace to some silt, less silt with depth, turning to a brownish-gray fine/medium/coarse sand at 18.75' bgs, saturated	70	0.0	0	3" Temporary Casing (Removed)
20	Gray CLAY, stiff Reddish-strong brown Silty CLAY, trace sand, thin clayey silt streaks throughout below 21.5' bgs, very moist, no odor	100	0.0	0	Bentonite Seal
25	NO RECOVERY	0	0.0	0	



NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-07I

DATE DRILLED: 5/29/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158737.94 N: 730691.35
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.9 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Strong reddish-brown Silty CLAY, very stiff, medium plasticity, moist. light gray and light reddish-brown below 35.0' bgs, few very very thin silt streaks throughout below 40.0' bgs, trace fine gravel, with some sand below 44.0' bgs	70	0.0	0		2" Nominal Borehole
35			55	0.0	0		
40			65	0.0	0		1" PVC Screen (10 slot) (Removed)
45		Gray silt, moist	100	0.0	0		
50		Reddish-brown Silty CLAY, very stiff, moist, trace gray/brown mottling	70	0.0	0		
55							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-07S

DATE DRILLED: 5/29/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158737.05 N: 730686.11
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.9 ft TOC: NA
TOTAL WELL DEPTH: 22 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Light gray to dark gray Sandy SILT, organic rich	100	0.0	0		Concrete
5		Light gray to light brownish-gray Silty Sandy CLAY, moist to very moist	75	0.0	0		1" PVC Riser (Removed)
10		Light gray Clayey Silty very fine SAND with dark gray mottling, very moist, sand coarser with depth, saturated below 10.5' bgs	75	0.0	0		Cement Bentonite Grout
15		Light grayish-brown very fine to fine SAND, trace to some silt, less silt with depth, turning to a brownish-gray fine/medium/coarse sand at 18.75' bgs, saturated	70	0.0	0		2" Nominal Borehole
20		Gray CLAY, stiff	100	0.0	0		1" PVC Screen (10 slot) (Removed)
25		Reddish-strong brown Silty CLAY, trace sand, thin clayey silt streaks throughout below 21.5' bgs, very moist, no odor		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-08I

DATE DRILLED: 6/1/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158365.44 N: 731953.49
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.8 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT with some loose gravel and organic material throughout, becoming more gray in color with depth	100	0.0	0		Concrete
5		Dark brown and gray Silty Sandy CLAY with some orange streaking throughout, soft, moist		0.0	0		1" PVC Riser (Removed)
10		Brown and gray Sandy Clayey SILT with some orange streaking throughout, becoming more sandy and gray in color with depth, dry	100	0.0	0		Cement Bentonite Grout
15		Gray Silty coarse SAND, slightly moist below 14.1' bgs, some small black streaking from 14.0-14.5' bgs, no odor, no PID reading (0.0 ppm), saturated below 15.6' bgs	100	0.0	0		3" Temporary Casing (Removed)
20		Dark reddish-brown Silty Sandy Clay, soft, moist		0.0	0		
		Dark reddish-brown Silty CLAY, stiff, slightly moist	100	0.0	0		
		Light brown and gray Silty fine SAND, saturated		0.0	0		
25			100	0.0	0		Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-08I

DATE DRILLED: 6/1/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158365.44 N: 731953.49
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.8 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Dark reddish-brown Silty CLAY, stiff, moist, some gray streaking throughout, stiff to very stiff below 25.0' bgs, brown in color below 27.6' bgs, saturated below 31.2' bgs, some gray streaking from 34.1-34.7' bgs, some white silt between 34.3-34.7' bgs, increase in gray coloration with depth	100	0.0	0		2" Nominal Borehole
35			100	0.0	0		
40		Gray Silty coarse SAND, moist, becoming brownish-gray at 38.8' bgs, brown in color below 43.3' bgs, turning light brown and gray below 45.0' bgs, with some dark brown streaks from 46.6-46.9' and 49.1-49.1' bgs, sand becoming fine below 50.0' bgs	60	0.0	0		1" PVC Screen (10 slot) (Removed)
45			100	0.0	0		
50			100	0.0	0		
55		Dark reddish-brown Silty CLAY, stiff, moist		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-08S

DATE DRILLED: 6/1/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158365.48 N: 731959.35
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 48.1 ft TOC: NA
TOTAL WELL DEPTH: 24 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT with some loose gravel and organic material throughout, becoming more gray in color with depth	100	0.0	0		Concrete
5		Dark brown and gray Silty Sandy CLAY with some orange streaking throughout, soft, moist		0.0	0		1" PVC Riser (Removed)
		Brown and gray Sandy Clayey SILT with some orange streaking throughout, becoming more sandy and gray in color with depth, dry	100	0.0	0		Cement Bentonite Grout
10				0.0	0		2" Nominal Borehole
		Gray Silty coarse SAND, slightly moist below 14.1' bgs, some small black streaking from 14.0-14.5' bgs, no odor, no PID reading (0.0 ppm), saturated below 15.6' bgs	100	0.0	0		
15				0.0	0		
			100	0.0	0		1" PVC Screen (10 slot) (Removed)
20		Dark reddish-brown Silty Sandy Clay, soft, moist		0.0	0		
		Dark reddish-brown Silty CLAY, stiff, slightly moist		0.0	0		
		Light brown and gray Silty fine SAND, saturated	100	0.0	0		
		Dark reddish-brown Silty CLAY, stiff, moist, some gray streaking throughout		0.0	0		
25							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-09I

DATE DRILLED: 6/4/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158390.12 N: 731568.67
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.2 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT, organic rich root material, no odors	100	0.0	0		Concrete
5		Brown/gray light to medium Silty CLAY, some sand, soft, moist to very moist with depth, orangish-brown mottling throughout, more sand below 6.0' bgs, some wood fragments and large white/gray rock fragments at 6.5' bgs, orange mottling throughout between 6.5-8.25' bgs, dark gray vertical sandy clay seam below 8.25' bgs, wet, very soft, no odors	100	0.0	0		1" PVC Riser (Removed)
10			50	0.0	0		Cement Bentonite Grout
15		Medium gray and light brownish-gray Sandy CLAY with orange mottling throughout, stiff, sand content increasing with depth	80	0.0	0		3" Temporary Casing (Removed)
20		Gray very fine Sandy SILT Medium brownish-gray Silty CLAY, some sand Light grayish/pinkish-brown Sandy SILT, trace clay, wet, light to medium olive gray color below 16.0' bgs, trace clay, saturated, strong brown vertical sandy silt seam from 16.0-17.2' bgs, clay content increasing with depth below 17.2' bgs, few strong reddish-brown layers/streaks below 18.75' bgs	75	0.0	0		
25			70	0.0	0		Bentonite Seal
30				0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-09I

DATE DRILLED: 6/4/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158390.12 N: 731568.67
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 49.2 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Strong reddish-brown Silty CLAY with some gray mottling throughout, very stiff, slightly moist, silt layer/streaks (0.2' thick) at 22.5' bgs and between 25.25-26.25' bgs, wet, few thin silt streaks throughout below 30.0' bgs, strong brown to medium grayish-brown in color below 38.5' bgs, light grayish-brown in color below 39.25' bgs, less clay and more sand below 40.0' bgs, orange mottling throughout below 43.2' bgs, very stiff, thin silt streak at 44.5' bgs, moist, less red color below 45.0' bgs	82	0.0	0		2" Nominal Borehole
35			84	0.0	0		
40			90	0.0	0		
45			80	0.0	0		
50		Light grayish-brown Silty very fine SAND, wet, saturated, trace to some clay with very thin clayey silt streaks, clay content increasing below 49.5' bgs, sand becoming coarser with depth below 50.0' bgs, increase in thin clayey streaks with depth below 55.0' bgs	62	0.0	0		1" PVC Screen (10 slot) (Removed)
55			75	0.0	0		
60		Strong reddish-brown Silty CLAY, very stiff, moist		0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-10I

DATE DRILLED: 6/5/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157262.77 N: 730323.16
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.8 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Dark brown Sandy SILT with some organics and root fragments throughout, dry	100	0.0	0	Concrete
	Light brown and gray Clayey SILT, soft, dry, dark gray in color below 5.0' bgs, becoming darker with depth		0.0	0	1" PVC Riser (Removed)
5		50	0.0	0	Cement Bentonite Grout
	Light brownish-gray Silty CLAY, very soft, moist, becoming light brown and stiff at 13.1' bgs		0.0	0	
10		50	0.0	0	
	Light gray Sandy SILT, moist		0.0	0	
15	Reddish-brown Silty CLAY, soft, moist	100	0.0	0	3" Temporary Casing (Removed)
	Gray fine SAND, moist		0.0	0	
	Reddish-brown Silty CLAY, soft, moist		0.0	0	
	Gray fine SAND, moist		0.0	0	
20	Dark reddish-brown Silty CLAY, very soft, moist, stiff below 19.3' bgs		0.0	0	
	NO RECOVERY	0			Bentonite Seal
25	NO RECOVERY	0			

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-10I

DATE DRILLED: 6/5/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157262.77 N: 730323.16
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.8 ft TOC: NA
TOTAL WELL DEPTH: 54 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30				0.0	0		2" Nominal Borehole
			100	0.0	0		
35		Dark reddish-brown Silty CLAY, stiff, moist, some light brown coloration between 33.1-33.5' bgs, gray in color below 41.2' bgs, with a small section (1" thick) of dark brown silt at 41.8' bgs, no odor, no PID reading (0.0 ppm), becoming brownish-gray in color below 44.5' bgs	100	0.0	0		
				0.0	0		
40			90	0.0	0		
				0.0	0		
45			100	0.0	0		1" PVC Screen (10 slot) (Removed)
		Light gray Silty fine SAND, moist		0.0	0		
50				0.0	0		
			80	0.0	0		
		Dark reddish-brown Silty CLAY, stiff, moist, some dark brown sand interbedded from 52.1-53.2' bgs		0.0	0		
55							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-10S

DATE DRILLED: 6/4/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157262.77 N: 730323.16
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.8 ft TOC: NA
TOTAL WELL DEPTH: 20 ft
TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Dark brown Sandy SILT with some organics and root fragments throughout, dry	100	0.0	0		Concrete
5		Light brown and gray Clayey SILT, soft, dry, dark gray in color below 5.0' bgs, becoming darker with depth	50	0.0	0		1" PVC Riser (Removed)
10		Light brownish-gray Silty CLAY, very soft, moist, becoming light brown and stiff at 13.1' bgs	50	0.0	0		Cement Bentonite Grout
15		Light gray Sandy SILT, moist	100	0.0	0		2" Nominal Borehole
		Reddish-brown Silty CLAY, soft, moist		0.0	0		
		Gray fine SAND, moist		0.0	0		
		Reddish-brown Silty CLAY, soft, moist		0.0	0		1" PVC Screen (10 slot) (Removed)
		Gray fine SAND, moist		0.0	0		
20		Dark reddish-brown Silty CLAY, very soft, moist, stiff below 19.3' bgs		0.0	0		
		NO RECOVERY	0				
25							

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-11I

DATE DRILLED: 6/12/13

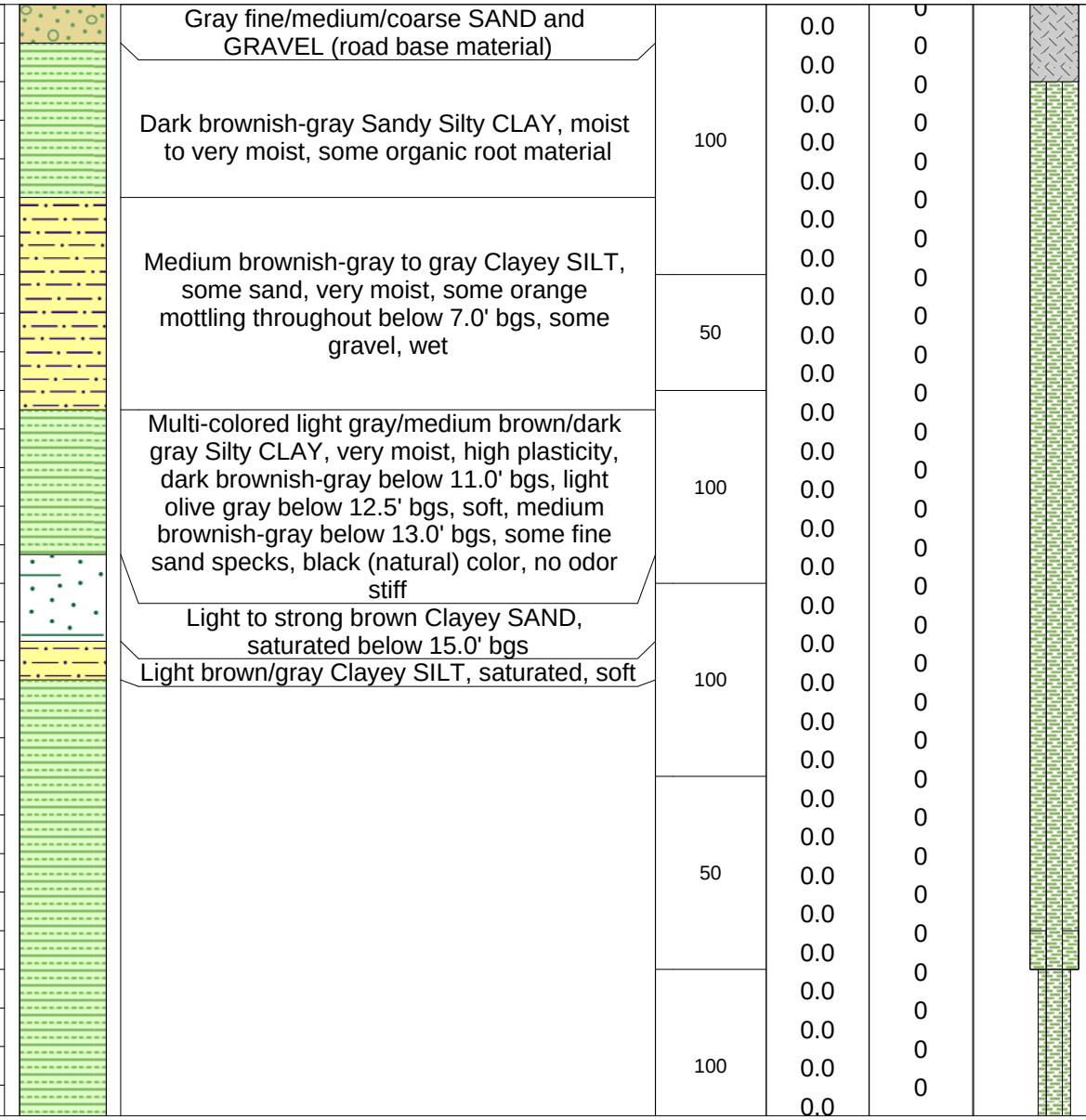
PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158264.71 N: 730090.95
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.5 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Gray fine/medium/coarse SAND and GRAVEL (road base material)	100	0.0	0	Concrete
	Dark brownish-gray Sandy Silty CLAY, moist to very moist, some organic root material		0.0	0	1" PVC Riser (Removed)
5	Medium brownish-gray to gray Clayey SILT, some sand, very moist, some orange mottling throughout below 7.0' bgs, some gravel, wet	50	0.0	0	Cement Bentonite Grout
10	Multi-colored light gray/medium brown/dark gray Silty CLAY, very moist, high plasticity, dark brownish-gray below 11.0' bgs, light olive gray below 12.5' bgs, soft, medium brownish-gray below 13.0' bgs, some fine sand specks, black (natural) color, no odor stiff	100	0.0	0	
15	Light to strong brown Clayey SAND, saturated below 15.0' bgs	100	0.0	0	3" Temporary Casing (Removed)
	Light brown/gray Clayey SILT, saturated, soft		0.0	0	
20		50	0.0	0	
			0.0	0	
25		100	0.0	0	Bentonite Seal
			0.0	0	



NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-11I

DATE DRILLED: 6/12/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3158264.71 N: 730090.95
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 2000
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.5 ft TOC: NA
TOTAL WELL DEPTH: 60 ft
TOTAL BORING DEPTH: 60 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Gray and strong brown reddish-brown Silty CLAY, very stiff, moist, reddish-brown below 40.0' bgs, stiff, thin silt streak below 59.0' bgs		0.0	0		2" Nominal Borehole
			100	0.0	0		
35				0.0	0		
			100	0.0	0		
40				0.0	0		
			100	0.0	0		
45				0.0	0		
			100	0.0	0		
50				0.0	0		1" PVC Screen (10 slot) (Removed)
			100	0.0	0		
55				0.0	0		
			95	0.0	0		

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-12I

DATE DRILLED: 6/11/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Mike Valesky
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157454.89 N: 731184.43
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Mario Moya
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 47.6 ft TOC: NA
TOTAL WELL DEPTH: 55 ft
TOTAL BORING DEPTH: 57.5 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
0		Medium brownish-gray Silty fine SAND, some to trace clay, slightly moist	100	0.0	0		Concrete
5		Medium brownish-gray Clayey SILT, some fine sand, moist					1" PVC Riser (Removed)
		Medium brownish-gray Sandy Silty CLAY, some orange mottling throughout, very moist	100				Cement Bentonite Grout
10			60				
15		Light gray very fine SAND, some silt, saturated below 15.0' bgs, dark patches throughout	84				3" Temporary Casing (Removed)
		Light gray and strong brown Clayey SILT, some fine sand, wet					
20			100				
25		Strong reddish-brown and gray Silty CLAY, very stiff, moist, sandy streaks from 19.0-19.25' bgs, with 1" silt nodule at 20.75' and 22.0' bgs, trace white calcarous material at 24.0' bgs and dry hard thin material at 24.5' bgs, some brown clay layers below 28.0' bgs, some sand below 31.0' bgs, light	75				Bentonite Seal

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-12I

DATE DRILLED: 6/11/13

PROJECT INFORMATION	DRILLING INFORMATION
PROJECT: South Cavalcade	DRILLING CO: Fugro
SITE LOCATION: Houston, Texas	DRILLER: Mario Moya
PROJECT NO: 13665	DRILLING RIG: Geoprobe 6610 DT
FIELD GEOLOGIST: Mike Valesky	DRILLING METHOD: Geoprobe
PROJECT MANAGER: Jim Zubrow	SAMPLING METHOD: 2" Discrete Sampler
COORDINATES: E: 3157454.89 N: 731184.43	ELEVATION: GND SURF: 47.6 ft TOC: NA
DATUM: NAD27/NAVD88	TOTAL WELL DEPTH: 55 ft
	TOTAL BORING DEPTH: 57.5 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		gray and brown mottling/layers with silty sand streaks below 34.0' bgs	80	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		2" Nominal Borehole
35		Medium brown fime to medium SAND, some to trace silt, trace gray nodules, clayey, saturated	78	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
40		Light greenish/olive gray Silty CLAY, stiff, moist, high plasticity, becoming strong reddish-brown below 36.5' bgs, very stiff, light brownish-gray in color below 38.5' bgs, sandier below 40.0' bgs	20	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		
45		Light gray very fine SAND, some silt	72	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		1" PVC Screen (10 slot) (Removed)
50		Light greenish/olive gray Silty CLAY, few thin clay streaks throughout, trace orange mottling	15	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0		
55		Strong reddish-brown CLAY, some silt	12	0.0 0.0 0.0	0 0 0		

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-13I

DATE DRILLED: 6/12/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157877.41 N: 730163.11
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.6 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithology Description	Recov %	PID	NAPL Rating	Completion Description
0	Asphalt	100	0.0	0	Concrete
	Dark brown Silty GRAVEL (fill-like material)		0.0	0	
5	Dark gray Clayey SILT, very soft, moist below 4.2' bgs, some loose gravel throughout below 5.0' bgs, very moist	100	0.0	0	1" PVC Riser (Removed)
			0.0	0	
10	Light brown and gray Sandy SILT, moist, some loose gravel between 10.7-12.8' bgs	100	0.0	0	Cement Bentonite Grout
			0.0	0	
15	Reddish-orange Clayey SILT, soft, moist, some black natural staining throughout, no odor, no PID reading (0.0 ppm)	100	0.0	0	3" Temporary Casing (Removed)
	Light brown and gray Silty fine SAND, saturated		0.0	0	
20	Reddish-orange Sandy CLAY, soft, moist	100	0.0	0	Bentonite Seal
			0.0	0	
25		100	0.0	0	

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

KEY ENVIRONMENTAL INCORPORATED

BOREHOLE LOG: DP13S-13I

DATE DRILLED: 6/12/13

PROJECT INFORMATION

PROJECT: South Cavalcade
SITE LOCATION: Houston, Texas
PROJECT NO: 13665
FIELD GEOLOGIST: Kyle Smith
PROJECT MANAGER: Jim Zubrow
COORDINATES: E: 3157877.41 N: 730163.11
DATUM: NAD27/NAVD88

DRILLING INFORMATION

DRILLING CO: Fugro
DRILLER: Jose Herrera
DRILLING RIG: Geoprobe 6610 DT
DRILLING METHOD: Geoprobe
SAMPLING METHOD: 2" Discrete Sampler
ELEVATION: GND SURF: 45.6 ft TOC: NA
TOTAL WELL DEPTH: 53 ft
TOTAL BORING DEPTH: 55 ft

Depth (ft-bgs)	Lithol Log	Lithology Description	Recov %	PID	NAPL Rating	Graphical Completion Log	Completion Description
30		Dark reddish-brown Silty CLAY, stiff, moist, saturated below 25.0' bgs, some loose brown gravel from 31.0-31.3' bgs, some gray streaking from 31.7-32.3' bgs, with a brown silt layer (2" thick) at 37.5' bgs	100	0.0	0		2" Nominal Borehole
35			90	0.0	0		
40		Light brown and gray Silty fine SAND, moist		0.0	0		
		Brown and red Silty Sandy CLAY, stiff, moist	60	0.0	0		
45		Gray and brown Silty coarse SAND with dark reddish-brown clay inclusions throughout,, some black streaking between 44.1-44.4' bgs, no odor, no PID reading (0.0 ppm), clay content increasing with depth below 48.0' bgs	100	0.0	0		1" PVC Screen (10 slot) (Removed)
50			100	0.0	0		
55		Dark reddish-brown Silty CLAY, stiff, moist		0.0	0		

NOTES: **1" PVC riser removed and borehole filled with cement bentonite grout**

BOREHOLE LOG: DP13S-13S

DATE DRILLED: 6/12/13

KEY ENVIRONMENTAL INCORPORATED

PROJECT INFORMATION	DRILLING INFORMATION
PROJECT: South Cavalcade	DRILLING CO: Fugro
SITE LOCATION: Houston, Texas	DRILLER: Jose Herrera
PROJECT NO: 13665	DRILLING RIG: Geoprobe 6610 DT
FIELD GEOLOGIST: Kyle Smith	DRILLING METHOD: Geoprobe
PROJECT MANAGER: Jim Zubrow	SAMPLING METHOD: 2" Discrete Sampler
COORDINATES: E: 3157876.7 N: 730170.68	ELEVATION: GND SURF: 45.6 ft TOC: NA
DATUM: NAD27/NAVD88	TOTAL WELL DEPTH: 21 ft
	TOTAL BORING DEPTH: 25 ft

Depth (ft-bgs): 0, 5, 10, 15, 20, 25

Lithol Log:

Lithology Description
Asphalt
Dark brown Silty GRAVEL (fill-like material)
Dark gray Clayey SILT, very soft, moist below 4.2' bgs, some loose gravel throughout below 5.0' bgs, very moist
Light brown and gray Sandy SILT, moist, some loose gravel between 10.7-12.8' bgs
Reddish-orange Clayey SILT, soft, moist, some black natural staining throughout, no odor, no PID reading (0.0 ppm)
Light brown and gray Silty fine SAND, saturated
Reddish-orange Sandy CLAY, soft, moist
Dark reddish-brown Silty CLAY, stiff, moist

Recov %: 100, 100, 100, 100, 100

PID: 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0

NAPL Rating: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Graphical Completion Log:

Completion Description
Concrete
1" PVC Riser (Removed)
Cement Bentonite Grout
2" Nominal Borehole
1" PVC Screen (10 slot) (Removed)

NOTES: 1" PVC riser removed and borehole filled with cement bentonite grout

ATTACHMENT D

FIELD SAMPLING FORMS/REPORT

ATTACHMENT D

FIELD SHEETS

South Cavalcade, TX
2013 Site-Wide Gauging Results

Well	Zone S/I/D	Date	Time	Top of Riser (ft-msl)	Depth to Groundwater (ft)	Total Depth (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	Groundwater Potentiometric Surface Elevation (ft-msl)
North Area									
OW-08	S	5/20/2013	1420	50.99	9.24	16.57	NP	NA	41.75
P-01	I	5/20/2013	1437	52.96	19.25	48.65	NP	NA	33.71
P-04	I	5/20/2013	1458	51.91	19.68	53.29	NP	NA	32.23
MW-03	S	5/20/2013	1509	52.04	7.19	27.2	NP	NA	44.85
MW-25	I	5/20/2013	Not Located	51.72	NM	NA	NM	NA	NA
OW-09	S	5/20/2013	1526	52.56	8.32	16.9	NP	NA	44.24
P-05	I	5/20/2013	1533	52.19	5.26	49.95	NP	NA	46.93
MW-05	S	5/20/2013	1541	53.55	11.06	23.95	NP	NA	42.49
OW-01	S	5/20/2013	802	52.37	5.60	21.36	NP	NA	46.77
OW-07	S	5/20/2013	1557	54.64	9.89	19.3	NP	NA	44.75
MW-10	I	5/20/2013	1608	53.67	20.60	56.21	NP	NA	33.07
MW-01	S	5/20/2013	1622	54.11	10.20	16.15	NP	NA	43.91
PZN-30	S	5/20/2013	1643	50.79	6.88	19.64	NP	NA	43.91
MW-24	S	5/20/2013	Not Located	51.99	NM	NA	NM	NA	NA
MW-12R	I	5/20/2013	1657	53.87	20.07	55.21	NP	NA	33.8
PZN-20	S	5/20/2013	1712	51.28	7.25	20	NP	NA	44.03
PZN-50	S	5/20/2013	1726	50.85	6.61	20.2	NP	NA	44.24
MW-02	S	5/20/2013	1731	53.79	9.53	23.72	NP	NA	44.26
OW-14	S	5/20/2013	1746	51.51	5.96	17.85	NP	NA	45.55
OW-06*	D	5/20/2013	1753	53.67	125.93	NA	NP	NA	-72.26
PZN-40	S	5/20/2013	1759	50.91	6.22	20.2	NP	NA	44.69
OW-15*	I	5/20/2013	1809	52.68	20.12	53.26	NP	NA	32.56
OW-16*	I	5/21/2013	0835	52.75	20.24	53.94	NP	NA	32.51
OW-13	S	5/21/2013	1530	51.63	5.67	18.1	NP	NA	45.96
ITW-01	I	5/21/2013	0847	NS	20.50	59.37	50.39	8.98	NA
MW-11	I	5/21/2013	Well Damaged	52.49	NM	NA	NM	NA	NA
PZN-10	S	5/20/2013	1813	51.03	7.25	20.11	NP	NA	43.78
PZN-11	S	5/20/2013	0936	51.11	7.42	20.15	NP	NA	43.69
PZN-21	S	5/20/2013	1834	50.87	6.81	12.49	NP	NA	44.06
PZN-31	S	5/20/2013	1847	50.75	6.85	20.13	NP	NA	43.9
PZN-41	S	5/20/2013	1900	50.75	6.10	16.53	NP	NA	44.65
PZN-51	S	5/20/2013	1907	52.76	6.74	20.19	NP	NA	46.02
RWN-01*	S	5/21/2013	0951	49.03	5.20	15.16	NP	NA	43.83
RWN-02*	S	5/20/2013	1430	49.07	4.91	18.21	NP	NA	44.16
RWN-03*	S	5/20/2013	1453	48.54	4.82	18.71	NP	NA	43.72
RWN-05*	S	5/20/2013	1503	48.95	4.42	18.46	NP	NA	44.53
OW-02	S	5/20/2013	1526	53.89	8.42	22.28	22.28	Trace on tip of probe	45.47
P-02N	S	5/20/2013	1552	NS	9.39	27.21	27.21	Trace on tip of probe	NA
RWN-04*	S	5/20/2013	1602	49.51	4.32	23.2	23.2	Trace on tip of probe	45.19
PTZ-02*	S	5/20/2013	1610	53.04	9.25	16.44	NP	NA	43.79
PTZ-02A	S	5/20/2013	1613	NS	Dry	7.83	NP	NA	NA
PTZ-01	S	5/20/2013	1616	NS	9.87	19.95	NP	NA	NA

South Cavalcade, TX
2013 Site-Wide Gauging Results

Well	Zone S/I/D	Date	Time	Top of Riser (ft-msl)	Depth to Groundwater (ft)	Total Depth (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	Groundwater Potentiometric Surface Elevation (ft-msl)
South Area									
MW-26	S	5/20/2013	1642	48.35	7.29	18.48	NP	NA	41.06
PZS-40	S	5/20/2013	1713	49.64	5.50	19.85	NP	NA	44.14
MW-07	S	5/20/2013	Not Located	52.89	NM	NA	NM	NA	NA
PZS-60	S	5/20/2013	1749	51.64	5.13	18.39	NP	NA	46.51
DW-02*	D	5/20/2013	1023	50.92	124.73	169	NP	NA	-73.81
MW-09*	S	5/20/2013	Not Located	46.34	NM	NA	NM	NA	NA
MW-08	S	5/20/2013	Not Located	48.79	NM	NA	NM	NA	NA
MW-04	S	5/20/2013	1826	49.71	3.91	24.43	NP	NA	45.8
P-03R	I	5/20/2013	1041	50.14	25.09	64.76	NP	NA	NA
P-02R	I	5/20/2013	1103	49.05	15.70	48.77	NP	NA	NA
PZS-30	S	5/20/2013	1856	49.39	4.97	20.09	NP	NA	44.42
MW-14R	I	5/20/2013	1917	48.97	15.47	46.27	NP	NA	33.5
MW-06	S	5/21/2013	1125	48.83	4.45	23.15	NP	NA	44.38
RWS-05*	S	5/21/2013	1148	48.27	3.8	27.15	27.15	Trace on tip of probe	44.47
RWS-02*	S	5/21/2013	1203	46.69	2.51	25.49	25.49	Trace on tip of probe	44.18
RWS-01*	S	5/21/2013	1216	46.47	5.31	24.11	24.11	Trace on tip of probe	41.16
MW-16*	I	5/21/2013	Not Located	46.2	NM	NA	NM	NA	NA
OW-17	I	5/21/2013	1234	NS	6.34	27.96	NP	NA	NA
PZS-10	S	5/21/2013	1258	48.09	5.31	14.67	NP	NA	42.78
PZS-11	S	5/21/2013	1313	48.28	6.97	20.21	NP	NA	41.31
PZS-21	S	5/21/2013	1329	48.57	4.93	21.3	NP	NA	43.64
PZS-31	S	5/21/2013	1346	49.27	4.95	20.11	NP	NA	44.32
PZS-41	S	5/21/2013	1401	49.55	5.41	19.98	NP	NA	44.14
PZS-50	S	5/21/2013	1429	49.85	4.65	21.84	21.84	Trace on tip of probe	45.2
PZS-61	S	5/21/2013	1442	51.57	5.29	20.15	NP	NA	46.28
RWS-03*	S	5/21/2013	1511	47.52	2.98	18.37	NP	NA	44.54
RWS-04*	S	5/21/2013	1523	47.86	4.32	18.71	NP	NA	43.54
RWS-06*	S	5/21/2013	1544	49.76	3.32	18.73	NP	NA	46.44
OW-10	S	5/21/2013	1602	50.94	8.47	24.47	24.47	Trace on tip of probe	42.47
OW-11	S	5/21/2013	1623	51.75	4.5	20.78	20.78	Trace on tip of probe	47.25
ITW-02	I	5/21/2013	1641	NS	20.78	59.26	57.02	2.24	NA
OW-19	I	5/21/2013	1705	NS	15.06	53.26	51.74	1.52	NA
OW-20	I	5/21/2013	1731	NS	14.65	48.45	47.73	0.72	NA
PZS-20	S	5/21/2013	1746	48.64	4.93	22.75	19.55	3.20	43.71
PZS-51	S	5/21/2013	1759	49.71	3.95	21.97	NP	NA	45.76
LCW-01	D	5/22/2013	0743	NS	177.31	252.94	NP	NA	NA

Notes:

1. Depth to water, DNAPL, and bottom of well measured relative to top of riser.
2. Zone S/I/D indicates shallow, intermediate, and deep, respectively
3. * - Indicates TOC - Top of Elevation based on Pre-1999 survey data.
4. NP - none present
5. NA - not applicable
6. NM - not measured (well could not be located or damaged)
7. NS - No survey data available

EQUIPMENT CALIBRATION FORM

Beaver Project #: KBE1365

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 05D1436AG / 08610398

Lot #'s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
5/22/13	0907	pH 10.00	9.95	Lot# Exp:
5/22/13	0918	Specific Conductivity	1.409	Lot# Exp:
		ORP		
5/22/13	0923	Dissolved Oxygen	100%	
5/22/13	0928	Turbidity 0.1/15/100/750	0.12/14.9/100/751	
		Temperature	BS 5/22/13	
		Ambient Air Pressure		

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 05D1436AG / 08610398

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
5/23/13	0750	pH 10.00	10.00	Lot# Exp:
5/23/13	0800	Specific Conductivity	1.409	Lot# Exp:
		ORP		
5/23/13	0805	Dissolved Oxygen	100%	
5/23/13	0810	Turbidity 0.1/15/100/750	0.10/15.1/100/750	
		Temperature	BS 5/23/13	
		Ambient Air Pressure		

EQUIPMENT CALIBRATION FORM

Client: Beazer Project #: KBE13665

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

* Lot #'s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By	
		4.00	4.00	Lot#	Exp:
		7.00	7.00	Lot#	Exp:
5/28/13	1150	pH 10.00	9.99	Lot#	Exp:
5/28/13	1200	Specific Conductivity	1.409	Lot#	Exp:
		ORP			
5/28/13	1205	Dissolved Oxygen	100%		
5/28/13	1210	Turbidity 0.1/10/100/750	0.12/10.9/100.9/732		
		Temperature			
		Ambient Air Pressure	RS	5/28/13	

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 10A101775 / 08610398

Date	Time	Parameter	Calibration Reading	Calibration Recorded By	
		4.00	4.00	Lot#	Exp:
		7.00	7.00	Lot#	Exp:
5/28/13	1140	pH 10.00	9.99	Lot#	Exp:
5/28/13	1150	Specific Conductivity	1.409	Lot#	Exp:
		ORP			
5/28/13	1155	Dissolved Oxygen	100%		
5/28/13	1200	Turbidity 0.1/10/100/750	0.1/10.1/98.5/760		
		Temperature			
		Ambient Air Pressure	RS	5/28/13	

Calibrated by: R. Stahl

Signature:

EQUIPMENT CALIBRATION FORM

Client: Brazos Project #: KBC-13665

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

* Lot #'s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By	
		4.00	4.00	Lot#	Exp:
		7.00	7.00	Lot#	Exp:
5/30/13	0820	pH 10.00	9.98	Lot#	Exp:
5/30/13	0823	Specific Conductivity	1.409	Lot#	Exp:
		ORP			
5/30/13	0838	Dissolved Oxygen	100%		
5/30/13	0843	Turbidity 0.1/15/100/750	0.12/14.9/99.8/750		
		Temperature			
		Ambient Air Pressure	RS 5/30/13		

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 10A101775 / 08610398

Date	Time	Parameter	Calibration Reading	Calibration Recorded By	
		4.00	4.00	Lot#	Exp:
		7.00	7.00	Lot#	Exp:
5/30/13	0650	pH 10.00	9.99	Lot#	Exp:
5/30/13	0702	Specific Conductivity	1.409	Lot#	Exp:
		ORP			
5/30/13	0707	Dissolved Oxygen	100%		
5/30/13	0712	Turbidity 0.1/15/100/750	0.12/14.9/99.8/750		
		Temperature			
		Ambient Air Pressure	RS 5/30/13		

Calibrated by: R. Stahl

Signature: R. Stahl

EQUIPMENT CALIBRATION FORM

Client: Beazer Project #: KBE13665

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 06M1536AA / 08610386

* Lot #s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
5/29/13	0700	pH 10.00	9.98	Lot# Exp:
5/29/13	0711	Specific Conductivity	1.409	Lot# Exp:
		ORP		
5/29/13	0716	Dissolved Oxygen	100%	
5/29/13	0721	Turbidity 0.1/15/100/750	0.1/14.9/100/736	
		Temperature		
		Ambient Air Pressure	RS 5/29/13	

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 10A101775 / 08610398

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
5/29/13	0710	pH 10.00	9.98	Lot# Exp:
5/29/13	0722	Specific Conductivity	1.410	Lot# Exp:
		ORP		
5/29/13	0727	Dissolved Oxygen	100%	
5/29/13	0733	Turbidity 0.1/15/100/750	0.1/14.9/99.8/736	
		Temperature		
		Ambient Air Pressure	RS 5/29/13	

Calibrated by: R. Stahl

Signature:

EQUIPMENT CALIBRATION FORM

Client: Berger Project #: KBE-13665

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

* Lot #'s not provided by FCI

Date	Time	Parameter		Calibration Reading	Calibration Recorded By	
			4.00	4.00	Lot#	Exp:
			7.00	7.00	Lot#	Exp:
6/3/13	0735	pH	10.00	9.95	Lot#	Exp:
6/3/13	0747	Specific Conductivity		1.409	Lot#	Exp:
		ORP			CS 6/3/13	
6/3/13	0752	Dissolved Oxygen		100%		
6/3/13	0758	Turbidity 0.1/15/100/750		0.12/14.9/100/752		
		Temperature				
		Ambient Air Pressure		RC 6/3/13		

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

Date	Time	Parameter		Calibration Reading	Calibration Recorded By	
			4.00	4.00	Lot#	Exp:
			7.00	7.00	Lot#	Exp:
6/4/13	0632	pH	10.00	9.95	Lot#	Exp:
6/4/13	0643	Specific Conductivity		1.409	Lot#	Exp:
		ORP			CS 6/4/13	
6/4/13	0648	Dissolved Oxygen		100%		
6/4/13	0653	Turbidity 0.1/15/100/750		0.12/14.8/100/750		
		Temperature				
		Ambient Air Pressure		CS 6/4/13		

Calibrated by: Ryan Stahl

Signature: 6/4/13

EQUIPMENT CALIBRATION FORM

Client: Pegasus Project #: KBE1366S

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

* Lot #'s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
5/31/13	0920	pH 10.00	9.95	Lot# Exp:
5/31/13	0931	Specific Conductivity	1.409	Lot# Exp:
		ORP		
5/31/13	0936	Dissolved Oxygen	100%	RS 6/1/13
5/31/13	0941	Turbidity 0.1/15/100/750	0.13/15/100/730	
		Temperature		
		Ambient Air Pressure		

INSTRUMENT: YSI 556 / Hanna HI98703

SERIAL NO.: 06M1636AM / 08610386

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
6/1/13	0740	pH 10.00	9.96	Lot# Exp:
6/1/13	0752	Specific Conductivity	1.409	Lot# Exp:
		ORP		
6/1/13	0757	Dissolved Oxygen	100%	RS 6/1/13
6/1/13	0802	Turbidity 0.1/15/100/750	0.14/14.9/100.2/749	
		Temperature		
		Ambient Air Pressure		

Calibrated by: R. Stahl

Signature:

EQUIPMENT CALIBRATION FORM

Client: Beazer Project #: KBG1-13665

INSTRUMENT: YSI556 / Hanna HI98703

SERIAL NO.: 06M1536AM / 08610386

* lot #'s not provided by FEI

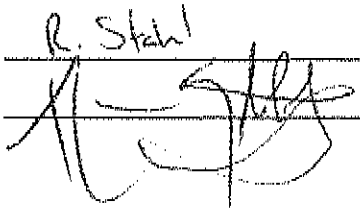
Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
6/7/13	0825	pH 10.00	9.96	Lot# Exp:
6/7/13	0836	Specific Conductivity	1.409	Lot# Exp:
		ORP		RS 6/7/13
6/7/13	0841	Dissolved Oxygen	100%	
6/7/13	0846	Turbidity 0.1/15/100/750	0.11/15/100/751	
		Temperature	RS 6/7/13	
		Ambient Air Pressure		

INSTRUMENT:

SERIAL NO.:

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00		Lot# Exp:
		7.00		Lot# Exp:
		pH 10.00		Lot# Exp:
		Specific Conductivity		Lot# Exp:
		ORP	RS 6/7/13	
		Dissolved Oxygen		
		Turbidity		
		Temperature		
		Ambient Air Pressure		

Calibrated by: R. Stahl



Signature: [signature]

EQUIPMENT CALIBRATION FORM

FTS

Client: BEAZER **Project #:** 13665

INSTRUMENT: YSI 556 / HANNA

SERIAL NO.: 10A101775 / ~~08279084~~ 08610386

LOT NUMBERS NOT PROVIDED BY FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	KS Lot# NA Exp: NA
		7.00	7.00	KS Lot# NA Exp: NA
5/21/13	0700	pH 10.00	10.00	KS Lot# NA Exp: NA
5/21/13	0700	Specific Conductivity 1.409 (mS/cm)	1.409	KS Lot# NA Exp: NA
		ORP	[illegible]	
5/21/13	0700	Dissolved Oxygen 100%	100.0%	KS
5/21/13	0700	Turbidity <0.10, 15, 100, 750 (NTU)	0.08, 14.9, 99.9, 750	KS
		Temperature		
		Ambient Air Pressure	[illegible]	

INSTRUMENT: YSI 556 / HANNA

SERIAL NO.: 06M1530 AM / 08279084

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	KS Lot# NA Exp: NA
		7.00	7.00	KS Lot# NA Exp: NA
5/21/13	0700	pH 10.00	10.00	KS Lot# NA Exp: NA
5/21/13	0700	Specific Conductivity 1.409 (mS/cm)	1.409	KS Lot# NA Exp: NA
		ORP	[illegible]	
5/21/13	0700	Dissolved Oxygen 100%	100.0%	KS
5/21/13	0700	Turbidity <0.10, 15, 100, 750 (NTU)	0.08, 15.1, 99.8, 751	KS
		Temperature		
		Ambient Air Pressure	[illegible]	

EQUIPMENT CALIBRATION FORM

Client: BEAZER Project #: 13665

INSTRUMENT: YSI 556 / HANNA

SERIAL NO.: 16A101775 / 08610386

LOT NUMBERS NOT KNOWN BY FTL

Date	Time	Parameter		Calibration Reading	Calibration Recorded By
			4.00	4.02	KS Lot# NA Exp: NA
			7.00	7.01	KS Lot# NA Exp: NA
5/23/13	0700	pH	10.00	10.00	KS Lot# NA Exp: NA
5/23/13	0700	Specific Conductivity (mS/cm)		1.409	KS Lot# NA Exp: NA
		ORP		[illegible]	
5/23/13	0700	Dissolved Oxygen 100%		100.0%	KS
5/23/13	0700	Turbidity <0.01, 15, 100, 750 (NTU)		0.09, 15.1, 99.9, 752	KS
		Temperature			
		Ambient Air Pressure		[illegible]	

INSTRUMENT: YSI 556 / HANNA

SERIAL NO.: 06M1536 AM / 08279084

Date	Time	Parameter		Calibration Reading	Calibration Recorded By
			4.00	4.00	KS Lot# NA Exp: NA
			7.00	7.01	KS Lot# NA Exp: NA
5/23/13	0700	pH	10.00	10.03	KS Lot# NA Exp: NA
5/23/13	0700	Specific Conductivity (mS/cm)		1.406	KS Lot# NA Exp: NA
		ORP		[illegible]	
5/23/13	0700	Dissolved Oxygen 100%		100.0%	KS
5/23/13	0700	Turbidity <0.01, 15, 100, 750 (NTU)		<0.01, 15.2, 99.6, 750	KS
		Temperature			
		Ambient Air Pressure		[illegible]	

EQUIPMENT CALIBRATION FORM

FTS

Client: BEAZER Project #: 13665

INSTRUMENT: YSI 556

SERIAL NO.: 06M1536 AM

LOT NUMBERS NOT PROVIDED BY FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	KJ Lot# NA Exp: NA
		7.00	7.00	KJ Lot# NA Exp: NA
6/10/13	1000	pH 10.00	10.01	KJ Lot# NA Exp: NA
6/10/13	1000	Specific Conductivity 1.409 (mS/cm)	1.409	KJ Lot# NA Exp: NA
		ORP		
6/10/13	1000	Dissolved Oxygen 100%	100%	KJ
		Turbidity		
		Temperature		
		Ambient Air Pressure		

INSTRUMENT: HANNA

SERIAL NO.: 08610386

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00		Lot# Exp:
		7.00		Lot# Exp:
		pH 10.00		Lot# Exp:
		Specific Conductivity		Lot# Exp:
		ORP		
		Dissolved Oxygen		
6/10/13	1000	Turbidity <0.10, 15, 100 750 (NTU)	<0.10, 15, 100 752	KJ
		Temperature		
		Ambient Air Pressure		

Calibrated by: KYLE SMITH

Signature: [signature]

Client: BEAZER Project #: 13665

INSTRUMENT: YSI 556

[illegible]: 06M1536AM

LOT NUMBERS NOT PROVIDED BY FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.01	KJ Lot# NA Exp: NA
		7.00	7.01	KJ Lot# NA Exp: NA
6/11/13	0645	pH 10.00	10.00	KJ Lot# NA Exp: NA
6/11/13	0645	Specific Conductivity 1.409 (mg/cm)	1.409	KJ Lot# NA Exp: NA
		ORP		KJ
6/11/13	0645	Dissolved Oxygen 100%	100.0%	KJ
		Turbidity		
		Temperature	[illegible]	
		Ambient Air Pressure		

INSTRUMENT: HANNA

SERIAL NO.: 08G14386

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00		Lot# Exp:
		7.00		Lot# Exp:
		pH 10.00	[illegible]	Lot# Exp:
		Specific Conductivity		Lot# Exp:
		ORP		
		Dissolved Oxygen		
6/11/13	0645	Turbidity <0.10, 15, 100, 750 (NTU)	0.09, 14, 100, 751	KJ
		Temperature		
		Ambient Air Pressure	[illegible]	

Calibrated by: KYLE SMITH

Signature: [signature]

EQUIPMENT CALIBRATION FORM

FTS

Client: Beazer Project #: KBE - 13665

INSTRUMENT: YSI556 / Hanna 98703

SERIAL NO.: 06M1536AM / 08610386

* Lot #'s not provided by FEI

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
6/5/13	0726	pH 10.00	9.95	Lot# Exp:
6/5/13	0737	Specific Conductivity	1.409	Lot# Exp:
		ORP		
6/5/13	0742	Dissolved Oxygen	100%	
6/5/13	0747	Turbidity 0.1/15/100/750	0.13/14.9/100/753	
		Temperature		
		Ambient Air Pressure	RS 6/5/13	

INSTRUMENT: YSI556 / Hanna 98703

SERIAL NO.: 06M1536AM / 08610386

Date	Time	Parameter	Calibration Reading	Calibration Recorded By
		4.00	4.00	Lot# Exp:
		7.00	7.00	Lot# Exp:
6/6/13	0809	pH 10.00	9.98	Lot# Exp:
6/6/13	0819	Specific Conductivity	1.409	Lot# Exp:
		ORP		
6/6/13	0824	Dissolved Oxygen	100%	
6/6/13	0825	Turbidity 0.1/15/100/750	0.13/14.9/99.8/749	
		Temperature		
		Ambient Air Pressure	RS 6/6/13	

Calibrated by: Ryan Stahl

Signature: [signature]

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZS-40

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, 85°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 4.93 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 19.85 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 14.92 (ft) (a-d)

h. Well Volume: 2.43 (gal)

2. WELL PURGE DATA HFTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~2.0 gallons

e. Begin Purge Time: 0915 End Purge Time: 1005

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	0915	150	23.93	8.06	0.294	-42.6	0.96	5.81	clear	none	5.15
PURGING VALUES											
1	0920	150	23.76	8.00	0.303	-63.8	0.21	5.05	clear	none	5.17
2	0925	150	23.68	8.08	0.310	-78.9	0.17	2.65	clear	none	5.14
3	0930	150	23.89	8.22	0.335	-102.3	0.12	2.02	clear	none	5.14
4	0935	150	23.91	8.22	0.344	-124.4	0.11	1.74	clear	none	5.14
5	0940	150	23.53	7.93	0.366	-110.4	0.09	1.63	clear	none	5.14
6	0945	150	23.58	7.89	0.372	-108.3	0.09	1.54	clear	none	5.14
7	0950	150	23.88	7.87	0.386	-111.8	0.08	1.50	clear	none	5.14
8	0955	150	23.87	7.87	0.399	-118.8	0.07	1.47	clear	none	5.14
9	1000	150	24.03	7.84	0.403	-122.4	0.07	1.43	clear	none	5.14
10	1005	150	24.07	7.80	0.405	-126.3	0.07	1.46	clear	none	5.14

RS 5/30/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): PZS-40, 5/30/13, 1010

Sample Analytical Parameters/Method: 8260D (BTEX), 8270CL (SVOCs), 6020 selected metals (diss. & total)

Sample Start Time: 1010 End SampleTime: 1039

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: WL #29649 FB-02-053013 collected here @ 1048 5/30/13

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-04

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~ 90°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 4.54 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 24.43 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 19.89 (ft) (a-d)

h. Well Volume: 3.24 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 55606M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~ 1.60 gallons

e. Begin Purge Time: 1107 End Purge Time: 1147

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1107	150	25.46	7.01	0.769	-60.9	3.25	45.9	cloudy	none	4.92
PURGING VALUES											
1	1112	150	25.31	6.66	0.767	-46.6	0.81	35.5	cloudy	none	4.92
2	1117	150	25.33	6.71	0.765	-46.2	0.49	26.5	clear	none	4.92
3	1122	150	25.16	6.72	0.778	-46.2	0.32	18.6	clear	none	4.92
4	1127	150	24.97	6.65	0.786	-36.2	0.22	16.8	clear	none	4.92
5	1132	150	24.86	6.64	0.799	-32.8	0.18	14.5	clear	none	4.92
6	1137	150	24.80	6.65	0.804	-34.4	0.16	13.4	clear	present	4.92
7	1142	150	24.66	6.63	0.807	-31.9	0.18	13.1	clear	present	4.92
8	1147	150	24.72	6.65	0.810	-30.3	0.15	12.6	clear	present	4.92

RS 5/30/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-04, 5/30/13, 1152

Sample Analytical Parameters/Method: 8260B(BTEX), 8270C LL (SVOCs), 6020 select metals (diss. + total)

Sample Start Time: 1152 End SampleTime: 1306

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none

COMMENTS: WC # 29486 MS/MSD collected here

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: P-03R

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny ~ 95°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 25.03 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 64.76 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 39.73 (ft) (a-d)

h. Well Volume: 6.48 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing #P7560172

b. Field Testing Equipment: YSI 556 06M 15326 Turbidity Meter 08G10386 tubing

c. Required Total Purge Volume (1f x 2c) (gals.): --

d. Total Volume and Number of Well Volumes Removed: ~ 6.75 gallons

e. Begin Purge Time: 1417 End Purge Time: 1447

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1412	100	26.83	11.85	6.602	-0.8	3.89	7.69	clear	present	25.83
PURGING VALUES											
1	1417	100	26.63	12.20	6.644	-0.9	2.19	7.02	clear	present	26.13
2	1422	100	26.40	12.20	6.686	-53.7	1.51	4.56	clear	present	26.17
3	1427	100	26.44	12.30	6.664	-54.7	1.32	1.39	clear	present	26.19
4	1432	75	26.32	12.26	6.672	-59.3	1.24	1.08	clear	present	26.19
5	1437	75	26.27	12.27	6.667	-65.5	1.15	0.96	clear	present	26.19
6	1442	75	26.37	12.25	6.661	-65.7	1.12	0.99	clear	present	26.19
7	1447	75	26.49	12.30	6.660	-68.1	1.16	0.93	clear	present	26.19
						RC 5/30/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stehl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): P-03R, 5/30/13, 1452

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C (L), 6020 select metals (diss. + total)

Sample Start Time: 1452 End SampleTime: 1533

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none

COMMENTS: WL # 29699

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZS-30

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy ~90°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 5.49 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 20.09 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 14.6 (ft) (a-d)

h. Well Volume: 2.38 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (Proactive) w/ dedicated tubing

b. Field Testing Equipment: YSI 556 (Proactive) Turbidity Meter (Proactive)

c. Required Total Purge Volume (1f x 2e) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1.75 gal.

e. Begin Purge Time: 1633 End Purge Time: 1733

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1633	130	26.07	8.71	0.224	-173.0	5.19	29.9	Clear	Present	6.09
PURGING VALUES											
1	1638	110	26.15	8.65	0.216	-180.5	1.17	15.0	Clear	Present	6.20
2	1643	110	26.35	8.73	0.246	-187.1	0.79	9.01	Clear	Present	6.19
3	1648	110	26.22	8.72	0.289	-200.5	0.65	8.06	Clear	Present	6.20
4	1653	110	25.95	8.62	0.325	-202.1	0.58	3.25	Clear	Present	6.20
5	1658	110	26.23	8.54	0.365	-198.9	0.54	2.62	Clear	Present	6.20
6	1703	110	26.66	8.43	0.381	-176.7	0.50	1.95	Clear	Present	6.20
7	1708	110	26.03	8.25	0.400	-214.3	0.49	1.87	Clear	Present	6.20
8	1713	110	24.35	8.15	0.413	-180.3	0.47	1.77	Clear	Present	6.20
9	1718	110	24/30/13 26.36	8.09	0.422	-205.0	0.49	1.70	Clear	Present	6.20
10	1723	110	26.12	8.03	0.426	-218.0	0.49	1.66	Clear	Present	6.20
11	1728	110	25.99	8.00	0.428	-222.0	0.50	1.63	Clear	Present	6.20
12	1733	110	25.78	7.98	0.430	-224.0	0.51	1.60	Clear	Present	6.20

3. SAMPLE COLLECTION DATA Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated tubing

Sample I.D. (Name, Date, Time): PZS-30 5/30/13 1735

Sample Analytical Parameters/Method: BTEX 8260B PAHs - 8270C Total Selected Metals 6020, Diss Selected Metals 6020

Sample Start Time: 1735 End SampleTime: 1810

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: No Sheen / Odor Present

COMMENTS:

Water Level SN 22046

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-14R

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~95°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.23 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 46.27 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 31.04 (ft) (a-d)

h. Well Volume: 5.06 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 0861038 tubing

c. Required Total Purge Volume (1f x 2c) (gals.): ~

d. Total Volume and Number of Well Volumes Removed: ~2.45 gallons

e. Begin Purge Time: 1640 End Purge Time: ~~1710~~ 1725 RS 5/30/13

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1640	250	26.76	7.38	0.985	-29.7	1.53	15.9	clear	present	16.03
PURGING VALUES											
1	1645	200	26.72	7.24	0.954	-28.4	1.02	9.96	clear	present	16.17
2	1650	200	26.90	7.20	0.898	-31.9	0.69	7.36	clear	present	16.19
3	1655	200	27.31	7.18	0.879	-44.2	1.13	6.62	clear	present	16.19
4	1700	200	27.25	7.04	0.931	-43.9	1.30	6.74	clear	present	16.19
5	1705	200	27.28	6.84	1.053	-50.2	1.07	6.36	clear	present	16.19
6	1710	200	27.05	6.60	1.102	-44.3	0.89	5.74	clear	present	16.19
7	1715	200	27.36	6.63	1.127	-49.8	0.78	4.98	clear	present	16.19
8	1720	200	27.86	6.67	1.130	-50.9	0.75	4.91	clear	present	16.19
9	1725	200	27.56	6.71	1.133	-52.6	0.73	5.01	clear	present	16.19

RS 5/30/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): MW-14R, 5/30/13, 1730

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 select metals (diss. & total)

Sample Start Time: 1730 End SampleTime: ~~1753~~ 1823 RS 5/30/13

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none

COMMENTS: WL #29694 Dupe PZN-99B collected here, 2000, 5/30/13

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: P-02R

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/6/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.70 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 48.77 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 64.47 (ft) (a-d)

h. Well Volume: 10.5 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Peristaltic Pump w/dedicated teflon-lined tubing

b. Field Testing Equipment: YSI 5560C M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.60 gallons

e. Begin Purge Time: 1353 End Purge Time: 1423

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	13.53	200	27.90	6.91	1.418	-109.3	2.41	35.4	clear	present	16.30
PURGING VALUES											
1	1358	200	27.48	6.63	1.402	-98.0	0.45	26.5	clear	present	16.30
2	1403	200	27.72	6.63	1.397	-92.9	0.34	20.7	clear	present	16.30
3	1408	200	27.53	6.65	1.382	-87.9	0.27	17.7	clear	present	16.30
4	1413	200	27.44	6.61	1.360	-82.2	0.26	14.8	clear	present	16.30
5	1418	200	27.32	6.65	1.358	-85.6	0.26	14.1	clear	present	16.30
6	1423	200	26.95	6.61	1.356	-84.7	0.25	13.7	clear	present	16.30

RS 6/6/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): P-02R, 6/6/13, 1428

Sample Analytical Parameters/Method: 8260B(BTEX), 8270C CL(SVOCs), 6020 selected metals (diss + total)

Sample Start Time: 1428 End SampleTime: 1451

PID/FID READING(s): 0.1 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / present

COMMENTS: WL # 29649 * EB-04 - 06/06/13 collected here @ 1500

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-8

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Overcast, ~80°F Sampling Date: 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 9.24 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 16.39 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NP (ft)

g. Length of Water Column: 7.15 (ft) (a-d)

h. Well Volume: 1.19 (gal)

2. WELL PURGE DATA

FTS # 061720

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 (DO/Temp/pH/Turbidity Meter (DO, Temp, pH, Turbidity)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~ 1.99 gal

e. Begin Purge Time: 1020 End Purge Time: 1050

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Start	1020	250	21.24	5.12	0.628	108.0	2.18	2.41	clear	none	9.29
PURGING VALUES											
1	1025	250	21.24	5.30	0.625	92.3	1.50	2.16	clear	none	9.28
2	1030	250	21.23	5.37	0.625	87.6	1.29	2.04	clear	none	9.28
3	1035	250	21.20	5.59	0.624	66.4	0.93	1.93	clear	none	9.28
4	1040	250	21.18	5.79	0.626	58.4	0.77	1.23	clear	none	9.28
5	1045	250	21.12	5.98	0.622	53.6	0.75	1.20	clear	none	9.28
6	1050	250	21.03	5.85	0.622	~~54.0~~ 49.2	0.75	1.15	clear	none	9.28
						KS 5/22/13					

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): OW-8, 5/22/13, 1055

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 - select diss. metals + select TOT metals

Sample Start Time: 1055 End SampleTime: 1115

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: WL # ~~29446~~ 29649 RS 5/22/13

P-01

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: ~~P-05~~ RS 5/22/13

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sampling Date: 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 19.23 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 48.63 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 29.40 (ft) (a-d)

h. Well Volume: 4.80 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Peristaltic Pump w/dedicated teflon lined tubing # 6150720

b. Field Testing Equipment: YSI 556 (SN# 13E101436) Turbidity Meter (SN# 13E101596) tubing

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 0.50 gallons

e. Begin Purge Time: 1130 End Purge Time: 1200

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Init	1130	100	23.29	7.38	0.406	60.7	2.08	5.93	clear	none	20.43
PURGING VALUES											
1	1135	100	23.49	7.29	0.408	21.4	1.85	3.10	clear	none	20.48
2	1140	100	23.59	7.22	0.408	23.4	0.99	2.93	clear	none	20.51
3	1145	100	23.77	7.21	0.407	24.0	0.85	2.66	clear	none	20.53
4	1150	100	23.68	7.21	0.408	17.1	0.72	1.47	clear	none	20.58
5	1155	100	23.81	7.20	0.407	20.5	0.69	1.45	clear	none	20.61
6	1200	100	23.65	7.19	0.408	15.9	0.67	1.39	clear	none	20.64
						RS 5/22/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow / Peristaltic Pump w/dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): P-03, 5/22/13, 1205 & sonket

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 (TOT + Dis Metals)

Sample Start Time: 1205 End SampleTime: 1233

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/22/13

COMMENTS: WL ~~#760946~~ 29649 replaced tubing * purged at lowest possible rate

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: P-04

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: OVERCAST, LIGHT WIND, 80°F **Sampling Date:** 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 19.89 (ft)

c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 53.29 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 33.70 (ft) (a-d)

h. **Well Volume:** 5.49 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (US 983UX) WITH DEDICATED TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (10A101775) Turbidity Meter (08610386)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 3.602 = 0.79 GALLONS

e. **Begin Purge Time:** 1050 **End Purge Time:** 1120

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1050	100	24.86	7.93	0.701	-11.6	3.67	12.6	CLEAR	NONE	19.74
PURGING VALUES											
1	1055	100	24.85	7.85	0.696	-23.8	1.91	5.85	CLEAR	NONE	19.75
2	1100	100	25.00	7.82	0.695	-42.8	1.16	4.27	CLEAR	NONE	19.75
3	1105	100	25.14	7.81	0.695	-56.5	0.96	2.98	CLEAR	NONE	19.76
4	1110	100	25.19	7.80	0.695	-59.2	0.74	3.64	CLEAR	NONE	19.76
5	1115	100	25.22	7.80	0.694	-63.2	0.72	3.52	CLEAR	NONE	19.76
6	1120	100	25.18	7.80	0.694	-65.1	0.71	3.49	CLEAR	NONE	19.77

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH DEDICATED TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): P-04 5/22/13 1130

Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C CL), TOTAL + DISSOLVED METALS (6020)

Sample Start Time: 1130 **End SampleTime:** 1210

PID/FID READING(s) : NA **PID/FID Model & Ionization Potential**

ODOR/SHEEN: NA

COMMENTS: * WATER LEVEL (25640)

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-03

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 7.23 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 27.20 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 19.97 (ft) (a-d)

h. Well Volume: 3.26 (gal)

2. WELL PURGE DATA

#FTS001720

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 0501436AG Turbidity Meter 08610396

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.20 gallons

e. Begin Purge Time: 1333 End Purge Time: 1400

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	~~150~~ 1333 RS 5/22/13	150	23.80	7.08	0.647	-19.4	3.75	2.26	clear	none	7.46
PURGING VALUES											
1	1338	150	23.38	6.93	0.645	-7.7	1.06	2.21	clear	none	7.46
2	1343	150	23.67	6.93	0.644	11.1	0.82	1.68	clear	none	7.46
3	1348	150	23.76	6.94	0.643	-3.4	0.69	1.73	clear	none	7.46
4	1353	150	23.78	6.95	0.640	-15.5	0.57	1.69	clear	none	7.46
5	1358	150	23.82	6.94	0.639	-12.3	0.56	1.62	clear	none	7.46
6	1403	150	24.01	6.96	0.640	-8.3	0.53	1.57	clear	none	7.46

RS 5/22/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-03, 5/22/13, 1408 Select

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), Metals (8260) Diss + Total

Sample Start Time: 1408 End SampleTime: 1430

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: w/ # ~~[illegible]~~ 29649 RS 5/22/13

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-05

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~90°F Sampling Date: 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: ~~12.25~~ 11.25 RS 5/22/13 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 23.95 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 12.7 (ft) (a-d)

h. Well Volume: 2.07 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow/Peristaltic Pump w/ dedicated teflon lined tubing #FTS001720

b. Field Testing Equipment: YSI 556 USD 1436 AG Turbidity Meter 08610396

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.20 gallons

e. Begin Purge Time: 1553 End Purge Time: 1623

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1553	150	24.03	7.06	1.102	97.6	2.44	29.8	clear / black particles	none	11.46
PURGING VALUES											
1	1558	150	23.90	6.80	1.117	94.9	0.99	16.1	clear w/ black particles	none	11.46
2	1603	150	23.92	6.76	1.122	91.3	0.89	8.06	clear	none	11.46
3	1608	150	23.80	6.78	1.130	77.1	0.73	4.70	clear	none	11.46
4	1613	150	23.68	6.75	1.130	78.8	0.66	3.96	clear	none	11.46
5	1618	150	23.81	6.76	1.133	73.4	0.65	3.78	clear	none	11.46
6	1623	150	23.81	6.78	1.135	70.4	0.62	3.73	clear	none	11.46

RS 5/22/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow/Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-05 5/22/13, 1628

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), select metals 6020 (diss. & total)

Sample Start Time: 1628 End SampleTime: 1649

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: WL ~~#70246~~ RS 5/22/13 29649

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-7

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, 85°F Sampling Date: 5/22/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 9.98 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 19.30 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 9.32 (ft) (a-d)

h. Well Volume: 1.52 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing (APT 150/720)

b. Field Testing Equipment: YSI 556 S/N 13436AG Turbidity Meter 08610396

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.20 gallons

e. Begin Purge Time: 1722 End Purge Time: 1752

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Init	1722	150	26.10	7.00	1.232	84.1	3.45	7.91	clear	none	10.27
PURGING VALUES											
1	1727	150	26.10	6.94	1.245	79.8	0.97	7.88	clear	none	10.29
2	1732	150	26.15	6.92	1.240	84.2	0.66	8.15	clear	none	10.30
3	1737	150	26.07	6.91	1.231	61.8	0.55	8.23	clear	none	10.30
4	1742	150	25.93	6.89	1.211	69.0	0.48	5.88	clear	none	10.30
5	1747	150	25.93	6.87	1.208	71.2	0.46	5.89	clear	none	10.30
6	1752	150	25.97	6.88	1.209	72.1	0.46	5.72	clear	none	10.30

RS 5/22/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stehl

Sampling Method(s) & Equip: Low Flow / Peristaltic pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): OW-7, 5/22/13, 1757

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), Select metals 6020 (diss. & total)

Sample Start Time: 1757 End SampleTime: 1827

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/22/13

COMMENTS: Well ~~70446~~ 29649 - replaced new tubing

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-09

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, 85°F Sampling Date: 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 8.32 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 16.90 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 8.58 (ft) (a-d)

h. Well Volume: 1.40 (gal) #FTS00472

2. WELL PURGE DATA

a. Purge Method: Low Flow/Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 SN#13A6A6 Turbidity Meter #26103518

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 0.79

e. Begin Purge Time: 0925 End Purge Time: 0955

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
1-A	0925	100	23.35	6.62	1.543	103.5	1.77	3.52	clear	none	9.58
PURGING VALUES											
1	0930	100	23.03	6.61	1.542	103.4	1.22	3.05	clear	none	8.73
2	0935	100	23.15	6.63	1.542	105.7	0.84	2.93	clear	none	8.95
3	0940	100	23.19	6.64	1.539	103.1	0.73	2.02	clear	none	9.21
4	0945	100	23.10	6.64	1.540	101.3	0.62	1.86	clear	none	9.43
5	0950	100	22.89	6.63	1.541	98.5	0.59	1.77	clear	none	9.65
6	0955	100	22.65	6.63	1.539	92.3	0.58	1.79	clear	none	9.87

RS 5/23/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): OW-09, 5/23/13, 1000

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C w/ (SVOC), 8260 select metals (Total & Dissolved)

Sample Start Time: 1000 End SampleTime: 1026

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/23/13

COMMENTS: WL# ~~44846~~ 29694 Purged @ lowest possible rate, new tubing

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-10

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly cloudy, ~90°F Sampling Date: 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 20.60 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 56.21 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 35.61 (ft) (a-d)

h. Well Volume: 5.80 (gal)

2. WELL PURGE DATA #FTS0041420

a. Purge Method: Low Flow / Peristaltic Pump w/dedicated teflon-lined tubing

b. Field Testing Equipment: YSI 556 MPS Turbidity Meter #16W978

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.89 gallons

e. Begin Purge Time: 1130 End Purge Time: 1205

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE-PURGE VALUES											
Init	1130	200	23.54	6.66	1.196	-53.6	1.15	96.2	cloudy	present	20.72
PURGING VALUES											
1	1135	200	23.82	6.66	1.189	-43.2	0.93	81.3	cloudy	present	20.72
2	1140	200	24.02	6.69	1.193	-48.2	0.97	52.2	cloudy	present	20.73
3	1145	200	23.62	6.67	1.170	-50.4	0.61	41.7	cloudy	present	20.73
4	1150	200	23.52	6.67	1.162	-53.8	0.50	29.1	cloudy	present	20.73
5	1155	200	23.39	6.67	1.155	-52.7	0.49	12.9	clear	present	20.73
6	1200	200	23.45	6.68	1.153	-55.7	0.48	12.1	clear	present	20.73
7	1205	200	23.40	6.69	1.151	-58.1	0.46	11.7	clear	present	20.73

#8 5/23/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Hall

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): MW-10, 5/23/13, 1210

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), select metals 6020 (dis. & total)

Sample Start Time: 1210 End SampleTime: 1233

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none as 5/23/13

COMMENTS: WL# ~~Fortite~~ 29649

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-01

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~88°F Sampling Date: 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 10.20 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 16.15 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 5.95 (ft) (a-d)

h. Well Volume: 0.97 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing #F15001720

b. Field Testing Equipment: YSI 556 [illegible] AC Turbidity Meter 08610398

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.20 gallons

e. Begin Purge Time: 1253 End Purge Time: 1328

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1253	150	24.30	7.00	0.732	-69.0	2.30	7.93	clear	present	10.53
PURGING VALUES											
1	1258	150	24.26	6.89	0.745	-59.8	4.73	6.89	clear	present	10.53
2	1303	150	24.20	6.92	0.773	-50.0	3.20	9.86	clear	present	10.55
3	1308	150	23.90	6.84	0.768	-48.2	1.19	8.90	clear	present	10.55
4	1313	150	23.17	6.82	0.775	-59.2	0.85	7.73	clear	present	10.55
5	1318	150	23.70	6.79	0.773	-68.9	0.81	6.83	clear	present	10.55
6	1323	150	23.65	6.74	0.773	-66.6	0.83	6.74	clear	present	10.55

RS 5/23/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-01, 5/23/13, 1328

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 Select metals (tot. + diss.)

Sample Start Time: 1328 End SampleTime: 1349

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/23/13

COMMENTS: Wt. # ~~[illegible]~~ 29649 * replaced tubing

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZN-30

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.88 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 19.64 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 12.76 (ft) (a-d)

h. Well Volume: 2.08 (gal)

2. WELL PURGE DATA #FTS001720

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 DCM636AM Turbidity Meter 09610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~2.0 gallons

e. Begin Purge Time: 1426 End Purge Time: 1456

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1426	250	22.05	7.12	0.749	-92.2	3.90	10.9	clear	present	7.09
PURGING VALUES											
1	1431	250	21.78	6.98	0.724	-94.1	1.05	9.22	clear	present	7.09
2	1436	250	21.79	6.88	0.686	-83.1	0.75	7.36	clear	present	7.09
3	1441	250	21.85	6.84	0.673	-76.1	0.67	5.44	clear	present	7.09
4	1446	250	21.68	6.75	0.634	-59.1	0.49	3.82	clear	present	7.09
5	1451	250	21.70	6.73	0.633	-58.3	0.47	3.67	clear	present	7.09
6	1456	250	21.66	6.69	0.633	-56.8	0.45	3.57	clear	present	7.09

RS 5/23/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): PZN-30, 5/23/13 1501

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 select metals (Total & Dissolved)

Sample Start Time: 1501 End SampleTime: 1529

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/23/13

COMMENTS: WL # ~~24260~~ 29649

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-12R

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 20.07 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 55.21 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 35.14 (ft) (a-d)

h. Well Volume: 5.73 (gal)

2. WELL PURGE DATA # ERS001930

a. Purge Method: Low flow / Peristaltic Pump w/dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 (S/N 13A 106598) Turbidity Meter (S/N 10E 106598)

c. Required Total Purge Volume (1f x 2c) (gals.):

d. Total Volume and Number of Well Volumes Removed: ~2.65 gallons

e. Begin Purge Time: 1545 End Purge Time: 1635

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1545	200	23.60	12.29	5.052	10.9	5.08	10.8	clear	none	20.21
PURGING VALUES											
1	1550	200	23.45	12.22	4.800	-2.5	4.77	1408	clear	none	20.36
2	1555	200	23.25	12.15	4.419	-15.7	4.47	147	cloudy	present	20.36
3	1600	200	23.71	12.13	3.802	-38.9	3.44	557	cloudy	present	20.36
4	1605	200	23.72	11.99	3.316	-41.0	3.18	365	cloudy	present	20.36
5	1610	200	23.82	10.80	2.247	-96.5	2.49	126	cloudy	present	20.36
6	1615	200	23.89	9.36	1.183	-18.4	1.73	60.6	cloudy	present	20.36
7	1620	200	23.90	8.90	0.973	-23.4	0.94	52.3	cloudy	present	20.36
8	1625	200	23.94	8.64	1.034	-30.5	0.73	93.7	clear	present	20.36
9	1630	200	23.90	8.60	1.040	-33.0	0.69	47.3	clear	present	20.36
10	1635	200	23.90	8.57	1.042	-30.3	0.69	40.1	clear	present	20.36
						RS 5/23/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stehl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-12R-, 5/23/13, 1640

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOC), 6020 Select metals (dissolved + total)

Sample Start Time: 1640 End SampleTime: 1705

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none RS 5/23/13

COMMENTS: WL # ~~Error~~ 29649

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-26

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy ~ 85°F Sampling Date: 5/24/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 7.31 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 18.48 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.17 (ft) (a-d)

h. Well Volume: 1.82 (gal)

2. WELL PURGE DATA #FRS0972

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 05D1436AG Turbidity Meter 04610398

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 1.12 gallons

e. Begin Purge Time: 0827 End Purge Time: 0857

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE-PURGE VALUES											
Int	0827	100	23.64	6.31	1.050	98.2	3.45	2.68	clear	none	7.64
PURGING VALUES											
1	0832	150	23.58	6.37	1.053	61.6	1.29	2.12	clear	none	7.72
2	0837	150	23.53	6.46	1.046	43.7	0.89	1.98	clear	none	7.72
3	0842	150	23.55	6.50	1.029	38.0	0.76	1.63	clear	none	7.72
4	0847	150	23.59	6.54	1.019	31.0	0.68	1.26	clear	none	7.72
5	0852	150	23.60	6.55	1.017	30.7	0.65	1.20	clear	none	7.72
6	0857	150	23.57	6.55	1.015	30.2	0.64	1.19	clear	none	7.72

RS 5/24/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): MW-26, 5/24/13, 0902

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), select metals 6020 (diss. & total)

Sample Start Time: 0902 End SampleTime: 0940

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: WL# 17871

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZN-20

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny Hot ~85 Breeze from South Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 7.64 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 2000 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 12.36 (ft) (a-d)

h. Well Volume: 2.02 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 (10A101775) Turbidity Meter (08610398)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~2.0 gal

e. Begin Purge Time: 1243 End Purge Time: 1323

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
WT	1243	150	21.26	6.80	0.783	-167.9	3.20	12.7	Clear	Present	7.83
PURGING VALUES											
1	1248	150	21.06	6.83	0.783	-165.4	0.92	11.8	Clear	Present	7.90
2	1253	150	20.70	6.83	0.779	-163.2	0.66	6.71	Clear	Present	7.91
3	1258	150	20.72	6.82	0.777	-157.9	0.56	5.22	Clear	Present	7.91
4	1303	150	20.94	6.80	0.774	-151.9	0.46	5.14	Clear	Present	7.91
5	1308	150	20.74	6.73	0.774	-138.5	0.39	5.37	Clear	Present	7.92
6	1313	150	20.58	6.72	0.777	-133.5	0.36	5.28	Clear	Present	7.92
7	1318	150	20.68	6.69	0.778	-128.5	0.33	5.01	Clear	Present	7.92
8	1323	150	20.67	6.69	0.778	-129.1	0.33	4.91	Clear	Present	7.92

3. SAMPLE COLLECTION DATA

Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Peristaltic Pump (FS001720) w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): PZN-20 5/28/13 1325

Sample Analytical Parameters/Method: BTEX-8260B, PAHs SVOCs 8270C LL, Total Selected Metals -6020, Diss Selected Metals -6020

Sample Start Time: 1325 End SampleTime: 1405

PID/FID READING(s): 0.0 ppm PID/FID Model & Ionization Potential

ODOR/SHEEN: Odor Present / No Sheen.

COMMENTS: Collected MS/MSD.

Water Level SN 2206

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZN-50

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy, Wind from S 5-10 mph Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.95 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 20.20 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 13.25 (ft) (a-d)

h. Well Volume: 2.16 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump w/teflon lined tubing

b. Field Testing Equipment: YSI 556 (10410-775) Turbidity Meter (0861038)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~2.0 gal.

e. Begin Purge Time: 1446 End Purge Time: 1526

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1446	150	21.99	6.99	0.717	-195.8	1.22	21.7	Clear	Present	7.69
PURGING VALUES											
1	1451	150	22.43	7.03	0.709	-203.1	0.71	21.8	Clear	Present	7.71
2	1456	150	22.90	7.04	0.698	-202.9	0.45	19.1	L. Yellow	Present	7.71
3	~~1451~~ 1501	150	23.59	7.07	0.698	-183.0	0.38	15.8	L. Yellow	Present	7.72
4	1506	150	23.51	7.10	0.708	-204.1	0.36	12.7	L. Yellow	Present	7.73
5	1511	150	22.77	7.10	0.709	-211.1	0.33	12.9	L. Yellow	Present	7.73
6	1516	150	22.49	7.10	0.713	-211.0	0.31	11.3	L. Yellow	Present	7.74
7	1521	150	22.84	7.09	0.717	-205.1	0.29	11.5	L. Yellow	Present	7.74
8	1526	150	22.96	7.09	0.720	-203.1	0.28	11.1	L. Yellow	Present	7.74

AL 5/28/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Peristaltic Pump (FTS 001720) w/ teflon lined tubing

Sample I.D. (Name, Date, Time): PZN-50, 5/28/13, 1550

Sample Analytical Parameters/Method: BTEX 8260B · PAHs-SVOCs · 8270 CL Total Selected Metals 6020

Diss. Selected Metals - 6020.

Sample Start Time: 1530 End SampleTime: 1550

PID/FID READING(s): PID/FID Model & Ionization Potential

ODOR/SHEEN: Odor Present / Sheen Present on purge water

COMMENTS: Water Levels N. 22066

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-14

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Overcast ~ 75°F Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.61 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 17.85 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.24 (ft) (a-d)

h. Well Volume: 1.83 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (FP001720) w/ ~~[illegible]~~ AC 5/29/13 teflon-lined tubing

b. Field Testing Equipment: YSI 556 (10A101775) Turbidity Meter (09610398)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.11 gal

e. Begin Purge Time: 0852 End Purge Time: 0922

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	0852	140	20.63	6.64	0.513	-172.3	2.40	6.25	Clear	Present	6.79
PURGING VALUES											
1	0857	140	20.55	6.62	0.521	-161.5	1.02	3.95	Clear	Present	6.80
2	~~0850~~ AC 5/29/13 0902	140	20.56	6.64	0.540	-141.7	0.66	2.55	Clear	Present	6.80
3	0907	140	20.56	6.66	0.545	-143.7	0.61	1.69	Clear	Present	6.80
4	0912	140	20.45	6.68	0.545	-149.2	0.50	1.77	Clear	Present	6.80
5	0917	140	20.45	6.69	0.544	-155.6	0.49	1.67	Clear	Present	6.80
6	0922	140	20.46	6.69	0.542	-157.1	0.47	1.64	Clear	Present	6.80

AC 5/29/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): OW-14, 5/29/13, 0925

Sample Analytical Parameters/Method: BTEX 8260B, PAHs-SVOCs-8270C, Total Selected Metals-6020, Diss. Selected Metals-6020

Sample Start Time: 0925 End SampleTime: 0940

PID/FID READING(s): ~~0925~~ 5/29/13 0.0 ppm PID/FID Model & Ionization Potential AC 5/29/13

ODOR/SHEEN: Odor Present / No Sheen.

COMMENTS:

Water Level #22666

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZN-40

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~90°F Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.61 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 20.20 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 13.59 (ft) (a-d)

h. Well Volume: 2.22 (gal)

2. WELL PURGE DATA #FTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 ~~OM1536AM~~ Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.20 gal

e. Begin Purge Time: 1245 End Purge Time: 1315

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1245	150	25.28	7.02	0.840	-144.0	0.47	21.7	present	clear	6.76
PURGING VALUES											
1	1250	150	24.82	6.79	0.844	-116.9	0.18	12.8	present	clear	6.79
2	1255	150	24.72	6.87	0.844	-109.4	0.11	8.84	present	clear	6.79
3	1300	150	24.38	6.84	0.838	-103.5	0.08	7.28	present	clear	6.79
4	1305	150	24.39	6.83	0.838	-101.7	0.07	6.60	present	clear	6.79
5	1310	150	24.27	6.77	0.826	-95.6	0.07	6.23	present	clear	6.79
6	1315	150	24.21	6.73	0.826	-92.1	0.07	6.13	present	clear	6.79

RS 5/28/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): PZN-40, 5/28/13, 1320

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SIOCs), 6020 Select metals (dissolved & total)

Sample Start Time: 1320 End SampleTime: 1358

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none RS 5/28/13

COMMENTS: WL # ~~20246~~ 29649 Duplicate collected here ~~PN~~ RS 5/28/13 PZN-99A 5/28/13 2000

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-15

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~92°F Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 20.12 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 53.26 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 33.14 (ft) (a-d)

h. Well Volume: 5.40 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Low Flow/Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1156AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~2.12 gallons

e. Begin Purge Time: 1415 End Purge Time: 1505

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1415	250	25.40	6.38	1.525	-29.5	2.20	>1000	gray	present	20.45
PURGING VALUES											
1	1420	150	25.12	6.03	1.550	-9.2	1.46	>1000	gray	present	20.52
2	1425	150	24.52	5.92	1.586	4.9	0.66	751	gray	present	20.54
3	1430	150	24.62	6.12	1.588	-7.0	0.42	388	cloudy	present	20.54
4	1435	150	24.83	6.21	1.579	-14.1	0.35	303	cloudy	present	20.54
5	1440	150	25.26	6.37	1.530	-27.9	0.33	82.0	cloudy	present	20.54
6	1445	150	24.92	6.43	1.350	-17.4	0.33	78.3	cloudy	present	20.54
7	1450	150	24.81	6.47	1.346	-17.1	0.33	75.2	cloudy	present	20.54
8	1455	150	24.90	6.53	1.354	-20.4	0.33	72.4	cloudy	present	20.54
9	1500	150	25.95	6.54	1.360	-24.8	0.32	69.3	cloudy	present	20.54
10	1505	150	25.73	6.54	1.361	-28.7	0.32	66.1	cloudy	present	20.54
					RS	5/28/13					

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): OW-15, 5/28/13, 1510

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 select metals (diss. & total)

Sample Start Time: 1510 End SampleTime:

PID/FID READING(s): 00 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none RS 5/28/13

COMMENTS: WL #~~20746~~ 29649 * Turbidity rose during sampling

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-16

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~80°F Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 20.39 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 53.94 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 33.55 (ft) (a-d)

h. Well Volume: 5.49 (gal)

2. WELL PURGE DATA #STS 001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon-lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 00610386

c. Required Total Purge Volume (1f x 2c) (gals.): –

d. Total Volume and Number of Well Volumes Removed: ~1.20 gallons

e. Begin Purge Time: 0845 End Purge Time: 0915

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE-PURGE VALUES											
Int	0845	150	23.37	5.83	1.558	16.2	1.45	11.2	clear	present	20.87
PURGING VALUES											
1	0850	150	23.29	5.89	1.574	5.7	0.77	9.67	clear	present	20.87
2	0855	150	23.44	6.14	1.534	4.6	0.52	7.31	clear	present	20.87
3	0900	150	23.42	6.15	1.535	4.7	0.51	6.82	clear	present	20.87
4	0905	150	23.39	6.17	1.529	4.9	0.50	7.13	clear	present	20.87
5	0910	150	23.42	6.20	1.524	5.7	0.49	7.23	clear	present	20.87
6	0915	150	23.40	6.20	1.521	5.9	0.48	7.02	clear	present	20.87

RS 5/29/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): OW-16, 5/29/13, 0920

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LC (SVOCs), 6020 selected metals (diss. or total)

Sample Start Time: 0920 End SampleTime: 0953

PID/FID READING(s): 0.3 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / none

COMMENTS: WL # 29649

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: OW-13

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Overcast ~80°F Breeze from SW 5-15 mph Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.15 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 18.02 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.87 (ft) (a-d)

h. Well Volume: 1.93 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (FTS001720) w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 (NA101775) Turbidity Meter (08610398)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1 7 gal

e. Begin Purge Time: 1402 End Purge Time: 1447

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1402	140	21.62	6.86	0.773	-199.7	3.18	17.4	Clear	Present	6.26
PURGING VALUES											
1	1407	140	21.25	6.81	0.766	-220.7	1.15	19.0	Clear	Present	6.27
2	1412	140	21.22	6.80	0.762	-222.3	0.68	16.4	Clear	Present	6.27
3	1417	140	21.22	6.78	0.760	-202.2	0.59	14.9	Clear	Present	6.28
4	1422	140	21.29	6.77	0.758	-195.1	0.52	12.7	Clear	Present	6.28
5	1427	140	21.45	6.75	0.753	-207.1	0.47	11.3	Clear	Present	6.28
6	1432	140	21.41	6.73	0.749	-203.2	0.45	9.76	Clear	Present	6.28
7	1437	140	21.74	6.70	0.746	-191.2	0.42	6.58	Clear	Present	6.28
8	1442	140	21.73	6.69	0.745	-190.4	0.41	6.64	Clear	Present	6.28
9	1447	140	21.27	6.67	0.743	-193.6	0.40	6.53	Clear	Present	6.28

AC 5/29/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): OW-13, 5/29/13, 1450

Sample Analytical Parameters/Method: BTEX-8260B, PAHs-SVOCs-8270cc, Total Selected Metals-6020, Diss Selected Metals-6020

Sample Start Time: 1450 End SampleTime: 1510

PID/FID READING(s): 0.0ppm PID/FID Model & Ionization Potential

ODOR/SHEEN: Odor Present / No Sheen.

COMMENTS: Collected Field Blank FB-052913 @ 1515

Water Level Sn 22066

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: P75-60

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~90°F Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 5.34 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 18.39 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 13.05 (ft) (a-d)

h. Well Volume: 2.13 (gal)

2. WELL PURGE DATA #ETS001721

a. Purge Method: Low Flow/Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 55606M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.05 gallons

e. Begin Purge Time: 1412 End Purge Time: 1442

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1412	150	26.04	7.12	0.971	-124.4	1.12	22.2	clear	none	5.87
PURGING VALUES											
1	1417	125	26.00	7.07	0.972	-129.5	0.48	19.8	clear	present	6.13
2	1422	125	26.06	7.07	0.969	-127.1	0.29	6.00	clear	present	6.13
3	1427	125	26.06	7.05	0.991	-130.4	0.22	4.48	clear	present	6.13
4	1432	125	26.11	7.00	1.009	-113.6	0.18	5.25	clear	present	6.13
5	1437	125	26.02	6.98	1.012	-113.0	0.17	5.02	clear	present	6.13
6	1442	125	25.94	6.94	1.020	-107.6	0.19	4.09	clear	present	6.13

RS 5/29/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): P75-60, 5/29/13, 1447 CS 5/29/13

Sample Analytical Parameters/Method: 8260B BTEX, 8270C LL ~~82~~ (SVOCs), 6020 selected metals (diss. & total)

Sample Start Time: 1447 End SampleTime: 1531

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present/none

COMMENTS: WL # 29649 EB 052913, 1545 collected here

5/29/13

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13S-09I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/5/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 20.90 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 48.32 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 27.42 (ft) (a-d)

h. Well Volume: 1.12 (gal)

2. WELL PURGE DATA #FTS001721

a. Purge Method: Low flow / Peristaltic Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.59 gallons

e. Begin Purge Time: 1617 End Purge Time: 1717

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1617	100	29.42	6.70	1.894	-80.6	1.46	>1000	brown	none	23.20
PURGING VALUES											
1	1622	100	29.49	6.64	1.892	-85.9	0.63	>1000	brown	none	23.20
2	1627	100	29.65	6.66	1.887	-101.1	0.24	>1000	brown	none	23.53
3	1632	100	29.85	6.70	1.875	-115.4	0.13	>1000	brown	none	23.71
4	1637	100	28.58	6.60	1.854	-118.3	0.10	>1000	brown	none	23.59
5	1642	100	28.44	6.59	1.839	-116.2	0.10	>1000	brown	none	23.60
6	1647	100	28.21	6.53	1.787	-108.4	0.09	>1000	brown	none	23.56
7	1652	100	28.07	6.55	1.753	-110.7	0.08	>1000	brown	none	23.56
8	1657	100	28.02	6.60	1.737	-117.9	0.07	>1000	brown	none	23.56
9	1702	100	27.97	6.61	1.720	-119.3	0.07	>1000	brown	none	23.56
10	1707	100	27.91	6.63	1.695	-122.7	0.07	>1000	brown	none	23.56
11	1712	100	27.59	6.66	1.688	-125.2	0.07	>1000	brown	none	23.56
12	1717	100	27.77	6.65	1.679	-124.8	0.07	>1000	brown	none	23.56
						RS 6/5/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13S-09I, 6/5/13, 1722

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 selected metals (diss. + total)

Sample Start Time: 1722 End SampleTime: 1748

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none

COMMENTS: WL # 20246 Ground to TOC: 1.13' Installed Depth: 50.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP 135 - 04 I

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: PARTLY CLOUDY, LIGHT WIND 90°F **Sampling Date:** 5/23/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 17.78 (ft)

c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 53.89 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 36.11 (ft) (a-d)

h. **Well Volume:** 1.48 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (0548836x) WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (14A101775) Turbidity Meter (08610336)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 1788 C = 4.72 GALLONS

e. **Begin Purge Time:** 1325 **End Purge Time:** 1430

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1325	275	26.84	6.96	0.935	-60.1	2.02	< 1000	BROWN	NONE	18.39
PURGING VALUES											
1	1330	275	27.48	6.97	0.932	-70.1	1.32	< 1000	BROWN	NONE	18.36
2	1335	275	27.24	6.97	0.931	-70.9	1.12	< 1000	BROWN	NONE	18.38
3	1340	275	26.34	6.96	0.923	-69.3	0.79	< 1000	LIGHT BROWN	NONE	18.37
4	1345	275	26.65	6.98	0.922	-70.0	0.70	< 1000	LIGHT BROWN	NONE	18.38
5	1350	275	26.66	6.97	0.923	-70.4	0.65	< 1000	LIGHT BROWN	NONE	18.38
6	1355	275	26.49	6.98	0.921	-72.8	0.53	< 1000	LIGHT BROWN	NONE	18.38
7	1400	275	26.79	6.98	0.921	-73.5	0.48	< 1000	LIGHT BROWN	NONE	18.37
8	1405	275	26.45	6.97	0.920	-76.2	0.43	< 1000	LIGHT BROWN	NONE	18.37
9	1410	275	26.51	6.96	0.920	-74.8	0.37	< 1000	LIGHT BROWN	NONE	18.37
10	1415	275	26.56	6.96	0.919	-74.5	0.35	< 1000	LIGHT BROWN	NONE	18.37
11	1420	275	26.20	6.96	0.919	-74.8	0.36	< 1000	LIGHT BROWN	NONE	18.37
12	1425	275	26.12	6.94	0.919	-74.5	0.36	< 1000	LIGHT BROWN	NONE	18.37
13	1430	275	26.37	6.94	0.918	-74.1	0.35	< 1000	LIGHT BROWN	NONE	18.37

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DP 135 04 I 5/23/13 1440

Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C LL), TOTAL + DISSOLVED METALS (6020)

Sample Start Time: 1440 **End SampleTime:** 1505

PID/FID READING(s) : NA **PID/FID Model & Ionization Potential**

ODOR/SHEEN: NA * PURGED 3 WELL VOLUMES AS TURBIDITY REMAINED ELEVATED

COMMENTS: * WATER LEVEL (29640) * PURGING / SAMPLING CONDUCTED NEAR BUSY INTERSECTION

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-045

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: SUNNY, LIGHT WIND, 85°F **Sampling Date:** 5/6/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 12.24 (ft)

c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 24.42 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 12.18 (ft) (a-d)

h. **Well Volume:** 0.50 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (US48304) WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (10A101775) Turbidity Meter (08G10386)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 4.50 L = 1.19 GALLONS

e. **Begin Purge Time:** 1240 **End Purge Time:** 1340

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1240	75	26.60	6.87	1.129	-71.3	3.13	< 1000	BROWN	NONE	12.25
PURGING VALUES											
1	1245	75	26.38	6.85	1.130	-84.0	1.76	< 1000	BROWN	NONE	12.29
2	1250	75	26.41	6.82	1.126	-88.1	1.08	< 1000	BROWN	NONE	12.34
3	1255	75	26.89	6.81	1.135	-95.2	0.82	< 1000	BROWN	NONE	12.36
4	1300	75	26.04	6.82	1.128	-103.6	0.74	< 1000	BROWN	NONE	12.39
5	1305	75	25.94	6.78	1.117	-114.9	0.53	< 1000	BROWN	NONE	12.45
6	1310	75	25.96	6.77	1.114	-121.3	0.49	< 1000	BROWN	NONE	12.54
7	1315	75	25.94	6.75	1.115	-123.6	0.45	852	L. BROWN	NONE	12.57
8	1320	75	25.92	6.75	1.114	-125.2	0.44	394	L. BROWN	NONE	12.62
9	1325	75	25.78	6.75	1.114	-126.1	0.42	79.4	CLEAR	NONE	12.67
10	1330	75	25.83	6.75	1.114	-128.3	0.42	61.2	CLEAR	NONE	12.75
11	1335	75	25.87	6.75	1.113	-130.2	0.42	60.7	CLEAR	NONE	12.79
12	1340	75	25.90	6.75	1.113	-131.2	0.41	66.0	CLEAR	NONE	12.81

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DP-135-045 5/6/13 1350

Sample Analytical Parameters/Method: VOCs (82608) SVOCs (82700) TOTAL + DISSOLVED METALS

Sample Start Time: 1350 **End SampleTime:** 1425

PID/FID READING(s) : NA **PID/FID Model & Ionization Potential**

ODOR/SHEEN: NA WATER LEVEL (ZACHN)

COMMENTS: * PURGING + SAMPLING CONDUCTED NEAR HEAVY TRAFFIC + OPERATING OFFICE BIG

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-05I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/5/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.40 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 52.39 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 36.99 (ft) (a-d)

h. Well Volume: 1.52 (gal)

2. WELL PURGE DATA (#161)

a. Purge Method: Low Flow / Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 MPS with Turbidity Meter #16E386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~3.11 gallons

e. Begin Purge Time: 1220 End Purge Time: 1435

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Ini	1220	150	26.08	6.95	1.300	-63.9	3.26	>1000	brown	present	20.61
PURGING VALUES											
1	1225	100	26.77	6.91	1.299	-77.2	0.63	>1000	brown	present	21.39
2	1230	100	26.98	6.92	1.311	-87.2	0.52	>1000	brown	present	21.99
3	1235	100	27.65	6.94	1.334	-98.7	0.50	>1000	brown	present	22.65
4	1240	100	28.82	6.96	1.331	-108.2	0.46	>1000	brown	present	23.45
5	1245	100	29.95	7.00	1.326	-112.1	0.39	>1000	brown	present	24.00
6	1250	75	30.33	7.02	1.325	-115.3	0.80	>1000	brown	present	24.65
7	1255	75	31.63	7.04	1.320	-108.3	0.68	>1000	brown	present	25.27
8	1300	75	31.91	7.04	1.320	-104.6	0.65	>1000	brown	present	25.63
9	1305	75	32.25	7.09	1.319	-97.9	0.80	>1000	brown	present	26.14
10	1310	75	33.17	7.12	1.323	-69.2	0.74	>1000	brown	present	26.36
11	1315	75	33.55	7.13	1.317	-60.6	0.70	>1000	brown	present	26.52
12	1320	75	33.14	7.13	1.313	-89.4	0.62	>1000	brown	present	26.93
13	1325	75	29.74	7.10	1.361	-95.0	0.59	>1000	brown	present	27.48
14	1330	75	27.79	7.05	1.304	-106.7	0.46	>1000	brown	present	28.02

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Steel

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-05I, 6/5/13, 0820

Sample Analytical Parameters/Method: 8260B(BTEX), 8270C LL, 6020 selected metals (diss. & total)

Sample Start Time: 0820 End SampleTime: 0925

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / present

COMMENTS: WL # 17871 Ground to TOC = 1.36'

Installed TD: 55.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N - 035

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy, ~85°F Sampling Date: 5/24/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 12.36 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 32.32 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 10.96 (ft) (a-d)

h. Well Volume: 6.45 (gal)

2. WELL PURGE DATA

#ETS001720

a. Purge Method: Low flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 MPS w/ Flow Cell & Turbidity Meter (SN 16G103758) tubing

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.85 gallons

e. Begin Purge Time: 1010 End Purge Time: 1045

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE-PURGE VALUES											
Init	1010	150	25.17	6.95	0.610	18.6	1.57	>1000	white	none	12.63
PURGING VALUES											
1	1015	150	25.09	6.84	0.609	3.4	1.18	>1000	white	none	12.63
2	1020	250	24.72	6.81	0.609	-21.6	0.78	141	cloudy	none	12.83
3	1025	250	24.80	6.82	0.609	-30.4	0.72	83.7	cloudy	none	12.85
4	1030	250	24.77	6.81	0.608	-34.9	0.72	45.4	cloudy	none	12.88
5	1035	250	24.88	6.82	0.606	-39.3	0.65	42.3	clear	none	12.88
6	1040	250	24.79	6.81	0.606	-41.2	0.64	41.1	clear	none	12.88
7	1045	250	24.78	6.81	0.605	-41.8	0.63	36.7	clear	none	12.88

JF 5/24/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-035, 5/24/13, 1050

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), select metals 6020 (diss. & total)

Sample Start Time: 1050 End SampleTime: 1125

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: wl # 20246 Ground to TOC: 1.19'

Installed Depth: 25.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-04I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~85°F Sampling Date: 6/3/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 17.81 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 47.83 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 30.02 (ft) (a-d)

h. Well Volume: 1.23 (gal)

2. WELL PURGE DATA #161

a. Purge Method: Low Flow/Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 03610286

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 1.06 gallons

e. Begin Purge Time: 0900 End Purge Time: 0940

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	0900	100	22.83	7.30	1.275	-150.5	0.32	>1000	brown	none	21.73
PURGING VALUES											
1	0905	100	23.10	7.19	1.274	-152.5	0.13	>1000	brown	none	21.75
2	0910	100	23.58	7.32	1.273	-141.8	0.08	>1000	brown	none	22.01
3	0915	100	24.09	7.43	1.273	-192.6	0.06	>1000	brown	none	22.04
4	0920	100	24.19	7.40	1.281	-203.3	0.05	>1000	brown	none	22.04
5	0925	100	24.41	7.43	1.289	-151.7	0.04	>1000	brown	none	22.04
6	0930	100	24.46	7.32	1.304	-143.2	0.04	>1000	brown	none	22.04
7	0935	100	24.67	7.35	1.305	-145.9	0.04	>1000	brown	none	22.04
8	0940	100	24.60	7.37	1.308	-144.2	0.04	>1000	brown	none	22.04

RS 6/3/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-04I, 6/3/13, 0945

Sample Analytical Parameters/Method: 8260D (BTEX), 8270C LL, 6020 select metals (diss. + total)

Sample Start Time: 0945 End SampleTime: 1125

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: 17871 MS/MSD collected here

Ground to TOC: 1.67' Installed Depth = 50.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-09S
PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX
Weather Conditions: Sunny, ~90°F Sampling Date: 6/7/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 9.80 (ft)
c. Depth to DNAPL: NA (ft) d. Total Well Depth: 22.00 (ft)
e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)
g. Length of Water Column: 12.20 (ft) (a-d)
h. Well Volume: 0.50 (gal)

2. WELL PURGE DATA # FT5001720

a. Purge Method: Low Flow/Peristaltic Pump w/ teflon lined tubing
b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386
c. Required Total Purge Volume (1f x 2c) (gals.): —
d. Total Volume and Number of Well Volumes Removed: ~1.80 gallons
e. Begin Purge Time: 1145 End Purge Time: 1240

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1145	100	27.54	6.84	0.990	-83.3	0.70	>1000	white	none	10.29
PURGING VALUES											
1	1150	125	27.56	6.62	0.988	-78.3	0.36	>1000	white	none	10.33
2	1155	125	27.08	6.53	0.976	-76.9	0.25	>1000	white	none	10.33
3	1200	125	26.79	6.50	0.968	-73.8	0.23	>1000	cloudy	none	10.33
4	1205	125	26.41	6.47	0.961	-70.5	0.22	>1000	cloudy	none	10.33
5	1210	125	26.37	6.44	0.958	-67.7	0.20	808	cloudy	none	10.33
6	1215	125	26.53	6.58	0.954	-73.8	0.18	589	cloudy	none	10.33
7	1220	125	26.40	6.59	0.953	-72.1	0.17	321	cloudy	none	10.33
8	1225	125	26.66	6.62	0.954	-71.9	0.17	265	cloudy	none	10.33
9	1230	125	26.74	6.68	0.954	-71.4	0.14	137	cloudy	none	10.33
10	1235	125	26.69	6.65	0.952	-65.4	0.14	128	cloudy	none	10.33
11	1240	125	26.79	6.61	0.950	-63.1	0.14	124	cloudy	none	10.33

RS 6/7/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow/Peristaltic Pump w/ teflon lined tubing
Sample I.D. (Name, Date, Time): DP13N-09S, 6/7/13, 1245
Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LC (SVOCs), 6020 selected metals (diss. + total)
Sample Start Time: 1245 End SampleTime: 1330

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential
ODOR/SHEEN: none
COMMENTS: WC # 20246 FB-04-060713 collected here @ 1345

Ground to TOC: 0.02'
Installed Depth: 22.00

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N - 07I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~85°F Sampling Date: 6/7/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 17.35 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 51.11 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: DS 6/7/13 ~~51.11~~ 33.76 (ft) (a-d)

h. Well Volume: 1.38 (gal)

2. WELL PURGE DATA

FTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 06A1536AM Turbidity Meter 08610586

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~5.00 gal

e. Begin Purge Time: 0900 End Purge Time: 1005

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	0900	70	23.38	6.58	1.513	-81.8	1.31	>1000	brown	present	21.46
PURGING VALUES											
1	0903	70	23.47	6.57	1.510	-89.6	0.45	>1000	brown	present	21.66
2	0910	100	23.92	6.61	1.506	-95.6	0.27	>1000	brown	present	21.51
3	0915	80	24.66	7.01	1.423	-107.6	0.67	>1000	brown	present	21.26
4	0920	80	24.15	6.89	1.470	-96.4	0.35	>1000	brown	present	21.51
5	0925	80	24.10	6.84	1.477	-96.3	0.25	>1000	brown	present	21.51
6	0930	100	24.38	6.80	1.474	-99.8	0.16	>1000	brown	present	21.51
7	0935	100	24.53	6.83	1.474	-105.1	0.11	>1000	brown	present	21.51
8	0940	100	24.15	6.73	1.422	-97.5	0.10	>1000	brown	present	21.51
9	0945	100	24.11	6.70	1.415	-94.7	0.10	>1000	brown	present	21.51
10	0950	100	23.94	6.65	1.371	-88.9	0.10	>1000	brown	present	21.51
11	0955	100	24.00	6.61	1.295	-85.5	0.10	>1000	cloudy	present	21.51
12	25 ~~09~~ 6/7/13 1000	100	24.12	6.59	1.285	-81.4	0.10	>1000	cloudy	present	21.51
13	1005	100	24.06	6.57	1.283	-77.3	0.10	>1000	cloudy	present	21.51
						DS 6/7/13					

← Started to recharge

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N - 07I, 6/7/13, 1010

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 selected metals (diss. + total)

Sample Start Time: 1010 End SampleTime: 1045

PID/FID READING(s): 0.2 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / present

COMMENTS: WL # 22066

Ground to TOC = 0.01'

Installed Depth = 55.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N - 01I

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: Partly Cloudy, ~90°F **Sampling Date:** 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 20.83 (ft)

c. **Depth to DNAPL:** NA (ft) d. **Total Well Depth:** ~~54.92~~ 55.00 (ft)

e. **LNAPL Thickness:** (a-b) NP (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 34.09 (ft) (a-d)

h. **Well Volume:** 1.40 (gal)

2. WELL PURGE DATA

a. **Purge Method:** Low flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. **Field Testing Equipment:** YSI 556 ORP/pH/Temp/DO & MW Turbidity Meter 08G103386

c. **Required Total Purge Volume (1f x 2c) (gals.):** —

d. **Total Volume and Number of Well Volumes Removed:** ~ 1.19 gallons

e. **Begin Purge Time:** 1745 **End Purge Time:** 1845

Conversion Factors (a x cF = b)	
Well I.D.	Conv. Fact. (cf)
①	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Init	1745	75	25.46	6.99	0.942	-91.8	1.56	>1000	brown	none	23.09
PURGING VALUES											
1	1750	75	25.47	6.96	0.782	-100.2	0.64	>1000	brown	none	26.92
2	1755	75	25.49	6.97	0.683	-107.8	0.96	>1000	brown	none	27.43
3	1800	75	25.54	6.97	0.523	-110.8	0.08	>1000	brown	none	28.02
4	1805	75	25.71	7.00	0.519	-123.4	0.07	>1000	brown	none	28.36
5	1810	75	25.35	7.06	0.516	-124.9	0.07	>1000	brown	none	28.64
6	1815	75	25.11	6.95	0.607	-105.7	0.07	>1000	brown	none	28.82
7	1820	75	24.20	6.85	1.078	-131.5	0.11	>1000	brown	none	29.47
8	1825	75	24.91	6.96	1.082	-142.0	0.06	>1000	brown	none	29.68
9	1830	75	24.75	6.89	1.092	-125.2	0.11	>1000	brown	none	30.90
10	1835	75	24.77	6.83	1.096	-122.5	0.11	>1000	brown	none	30.90
11	1840	75	24.75	6.82	1.069	-120.6	0.11	>1000	brown	none	30.90
12	1845	75	24.75	6.85	1.070	-125.4	0.10	>1000	brown	none	30.90
					RS 5/28/13						

3. SAMPLE COLLECTION DATA **Sampling Personnel:** R. Stahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-01I, 5/28/13, 1850

Sample Analytical Parameters/Method: 8260B(BTEX), 8270C LL (SVOC), 6020 total metals (diss. & total)

Sample Start Time: 1850 **End SampleTime:** 1925

PID/FID READING(s): 0.0 **PID/FID Model & Ionization Potential**

ODOR/SHEEN: none / none

COMMENTS: WL# 17971 * purged at lowest possible rate

Ground to TOC: 0.99'

Measured TD: 54.92'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-02I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 5/31/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 11.03 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: ~~44.63~~ 50.00 (ft) RS 5/31/13

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 33.60 (ft) (a-d)

h. Well Volume: 1.38 (gal)

2. WELL PURGE DATA #161

a. Purge Method: Low flow / Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 MPS #13A101386 Turbidity Meter 0%10386

c. Required Total Purge Volume (1f x 2e) (gals.): -

d. Total Volume and Number of Well Volumes Removed: ~6.0

e. Begin Purge Time: 1132 End Purge Time: 1307

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	RS 5/31/13 0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1132	100	27.53	7.20	0.948	-80.0	0.36	>1000	brown	none	11.70
PURGING VALUES											
1	1137	75	29.35	7.07	0.939	-105.3	0.15	>1000	brown	none	12.35
2	1142	75	28.76	7.19	0.883	-122.7	0.08	>1000	brown	none	12.48
3	1147	75	26.73	6.96	1.068	-118.8	0.07	>1000	brown	none	13.68
4	1152	250	26.21	7.01	1.113	-127.4	0.07	>1000	brown	none	14.21
5	1157	250	26.04	7.03	1.131	-130.4	0.06	>1000	brown	none	17.68
6	1202	250	25.33	7.09	1.144	-135.0	0.05	>1000	brown	none	20.13
7	1207	250	25.73	6.93	1.102	-135.2	0.05	>1000	brown	none	21.63
8	1212	250	25.75	7.03	1.045	-140.1	0.06	>1000	brown	none	23.95
9	1217	250	26.01	7.07	0.944	-134.7	0.09	>1000	brown	none	25.45
10	1222	250	25.93	7.05	0.869	-112.7	0.11	>1000	brown	none	27.04
11	1227	250	26.02	7.06	0.859	-100.5	0.10	>1000	brown	none	29.36
12	1232	250	26.05	7.05	0.817	-78.1	0.29	>1000	brown	none	30.92
13	1237	250	26.08	7.05	0.823	-85.4	0.20	>1000	brown	none	32.29
14	1242	250	25.91	7.02	0.971	-82.2	0.21	>1000	brown	none	33.91

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stehl

Sampling Method(s) & Equip: Bladder Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): DP13N-02I 5/31/13, 1307

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 select metals (dis. + total)

Sample Start Time: 1307 End SampleTime: 1352

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential RS 5/31/13

ODOR/SHEEN: none / none

COMMENTS: WO # 19871 ~~* Duplicate DP13N-01A collected here, 2000, 5/31/13~~

Ground to TOC: 3.71'

Measured TD: 49.63'

* increased purge rate after 3 readings, unable to stabilize water column, will purge 3 volumes

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-02Z

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade Tf Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 5/31/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 11.93 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 50.00 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 38.60 (ft) (a-d)

h. Well Volume: 1.3K (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow/Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 w/ 1535A Turbidity Meter 09L0386

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~6.0

e. Begin Purge Time: 1132 End Purge Time: 1302

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
15	1247	250	25.93	7.00	0.796	-81.2	0.21	>1000	brown	none	35.11
PURGING VALUES											
16	1252	250	25.65	6.91	0.733	-79.6	0.19	>1000	brown	none	36.79
17	1257	250	25.72	6.86	0.727	-76.3	0.19	>1000	brown	none	38.25
18	1302	250	25.52	6.82	0.726	-71.5	0.18	>1000	brown	none	39.69

RS 5/31/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-02Z, 5/31/13, 1307

Sample Analytical Parameters/Method: * see previous sheets

Sample Start Time: 1307 End SampleTime: 1328

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: WL # 19671

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-05S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/1/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 9.63 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: ~~25.26~~ 25.00 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: RS 6/1/13 (c-d) NA (ft)

g. Length of Water Column: 15.63 (ft) (a-d)

h. Well Volume: 0.64 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Low Flow/Peristaltic Pump w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 OSM1136 AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~3.65

e. Begin Purge Time: 1111 End Purge Time: RS 6/1/13 ~~1156~~ 1206

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1111	250	24.63	6.30	0.792	-2.8	1.10	>1000	brown	none	9.87
PURGING VALUES											
RS 6/1/13 ~~1~~	1116	250	23.78	5.90	0.787	10.6	0.45	696	brown	none	9.87
2	1121	250	22.37	6.75	0.781	-12.9	0.41	956	cloudy	none	9.87
3	1126	250	22.46	6.22	0.779	6.7	0.39	902	cloudy	none	9.87
4	1131	250	23.08	6.44	0.778	-11.7	0.24	834	cloudy	none	9.87
5	1136	250	22.58	6.48	0.782	-13.4	0.18	632	cloudy	none	9.87
6	1141	250	22.92	6.45	0.776	-8.7	0.16	445	cloudy	none	9.87
7	1146	250	23.07	6.54	0.779	-13.6	0.15	302	cloudy	none	9.87
8	1151	250	23.11	6.54	0.780	-11.5	0.14	205	cloudy	none	9.87
9	1156	250	23.16	6.54	0.782	-14.6	0.14	90.5	cloudy	none	9.87
10	1201	250	23.09	6.53	0.781	-17.6	0.14	84.3	cloudy	none	9.87
11	1206	250	23.01	6.53	0.783	-15.3	0.13	85.6	cloudy	none	9.87
						RS 6/1/13					

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-05S, 6/1/13, 1211

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C CC, 6020 select metals (diss + total)

Sample Start Time: 1211 End SampleTime: 1232

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: None/none

COMMENTS: WL #17871 Ground to TOC: 3.32' Measured TD: 25.26

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N.03I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy ~85°F Breezes 5-10 mph Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.12 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 52.64 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 37.52 (ft) (a-d)

h. Well Volume: 154 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (Geotech 720) Teflon-lined tubing

b. Field Testing Equipment: YSI 556 (SN 13A101778) Turbidity Meter (SN 13E102478)

c. Required Total Purge Volume (1f x 2e) (gals.): NA

d. Total Volume and Number of Well Volumes Removed:

e. Begin Purge Time: 1623 End Purge Time: 1653

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INIT	1623	125	24.36	7.15	1.419	-122.0	1.60	>1000	Brown	None	18.22
PURGING VALUES											
1	1628	125	24.63	7.10	1.412	-144.2	0.45	>1000	Brown	None	23.64
2	1633	100	25.19	7.11	1.416	-150.9	0.31	>1000	Brown	None	26.67
3	1638	100	26.00	7.13	1.418	-154.8	0.29	>1000	Brown	None	27.49
4	1643	100	26.42	7.13	1.443	-139.4	0.27	>1000	Brown	None	28.64
5	1648	100	26.31	7.16	1.419	-143.1	0.26	>1000	Brown	None	29.17
6	1653	100	26.43	7.23	1.453	-110.1	0.25	>1000	Brown	None	29.83

3. SAMPLE COLLECTION DATA Sampling Personnel: A Clark

Sampling Method(s) & Equip: N/A

Sample I.D. (Name, Date, Time): N/A

Sample Analytical Parameters/Method: NA

Sample Start Time: End SampleTime:

PID/FID READING(s): NA PID/FID Model & Ionization Potential

ODOR/SHEEN:

COMMENTS: See 2nd Sheet Switched to Bladder Pump due to poor recovery

water level sn 20246 Heavy sediment collecting in flow cell.

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-03S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy ~85°F Breezy/wind 5 mph Sampling Date: 5/28/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.12 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: ~~52.64~~ 55.00 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 37.52 (ft) (a-d)

h. Well Volume: 1.54 (gal)

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (165) w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 (10A101775) Turbidity Meter (05A0378)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1.7 gal

e. Begin Purge Time: 1759 End Purge Time: 1909

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1759	90	23.53	7.20	1.441	-110.6	1.34	>1000	Brown	No	30.98
PURGING VALUES											
1	1804	90	23.62	7.16	1.462	-113.6	0.98	>1000	Brown	No	31.99
2	1809	90	23.74	7.17	1.468	-115.9	0.88	>1000	Brown	No	31.01
3	1814	90	23.78	7.20	1.474	-119.2	0.87	>1000	Brown	No	31.02
4	1819	90	23.84	7.22	1.480	-122.1	0.84	>1000	Brown	No	31.02
5	1824	90	23.85	7.23	1.484	-123.1	0.81	>1000	Brown	No	31.02
6	1829	90	23.89	7.23	1.487	-124.3	0.78	>1000	Brown	No	31.03
7	1834	90	23.74	7.24	1.489	-124.3	0.74	>1000	Brown	No	31.03
8	1839	90	23.72	7.22	1.493	-124.9	0.71	>1000	Brown	No	31.03
9	1844	90	23.66	7.21	1.499	-127.6	0.65	>1000	Brown	No	31.04
10	1849	90	23.58	7.20	1.501	-121.3	0.60	>1000	Brown	No	31.04
11	1854	90	23.51	7.20	1.502	-120.9	0.59	>1000	Brown	No	31.04
12	1859	90	23.45	7.19	1.504	-119.6	0.58	>1000	Brown	No	31.05
13	1904	90	23.41	7.20	1.503	-118.2	0.56	>1000	Brown	No	31.05
14	1909	90	23.38	7.20	1.504	-118.0	0.55	>1000	Brown	No	31.05

3. SAMPLE COLLECTION DATA Sampling Personnel: A. Clark

Sampling Method(s) & Equip: Bladder Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): DP13N-03S, 5/28/13, 1915

Sample Analytical Parameters/Method: BTEX - 8260B Partial Metals - 6020 Total Dissolved Metals (6020 Diss. Selected Metals - 6020

Sample Start Time: 1910 End SampleTime: 1930

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: No Odor ; No Sheen

COMMENTS: Installed Bladder Pump + began purging after using peristaltic pump

Water Level Set: 20.26

Measured TD: 52.64

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls

Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-04S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~95°F Sampling Date: 5/31/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 11.34 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: ~~25.26~~ 25.00 (ft) RS 5/31/13

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 13.92 (ft) (a-d)

h. Well Volume: 0.57 (gal)

2. WELL PURGE DATA

#FTS001721

a. Purge Method: Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.10 gallons

e. Begin Purge Time: 1556 End Purge Time: 1641

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1556	90	26.80	6.18	0.989	66.0	3.34	1000	gray	none	12.31
PURGING VALUES											
1	1601	90	25.86	6.16	0.990	56.3	2.89	1000	gray	none	12.46
2	1606	90	26.39	6.47	0.922	22.7	2.19	1000	gray	none	12.56
3	1611	90	26.02	6.39	0.854	16.7	1.48	1000	gray	none	12.64
4	1616	90	25.58	6.30	0.828	17.9	1.24	187	cloudy	none	12.56
5	1621	90	26.13	6.87	0.818	-4.8	1.18	120	cloudy	none	12.56
6	1626	90	25.25	6.49	0.778	-1.6	1.09	111	cloudy	none	12.56
7	1631	90	24.59	6.39	0.764	4.3	0.61	78.2	cloudy	none	12.56
8	1636	90	25.25	6.43	0.769	1.2	0.63	73.7	cloudy	none	12.56
9	1641	90	25.21	6.47	0.770	-2.6	0.59	75.2	cloudy	none	12.56

RS 5/31/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Low Flow / Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-035, 5/31/13, 1646

Sample Analytical Parameters/Method: 8260B (BTEX), 8270 CLL, 6020 select metals (diss. + total)

Sample Start Time: 1646 End SampleTime: 1745

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none

COMMENTS: WL # 17871 Duplicate collected here DP13N-99A @ 2000 5/31/13

Ground to TOC = 3.36'

Measured TD: 25.26'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-08I

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: SUNNY, LIGHT WIND, 95 °F **Sampling Date:** 6/11/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** ~~NP~~ ND (ft) b. **Depth to Water:** 10.05 (ft)

c. **Depth to DNAPL:** ~~NP~~ ND 55.00 (ft) d. **Total Well Depth:** 55.00 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) ~~NA~~ TRACE (ft) TS ONLY

g. **Length of Water Column:** 44.95 (ft) (a-d)

h. **Well Volume:** 1.84 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (K1200455?) WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (06M1526 FM) Turbidity Meter (08610886)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 5.95 C = 1.57 GALLONS

e. **Begin Purge Time:** 0930 **End Purge Time:** 1040

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	0930	85	27.37	7.24	1.444	-55.4	1.39	<1000	BROWN	STRONG	13.31
PURGING VALUES											
1	0935	85	27.23	7.13	1.440	-82.1	0.96	<1000	BROWN	STRONG	15.53
2	0940	85	27.27	7.07	1.430	-114.0	0.88	<1000	BROWN	STRONG	18.01
3	0945	85	27.47	7.10	1.427	-143.9	0.74	<1000	BROWN	STRONG	20.22
4	0950	85	27.99	7.17	1.423	-161.5	0.69	<1000	BROWN	STRONG	22.14
5	0955	85	28.37	7.21	1.417	-172.4	0.66	<1000	BROWN	STRONG	23.37
6	1000	85	28.61	7.24	1.413	-178.8	0.65	<1000	BROWN	STRONG	24.52
7	1005	85	28.93	7.27	1.412	-184.6	0.63	<1000	BROWN	STRONG	25.32
8	1010	85	28.74	7.26	1.408	-187.2	0.63	<1000	BROWN	STRONG	26.01
9	1015	85	28.86	7.25	1.409	-191.3	0.61	<1000	BROWN	STRONG	26.52
10	1020	85	28.84	7.25	1.409	-192.2	0.60	<1000	BROWN	STRONG	26.63
11	1025	85	28.79	7.25	1.408	-193.2	0.61	<1000	BROWN	STRONG	26.72
12	1030	85	28.75	7.25	1.409	-193.1	0.61	<1000	BROWN	STRONG	26.79
13	1035	85	28.76	7.25	1.409	-194.2	0.61	<1000	BROWN	STRONG	26.86
14	1040	85	28.79	7.25	1.410	-194.6	0.61	<1000	BROWN	STRONG	26.90

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DP13N-08I 6/11/13 1050

Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C), TOTAL + DISSOLVED METALS (6020)

Sample Start Time: 1050 **End SampleTime:** 1135

PID/FID READING(s) : **PID/FID Model & Ionization Potential**

ODOR/SHEEN: * PARAMETERS ARE STABLE DESPITE ELEVATED TURBIDITY READINGS

COMMENTS: WL: 24640 * SHEEN OBSERVED DURING PURGING STRONG ODOR PRESENT

MEASURED TD = 54.57 TOC TO GROUND SURFACE = 0.39' TRACE PRODUCT ON WL PROBE DURING GAUGING

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N - 09I

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: SUNNY, LIGHT WIND 95°F **Sampling Date:** 6/10/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** ND (ft) b. **Depth to Water:** 12.23 (ft)

c. **Depth to DNAPL:** ND (ft) d. **Total Well Depth:** 53.00 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 40.77 (ft) (a-d)

h. **Well Volume:** 1.67 (gal)

2. WELL PURGE DATA

a. **Purge Method:** BLADDER PUMP ~~PERISTALTIC PUMP (K1200 HEAT)~~ WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (06M1536 AM) Turbidity Meter (08G1088)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 5.95 L = 1.57 GALLONS

e. **Begin Purge Time:** 1330 **End Purge Time:** 1440

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1330	85	27.21	7.43	1.040	-57.2	2.17	<1000	BROWN	NONE	17.22
PURGING VALUES											
1	1335	85	27.35	7.37	1.002	-85.3	1.46	<1000	BROWN	NONE	20.01
2	1340	85	27.42	7.34	0.986	-96.2	1.30	<1000	BROWN	NONE	22.74
3	1345	85	27.56	7.32	0.980	-102.4	1.20	<1000	BROWN	NONE	25.62
4	1350	85	27.42	7.31	0.983	-109.3	1.14	<1000	BROWN	NONE	28.49
5	1355	85	27.40	7.31	0.979	-115.2	1.07	<1000	BROWN	NONE	31.52
6	1400	85	27.58	7.31	0.974	-117.3	1.04	<1000	BROWN	NONE	34.64
7	1405	85	27.63	7.33	0.972	-119.2	1.01	<1000	BROWN	NONE	37.21
8	1410	85	27.60	7.32	0.971	-122.8	0.96	<1000	BROWN	NONE	40.61
9	1415	85	27.56	7.32	0.973	-124.9	0.94	<1000	BROWN	NONE	42.83
10	1420	85	27.49	7.31	0.971	-127.2	0.92	<1000	BROWN	NONE	45.02
11	1425	85	27.55	7.31	0.972	-129.0	0.91	<1000	BROWN	NONE	47.39
12	1430	85	27.55	7.31	0.972	-130.6	0.84	<1000	BROWN	NONE	49.29
13	1435	85	27.50	7.31	0.972	-131.4	0.88	<1000	BROWN	NONE	50.63
14	1440	85	27.42	7.31	0.974	-132.2	0.87	<1000	BROWN	NONE	51.98

3. SAMPLE COLLECTION DATA

Sampling Personnel: K SMITH

Sampling Method(s) & Equip: ~~PERISTALTIC~~ BLADDER PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DP13N - 09I 6/10/13 0745

Sample Analytical Parameters/Method: VOC, (8260B), SVOC, (8270C), TOTAL + DISSOLVED METALS (6020)

Sample Start Time: 0745 **End SampleTime:** 1200

PID/FID READING(s) : **PID/FID Model & Ionization Potential**

ODOR/SHEEN: *WELL PURGED DRY AT 1440 ON 6/10/13, WILL RETURN TO SAMPLE ON 6/11/13 AFTER RECHARGE

COMMENTS: WL: 28640 GROUND SURFACE TO TOC = 2.03' ~~INTAKE~~ 13 GAL MEASURED TD = 40.11

PRE-SAMPLE READINGS	TEMP	PH	SPEC COND	ORP	DO	TURB	COLOR	ODOR	WL
	27.32	7.37	1.002	-122.6	1.62	<1000	BROWN	NONE	16.87

TOC IN GROUND SURFACE = 2.04'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-085

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: SUNNY LIGHT WIND 95°F **Sampling Date:** 6/10/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 3.45 (ft)

c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 14.87 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 11.42 (ft) (a-d)

h. **Well Volume:** 0.47 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (K12004551) WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (06M1536 AN) Turbidity Meter (08610386)

c. **Required Total Purge Volume (1f x 2c) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 6.75 L = 1.78 GALLONS

e. **Begin Purge Time:** 1120 **End Purge Time:** 1205

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1120	150	27.57	7.38	0.817	-144.1	0.21	< 1000	BROWN	NONE	8.76
PURGING VALUES											
1	1125	150	27.57	7.10	0.795	-144.0	0.15	< 1000	BROWN	NONE	8.77
2	1130	150	27.23	6.94	0.750	-135.1	0.14	< 1000	BROWN	NONE	8.76
3	1135	150	27.99	6.92	0.693	-132.2	0.13	< 1000	BROWN	SLIGHT ODOR	8.76
4	1140	150	27.86	6.93	0.691	-131.8	0.15	< 1000	CLOUDY	SLIGHT ODOR	8.76
5	1145	150	27.57	6.93	0.690	-130.4	0.15	974	CLEAR	SLIGHT ODOR	8.77
6	1150	150	27.49	6.93	0.688	-126.2	0.14	853	CLEAR	SLIGHT ODOR	8.76
7	1155	150	27.46	6.93	0.686	-124.9	0.14	621	CLEAR	SLIGHT ODOR	8.76
8	1200	150	27.44	6.93	0.684	-124.0	0.13	433	CLEAR	SLIGHT ODOR	8.76
9	1205	150	27.40	6.93	0.684	-122.7	0.13	372	CLEAR	SLIGHT ODOR	8.76

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DP13N-085 6/10/13 1215

Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C), TOTAL + DISSOLVED METALS (6020)

Sample Start Time: 1215 **End SampleTime:** 1247

PID/FID READING(s) : **PID/FID Model & Ionization Potential**

ODOR/SHEEN: * ELEVATED TURBIDITY READINGS, BUT 3 WELL VOLUMES WERE REMOVED.

COMMENTS: WL: 29640 GROUND SURFACE TO TOC = 1.01' * INTERMEDIATE WELL DRILLING NEARBY DURING PURGE / SAMPLE

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DPDW-06T

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, clear, wind, 95 °F Sampling Date: 6/11/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 23.30 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 57.50 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 34.20 (ft) (a-d)

h. Well Volume: 1.40 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (Waterra 4951) with Teflon Lined Tubing

b. Field Testing Equipment: YSI 556 (SN 13C 100386) Turbidity Meter (07E10386)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 14.35 L = 3.96 gallons = 10

e. Begin Purge Time: 1500 End Purge Time: 1635

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
15	1615	150	28.73	6.96	1.074	-123.7	0.78	<1000	Light Brown	None	23.92
PURGING VALUES											
16	1620	150	28.32	6.96	1.075	-123.6	0.79	<1000	Light Brown	None	23.92
17	1625	150	28.34	6.96	1.077	-124.5	0.80	<1000	Light Brown	None	23.92
18	1630	150	28.61	6.96	1.075	-123.9	0.80	<1000	Light Brown	None	23.92
19	1635	150	28.69	6.96	1.075	-123.8	0.79	<1000	Light Brown	None	23.92

3. SAMPLE COLLECTION DATA Sampling Personnel: K. Smith

Sampling Method(s) & Equip: Peristaltic Pump with Teflon Lined Tubing

Sample I.D. (Name, Date, Time): DPDW-06T 6/11/13 1640

Sample Analytical Parameters/Method: VOCs (8260B) SVOCs (8270C), TOTAL Fe Dissolved Fe (6020)

Sample Start Time: 1640 End SampleTime: 1710

PID/FID READING(s): PID/FID Model & Ionization Potential

ODOR/SHEEN:

COMMENTS: WL (3964w) * Parameters stable before sample collection turbidity measured TOC = 58.09 Ground surface to TOC = 2.59'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DPT3N-06I

PERMIT NO.:

Project No.: KB513665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: SUNNY CLEAR WIND, 95 °F **Sampling Date:** 6/6/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 23.30 (ft)

c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 57.50 (ft)

e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 34.20 (ft) (a-d)

h. **Well Volume:** 1.40 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (K12604551) WITH TEFLON LINED TUBING

b. **Field Testing Equipment:** YSI 556 (09A101438) Turbidity Meter (08A101436)

c. **Required Total Purge Volume (1f x 2e) (gals.):** NA

d. **Total Volume and Number of Well Volumes Removed:** 4.25 L = 3.76 Gallons

e. **Begin Purge Time:** 1500 **End Purge Time:** 1625

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1500	150	28.32	7.87	1.076	-33.9	1.61	< 1000	BROWN	NONE	23.91
PURGING VALUES											
1	1505	150	28.36	7.64	1.050	-69.2	1.33	< 1000	BROWN	NONE	23.89
2	1510	150	28.25	7.28	1.109	-120.5	1.06	< 1000	BROWN	NONE	23.91
3	1515	150	28.39	7.24	1.116	-129.4	1.01	< 1000	BROWN	NONE	23.91
4	1520	150	28.33	7.22	1.120	-146.3	0.96	< 1000	BROWN	NONE	23.91
5	1525	150	28.16	7.21	1.121	-152.1	0.93	< 1000	BROWN	NONE	23.91
6	1530	150	28.17	7.01	1.107	-156.2	0.86	< 1000	LIGHT BROWN	NONE	23.92
7	1535	150	28.23	6.74	1.086	-148.3	0.84	< 1000	LIGHT BROWN	NONE	23.91
8	1540	150	28.37	6.62	1.080	-139.3	0.82	< 1000	LIGHT BROWN	NONE	23.92
9	1545	150	28.52	6.55	1.079	-132.6	0.81	< 1000	LIGHT BROWN	NONE	23.92
10	1550	150	28.55	6.51	1.078	-136.3	0.82	< 1000	LIGHT BROWN	NONE	23.92
11	1555	150	28.38	6.50	1.077	-129.7	0.81	< 1000	LIGHT BROWN	NONE	23.92
12	1600	150	28.42	6.48	1.077	-127.6	0.79	< 1000	LIGHT BROWN	NONE	23.92
13	1605	150	28.51	6.47	1.077	-125.9	0.78	< 1000	LIGHT BROWN	NONE	23.92
14	1610	150	28.56	6.46	1.079	-123.2	0.78	< 1000	LIGHT BROWN	NONE	23.92

3. SAMPLE COLLECTION DATA **Sampling Personnel:** K. SMITH

Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING

Sample I.D. (Name, Date, Time): DPT3N-06I 6/6/13 1640

Sample Analytical Parameters/Method: VOCs (8260B) SVOCs (8270C) TOTAL & DISSOLVED ARSENIC (6020)

Sample Start Time: 1640 **End SampleTime:** 1710

PID/FID READING(s): **PID/FID Model & Ionization Potential**

ODOR/SHEEN:

COMMENTS: 1625 - 2.5 GAL * PARAMETERS STABLE DISPOSE GROUNDWATER TOTE #1019

MEASURED TD = 58.09 GROUND SURFACE TO TOC = 2.38'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N-01S
PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX
Weather Conditions: CLOUDY, LIGHT WIND, 90°F **Sampling Date:** 5/24/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 12.85 (ft)
c. **Depth to DNAPL:** NP (ft) d. **Total Well Depth:** 23.97 (ft)
e. **LNAPL Thickness:** (a-b) NA (ft) f. **DNAPL Thickness:** (c-d) NA (ft)
g. **Length of Water Column:** 11.12 (ft) (a-d)
h. **Well Volume:** 0.46 (gal)

2. WELL PURGE DATA

a. **Purge Method:** PERISTALTIC PUMP (US4830X) WITH TEFLON LINED TUBING
b. **Field Testing Equipment:** YSI 556 (10A101775) Turbidity Meter (08610386)
c. **Required Total Purge Volume (1f x 2c) (gals.):** NA
d. **Total Volume and Number of Well Volumes Removed:** 10 [illegible] = 2.64 GALLONS
e. **Begin Purge Time:** 1220 **End Purge Time:** 1300

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1220	250	25.92	7.06	0.511	-154.5	0.81	<1000	BROWN	NONE	14.72
PURGING VALUES											
1	1225	250	25.97	7.08	0.498	-178.5	0.58	<1000	BROWN	NONE	14.71
2	1230	250	25.18	7.15	0.475	-197.4	0.50	<1000	LIGHT BROWN	NONE	14.72
3	1235	250	25.27	7.24	0.455	-212.1	0.41	322	CLOUDY	NONE	14.72
4	1240	250	25.47	7.26	0.448	-197.1	0.43	147	CLOUDY	NONE	14.72
5	1245	250	25.54	7.27	0.443	-193.2	0.45	59.8	CLEAR	NONE	14.72
6	1250	250	25.62	7.27	0.441	-187.1	0.46	39.8	CLEAR	NONE	14.72
7	1255	250	25.67	7.28	0.440	-185.2	0.45	40.3	CLEAR	NONE	14.72
8	1300	250	25.69	7.27	0.441	-183.5	0.44	42.7	CLEAR	NONE	14.72

3. SAMPLE COLLECTION DATA

Sampling Personnel: K. SMITH
Sampling Method(s) & Equip: PERISTALTIC PUMP WITH TEFLON LINED TUBING
Sample I.D. (Name, Date, Time): DP13N-01S 5/24/13 1310
Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C), TOTAL & DISSOLVED METALS (6020)

Sample Start Time: 1310 **End SampleTime:** 1335
PID/FID READING(s) : NA **PID/FID Model & Ionization Potential**
ODOR/SHEEN: NA
COMMENTS: *WATER LEVEL (29640) *PURGING/SAMPLING CONDUCTED NEAR BUSY STREET

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-10T

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/6/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.11 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 56.29 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 43.18 (ft) (a-d)

h. Well Volume: 1.77 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow Peristaltic Pump w/ Teflon lined tubing

b. Field Testing Equipment: YSI 556 & Mw36 Am Turbidity Meter

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 0.53 gallons

e. Begin Purge Time: 1110 End Purge Time: 1150

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES:											
IM	1110	100	26.93	7.02	1.070	39.4	3.30	84.4	cloudy	none	15.72
PURGING VALUES:											
1	1115	75	27.15	6.77	1.074	24.9	1.38	115	cloudy	none	18.16
2	1120	75	27.12	6.85	1.091	13.1	1.34	119	cloudy	none	18.99
3	1125	75	27.12	6.87	1.100	10.9	1.31	136	cloudy	none	19.84
4	1130	75	27.27	6.88	1.111	10.9	1.31	123	cloudy	none	20.53
5	1135	75	27.50	6.95	1.125	7.6	1.37	89.9	cloudy	none	21.38
6	1140	75	27.52	6.93	1.130	7.4	1.42	89.3	cloudy	none	21.79
7	1145	75	27.40	6.94	1.135	5.7	1.39	88.6	cloudy	none	21.79
8	1150	75	27.35	6.93	1.137	2.3	1.39	82.5	cloudy	none	21.79

RS 6/6/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ Teflon Lined Tubing

Sample I.D. (Name, Date, Time): DP135-10T, 6/6/13, 1155

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOC), 6020 Nickel only (dissolved)

Sample Start Time: 1155 End SampleTime: 1234

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none

COMMENTS: WL #20246 Ground to TOC: 1.16 FB-03-060613 collected here

6 1255

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13S-01I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90° F Sampling Date: 6/3/13 - 6/4/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 19.75 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 52.73 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 32.98 ~~34.46~~ RS 6/3/13 (ft) (a-d)

h. Well Volume: ~~1.03~~ 1.35 RS 6/3/13 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Bladder Pump #161 w/ Teflon-lined tubing

b. Field Testing Equipment: YSI 556 MPS (SN 13A104538) Turbidity Meter (SN 13G103586)

c. Required Total Purge Volume (1f x 2c) (gals.): ~

d. Total Volume and Number of Well Volumes Removed: 1.16 gallons

e. Begin Purge Time: 1555 End Purge Time: 1705

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Tnl	1555	80	33.42	7.72	0.956	-50.2	0.07	>1600	brown	none	22.92
PURGING VALUES											
1	1600	80	33.76	7.69	0.941	-42.8	0.04	>1000	brown	none	26.05
2	1605	80	33.46	7.64	0.937	-40.2	0.05	>1000	brown	none	27.94
3	1610	80	33.50	7.58	0.928	-38.2	0.04	>1000	brown	none	31.40
4	1615	80	32.45	7.54	0.956	-67.5	0.02	>1000	brown	none	34.33
5	1620	80	31.33	7.52	0.978	-90.7	0.03	>1000	brown	none	37.41
6	1625	80	31.31	7.49	1.010	-99.2	0.04	>1000	brown	none	39.11
7	1630	80	31.42	7.48	1.008	-115.0	0.07	>1000	brown	none	42.03
8	1635	80	33.95	7.55	0.988	-109.7	0.02	>1000	brown	none	44.23
9	1640	80	30.15	7.50	0.953	-75.3	0.03	>1000	brown	none	46.31
10	1645	80	28.83	7.47	0.893	-37.1	0.04	>1000	brown	none	48.53
11	1650	80	28.53	7.46	0.873	-32.1	0.04	>1000	brown	none	49.36
12	1655	80	29.01	7.43	0.969	-29.8	0.03	71000	brown	none	50.09
13	1700	80	29.32	7.39	0.968	-22.6	0.03	>1000	brown	none	51.01
---	---	---	---	---	---	ORP @ 1.40	---	---	---	---	---

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Bladder Pump #161 w/ teflon lined tubing, Sampled w/ #164

Sample I.D. (Name, Date, Time): DP13S-01I, 6/4/13, 0915

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C (L, 6020 Selected metals (diss + total)

Sample Start Time: 0915 End SampleTime: 1115

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none (Ground to TOC: 1.5' Installed TD: 55.00'

COMMENTS: WL # 17871/20246 FB-03-060413 collected here @ 1125

Well ran dry @ ~1.40 gallons, will return later to access recharge. Returned to well @ 0905, 6/4/13, DTW: 28.02', recharge sufficient. Began sampling.

Pre-sample - 28.65°C, pH: 7.15, Sp. Cond: 0.872, ORP: -34.7, DO: 1.58, TURB: 142 NTU, cloudy, no odor

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13S - 05S

PERMIT NO.:

Project No.: KBE13665-03 **Client:** Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan **Project Location:** Houston, TX

Weather Conditions: Partly Cloudy, ~90°F **Sampling Date:** 5/24/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. **Depth to LNAPL:** NP (ft) b. **Depth to Water:** 6.79 (ft)

c. **Depth to DNAPL:** NA (ft) d. **Total Well Depth:** ~~20.68~~ 25.00 (ft)

e. **LNAPL Thickness:** (a-b) NP (ft) f. **DNAPL Thickness:** (c-d) NA (ft)

g. **Length of Water Column:** 11.89 (ft) (a-d)

h. **Well Volume:** 1.94 (gal)

2. WELL PURGE DATA HFTS001720

a. **Purge Method:** Low Flow / Peristaltic Pump w/ dedicated teflon lined tubing

b. **Field Testing Equipment:** YSI 556 0501436A6 Turbidity Meter 0861039F6

c. **Required Total Purge Volume (1f x 2c) (gals.):** —

d. **Total Volume and Number of Well Volumes Removed:** ~ 1.40 gallons

e. **Begin Purge Time:** 1155 **End Purge Time:** 1245

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1155	250	25.59	7.06	0.934	-123.8	5.09	>1000	brown	present	9.56
PURGING VALUES											
1	1200	250	25.35	7.03	0.946	-128.6	1.39	>1000	brown	present	10.27
2	1205	100	26.44	7.04	0.935	-135.2	0.60	>1000	brown	present	10.64
3	1210	100	26.62	7.02	0.915	-134.8	0.48	>1000	brown	present	10.86
4	1215	100	26.61	6.94	0.900	-126.4	0.42	486	cloudy	present	10.95
5	1220	100	25.49	6.85	0.905	-73.2	0.41	372	cloudy	present	11.03
6	1225	100	25.72	6.88	0.909	-86.4	0.39	464	cloudy	present	11.08
7	1230	100	25.85	6.88	0.907	-87.3	0.40	404	cloudy	present	11.13
8	1235	100	25.57	6.87	0.906	-85.6	0.41	123	cloudy	present	11.18
9	1240	100	25.48	6.89	0.905	-82.3	0.39	120	cloudy	present	11.18
10	1245	100	25.37	6.88	0.905	-79.4	0.39	116	cloudy	present	11.19
					RS	5/24/13					

3. SAMPLE COLLECTION DATA **Sampling Personnel:** R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ dedicated teflon lined tubing

Sample I.D. (Name, Date, Time): DP13S - 05S, 5/24/13, 1250

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 select metals (dissolved & total)

Sample Start Time: 1250 **End SampleTime:** 1337

PID/FID READING(s): 11.3 **PID/FID Model & Ionization Potential**

ODOR/SHEEN: yes / yes

COMMENTS: WL-# 29649 * after first two readings, purge rate slowed to slowest rate possible

* ~ 3 well volumes taken out, ~ 2.0 gallons ∴ sampled as turbidity was not going to settle

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

Ground L-Tac: 0.98' Measured TD: 20.68

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-015

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny ~95°F Sampling Date: 5/31/13 - 6/1/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 10.42 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 25.00 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.08 (ft) (a-d)

h. Well Volume: 0.45 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow/Peristaltic Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556, [illegible] Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~0.50

e. Begin Purge Time: 1420 End Purge Time: 1435

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1420	120	33.42	7.19	0.570	-155.3	0.15	>1000	brown	none	15.22
PURGING VALUES											
1	1425	120	30.86	6.95	0.718	-149.8	0.13	>1000	brown	none	18.03
2	1430	120	31.71	7.32	0.738	-174.9	0.05	>1000	brown	none	19.92
3	1435	120	32.26	7.38	0.762	-189.2	0.05	>1000	brown	none	21.50
Presample →	0820	—	29.13	7.42	0.810	-154.3	1.36	758	brown	none	6.92
Presample →	1452	—	28.56	7.56	0.803	-135.6	1.54	72.6	cloudy	none	7.34

well purged dry @ 0.45 gallon

RS 6/1/13

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP135-015 6/1/13, 0825

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL (SVOCs), 6020 selected metals (diss. + total)

Sample Start Time: 0825/1458 End SampleTime: 1512

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none

COMMENTS: WL # 17871 * purged at lowest rate possible, well was heavy with silt and

Ground to TOC: 0.85' would clog tubing easily. Well ran dry @ ~0.45 gallons. Returned to well @ 0815 on 06/1/13, recharge deemed sufficient. Filled partial sample set, will return [illegible] #15

Measured TD: 21.50' later to finish bottle set. Returned @ 1452, enough recharge observed to finish bottle set.

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KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-025

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX RS 5/31/13

Weather Conditions: Partly Cloudy, ~85°F Sampling Date: ~~6/1/13~~ 5/31/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.89 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 23.88 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 16.99 (ft) (a-d)

h. Well Volume: 0.70 (gal)

2. WELL PURGE DATA #FTS001721

a. Purge Method: Low flow/Peristaltic Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.10 gallons

e. Begin Purge Time: 0925 End Purge Time: 1020

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	0925	75	25.44	6.80	0.731	-88.3	2.69	231	cloudy	none	9.42
PURGING VALUES											
1	0930	75	25.31	6.50	0.716	-54.7	0.89	195	cloudy	none	12.07
2	0935	75	24.97	6.57	0.714	-59.6	0.72	153	cloudy	none	13.42
3	0940	75	24.93	6.55	0.710	-59.3	0.65	94.8	cloudy	none	14.46
4	0945	60	25.02	6.65	0.714	-59.3	0.71	89.2	cloudy	none	15.72
5	0950	60	24.93	6.69	0.723	-58.7	0.82	83.6	cloudy	none	16.98
6	0955	60	25.18	6.68	0.747	-63.5	0.85	86.2	cloudy	none	18.06
7	1000	60	25.45	6.76	0.758	-67.1	0.83	87.2	cloudy	none	18.81
8	1005	60	25.30	6.77	0.777	-69.6	0.83	84.6	cloudy	none	19.92
9	1010	60	25.20	6.71	0.779	-64.1	0.81	82.1	cloudy	none	20.98
10	1015	60	25.10	6.69	0.774	-60.3	0.79	79.2	cloudy	none	21.76
11	1020	60	25.18	6.74	0.756	-58.3	0.85	81.6	cloudy	none	22.66
					Dry @ ~1.0 gallon						
resample →	1520	—	24.68	6.82	0.763	-65.1	1.02	122	cloudy	none	7.43
						RS 5/31/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP135-025, 6/1/13, 1520

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C CL, 6020 select metals (diss + total)

Sample Start Time: 1530 End SampleTime: 1548

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none

COMMENTS: WL # 17871 * purged at lowest possible rate

* DP135-025 ran dry @ ~1.0 gal, will return later to access recharge. Returned to well @ 1520, DTW: 7.43', recharge deemed sufficient. Ground to TOC: 1.26' Installed Depth: 25.00'

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP 13 S - 06 S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Overcast ~80°F; Breeze from S 5-10mph Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.73 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 20.72 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 13.99 (ft) (a-d)

h. Well Volume: 0.57 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump FT3 (001720) w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 (10A101775) Turbidity Meter (08610378)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1.7 gal

e. Begin Purge Time: 1043 End Purge Time: 1148

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1043	110	24.83	6.99	1.034	-145.5	4.42	972	L. Brown	No	9.84
PURGING VALUES											
1	1048	90	24.79	6.97	1.035	-146.0	1.45	866	L. Brown	No	11.01
2	1053	90	24.95	6.97	1.029	-145.3	0.92	484	L. Brown	No	12.57
3	1058	80	25.11	6.96	1.021	-142.3	0.80	426	L. Brown	No	13.56
4	1103	80	24.93	6.95	1.013	-144.6	0.71	254	L. Brown	No	14.62
5	1108	80	24.99	6.95	1.008	-143.8	0.65	213	L. Brown	No	14.91
6	1113	75	24.95	6.94	1.003	-144.1	0.60	224	L. Brown	No	15.61
7	1118	75	25.08	6.94	1.004	-143.6	0.59	219	L. Brown	No	15.87
8	1123	75	25.01	6.94	1.002	-143.4	0.58	203	L. Brown	No	15.94
9	1128	75	25.12	6.92	1.001	-143.2	0.57	212	L. Brown	No	16.13
10	1133	75	25.22	6.92	1.001	-143.7	0.52	206	L. Brown	No	16.27
11	1138	75	25.61	6.93	1.005	-143.2	0.54	123	L. Brown	No	16.44
12	1143	75	25.36	6.91	1.003	-142.5	0.53	134	L. Brown	No	16.56
13	1148	75	25.43	6.91	1.003	-134.8	0.52	125	L. Brown	No	16.63
					AC	5/29/13					

3. SAMPLE COLLECTION DATA

Sampling Personnel: A Clark

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP 13 S - 06 S, 5/29/13, 1150

Sample Analytical Parameters/Method: BTEX 8260B, PAHs SVOCs 8270LL, Total Selected Metals 6020, Diss Selected Metals 6020

Sample Start Time: 1150 End SampleTime: 1235

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: No Sheen No Odor.

COMMENTS: Riser 1.26' AGS

Water Level SN. 20246

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KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP 13S-06I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy Hot ~85°F Breezeline S 5-10 mph Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 5.79 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 49.69 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 43.9 (ft) (a-d)

h. Well Volume: 1.8 (gal)

2. WELL PURGE DATA

a. Purge Method: S.S. Bladder Pump (165 w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 (10A101995) Turbidity Meter (08610398)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1 gal.

e. Begin Purge Time: 1238 End Purge Time: 1338

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1238	30	28.73	6.84	1.463	-99.6	3.82	~~3.82~~ AC 5/30/13 >1000	Brown	Present	5.91
PURGING VALUES											
1	1243	40	29.50	6.87	1.451	-120.4	1.66	>1000	Brown	Present	5.96
2	1248	40	29.69	6.89	1.455	-136.9	1.00	>1000	Brown	Present	5.99
3	1253	40	29.21	6.89	1.463	-149.3	0.79	>1000	Brown	Present	6.00
4	1258	~~40~~ AC 5/30/13 50	29.31	6.88	1.458	-157.5	0.67	>1000	Brown	Present	6.05
5	1303	50	29.66	6.87	1.463	-172.5	0.52	>1000	Brown	Present	6.06
6	1308	50	30.17	6.87	1.461	-181.4	0.43	>1000	Brown	Present	6.06
7	1313	50	30.52	6.87	1.462	-187.4	0.37	>1000	Brown	Present	6.07
8	1318	50	30.56	6.86	1.455	-193.9	0.30	>1000	Brown	Present	6.07
9	1323	50	30.35	6.86	1.457	-199.6	0.26	>1000	Brown	Present	6.07
10	1328	50	29.92	6.86	1.459	-206.3	0.25	>1000	Brown	Present	6.07
11	1333	50	29.42	6.86	1.457	-207.7	0.26	>1000	Brown	Present	6.07
12	1338	50	29.21	6.85	1.462	-212.7	0.26	>1000	Brown	Present	6.07
13	1343										
14	~~1348~~ 1348 AC 5/30/13				AC 5/30/13						

3. SAMPLE COLLECTION DATA Sampling Personnel: A. Clark

Sampling Method(s) & Equip: S.S. Bladder Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): DP13S-06I, 5/30/13, 1340

Sample Analytical Parameters/Method: BTEX 8260B PAHs 8270LL Total Selected Metals 6010 D.S.S. Selected Metals 6020

Sample Start Time: 1340 End SampleTime: 1440

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: Odor Present / Sheen Present on purge water.

COMMENTS: Pumping at lowest flow rate minimizing drawdown Collected Equipment Blank on

Water Level SN: 20246 Riser 0.59' Above GS Pump #165 @ 1535 EB 0330.5

dmw-c:\misoffice\excel\GWSampleSheet Low Flow.xls Form #15

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP 13S-07I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy Breezy S 5-10mph ~80°F Sampling Date: 5/30/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 3.74 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 40.58 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 37.8 (ft) (a-d)

h. Well Volume: 1.53 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: S.S. Bladder Pump (165) w/ Teflon lined tubing

b. Field Testing Equipment: YSI 556 (Horiba U-22) Turbidity Meter (0880103)

c. Required Total Purge Volume (1f x 2e) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: ~1.8 gal.

e. Begin Purge Time: 0853 End Purge Time: 1003

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	0853	60	24.89	6.96	1.132	-129.5	1.86	71000	Brown	No	4.64
PURGING VALUES											
1	0858	60	25.26	6.95	1.133	-140.5	1.43	71000	Brown	No	4.61
2	0903	70	26.58	6.97	1.139	-162.5	0.90	71000	Brown	No	4.46
3	0908	100	27.93	6.96	1.131	-172.6	1.24	71000	Brown	No	4.63
4	0913	100	25.59	6.95	1.156	-216.1	0.85	71000	Brown	No	4.84
5	0918	90	25.94	6.96	1.181	-226.5	0.73	71000	Brown	No	4.86
6	0923	90	26.33	6.94	1.183	-224.3	0.68	71000	Brown	No	4.76
7	0928	90	25.66	6.91	1.187	-213.0	0.61	71000	Brown	No	4.76
8	0933	90	25.89	6.89	1.181	-204.9	0.54	71000	Brown	No	4.73
9	0938	90	27.17	6.87	1.181	-197.1	0.49	71000	Brown	No	4.75
10	0943	90	26.87	6.85	1.181	-183.2	0.47	71000	Brown	No	4.75
11	0948	90	25.75	6.83	1.174	-167.7	0.53	71000	Brown	No	4.75
12	0953	90	26.81	6.85	1.182	-149.6	0.51	71000	Brown	No	4.76
13	0958	90	26.68	6.87	1.190	-152.3	0.53	71000	Brown	No	4.76
14	1003	90	26.92	6.88	1.188	-157.1	0.53	71000	Brown	No	4.76

3. SAMPLE COLLECTION DATA Sampling Personnel: A. Clark

Sampling Method(s) & Equip: S.S. Bladder Pump w/ Teflon lined tubing

Sample I.D. (Name, Date, Time): DP13S-07I, 5/30/13, 1005

Sample Analytical Parameters/Method: BTEX-8260B SVOCs PAHs-8270C Total Selected Metals 6010B Diss Selected Metals 6010B

Sample Start Time: 1005 End SampleTime: 1040

PID/FID READING(s): 0.0ppm PID/FID Model & Ionization Potential

ODOR/SHEEN: No Odor / No Sheen

COMMENTS: DTW Taken From top of PVC riser which is level to ground surface.

Water Level SN: 20246

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-07S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Mostly Cloudy, ~88° F, light breeze Sampling Date: 5/29/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 5.39 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 19.48 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 14.09 (ft) (a-d)

h. Well Volume: 0.58 (gal)

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA # FTS001721

a. Purge Method: Low Flow/Peristaltic Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 DEMS/MPA Turbidity Meter 07A1386

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.72

e. Begin Purge Time: 1105 End Purge Time: 1145

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1105	200	24.28	6.88	0.967	-115.8	0.46	>1000	brown	none	7.56
PURGING VALUES											
1	1110	200	24.10	6.83	0.965	-109.4	0.32	>1000	brown	none	7.89
2	1115	150	24.50	6.78	0.973	-107.3	0.11	>1000	white	none	8.30
3	1120	150	24.37	6.76	0.954	-102.1	0.09	>1000	grey	none	6.35
4	1125	150	24.96	6.72	0.952	-95.5	0.08	>1000	grey	none	6.35
5	1130	150	24.32	6.71	0.951	-90.3	0.08	>1000	grey	none	6.35
6	1135	150	24.58	6.73	0.959	-72.1	0.08	>1000	grey	none	6.35
7	1140	150	24.73	6.72	0.960	-73.9	0.08	>1000	grey	none	6.35
8	1145	150	24.67	6.64	0.957	-75.2	0.08	>1000	grey	none	6.35
					RT 5/29/13						

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): DP135-07S, 5/29/13, 1150

Sample Analytical Parameters/Method: BTEX (8260B), 8270C LL (SVOC), 6020 select metals (diss. & total)

Sample Start Time: 1150 End SampleTime: 1219

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: WL # 17871 * purge rate was high due to get sediment through tubing

* BTEX collected via soda straw method

dmw-c:\msoffice\excel\GWSampleSheet Low Flow.xls Form #15

Ground to TOC: 1.32' Installed Depth: 20.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13S-08S

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~95°F Sampling Date: 5/31/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 6.35 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 23.65 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 17.30 (ft) (a-d)

h. Well Volume: 0.71 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow / Peristaltic Pump w/ teflon-lined tubing

b. Field Testing Equipment: YSI 556 06M1526AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~ 0.83 gallons

e. Begin Purge Time: 1313 End Purge Time: 1338

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1313	70	28.02	6.54	1.288	3.8	3.69	>1000	brown	none	11.34
PURGING VALUES											
1	1318	70	28.54	6.53	1.286	-28.0	0.23	>1000	brown	none	12.33
2	1323	70	29.18	6.55	1.130	-44.0	0.14	>1000	brown	none	12.85
3	1328	70	30.08	6.81	1.079	-64.6	0.16	>1000	brown	none	13.00
4	1333	70	30.25	6.85	0.993	-67.8	0.14	>1000	brown	none	13.13
5	1338	70	30.26	6.84	0.730	-74.5	0.07	>1000	brown	none	13.16
6	1343	70	30.07	6.82	0.684	-75.5	0.04 ~~0.04~~	896	brown	none	13.16
7	1348	70	29.77	6.80	0.511	-75.2	0.05 ~~0.050~~ RS 6/4/13	803	brown	none	13.16
8	1353	70	29.84	6.81	0.510	-76.5	0.04	771	brown	none	13.16
9	1358	70	29.99	6.80	0.512	-72.3	0.04	735	brown	none	13.16

RS 5/31/13

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Peristaltic Pump w/ teflon-lined tubing

Sample I.D. (Name, Date, Time): DP13S-08S, 6/1/13, 1403

Sample Analytical Parameters/Method: 8260B (BTEX), 8270CLL, 6020 select metals (diss. + total)

Sample Start Time: 1403 End SampleTime: 1437

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: WL # 17871 * pulsed at slowest rate possible

Ground to TOC: 1.55'

Installed TD: 25.00'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13S-02I
PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX
Weather Conditions: Sunny, ~90°F Sampling Date: 6/5/13

1. WATER LEVEL DATA (measured from top of inner well casing)
   a. Depth to LNAPL: NP (ft) b. Depth to Water: 16.94 (ft)
   c. Depth to DNAPL: NA (ft) d. Total Well Depth: 59.86 (ft)
   e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)
   g. Length of Water Column: 42.92 (ft) (a-d)
   h. Well Volume: 1.76 (gal)

2. WELL PURGE DATA #105
   a. Purge Method: Low Flow / Bladder Pump w/ teflon lined tubing
   b. Field Testing Equipment: YSI 556 06M158AM Turbidity Meter 08610386
   c. Required Total Purge Volume (1f x 2c) (gals.): —
   d. Total Volume and Number of Well Volumes Removed: ~2.10 gallons
   e. Begin Purge Time: 1045 End Purge Time: 1205

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1045	200	27.37	7.36	1.040	-127.4	0.38	>1000	brown	present	19.20
PURGING VALUES											
1	1050	100	27.19	7.13	1.040	-142.9	0.12	>1000	brown	present	19.34
2	1055	150	27.78	7.20	1.044	-155.8	0.08	>1000	brown	present	19.63
3	1100	100	27.55	7.19	1.057	-172.4	0.07	>1000	brown	present	19.70
4	1105	100	28.45	7.20	1.072	-175.3	0.06	>1000	brown	present	19.70
5	1110	100	28.25	7.16	1.079	-169.5	0.06	>1000	brown	present	19.70
6	1115	100	28.02	7.11	1.086	-162.6	0.07	>1000	brown	present	19.70
7	1120	100	27.62	7.00	1.092	-148.3	0.09	>1000	brown	present	19.70
8	1125	100	27.89	6.90	1.085	-140.4	0.10	>1000	brown	present	19.70
9	1130	100	27.77	7.03	1.097	-139.3	0.11	>1000	brown	present	19.70
10	1135	100	27.59	7.00	1.100	-135.6	0.11	>1000	brown	present	19.70
11	1140	100	27.38	6.87	1.098	-122.6	0.12	>1000	brown	present	19.70
12	1145	100	28.26	6.90	1.102	-103.7	0.12	>1000	brown	present	19.70
13	1150	100	28.04	6.93	1.105	-115.2	0.12	>1000	brown	present	19.70
14	1155	100	28.50	7.00	1.116	-114.3	0.12	>1000	brown	present	19.70

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl
   Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing
   Sample I.D. (Name, Date, Time): DP13S-02I, 6/5/13, 1210
   Sample Analytical Parameters/Method: 8260B (BTEX), 8270C LL, 6020 selected metals (diss. + total)
   Sample Start Time: 1210 End SampleTime: 1400

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential
ODOR/SHEEN: present / present
COMMENTS: WL # 17871 Ground to TOC: 0.02' MS/MSD collected here
Installed TD: 60.05'

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DPTSS - 02I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny ~90°F Sampling Date: 6/5/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 16.94 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 59.86 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 42.92 (ft) (a-d)

h. Well Volume: 1.76 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Low Flow/Bladder Pump w/ teflon lined tubing #165

b. Field Testing Equipment: YSI 556 SN 15A 13601 Turbidity Meter SN 10366

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~7.10 gallons

e. Begin Purge Time: 1045 End Purge Time: 1205

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
—	—	—	—	—	—	—	—	—	—	—	—
PURGING VALUES											
15	1200	100	29.80	7.01	1.118	-113.4	0.14	>1000	brown	present	19.70
16	1205	100	29.77	7.01	1.120	-112.6	0.14	>1000	brown	present	19.70
						RS 6/5/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Skahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DPTSS - 02I 6/5/13, 1210

Sample Analytical Parameters/Method: 8260B (STEX), 8270C (LL (SVOC), 6020 selected metals (diss + total)

Sample Start Time: 1210 End SampleTime: 1400

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present/present

COMMENTS: WO # 17871 MS/MSD collected here

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-081

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, ~90°F Sampling Date: 6/3/13-6/4/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 22.41 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 45.52 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 23.11 (ft) (a-d)

h. Well Volume: 0.95 (gal)

2. WELL PURGE DATA #165

a. Purge Method: Low Flow/Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~4.10

e. Begin Purge Time: 1210 End Purge Time: 1415

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1210	125	29.56	7.38	1.288	-94.7	3.85	>1000	brown	none	25.42
PURGING VALUES											
1	1215	125	28.64	7.03	1.282	-32.5	1.93	>1000	brown	none	26.73
2	1220	125	29.32	7.13	1.297	-67.2	1.54	>1000	brown	none	27.10
3	1225	125	30.87	7.21	1.304	-89.3	1.23	>1000	brown	none	28.63
4	1230	125	31.63	7.29	1.319	-120.7	0.84	>1000	brown	none	29.13
5	1235	125	30.87	7.31	1.314	-130.8	0.74	>1000	brown	none	29.68
6	1240	125	32.57	7.30	1.292	-142.8	0.44	>1000	brown	none	30.24
7	1245	125	33.24	7.29	1.271	-131.0	0.33	>1000	brown	none	30.87
8	1250	125	34.04	7.23	1.237	-82.1	0.30	>1000	brown	none	31.52
9	1255	125	33.92	7.23	1.224	-117.4	0.16	>1000	brown	none	32.20
10	1300	125	32.90	7.21	1.219	-124.3	0.04	>1000	brown	none	32.89
11	1305	125	31.68	7.22	1.199	-120.0	0.04	>1000	brown	none	33.52
12	1310	125	30.78	7.10	1.009	-125.3	0.03	>1000	brown	none	34.31
13	1315	125	30.71	7.08	1.000	-126.2	0.03	>1000	brown	none	34.96
14	1320	125	30.60	7.04	0.990	-119.5	0.03	>1000	brown	none	35.49

3. SAMPLE COLLECTION DATA

Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP135-081, 6/4/13, 0730

Sample Analytical Parameters/Method: 8260B (BTEX), 8270CLL (SVOCs), 6020 selected metals (diss + total)

Sample Start Time: 0730 End SampleTime: 0750

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none

COMMENTS: WL #17871 * due to excessive sediments in bottom of well, 125 mL/min was lowest possible purge rate. Well ran dry @ ~4.10 gallons, will return at a later time to access recharge. Returned to well @ 0720 6/4/13, recharge deemed sufficient.

sample: DTW: 21.03 Temp: 29.73, pH: 7.15, Sp Cond: 1.031, ORP: -128.7, DO: 1.15, NTU: 121, color: cloudy, no odor

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-08I
PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX
Weather Conditions: Sunny, ~90°F Sampling Date: 6/3/13 - 6/4/13

1. WATER LEVEL DATA (measured from top of inner well casing)
   a. Depth to LNAPL: NP (ft) b. Depth to Water: 22.41 (ft)
   c. Depth to DNAPL: NA (ft) d. Total Well Depth: 45.52 (ft)
   e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)
   g. Length of Water Column: 23.11 (ft) (a-d)
   h. Well Volume: 0.95 (gal)

2. WELL PURGE DATA
   a. Purge Method: Low Flow/Bladder Pump w/ teflon lined tubing
   b. Field Testing Equipment: YSI 556 06M1536AM Turbidity Meter 08610386
   c. Required Total Purge Volume (1f x 2c) (gals.): —
   d. Total Volume and Number of Well Volumes Removed: ~4.13 gallons
   e. Begin Purge Time: 1210 End Purge Time: 1415

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
—	—	—	—	—	—	—	—	—	—	—	—
PURGING VALUES											
15	1325	12.5	31.20	7.01	1.014	-116.7	0.03	>1000	brown	none	36.85
16	1330	12.5	31.46	7.04	1.017	-118.7	0.03	>1000	brown	none	37.61
17	1335	12.5	31.32	7.02	1.014	-123.6	0.03	>1000	brown	none	38.69
18	1340	12.5	31.56	7.01	1.009	-127.8	0.03	>1000	brown	none	39.71
19	1345	12.5	32.62	6.99	1.045	-130.8	0.03	>1000	brown	none	40.32
20	1350	12.5	32.56	6.95	1.032	-133.6	0.03	>1000	brown	none	41.23
21	1355	12.5	32.42	6.98	1.030	-134.2	0.03	>1000	brown	none	42.01
22	1400	12.5	32.71	7.01	1.036	-133.7	0.03	>1000	brown	none	42.68
23	1405	12.5	32.31	7.07	1.032	-133.1	0.03	>1000	brown	none	43.82
24	1410	12.5	31.64	7.13	1.026	-135.6	0.03	>1000	brown	none	44.52
25	1415	12.5	31.72	7.23	1.021	-136.4	0.03	>1000	brown	none	45.32
~~26~~					Dry @ 4.10 gallons						
					RS 6/4/13						

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl
   Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing
   Sample I.D. (Name, Date, Time): DP135-08I, 6/4/13, 0730
   Sample Analytical Parameters/Method: 8260B (BTEX), 8270C SL (SVOCs), 6020 selected metals (diss. + total)
   Sample Start Time: 0730 End SampleTime: 0750

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential
ODOR/SHEEN: none / none
COMMENTS: WL # 17871 *

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-105

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Partly Cloudy ~90°F Sampling Date: 6/4/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 7.75 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: ~~19.96~~ 20.00 (ft) RS 6/5/13

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 12.21 (ft) (a-d)

h. Well Volume: 0.50 (gal) #165

2. WELL PURGE DATA

a. Purge Method: Low Flow / Bladder Pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 MPS with Turbidity Meter and flow through cell

c. Required Total Purge Volume (1f x 2e) (gals.): —

d. Total Volume and Number of Well Volumes Removed: ~1.50 gallons

e. Begin Purge Time: 1640 End Purge Time: 1725

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
①	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
INT	1640	125	26.52	6.04	1.034	76.2	1.22	>1000	brown	none	8.59
PURGING VALUES											
1	1645	125	26.27	5.77	1.031	87.9	0.73	>1000	brown	none	8.59
2	1650	125	26.18	5.61	1.026	96.1	0.59	>1000	brown	none	8.67
3	1655	125	25.97	5.42	1.022	102.6	0.46	>1000	brown	none	8.67
4	1700	125	25.96	5.62	1.028	91.6	0.45	>1000	brown	none	8.67
5	1705	125	25.70	6.05	1.027	65.7	0.34	>1000	brown	none	8.67
6	1710	125	25.35	6.18	1.031	58.9	0.39	>1000	brown	none	8.67
7	1715	125	25.20	6.27	1.021	55.4	0.31	>1000	brown	none	8.67
8	1720	125	25.14	6.29	1.022	55.9	0.29	>1000	brown	none	8.67
9	1725	125	25.15	6.30	1.022	56.3	0.29	>1000	cloudy	none	8.67
						RS 6/4/13					

3. SAMPLE COLLECTION DATA Sampling Personnel: R. Stahl

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP135-105, 6/4/13 1810

Sample Analytical Parameters/Method: BTEX (8260), 1,2-DCA (8260), 6 PBO alcohol related (diss. & total)

Sample Start Time: 1730 End SampleTime: 1810

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none / none

COMMENTS: WL # 17871 * Duplicate DP135-994 collected here at 2000

* sampled after 3 well volumes purged, ~1.50 gallons

Ground to TOC: 0.04' Measured TD: 19.96

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-13S-11I
PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX
Weather Conditions: 90 Sunny Sampling Date: 6-13-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 32.60 (ft)
c. Depth to DNAPL: NP (ft) d. Total Well Depth: 61.75 (ft)
e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)
g. Length of Water Column: 29.15 (ft) (a-d)
h. Well Volume: 1.20 (gal)

2. WELL PURGE DATA

a. Purge Method: S.S. Bladder Pump (161) w/ Dec. Teflon Lined Tub
b. Field Testing Equipment: YSI 556(66m:536m) Turbidity Meter/(08610391)
c. Required Total Purge Volume (1f x 2c) (gals.): 0.90
d. Total Volume and Number of Well Volumes Removed: 0.75
e. Begin Purge Time: 1124 End Purge Time: 1415

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Jnt	1124	30	27.70	7.35	0.890	-29.7	5.86	71000	Brown	None	32.6
PURGING VALUES											
1	1129	20	28.32	7.23	0.886	103.7	4.53	71000	Brown	None	34.92
2	1134	20	29.27	7.28	0.885	93.4	3.72	71000	Brown	None	35.34
3	1139	20	30.41	7.39	0.880	78.6	3.07	71000	Brown	None	35.65
4	1144	200	31.76	7.40	0.900	74.9	3.03	71000	Brown	None	36.07
5	1149	20	31.72	7.37	0.904	75.2	3.00	71000	Brown	None	36.50
6	1159	20	32.09	7.36	0.904	73.0	2.83	71000	Brown	None	36.72
7	1159	20	31.97	7.37	0.904	69.4	2.73	71000	Brown	None	36.98
8	1204	20	31.86	7.38	0.899	67.8	2.34	71000	Brown	None	37.21
9	1209	20	31.89	7.39	0.897	64.7	2.20	71000	Brown	None	37.40
10	1219	20	31.93	7.39	0.901	62.4	2.09	71000	Brown	None	37.64
11	1219	20	31.97	7.39	0.903	61.2	2.09	71000	Brown	None	37.82
12	1224	20	32.09	7.38	0.903	62.7	2.08	71000	Brown	None	38.13
13	1229	20	31.98	7.36	0.904	64.5	2.08	71000	Brown	None	38.41
14	1234	20	31.98	7.35	0.905	68.4	2.06	71000	Brown	None	38.66

3. SAMPLE COLLECTION DATA

Sampling Personnel: [signature]

Sampling Method(s) & Equip: Bladder pump (161) w/ Dec Teflon Lined Tubing
Sample I.D. (Name, Date, Time): DP-13S 11I 6-13-13 1420
Sample Analytical Parameters/Method: VOCs (8260B); SVOC's (8270C) Dis + Total Metals (6020)
Sample Start Time: 1420 End SampleTime: 1635

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential
ODOR/SHEEN: No odor/sheen
COMMENTS: WL: 20.46

Ground surface to top of riser: 2.00 Measured TD: 59.96

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-11I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: 90° Sunny Sampling Date: 6-13-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 32.60 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 61.75 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 29.15 (ft) (a-d)

h. Well Volume: 1.20 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: SS Bladder pump (QED) w/ poly teflon lined tubing

b. Field Testing Equipment: YSI 556 w/ flow-thru Turbidity Meter (09G0391)

c. Required Total Purge Volume (1f x 2c) (gals.): 0.40

d. Total Volume and Number of Well Volumes Removed: 0.75

e. Begin Purge Time: 1124 End Purge Time: 1415

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
15	1240	20	31.87	7.35	0.911	63.7	2.34	>1000	Brown	None	36.81
PURGING VALUES											
16	1245	20	31.91	7.35	0.922	60.5	2.76	>1000	Brown	None	38.93
17	1250	20	31.90	7.30	0.915	61.2	2.94	>1000	Brown	None	39.72
18	1255	20	31.98	7.24	0.913	63.5	3.05	>1000	Brown	None	40.55
19	1300	20	32.01	7.17	0.911	64.0	2.90	>1000	Brown	None	41.00
20	1305	20	32.04	7.16	0.909	66.6	2.87	>1000	Brown	None	41.45
21	1310	20	32.05	7.21	0.904	56.8	2.73	>1000	Brown	None	41.56
22	1315	20	32.01	7.29	0.903	49.0	2.64	>1000	Brown	None	41.68
23	1320	20	32.07	7.30	0.912	47.8	2.87	>1000	Brown	None	41.96
24	1325	20	32.06	7.32	0.921	45.8	3.02	>1000	Brown	None	42.42
25	1330	20	32.01	7.24	0.921	46.6	3.21	>1000	Brown	None	42.85
26	1335	20	31.98	7.20	0.919	52.5	3.36	>1000	Brown	None	43.17
27	1340	20	32.01	7.16	0.917	56.1	3.05	>1000	Brown	None	43.51
28	1345	20	32.06	7.18	0.919	56.9	3.41	>1000	Brown	None	44.17
29	1350	20	32.07	7.26	0.921	57.8	3.01	>1000	Brown	None	44.63

3. SAMPLE COLLECTION DATA

Sampling Personnel: AT

Sampling Method(s) & Equip: Bladder pump w/ poly Teflon lined tubing

Sample I.D. (Name, Date, Time): DP-135-11I 6-13-13 1420

Sample Analytical Parameters/Method: VOCs (8260B), SVOCs (8270C) Dis & Total Metals (6020)

Sample Start Time: 1420 End SampleTime: 1635

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: No odor / Sheen

COMMENTS: MW-2046

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-13N-10I
PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.
Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX
Weather Conditions: 95° Sunny Sampling Date: 6-13-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 21.32 (ft)
c. Depth to DNAPL: NP (ft) d. Total Well Depth: 55.00 (ft)
e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)
g. Length of Water Column: 33.64 (ft) (a-d)
h. Well Volume: 1.37 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump w/ Ded teflon Lined t-hing (54830)
b. Field Testing Equipment: YSI 556 (06m15 2cm) Turbidity Meter (08610391)
c. Required Total Purge Volume (1f x 2c) (gals.): 2.64
d. Total Volume and Number of Well Volumes Removed: 1.93
e. Begin Purge Time: 1715 End Purge Time: 1805

Conversion Factors (a x ef = h)	
Well I.D.	Conv. Fact. (ef)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1715	200	27.30	7.12	1.027	-45.6	0.43	>1000	Brown	None	21.75
PURGING VALUES											
1	1720	200	28.41	6.47	0.995	-52.3	0.11	>1000	Brown	None	21.78
2	1725	200	28.42	6.40	0.997	-60.3	0.09	>1000	Brown	None	21.79
3	1730	200	28.49	6.17	0.985	-54.7	0.10	>1000	Brown	None	21.79
4	1735	200	28.43	6.02	0.992	-49.3	0.11	>1000	Brown	None	21.79
5	1740	200	28.44	6.00	0.987	-63.3	0.09	>1000	Brown	None	21.79
6	1745	200	28.47	5.76	0.987	-66.1	0.10	>1000	Brown	None	21.79
7	1750	200	28.46	5.72	0.989	-67.0	0.13	>1000	Brown	None	21.79
8	1755	200	28.43	5.72	0.985	-64.3	0.13	>1000	Brown	None	21.79
9	1800	200	28.45	5.71	0.983	-63.2	0.12	>1000	Brown	None	21.79
10	1805	200	28.44	5.70	0.987	-65.8	0.13	>1000	Brown	None	21.79
					AT	6-13-13					

3. SAMPLE COLLECTION DATA

Sampling Personnel: AT
Sampling Method(s) & Equip: ~~DP-13N-10I~~ Peristaltic Pump w/ Ded Teflon Lined tub
Sample I.D. (Name, Date, Time): DP-13N-10I 6-13-13 1810
Sample Analytical Parameters/Method: 8260B; 8270C; Total + Dis Metals 6020
Sample Start Time: 1810 End SampleTime: ~~1810~~ 1830

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential
ODOR/SHEEN: none
COMMENTS: WL 20246

Ground level to TOC 1.59 MEASURED TOTAL DEPTH 51.32

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP13N - 052

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny ~ 90°F Sampling Date: 6/4/13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 15.90 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 52.39 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 36.95 (ft) (a-d)

h. Well Volume: 1.52 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
①	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Geoflow Bladder Pump w/ teflon lined tubing

b. Field Testing Equipment: YSI 556 MPS Multi-Meter & Turbidity Meter 08G0326

c. Required Total Purge Volume (1f x 2c) (gals.): —

d. Total Volume and Number of Well Volumes Removed: 3.1 gallons

e. Begin Purge Time: 1226 End Purge Time: 1435

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
—	—	—	—	—	—	—	—	—	—	—	—
PURGING VALUES											
15	1335	100	27.76	6.97	1.302	-109.4	0.65	>1000	brown	present	30.17
16	1340	100	27.19	6.99	1.305	-95.2	0.80	>1000	brown	present	32.06
17	1345	100	26.56	6.94	1.303	-86.3	1.09	>1000	brown	present	34.13
18	1350	100	25.93	6.93	1.308	-81.3	1.40	>1000	brown	present	37.01
19	1355	100	25.94	6.91	1.306	-81.2	1.40	>1000	brown	present	38.62
20	1400	100	26.68	6.91	1.311	-79.1	1.41	>1000	brown	present	41.11
21	1405	100	26.02	6.92	1.313	-79.2	1.41	>1000	brown	present	42.63
22	1410	100	26.07	6.93	1.315	-78.6	1.39	>1000	brown	present	43.96
23	1415	100	26.93	6.91	1.311	-76.3	1.39	>1000	brown	present	45.56
24	1420	100	26.56	6.91	1.312	-77.2	1.38	>1000	brown	present	47.01
25	1425	100	26.47	6.90	1.313	-77.6	1.37	>1000	brown	present	48.16
26	1430	100	26.49	6.90	1.309	-80.2	1.40	>1000	brown	present	49.32
27	1435	100	25.99	6.89	1.307	-80.5	1.41	952	brown	present	50.64
—	—	—	—	—	Dry @ ~3.00 gallons		—	—	—	—	—

3. SAMPLE COLLECTION DATA Sampling Personnel: E. Stein

Sampling Method(s) & Equip: Bladder Pump w/ teflon lined tubing

Sample I.D. (Name, Date, Time): DP13N-052, 6/5/13, 0820

Sample Analytical Parameters/Method: 8260B (BTEX), 8270C (1,4-Dioxane), 6020 selected metals (diss & total)

Sample Start Time: 0820 End SampleTime: 0925

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: present / present

COMMENTS: WL # 19871 Well ran dry @ 3.00 gallons, will return later to recharge. Returned to well @ 0810 6/5/13, recharge = Drwdn: 14.26 sufficient recharge, proceeded to sample well.

esample: Temp: 24.93, pH: 6.73, sp cond: 1.293, ORP: -86.7, DO: 2.33, NTU: 56.3, color: clear, odor present

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-11I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: 90° Sunny Sampling Date: 6-13-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 32.60 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 61.75 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 29.15 (ft) (a-d)

h. Well Volume: 1.20 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: SS Bladder Pump (Geo) w/ Ded Teflon-Lined Tubing

b. Field Testing Equipment: YSI 556 (MPS) w/ Turbidity Meter (OS Geo 3001)

c. Required Total Purge Volume (1f x 2c) (gals.): 0.90

d. Total Volume and Number of Well Volumes Removed: 0.75

e. Begin Purge Time: 1124 End Purge Time: 1415

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE-PURGE VALUES											
30	1350	20	32.17	7.03	0.919	60.3	3.84	710 ca	Brown	None	45.21
PURGING VALUES											
31	1355	20	32.24	6.84	0.917	63.7	4.04	710 ca	Brown	none	45.73
32	1400	20	32.36	6.74	0.914	67.4	4.20	710 ca	Brown	none	46.14
33	1405	20	32.39	6.80	0.916	68.2	4.23	710 ca	Brown	none	46.78
34	1410	20	32.39	6.84	0.916	66.3	4.21	710 ca	Brown	none	47.21
35	1415	20	32.35	6.85	0.914	65.4	4.20	710 ca	Brown	none	47.65

3. SAMPLE COLLECTION DATA Sampling Personnel: AT

Sampling Method(s) & Equip: Bladder Pump (Geo) w/ Ded Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): DP-135-11I 6-13-13 1420

Sample Analytical Parameters/Method: VOCs (8260B); SVOCs (8270C); Total & Dis Metals (6020)

Sample Start Time: 1430 End SampleTime: 1435

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: No Odor/Sheen

COMMENTS: WO# 20346

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-12I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: 90 Sunny Sampling Date: 6-12-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 17.59 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 55.82 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 38.23 (ft) (a-d)

h. Well Volume: 1.57 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic pump (054830X) w/ Ded Teflon Lined Tub

b. Field Testing Equipment: YSI 5560G M1534AM Turbidity Meter 0861 0891

c. Required Total Purge Volume (1f x 2c) (gals.): 1.85 gal

d. Total Volume and Number of Well Volumes Removed: 1.18

e. Begin Purge Time: 1205 End Purge Time: 1315

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	1205	100	28.59	7.14	0.986	-49.4	0.50	71000	Brown	None	17.62
PURGING VALUES											
1	1210	100	28.23	7.04	0.969	-70.9	0.11	71000	Brown	None	17.63
2	1215	100	27.79	6.98	0.961	-101.5	0.05	71000	Brown	None	17.64
3	1220	100	28.36	7.01	0.954	-118.7	0.10	71000	Brown	None	17.64
4	1225	100	28.86	7.05	0.953	-132.6	0.12	71000	Brown	None	17.64
5	1230	100	29.43	7.11	0.953	-150.4	0.06	71000	Brown	None	17.64
6	1235	100	29.48	7.08	0.953	-152.9	0.06	71000	Brown	None	17.64
7	1240	100	29.50	7.11	0.953	-157.6	0.05	71000	Brown	None	17.64
8	1245	100	29.52	7.12	0.953	-161.6	0.06	71000	Brown	None	17.64
9	1250	100	29.49	7.04	0.955	-157.1	0.07	71000	Brown	None	17.64
10	1255	100	29.51	6.97	0.952	-153.6	0.08	71000	Brown	None	17.64
11	1300	100	29.55	6.97	0.951	-154.5	0.07	71000	Brown	None	17.64
12	1305	100	29.53	6.92	0.953	-152.3	0.08	71000	Brown	None	17.65
13	1310	100	29.51	6.95	0.953	-155.4	0.08	71000	Brown	None	17.65
14	1315	100	29.50	6.94	0.954	-155.7	0.08	71000	Brown	None	17.65

3. SAMPLE COLLECTION DATA

Sampling Personnel: AT

Sampling Method(s) & Equip: Peristaltic Pump w/ Ded Teflon Lined Tubing

Sample I.D. (Name, Date, Time): DP-135-12I 6-12-13 1320

Sample Analytical Parameters/Method: VOCs (8260B); SVOCs (8270C); Total + D.S. Metals (6020)

Sample Start Time: 1320 End SampleTime: 1350

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: None/None

COMMENTS: WL: * All parameters stable excluding Turbidity

Ground Surface to TOC: 1.05 Measured TD: 55.82

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-135

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: 86° Sunny Sampling Date: 6-13-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 9.33 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 53.00 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 43.67 (ft) (a-d)

h. Well Volume: 1.79 (gal)

Conversion Factors (g x cf = h)	
Well I.D.	Conv. Fact. (cf)
(1)	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (QED) w/Dedi Teflon Lined Tubing

b. Field Testing Equipment: YSI 556 & Hach 2100P Turbidity Meter SN 10B101001

c. Required Total Purge Volume (1f x 2c) (gals.): 1.45

d. Total Volume and Number of Well Volumes Removed: 0.81

e. Begin Purge Time: 0835 End Purge Time: 0930

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Int	0835	100	26.48	6.55	0.920	64.2	3.52	>1000	Brown	none	9.38
PURGING VALUES											
1	0840	100	26.37	6.58	0.914	75.8	0.76	>1000	Brown	none	13.93
2	0845	100	26.39	6.67	0.914	72.4	0.31	>1000	Brown	none	15.51
3	0850	100	26.41	6.71	0.914	70.7	0.24	>1000	Brown	none	18.21
4	0855	100	26.44	6.79	0.915	68.7	0.18	>1000	Brown	none	21.76
5	0900	100	26.42	6.84	0.914	68.2	0.17	>1000	Brown	none	24.83
6	0905	100	26.44	6.85	0.914	67.2	0.16	>1000	Brown	none	27.91
7	0910	100	26.49	6.82	0.914	64.7	0.16	>1000	Brown	none	30.51
8	0915	100	26.50	6.80	0.915	64.9	0.16	>1000	Brown	none	34.04
9	0920	100	26.47	6.81	0.915	65.3	0.16	>1000	Brown	none	38.21
10	0925	100	26.48	6.81	0.915	65.7	0.16	>1000	Brown	none	41.06
11	0930	100	26.49	6.81	0.916	66.7	0.16	>1000	Brown	none	44.89
Dry					1.45						
P.S.	1325	100	26.59	6.78	0.914	63.4	0.16	>1000	Brown	None	14.06

3. SAMPLE COLLECTION DATA Sampling Personnel: AT

Sampling Method(s) & Equip: Bladder Pump w/ Ded Teflon Lined tubing

Sample I.D. (Name, Date, Time): DP-135-135 6-13-13 1330

Sample Analytical Parameters/Method: VOCs (8260B); SVOCs (8270C) Total & Dis Metals (6020A)

Sample Start Time: 1330 End SampleTime: 1400

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: none/none Ground Surface to TOC: 1.87

COMMENTS: WC. 20947 Measured T.D.: 47.52

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP-135-135

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: 90° Sunny Sampling Date: 6-12-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b. Depth to Water: 4.36 (ft)

c. Depth to DNAPL: NA (ft) d. Total Well Depth: 22.10 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 17.74 (ft) (a-d)

h. Well Volume: 0.73 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (0.548300) w/ Ded Teflon Lined tubing

b. Field Testing Equipment: YSI 556 06-4336 Turbidity Meter 08610391

c. Required Total Purge Volume (1f x 2c) (gals.): 1.32

d. Total Volume and Number of Well Volumes Removed: 1.81

e. Begin Purge Time: 1435 End Purge Time: 1545

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
Jn1	1435	100	28.62	7.41	0.575	-121.5	0.26	>1000	Brown	None	4.39
PURGING VALUES											
1	1440	100	28.19	7.17	0.573	-144.9	0.12	>1000	Brown	None	4.41
2	1445	100	28.24	7.16	0.573	-158.8	0.09	>1000	Brown	None	4.42
3	1450	100	28.22	7.13	0.573	-163.1	0.08	>1000	Brown	None	4.44
4	1455	100	28.27	7.11	0.569	-124.3	0.06	>1000	Brown	None	4.45
5	1500	100	28.25	7.07	0.569	-107.4	0.06	>1000	Brown	None	4.45
6	1505	100	28.25	7.00	0.568	-99.5	0.06	>1000	Brown	None	4.45
7	1510	100	28.26	6.97	0.567	-93.4	0.08	>1000	Brown	None	4.46
8	1515	100	28.26	6.90	0.566	-91.2	0.10	>1000	Brown	None	4.46
9	1520	100	28.28	6.89	0.565	-89.6	0.15	>1000	Brown	None	4.46
10	1525	100	28.29	6.83	0.564	-87.3	0.20	>1000	Brown	None	4.46
11	1530	100	28.30	6.84	0.564	-84.5	0.24	>1000	Brown	None	4.46
12	1535	100	28.30	6.83	0.564	-83.6	0.24	>1000	Brown	None	4.46
13	1540	100	28.31	6.84	0.564	-82.9	0.24	>1000	Brown	None	4.46
14	1545	100	28.30	~~6.58~~ 6.83	0.564	-80.4	0.25	>1000	Brown	None	4.46

3. SAMPLE COLLECTION DATA

Sampling Personnel: AP

Sampling Method(s) & Equip: Peristaltic Pump w/ Ded Teflon Lined tubing

Sample I.D. (Name, Date, Time): DP-135-135 6-12-13 1550

Sample Analytical Parameters/Method: VOC's (8260B), SVOC's (8270C) Dis & Total Metals (6020)

Sample Start Time: 1550 End SampleTime: 1620

PID/FID READING(s): 0.0 PID/FID Model & Ionization Potential

ODOR/SHEEN: None/None Ground Surface to TOC: 1.10

COMMENTS: WL 20246 Measured TD: 21.64

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP35-035

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Clear, Humid Sampling Date: 5-21-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: N P (ft) b. Depth to Water: 8.32 (ft)

c. Depth to DNAPL: N P (ft) d. Total Well Depth: 19.83 (ft)

e. LNAPL Thickness: (a-b) N/A (ft) f. DNAPL Thickness: (c-d) N/A (ft)

g. Length of Water Column: 11.51 (ft) (a-d)

h. Well Volume: 0.472 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: LowFlow

b. Field Testing Equipment: YSI 556 Turbidity Meter

c. Required Total Purge Volume (1f x 2c) (gals.): 2.36

d. Total Volume and Number of Well Volumes Removed: 6.20

e. Begin Purge Time: 12.20 End Purge Time: 1458

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
1	R22	500	28.12	6.57	1.028	—	—	VT	Brn	none	8.67
PURGING VALUES											
2	1235	250	25.73	6.61	1.029	—	—	VT	Brn	None	
3	1240	160	25.83	6.62	1.038	—	—	VT	"	"	
4	1245		26.22	6.66	1.055	—	—	>1000	"	"	
5	1250		27.26	6.71	1.086	—	—	>1000	"	"	8.97
6	1255		26.91	6.67	1.077	—	—	>1000	"	"	
7	1300		26.56	6.66	1.069	—	—	>1000	"	"	
8	1305		26.34	6.65	1.067	—	—	>1000	"	"	
9	1310		26.52	6.64	1.056	—	—	>1000	"	"	
10	1315		26.78	6.64	1.057	—	—	>1000	"	"	8.67
11	1320		26.67	6.64	1.051	—	—	>1000	"	"	
12	1325		26.35	6.52	1.051	50.25	35.6	>1000	"	"	
13	1330		26.12	6.50	1.051	56.5	31.8	>1000	"	"	
14	1335		25.95	6.56	1.037	57.7	25.33	>1000	"	"	
15	1340		26.45	6.54	1.044	53.4	22.49	>1000	"	"	8.89

3. SAMPLE COLLECTION DATA Sampling Personnel: D. Mulcahy

Sampling Method(s) & Equip: Peristaltic Pump, YSI flow through cell meter, Hydac Turb. meter

Sample I.D. (Name, Date, Time): DP35-035

Sample Analytical Parameters/Method: VOC (8260B), SVOC (8270C), + Total/Dissolved metals (6020)

Sample Start Time: 1458 End SampleTime: 1538

PID/FID READING(s): 0.0 ppm PID/FID Model & Ionization Potential: Mini-RAE 2000 10.6 eV

ODOR/SHEEN: None

COMMENTS:

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Cont.

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-035

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: See Page 1 Sampling Date: 5-21-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: See Page 1 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: " (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.5' (ft) (a-d)

h. Well Volume: 0.477 (gal)

2. WELL PURGE DATA

a. Purge Method: Low Flow

b. Field Testing Equipment: YSI 556 Turbidity Meter

c. Required Total Purge Volume (1f x 2c) (gals.): See Page 1

d. Total Volume and Number of Well Volumes Removed: "

e. Begin Purge Time: 1222 End Purge Time: 1458

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
PURGING VALUES											
16	1345	160	26.65	6.57	1.050	50.6	22.43	>1000	Light Brn	None	
17	1350		25.86	6.55	1.040	51.2	16.03	>1000		"	
18	1355		25.89	6.61	1.032	56.3	13.43	>1000		"	
19	1405		26.26	6.62	1.042	54.1	15.99	>1000		"	8.95
20	1415		26.56	6.62	1.050	59.2	16.77	869	Not as Thick	"	
21	1420		26.18	6.60	1.045	60.1	17.07	404	v Cloudy	"	
22	1425		26.52	6.56	1.044	81.7	56.57	304	v Cloudy	"	8.98
23	1440		26.58	6.59	1.058	65.4	18.57	55.1	Cloudy	"	
24	1445		26.72	6.59	1.049	63.2	18.80	110	Cloudy	"	
25	1450		26.75	6.58	1.054	60.9	17.79	103	Cloudy	"	8.97
26	1455	6.20	26.67	6.58	1.060	57.6	17.82	122	Cloudy	"	9.0
	1438		Start Sampling VOC, SVOC, Followed by Metals								
	1538		Sampling Complete								

3. SAMPLE COLLECTION DATA Sampling Personnel: J M Valesky

Sampling Method(s) & Equip:

Sample I.D. (Name, Date, Time): See Page 1

Sample Analytical Parameters/Method:

Sample Start Time: End SampleTime:

PID/FID READING(s) : PID/FID Model & Ionization Potential

ODOR/SHEEN: See Page 1

COMMENTS:

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: DP135-03I

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny Windy, Cloudy Sampling Date: 5-22-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: None (ft) b. Depth to Water: 10.13 (ft)

c. Depth to DNAPL: None (ft) d. Total Well Depth: 54 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 43.87 (ft) (a-d)

h. Well Volume: 1.79 (gal)

Conversion Factors (g x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Low Flow

b. Field Testing Equipment: YSI 556 Turbidity Meter

c. Required Total Purge Volume (1f x 2c) (gals.): 1.8

d. Total Volume and Number of Well Volumes Removed: 6.8 / 3.8

e. Begin Purge Time: 1534 End Purge Time: 1750

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
1	1535	~250	27.05	6.87	1.208	100.1	236.1	VVT	BN	None	
PURGING VALUES											
2	1545	~250	26.26	6.83	1205	56.9	14.84	VVT	BN	None	13.09
3	1555	135	25.68	6.66	1.179	-26.0	5.16	VVT	BN	None	
4	1600	135	26.34	6.74	1.193	-80.3	3.24	VVT	BN	None	12.98
5	1605	135	26.67	6.80	1.205	-105.3	2.86	VVT	BN	"	
6	1610	135	27.22	6.83	1.213	-133.5	2.41	VVT	BN	"	
7	1615	135	27.80	6.84	1.223	-149.1	1.89	VVT	BN	"	12.85
8	1620	135	28.17	6.86	1241	-161.1	1.57	>1,000	BN	"	
9	1625	185	27.96	6.81	1.233	-167	1.54	>1,000	BN	"	13.17
10	1637	185	26.34	6.57	1.210	-53.4	28.55	>1,000	SLT BN	"	
11	1645	185	26.02	6.64	1.198	-120.0	7.41	>1,000	"	None	
12	1650	185	26.17	6.65	1.201	-126	7.11	>1,000	"	"	13.48
13	1655	185	26.07	6.66	1.196	-127.1	7.00	>1,000	"	"	13.49
14	1700	185	26.02	6.65	1.194	-127	6.91	>1,000	"	"	13.68
15	1707	185	26.13	6.62	1.195	-123	6.93	>1,000	Lt BN	"	

3. SAMPLE COLLECTION DATA Sampling Personnel: JW/AG

Sampling Method(s) & Equip: Low Flow Peristaltic Pump YSI Flow thru cell, Horiba Turb. mtr

Sample I.D. (Name, Date, Time): DP135-03I 5-22-13 1750 hrs

Sample Analytical Parameters/Method: VOC (8260B) SVOC (8270C SIM), TOTAL/ Dissolved Metals (6020)

Sample Start Time: 1730 End SampleTime: 1815

PID/FID READING(s):

PID/FID Model & Ionization Potential MiniRAE 2000 10.6 eV

ODOR/SHEEN: None

COMMENTS:

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DP13 5-031 Cont

KEY ENVIRONMENTAL INCORPORATED

GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.:

PERMIT NO.:

Project No.: KBE13665-03 Client: Beazer East, Inc.

Project Name: S. Cavalcade TI Zone Delineation Plan Project Location: Houston, TX

Weather Conditions: Sunny, Partly Cloudy Sampling Date: 5-22-13

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: none (ft) b. Depth to Water: 10.13 (ft)

c. Depth to DNAPL: none (ft) d. Total Well Depth: 54 (ft)

e. LNAPL Thickness: (a-b) N/A (ft) f. DNAPL Thickness: (c-d) N/A (ft)

g. Length of Water Column: 43.87 (ft) (a-d)

h. Well Volume: 1.79 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Low Flow

b. Field Testing Equipment: YSI 556 Turbidity Meter

c. Required Total Purge Volume (1f x 2c) (gals.): 1.8

d. Total Volume and Number of Well Volumes Removed: 6.8/3.8

e. Begin Purge Time: 1534 End Purge Time: 1750

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) (±10%)	pH (s.u.) (±0.1)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (±10%)	Color	Odor	Water Level (ft)
PRE PURGE VALUES											
16	1715	185	25.62	6.54	1.181	-116	6.80	>1,000			
PURGING VALUES											
17	1720	185	25.8	6.62	1.186	-120.3	6.96	>1,000			
18	1725	185	25.94	6.60	1.188	-119	6.48	>1,000			
19	1730	185	26.09	6.64	1.194	-122	6.29	>1,000			
20	1735	185	26.12	6.66	1.199	-119	7.44	>1,000			
21	1740	185	25.78	6.59	1.189	-119	7.65	>1,000			
22	1745	185	25.88	6.62	1.188	-121	7.26	>1,000			
23	1750	185	25.86	6.61	1.187	-120	7.65	>1,000			
		6.8	gal w/s	Removed							
		1750	Collect	Sample							
		1815	Sampling Complete								

3. SAMPLE COLLECTION DATA Sampling Personnel:

Sampling Method(s) & Equip:

Sample I.D. (Name, Date, Time):

Sample Analytical Parameters/Method:

Sample Start Time: End SampleTime:

PID/FID READING(s): PID/FID Model & Ionization Potential

ODOR/SHEEN:

COMMENTS:

SEE Page 1

ATTACHMENT E

GROUNDWATER ANALYTICAL SUMMARY TABLES

TABLE E-1
Groundwater Analytical Results
Shallow Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01S 5/24/2013 Primary	DP13N-03S 5/24/2013 Primary	DP13N-04S 5/31/2013 Primary	DP13N-04S 5/31/2013 Duplicate	DP13N-05S 6/3/2013 Primary	DP13N-08S 6/11/2013 Primary	DP13N-09S 6/7/2013 Primary	PZN-20 5/28/2013 Primary	PZN-30 5/23/2013 Primary	PZN-40 5/28/2013 Primary	PZN-40 5/28/2013 Duplicate	PZN-50 5/28/2013 Primary	MW-01 5/23/2013 Primary	MW-03 5/22/2013 Primary	OW-07 5/22/2013 Primary	OW-08 5/22/2013 Primary	OW-09 5/23/2013 Primary	OW-14 5/29/2013 Primary	MW-05 5/22/2013 Primary	OW-13 5/29/2013 Primary
Volatile Organic Compounds, Method 8260B (ug/l)																				
1,1,1-Trichloroethane	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	3.3 U	0.82 U	3.3 U	3.3 U	3.3 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,1,2,2-Tetrachloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	0.84 U	0.84 U	0.84 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	1.2 U	0.31 U	1.2 U	1.2 U	1.2 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.92 U	0.23 U	0.92 U	0.92 U	0.92 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1-Dichloroethane	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.5 U	0.38 U	1.5 U	1.5 U	1.5 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,1-Dichloroethylene	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	1.2 U	0.29 U	1.2 U	1.2 U	1.2 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,2,4-Trichlorobenzene	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1.6 U	0.41 U	1.6 U	1.6 U	1.6 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromo-3-chloropropane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	1.6 U	1.6 U	1.6 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dibromoethane	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	2.9 U	2.9 U	2.9 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
1,2-Dichlorobenzene	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	3.2 U	0.79 U	3.2 U	3.2 U	3.2 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,2-Dichloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	0.84 U	0.84 U	0.84 U	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-Dichloropropane	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	2.9 U	0.72 U	2.9 U	2.9 U	2.9 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
1,3-Dichlorobenzene	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	3.1 U	0.78 U	3.1 U	3.1 U	3.1 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
1,4-Dichlorobenzene	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	3.4 U	0.84 U	3.4 U	3.4 U	3.4 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
2-Butanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	5.3 U	1.3 U	5.3 U	5.3 U	5.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Hexanone	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.0 U	1.2 U	5.0 U	5.0 U	5.0 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	8.4 U	2.1 U	8.4 U	8.4 U	8.4 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Acetone	3 U	3 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	12 U	3.0 U	240	240	12 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzene	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	13	0.41 U	13	13	1.6 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromodichloromethane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	1.6 U	1.6 U	1.6 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Bromoform	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.0 U	0.26 U	1.0 U	1.0 U	1.0 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromomethane	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	2.8 U	0.69 U	2.8 U	2.8 U	2.8 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Carbon disulfide	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.19 U	0.76 U	0.76 U	0.76 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon Tetrachloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.1 U	0.27 U	1.1 U	1.1 U	1.1 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Chlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	3.0 U	0.75 U	3.0 U	3.0 U	3.0 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Chloroethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	1.3 U	1.3 U	1.3 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.4 U	0.34 U	1.4 U	1.4 U	1.4 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chloromethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.4 U	0.35 U	1.4 U	1.4 U	1.4 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
cis-1,2-Dichloroethylene	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	3.2 U	0.81 U	3.2 U	3.2 U	3.2 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
cis-1,3-Dichloropropene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	1.4 U	1.4 U	1.4 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Cyclohexane	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.72 U	0.18 U	0.72 U	0.72 U	0.72 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Dibromochloromethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	1.3 U	1.3 U	1.3 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorodifluoromethane	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	2.7 U	0.68 U	2.7 U	2.7 U	2.7 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Ethylbenzene	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	44	1.2	53	52	21	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	14	0.74 U	0.74 U
Isopropylbenzene	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	1.9	0.79 U	3.2 U	0.79 U	4.2	4.1	3.2 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	2.8	0.79 U	0.79 U
Methyl Acetate	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	0.64 U	0.64 U	0.64 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Methylene chloride	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	1.8 U	0.44 U	1.8 U	1.8 U	1.8 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Methyltert-butylether	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	0.64 U	0.64 U	0.64 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Styrene	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	2.9 U	2.9 U	2.9 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	3.5	0.73 U	0.73 U
Tetrachloroethylene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	1.4 U	1.4 U	1.4 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Toluene	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	27	0.51 U	65	63	2.0 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	9.8	0.51 U	0.51 U
trans-1,2-Dichloroethene	0.9 U	0.9 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	3.6 U	0.90 U	3.6 U	3.6 U	3.6 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Trans-1,3-Dichloropropene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.5 U	0.37 U	1.5 U	1.5 U	1.5 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Trichloroethylene	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	1.8 U	0.46 U	1.8 U	1.8 U	1.8 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Trichlorofluoromethane	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	3.5 U	0.88 U	3.5 U	3.5 U	3.5 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Vinyl chloride	0.9 U	0.9 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	3.6 U	0.90 U	3.6 U	3.6 U	3.6 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Xylene (total)	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	3.2	0.66 U	110	0.66 U	170	170	19	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	47	0.66 U	0.66 U

TABLE E-1
Groundwater Analytical Results
Shallow Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01S 5/24/2013 Primary	DP13N-03S 5/24/2013 Primary	DP13N-04S 5/31/2013 Primary	DP13N-04S 5/31/2013 Duplicate	DP13N-05S 6/3/2013 Primary	DP13N-08S 6/11/2013 Primary	DP13N-09S 6/7/2013 Primary	PZN-20 5/28/2013 Primary	PZN-30 5/23/2013 Primary	PZN-40 5/28/2013 Primary	PZN-40 5/28/2013 Duplicate	PZN-50 5/28/2013 Primary	MW-01 5/23/2013 Primary	MW-03 5/22/2013 Primary	OW-07 5/22/2013 Primary	OW-08 5/22/2013 Primary	OW-09 5/23/2013 Primary	OW-14 5/29/2013 Primary	MW-05 5/22/2013 Primary	OW-13 5/29/2013 Primary
Semivolatile Organic Compounds, Method 8270C (ug/l)																				
1,1'-Biphenyl	0.033 U	0.032 U	0.032 U	0.032 U	0.032 U	16 U	0.032 U	3.2 U	1.6 U	3.3 U	3.3 U	3.2 U	0.65 U	0.032 U	0.032 U	0.032 U	0.032 U	33 U	0.032 U	0.033 U
2,4,5-Trichlorophenol	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	31 U	0.062 U	6.2 U	3.1 U	6.2 U	6.2 U	6.2 U	1.2 U	0.062 U	0.062 U	0.062 U	0.062 U	63 U	0.062 U	0.062 U
2,4,6-Trichlorophenol	0.069 U	0.069 U	0.068 U	0.069 U	0.069 U	35 U	0.069 U	6.9 U	3.4 U	6.9 U	6.9 U	6.9 U	1.4 U	0.069 U	0.069 U	0.068 U	0.069 U	70 U	0.069 U	0.069 U
2,4-Dichlorophenol	0.054 U	0.054 U	0.053 U	0.053 U	0.053 U	27 U	0.053 U	5.3 U	2.7 U	5.4 U	5.4 U	5.3 U	1.1 U	0.053 U	0.053 U	0.053 U	0.053 U	54 U	0.053 U	0.054 U
2,4-Dimethylphenol	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	140 U	0.29 U	200	14 U	390 J	560 J	29 U	5.7 U	0.29 U	0.29 U	0.29 U	0.29 U	290 U	0.29 U	0.29 U
2,4-Dinitrophenol	0.58 U	0.57 U	0.57 U	0.57 U	0.57 U	290 U	0.57 U	57 U	29 U	58 U	57 U	57 U	11 U	0.57 U	0.57 U	0.57 U	0.57 U	580 U	0.57 U	0.58 U
2,4-Dinitrotoluene	0.033 U	0.032 U	0.032 U	0.032 U	0.032 U	16 U	0.032 U	3.2 U	1.6 U	3.3 U	3.3 U	3.2 U	0.65 U	0.032 U	0.032 U	0.032 U	0.032 U	33 U	0.032 U	0.033 U
2,6-Dinitrotoluene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	44 U	0.087 U	8.7 U	4.3 U	8.7 U	8.7 U	8.7 U	1.7 U	0.087 U	0.087 U	0.086 U	0.087 U	88 U	0.087 U	0.087 U
2-Chloronaphthalene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	32 U	0.063 U	6.3 U	3.1 U	6.3 U	6.3 U	6.3 U	1.3 U	0.063 U	0.063 U	0.063 U	0.063 U	64 U	0.063 U	0.063 U
2-Chlorophenol	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	32 U	0.063 U	6.3 U	3.1 U	6.3 U	6.3 U	6.3 U	1.3 U	0.063 U	0.063 U	0.063 U	0.063 U	64 U	0.063 U	0.063 U
2-Methylnaphthalene	0.05 U	0.05 U	0.049 U	0.049 U	0.049 U	25 U	0.050 U	400	2.5 U	680	690	66	12	0.050 U	0.050 U	0.049 U	0.050 U	51 U	0.049 U	0.050 U
2-Methylphenol	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	68 U	0.13 U	13 U	6.7 U	13 U	120	13 U	2.7 U	0.13 U	0.13 U	0.13 U	0.13 U	140 U	0.13 U	0.13 U
2-Nitroaniline	0.091 U	0.091 U	0.090 U	0.090 U	0.090 U	46 U	0.090 U	9.1 U	4.5 U	9.1 U	9.1 U	9.0 U	1.8 U	0.091 U	0.091 U	0.090 U	0.090 U	92 U	0.090 U	0.091 U
2-Nitrophenol	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U	30 U	0.059 U	5.9 U	3.0 U	6.0 U	5.9 U	5.9 U	1.2 U	0.059 U	0.059 U	0.059 U	0.059 U	60 U	0.059 U	0.060 U
3,3-Dichlorobenzidine	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	110 U	0.21 U	21 U	10 U	21 U	21 U	21 U	4.2 U	0.21 U	0.21 U	0.21 U	0.21 U	210 U	0.21 U	0.21 U
3-Nitroaniline	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	63 U	0.12 U	12 U	6.2 U	12 U	12 U	12 U	2.5 U	0.12 U	0.12 U	0.12 U	0.12 U	130 U	0.12 U	0.12 U
4,6-Dinitro-2-methylphenol	0.71 U	0.71 U	0.70 U	0.70 U	0.70 U	360 U	0.70 U	71 U	35 U	71 U	71 U	70 U	14 U	0.71 U	0.71 U	0.70 U	0.70 U	720 U	0.70 U	0.71 U
4-Bromophenylphenyl ether	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	44 U	0.087 U	8.7 U	4.3 U	8.7 U	8.7 U	8.7 U	1.7 U	0.087 U	0.087 U	0.086 U	0.087 U	88 U	0.087 U	0.087 U
4-Chloro-3-methylphenol	0.051 U	0.051 U	0.050 U	0.050 U	0.050 U	26 U	0.050 U	5.1 U	2.5 U	5.1 U	5.1 U	5.0 U	1.0 U	0.051 U	0.051 U	0.050 U	0.050 U	52 U	0.050 U	0.051 U
4-Chloroaniline	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	63 U	0.12 U	12 U	6.2 U	12 U	12 U	12 U	2.5 U	0.12 U	0.12 U	0.12 U	0.12 U	130 U	0.12 U	0.12 U
4-Chlorophenyl phenyl ether	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	22 U	0.044 U	4.4 U	2.2 U	4.4 U	4.4 U	4.4 U	0.88 U	0.044 U	0.044 U	0.044 U	0.044 U	45 U	0.044 U	0.044 U
4-Methylphenol	0.09 U	0.09 U	0.089 U	0.089 U	0.089 U	45 U	0.090 U	9.0 U	4.5 U	9.0 U	130	9.0 U	1.8 U	0.090 U	0.090 U	0.089 U	0.090 U	91 U	0.089 U	0.090 U
4-Nitroaniline	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	12 U	0.024 U	2.4 U	1.2 U	2.4 U	2.4 U	2.4 U	0.48 U	0.024 U	0.024 U	0.024 U	0.024 U	24 U	0.024 U	0.024 U
4-Nitrophenol	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	190 U	0.37 U	37 U	19 U	37 U	37 U	37 U	7.4 U	0.37 U	0.37 U	0.37 U	0.37 U	380 U	0.37 U	0.37 U
Acenaphthene	0.035 U	0.034 U	0.034 U	0.034 U	0.034 U	490	0.034 U	300	65	480	510	170	57	0.034 U	0.034 U	0.034 U	0.034 U	35 U	0.034 U	0.035 U
Acenaphthylene	0.054 U	0.054 U	0.053 U	0.053 U	0.053 U	27 U	0.053 U	5.3 U	2.7 U	5.4 U	5.4 U	5.3 U	1.1 U	0.053 U	0.053 U	0.053 U	0.053 U	54 U	0.053 U	0.054 U
Acetophenone	0.096 U	0.096 U	0.095 U	0.095 U	0.095 U	48 U	0.095 U	9.5 U	4.8 U	9.6 U	9.6 U	9.5 U	1.9 U	0.095 U	0.095 U	0.095 U	0.095 U	97 U	0.095 U	0.096 U
Anthracene	0.033 U	0.032 U	0.032 U	0.032 U	0.032 U	16 U	0.032 U	3.2 U	1.6 U	3.3 U	3.3 U	3.2 U	0.65 U	0.032 U	0.032 U	0.032 U	0.032 U	33 U	0.032 U	0.033 U
Atrazine	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	140 U	0.28 U	28 U	14 U	28 U	28 U	28 U	5.5 U	0.28 U	0.28 U	0.28 U	0.28 U	280 U	0.28 U	0.28 U
Benzaldehyde	0.072 U	0.072 U	0.071 U	0.071 U	0.071 U	36 U	0.071 U	7.1 U	3.6 U	7.2 U	7.2 U	7.1 U	1.4 U	0.072 U	0.072 U	0.071 U	0.071 U	73 U	0.071 U	0.072 U
Benzo(a)anthracene	0.033 U	0.032 U	0.032 U	0.032 U	0.032 U	16 U	0.032 U	3.2 U	1.6 U	3.3 U	3.3 U	3.2 U	0.65 U	0.032 U	0.032 U	0.032 U	0.032 U	33 U	0.032 U	0.033 U
Benzo(a)pyrene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	63 U	0.12 U	12 U	6.2 U	12 U	12 U	12 U	2.5 U	0.12 U	0.12 U	0.12 U	0.12 U	130 U	0.12 U	0.12 U
Benzo(b)fluoranthene	0.06 U	0.06 U	0.060 U	0.060 U	0.060 U	30 U	0.060 U	6.0 U	3.0 U	6.1 U	6.0 U	6.0 U	1.2 U	0.060 U	0.060 U	0.060 U	0.060 U	61 U	0.060 U	0.061 U
Benzo(ghi)perylene	0.056 U	0.055 U	0.055 U	0.055 U	0.055 U	28 U	0.055 U	5.5 U	2.8 U	5.6 U	5.5 U	5.5 U	1.1 U	0.055 U	0.055 U	0.055 U	0.055 U	56 U	0.055 U	0.056 U
Benzo(k)fluoranthene	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	34 U	0.067 U	6.7 U	3.3 U	6.7 U	6.7 U	6.7 U	1.3 U	0.067 U	0.067 U	0.067 U	0.067 U	68 U	0.067 U	0.067 U
Bis(2-chloroethoxy)methane	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	42 U	0.061 U	8.2 U	3.0 U	8.3 U	8.2 U	8.2 U	1.2 U	0.061 U	0.061 U	0.061 U	0.061 U	62 U	0.061 U	0.061 U
Bis(2-chloroethyl)ether	0.069 U	0.069 U	0.068 U	0.069 U	0.069 U	31 U	0.069 U	6.1 U	3.4 U	6.2 U	6.1 U	6.1 U	1.4 U	0.069 U	0.069 U	0.068 U	0.069 U	70 U	0.069 U	0.069 U
Bis(2-chloroisopropyl)ether	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	35 U	0.082 U	6.9 U	4.1 U	6.9 U	6.9 U	6.9 U	1.6 U	0.082 U	0.082 U	0.082 U	0.082 U	84 U	0.082 U	0.083 U
bis(2-Ethylhexyl) phthalate	0.4 U	0.4 U	0.40 U	0.40 U	0.40 U	200 U	0.40 U	40 U	20 U	40 U	40 U	40 U	8.0 U	0.40 U	0.40 U	0.40 U	0.40 U	410 U	0.40 U	0.40 U
Butyl benzyl phthalate	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	77 U	0.15 U	15 U	7.6 U	15 U	15 U	15 U	3.0 U	0.15 U	0.15 U	0.15 U	0.15 U	160 U	0.15 U	0.15 U
Caprolactam	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	110 U	0.21 U	21 U	10 U	21 U	21 U	21 U	4.2 U	0.21 U	0.21 U	0.21 U	0.21 U	210 U	0.21 U	0.21 U
Carbazole	0.076 U	0.075 U	0.075 U	0.075 U	0.075 U	38 U	0.075 U	7.5 U	3.8 U	7.6 U	530	7.5 U	1.5 U	0.075 U	0.075 U	0.075 U	0.075 U	77 U	0.075 U	0.076 U
Chrysene	0.071 U	0.071 U	0.070 U	0.070 U	0.070 U	36 U	0.070 U	7.1 U	3.5 U	7.1 U	7.1 U	7.0 U	1.4 U	0.071 U	0.071 U	0.070 U	0.070 U	72 U	0.070 U	0.071 U
Dibenzo(a,h)anthracene	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	34 U	0.067 U	6.7 U	3.3 U	6.7 U	6.7 U	6.7 U	1.3 U	0.067 U	0.067 U	0.067 U	0.067 U	68 U	0.067 U	0.067 U
Dibenzofuran	0.058 U	0.057 U	0.057 U	0.057 U	0.057 U	29 U	0.057 U	5.7 U	2.9 U	5.8 U	5.7 U	5.7 U	1.1 U	0.057 U	0.057 U	0.057 U	0.057 U	58 U	0.057 U	0.058 U
Diethyl phthalate	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	31 U	0.061 U	6.1 U	3.0 U	6.2 U	6.1 U	6.1 U	1.2 U	0.061 U	0.061 U	0.061 U	0.061 U	62 U	0.061 U	0.061 U
Dimethyl phthalate	0.055 U	0.054 U	0.054 U	0.054 U	0.054 U	28 U	0.054 U	5.4 U	2.7 U	5.5 U	5.5 U	5.4 U	1.1 U	0.054 U	0.054 U	0.054 U	0.054 U	55 U	0.054 U	0.055 U
Di-n-butyl phthalate	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	170 U	0.33 U	33 U	17 U	34 U	33 U	33 U	6.7 U	0.33 U	0.33 U	0.33 U	0.33 U	340 U	0.33 U	0.34 U
Di-n-octyl phthalate	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	97 U	0.19 U	19 U	9.5 U	19 U	19 U	19 U	3.8 U	0.19 U	0.19 U	0.19 U	0.19 U	190 U	0.19 U	0.19 U

TABLE E-1
Groundwater Analytical Results
Shallow Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01S 5/24/2013 Primary	DP13N-03S 5/24/2013 Primary	DP13N-04S 5/31/2013 Primary	DP13N-04S 5/31/2013 Duplicate	DP13N-05S 6/3/2013 Primary	DP13N-08S 6/11/2013 Primary	DP13N-09S 6/7/2013 Primary	PZN-20 5/28/2013 Primary	PZN-30 5/23/2013 Primary	PZN-40 5/28/2013 Primary	PZN-40 5/28/2013 Duplicate	PZN-50 5/28/2013 Primary	MW-01 5/23/2013 Primary	MW-03 5/22/2013 Primary	OW-07 5/22/2013 Primary	OW-08 5/22/2013 Primary	OW-09 5/23/2013 Primary	OW-14 5/29/2013 Primary	MW-05 5/22/2013 Primary	OW-13 5/29/2013 Primary
Fluoranthene	0.077 U	0.076 U	0.076 U	0.076 U	0.076 U	39 U	0.076 U	7.6 U	3.8 U	7.7 U	61	7.6 U	1.5 U	0.076 U	0.076 U	0.076 U	0.076 U	78 U	0.076 U	0.077 U
Fluorene	0.056 U	0.055 U	0.055 U	0.055 U	0.055 U	28 U	0.055 U	120	24	220	250	66	18	0.055 U	0.055 U	0.055 U	0.055 U	56 U	0.055 U	0.056 U
Hexachlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	110 U	0.21 U	21 U	10 U	21 U	21 U	21 U	4.2 U	0.21 U	0.21 U	0.21 U	0.21 U	210 U	0.21 U	0.21 U
Hexachlorobutadiene	0.096 U	0.096 U	0.095 U	0.095 U	0.095 U	48 U	0.095 U	9.5 U	4.8 U	9.6 U	9.6 U	9.5 U	1.9 U	0.095 U	0.095 U	0.095 U	0.095 U	97 U	0.095 U	0.096 U
Hexachlorocyclopentadiene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	44 U	0.087 U	8.7 U	4.3 U	8.7 U	8.7 U	8.7 U	1.7 U	0.087 U	0.087 U	0.086 U	0.087 U	88 U	0.087 U	0.087 U
Hexachloroethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	43 U	0.084 U	8.4 U	4.2 U	8.5 U	8.4 U	8.4 U	1.7 U	0.084 U	0.084 U	0.084 U	0.084 U	86 U	0.084 U	0.085 U
Indeno(1,2,3-cd)pyrene	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	53 U	0.10 U	10 U	5.2 U	11 U	11 U	10 U	2.1 U	0.10 U	0.10 U	0.10 U	0.10 U	110 U	0.10 U	0.11 U
Isophorone	0.049 U	0.049 U	0.048 U	0.049 U	0.049 U	25 U	0.049 U	4.9 U	2.4 U	4.9 U	4.9 U	4.9 U	0.97 U	0.049 U	0.049 U	0.048 U	0.049 U	50 U	0.049 U	0.049 U
Naphthalene	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	1600	0.061 U	8100	840	11000	11000	3600	330	0.061 U	0.061 U	0.061 U	0.061 U	3200	0.061 U	2.6 B
Nitrobenzene	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	31 U	0.062 U	6.2 U	3.1 U	6.2 U	6.2 U	6.2 U	1.2 U	0.062 U	0.062 U	0.062 U	0.062 U	63 U	0.062 U	0.062 U
N-Nitrosodiphenylamine	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	34 U	0.067 U	6.7 U	3.3 U	6.7 U	6.7 U	6.7 U	1.3 U	0.067 U	0.067 U	0.067 U	0.067 U	68 U	0.067 U	0.067 U
N-Nitrosodipropylamine	0.058 U	0.057 U	0.057 U	0.057 U	0.057 U	29 U	0.057 U	5.7 U	2.9 U	5.8 U	5.7 U	5.7 U	1.1 U	0.057 U	0.057 U	0.057 U	0.057 U	58 U	0.057 U	0.058 U
Pentachlorophenol	0.33 U	0.33 U	0.32 U	0.32 U	0.32 U	160 U	0.32 U	32 U	16 U	120	120	32 U	6.5 U	0.33 U	0.32 U	0.32 U	0.32 U	330 U	0.32 U	0.33 U
Phenanthrene	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U	120	0.059 U	56	10	260	330	51	1.2 U	0.2	0.059 U	0.059 U	0.059 U	250	0.22	0.37
Phenol	0.096 U	0.096 U	0.095 U	0.095 U	0.095 U	48 U	0.095 U	9.5 U	4.8 U	9.6 U	9.6 U	9.5 U	1.9 U	0.095 U	0.095 U	0.095 U	0.095 U	97 U	0.095 U	0.096 U
Pyrene	0.073 U	0.073 U	0.072 U	0.072 U	0.072 U	37 U	0.072 U	7.2 U	3.6 U	7.3 U	7.3 U	7.2 U	1.4 U	0.072 U	0.072 U	0.072 U	0.072 U	74 U	0.072 U	0.073 U
Metals, Method 6020 (ug/l)																				
Arsenic	1	0.078 U	0.078 U	0.078 U	0.078 U	3.8	0.078 U	33	0.078 U	550	540	3.5	45	0.078 U	1	0.078 U	0.078 U	19	0.078 U	1
Arsenic, dissolved	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	2	0.078 U	37	0.078 U	540	570	3.5	38	0.078 U	0.078 U	0.078 U	0.078 U	17	0.078 U	0.078 U
Chromium	5.7	0.07 U	0.070 U	1.5	2.5	23	0.070 U	0.070 U	0.070 U	5.7	5.5	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
Chromium, dissolved	0.07 U	0.07 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	5.3	5.8	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
Copper	1.8	0.22 U	1.5 J	1.1 J	1.7	10	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.4	1.3 B	0.22 U	0.22 U
Copper, dissolved	0.22 U	1.2	0.22 U	1.2	1.1	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.3	1.6	1	2.4	0.22 U	1.2	0.22 U
Lead	2.1	0.069 U	0.069 U	0.069 U	2.4	19	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
Lead, dissolved	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
Zinc	29	45	1.1 U	1.1 U	1.1 U	29	1.1 U	1.1 U	1.1 U	11	10	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	82
Zinc, dissolved	21	43	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

Notes:

ug/l = micrograms per liter

U = result not detected at reported concentration

B = blank contamination

J = estimated result

TABLE E-2
Groundwater Analytical Results
Shallow Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-01S 6/1/2013 Primary	DP13S-02S 6/3/2013 Primary	DP13S-03S 5/21/2013 Primary	DP13S-04S 5/21/2013 Primary	DP13S-05S 5/24/2013 Primary	DP13S-06S 5/29/2013 Primary	DP13S-07S 5/29/2013 Primary	DP13S-08S 6/3/2013 Primary	DP13S-10S 6/4/2013 Primary	DP13S-10S 6/4/2013 Duplicate	DP13S-13S 6/12/2013 Primary	MW-04 5/30/2013 Primary	MW-26 5/24/2013 Primary	PZS-30 5/30/2013 Primary	PZS-40 5/30/2013 Primary	PZS-60 5/29/2013 Primary
Volatile Organic Compounds, Method 8260B (ug/l)																
1,1,1-Trichloroethane	0.82 U	0.82 U	0.82 U	4.1 U	4.1 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	1.6 U
1,1,2,2-Tetrachloroethane	0.21 U	0.21 U	0.21 U	1.1 U	1.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31 U	0.31 U	0.31 U	1.6 U	1.6 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.62 U
1,1,2-Trichloroethane	0.23 U	0.23 U	0.23 U	1.2 U	1.2 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U
1,1-Dichloroethane	0.38 U	0.38 U	0.38 U	1.9 U	1.9 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.76 U
1,1-Dichloroethylene	0.29 U	0.29 U	0.29 U	1.5 U	1.5 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U
1,2,4-Trichlorobenzene	0.41 U	0.41 U	0.41 U	2.1 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.82 U
1,2-Dibromo-3-chloropropane	0.39 U	0.39 U	0.39 U	2.0 U	2 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.78 U
1,2-Dibromoethane	0.73 U	0.73 U	0.73 U	3.7 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	1.5 U
1,2-Dichlorobenzene	0.79 U	0.79 U	0.79 U	4.0 U	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	1.6 U
1,2-Dichloroethane	0.21 U	0.21 U	0.21 U	1.1 U	1.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U
1,2-Dichloropropane	0.72 U	0.72 U	0.72 U	3.6 U	3.6 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	1.4 U
1,3-Dichlorobenzene	0.78 U	0.78 U	0.78 U	3.9 U	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	1.6 U
1,4-Dichlorobenzene	0.84 U	0.84 U	0.84 U	4.2 U	4.2 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	1.7 U
2-Butanone	1.3 U	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U
2-Hexanone	1.2 U	1.2 U	1.2 U	6.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U
4-Methyl-2-pentanone	2.1 U	2.1 U	2.1 U	11 U	11 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U
Acetone	18	51	3.0 U	15 U	15 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3 U	3.0 U	3.0 U	6.0 U
Benzene	0.41 U	0.41 U	0.41 U	2.1 U	12	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	6.2	0.41 U	0.82 U
Bromodichloromethane	0.39 U	0.39 U	0.39 U	2.0 U	2 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.78 U
Bromoform	0.26 U	0.26 U	0.26 U	1.3 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U
Bromomethane	0.69 U	0.69 U	0.69 U	3.5 U	3.5 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	1.4 U
Carbon disulfide	0.19 U	0.19 U	0.19 U	0.95 U	0.95 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U
Carbon Tetrachloride	0.27 U	0.27 U	0.27 U	1.4 U	1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U
Chlorobenzene	0.75 U	0.75 U	0.75 U	3.8 U	3.8 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	1.5 U
Chloroethane	0.32 U	0.32 U	0.32 U	1.6 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U
Chloroform	0.34 U	0.34 U	0.34 U	1.7 U	1.7 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.68 U
Chloromethane	0.35 U	0.35 U	0.35 U	1.8 U	1.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.70 U
cis-1,2-Dichloroethylene	0.81 U	0.81 U	0.81 U	4.1 U	4.1 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	1.6 U
cis-1,3-Dichloropropene	0.36 U	0.36 U	0.36 U	1.8 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 U
Cyclohexane	0.18 U	0.18 U	0.18 U	0.90 U	0.9 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.36 U
Dibromochloromethane	0.32 U	0.32 U	0.32 U	1.6 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U
Dichlorodifluoromethane	0.68 U	0.68 U	0.68 U	3.4 U	3.4 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	1.4 U
Ethylbenzene	0.74 U	0.74 U	0.74 U	3.7 U	19	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	3.3	0.74 U	1.5 U
Isopropylbenzene	0.79 U	0.79 U	0.79 U	4.0 U	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	1.6 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U	1.0 U
Methylcyclohexane	0.16 U	0.16 U	0.16 U	0.80 U	0.8 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.32 U
Methylene chloride	0.44 U	0.44 U	0.44 U	2.2 U	2.2 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.88 U
Methyltert-butylether	8.2	1.6	1.6	140	0.8 U	0.16 U	0.16 U	0.16 U	2.6	2.6	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.32 U
Styrene	0.73 U	0.73 U	0.73 U	3.7 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	1.5 U
Tetrachloroethylene	0.36 U	0.36 U	0.36 U	1.8 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 U
Toluene	0.51 U	0.51 U	0.51 U	2.6 U	22	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	1.0 U
trans-1,2-Dichloroethene	0.90 U	0.90 U	0.90 U	4.5 U	4.5 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.9 U	0.90 U	0.90 U	1.8 U
Trans-1,3-Dichloropropene	0.37 U	0.37 U	0.37 U	1.9 U	1.9 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U
Trichloroethylene	0.46 U	0.46 U	0.46 U	2.3 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U
Trichlorofluoromethane	0.88 U	0.88 U	0.88 U	4.4 U	4.4 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	1.8 U
Vinyl chloride	0.90 U	0.90 U	0.90 U	4.5 U	4.5 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.9 U	0.90 U	0.90 U	1.8 U
Xylene (total)	0.66 U	0.66 U	0.66 U	3.3 U	58	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	3.6	0.66 U	1.3 U

TABLE E-2
Groundwater Analytical Results
Shallow Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-01S 6/1/2013 Primary	DP13S-02S 6/3/2013 Primary	DP13S-03S 5/21/2013 Primary	DP13S-04S 5/21/2013 Primary	DP13S-05S 5/24/2013 Primary	DP13S-06S 5/29/2013 Primary	DP13S-07S 5/29/2013 Primary	DP13S-08S 6/3/2013 Primary	DP13S-10S 6/4/2013 Primary	DP13S-10S 6/4/2013 Duplicate	DP13S-13S 6/12/2013 Primary	MW-04 5/30/2013 Primary	MW-26 5/24/2013 Primary	PZS-30 5/30/2013 Primary	PZS-40 5/30/2013 Primary	PZS-60 5/29/2013 Primary
Semivolatile Organic Compounds, Method 8270C (ug/l)																
1,1'-Biphenyl	0.17 U	3.3 U	0.033 U	0.033 U	0.33 U	20	0.032 U	0.033 U	0.033 U	0.033 U	0.17 U	0.032 U	0.032 U	0.034 U	0.032 U	0.032 U
2,4,5-Trichlorophenol	0.32 U	6.4 U	0.063 U	0.063 U	0.62 U	0.067 U	0.062 U	0.063 U	0.063 U	0.062 U	0.32 U	0.062 U	0.062 U	0.064 U	0.062 U	0.062 U
2,4,6-Trichlorophenol	0.35 U	7.1 U	0.070 U	0.070 U	0.69 U	0.074 U	0.069 U	0.070 U	0.069 U	0.069 U	0.36 U	0.068 U	0.069 U	0.071 U	0.068 U	0.068 U
2,4-Dichlorophenol	0.27 U	5.5 U	0.054 U	0.055 U	0.54 U	0.058 U	0.053 U	0.054 U	0.054 U	0.054 U	0.28 U	0.053 U	0.053 U	0.055 U	0.053 U	0.053 U
2,4-Dimethylphenol	1.5 U	30 U	0.29 U	0.29 U	12	0.31 U	0.29 U	0.29 U	0.29 U	0.29 U	1.5 U	0.28 U	0.29 U	0.30 U	0.28 U	0.28 U
2,4-Dinitrophenol	2.9 U	59 U	0.58 U	0.58 U	5.7 U	0.62 U	0.57 U	0.58 U	0.58 U	0.58 U	3.0 U	0.57 U	0.57 U	0.59 U	0.57 U	0.57 U
2,4-Dinitrotoluene	0.17 U	3.3 U	0.033 U	0.033 U	0.33 U	0.035 U	0.032 U	0.033 U	0.033 U	0.033 U	0.17 U	0.032 U	0.032 U	0.034 U	0.032 U	0.032 U
2,6-Dinitrotoluene	0.44 U	8.9 U	0.088 U	0.089 U	0.87 U	0.094 U	0.087 U	0.088 U	0.088 U	0.087 U	0.45 U	0.086 U	0.087 U	0.090 U	0.086 U	0.086 U
2-Chloronaphthalene	0.32 U	6.5 U	0.064 U	0.064 U	0.63 U	0.068 U	0.063 U	0.064 U	0.063 U	0.063 U	0.33 U	0.063 U	0.063 U	0.065 U	0.063 U	0.063 U
2-Chlorophenol	0.32 U	6.5 U	0.064 U	0.064 U	0.63 U	0.068 U	0.063 U	0.064 U	0.063 U	0.063 U	0.33 U	0.063 U	0.063 U	0.065 U	0.063 U	0.063 U
2-Methylnaphthalene	0.25 U	5.1 U	0.050 U	0.051 U	220	140	0.050 U	0.050 U	0.050 U	0.050 U	0.26 U	1.3	0.05 U	9.5	0.049 U	0.049 U
2-Methylphenol	0.68 U	14 U	0.14 U	0.14 U	1.3 U	0.14 U	0.13 U	0.14 U	0.13 U	0.13 U	0.70 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U
2-Nitroaniline	0.46 U	9.3 U	0.092 U	0.092 U	0.91 U	0.098 U	0.091 U	0.092 U	0.091 U	0.091 U	0.47 U	0.090 U	0.091 U	0.094 U	0.090 U	0.090 U
2-Nitrophenol	0.30 U	6.1 U	0.060 U	0.060 U	0.59 U	0.064 U	0.059 U	0.060 U	0.060 U	0.060 U	0.31 U	0.059 U	0.059 U	0.061 U	0.059 U	0.059 U
3,3-Dichlorobenzidine	1.1 U	22 U	0.21 U	0.21 U	2.1 U	0.23 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U
3-Nitroaniline	0.63 U	13 U	0.13 U	0.13 U	1.2 U	0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.65 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U
4,6-Dinitro-2-methylphenol	3.6 U	73 U	0.72 U	0.72 U	7.1 U	0.76 U	0.71 U	0.72 U	0.71 U	0.71 U	3.7 U	0.70 U	0.71 U	0.73 U	0.70 U	0.70 U
4-Bromophenylphenyl ether	0.44 U	8.9 U	0.088 U	0.089 U	0.87 U	0.094 U	0.087 U	0.088 U	0.088 U	0.087 U	0.45 U	0.086 U	0.087 U	0.090 U	0.086 U	0.086 U
4-Chloro-3-methylphenol	0.26 U	5.2 U	0.051 U	0.052 U	0.51 U	0.055 U	0.051 U	0.051 U	0.051 U	0.051 U	0.26 U	0.050 U	0.051 U	0.052 U	0.050 U	0.050 U
4-Chloroaniline	0.63 U	13 U	0.13 U	0.13 U	1.2 U	0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.65 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U
4-Chlorophenyl phenyl ether	0.22 U	4.5 U	0.044 U	0.045 U	0.44 U	0.047 U	0.044 U	0.045 U	0.044 U	0.044 U	0.23 U	0.044 U	0.044 U	0.045 U	0.044 U	0.044 U
4-Methylphenol	0.46 U	9.2 U	0.091 U	0.091 U	0.9 U	0.097 U	0.090 U	0.091 U	0.090 U	0.090 U	0.47 U	0.089 U	0.09 U	0.093 U	0.089 U	0.089 U
4-Nitroaniline	0.12 U	2.5 U	0.024 U	0.024 U	0.24 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.12 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U
4-Nitrophenol	1.9 U	38 U	0.38 U	0.38 U	3.7 U	0.40 U	0.37 U	0.38 U	0.38 U	0.37 U	1.9 U	0.37 U	0.37 U	0.38 U	0.37 U	0.37 U
Acenaphthene	0.18 U	3.5 U	0.035 U	0.035 U	480	87	2.5	0.035 U	0.035 U	0.035 U	0.18 U	17	0.034 U	66	2.1	13
Acenaphthylene	0.27 U	5.5 U	0.054 U	0.055 U	7.2	1.6	0.053 U	0.054 U	0.054 U	0.054 U	0.28 U	0.053 U	0.053 U	0.61	0.053 U	0.053 U
Acetophenone	0.49 U	9.8 U	0.097 U	0.097 U	0.96 U	0.10 U	0.095 U	0.097 U	0.096 U	0.096 U	0.50 U	0.095 U	0.095 U	0.099 U	0.095 U	0.095 U
Anthracene	0.17 U	3.3 U	0.033 U	0.033 U	47	6.2	0.032 U	0.033 U	0.033 U	0.033 U	0.17 U	0.032 U	0.032 U	1.8	0.032 U	1.1
Atrazine	1.4 U	29 U	0.28 U	0.28 U	2.8 U	0.30 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.27 U	0.28 U	0.29 U	0.27 U	0.27 U
Benzaldehyde	0.37 U	7.4 U	0.073 U	0.073 U	0.72 U	0.077 U	0.072 U	0.073 U	0.072 U	0.072 U	0.37 U	0.071 U	0.072 U	0.074 U	0.071 U	0.071 U
Benzo(a)anthracene	0.17 U	3.3 U	0.033 U	0.033 U	5.3	1	0.032 U	0.033 U	0.033 U	0.033 U	0.17 U	0.032 U	0.032 U	0.034 U	0.032 U	0.032 U
Benzo(a)pyrene	0.63 U	13 U	0.13 U	0.13 U	1.2 U	0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.65 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U
Benzo(b)fluoranthene	0.31 U	6.2 U	0.061 U	0.061 U	0.6 U	0.065 U	0.060 U	0.061 U	0.061 U	0.060 U	0.31 U	0.060 U	0.06 U	0.062 U	0.060 U	0.060 U
Benzo(ghi)perylene	0.28 U	5.7 U	0.056 U	0.056 U	0.55 U	0.060 U	0.055 U	0.056 U	0.056 U	0.056 U	0.29 U	0.055 U	0.055 U	0.057 U	0.055 U	0.055 U
Benzo(k)fluoranthene	0.34 U	6.9 U	0.068 U	0.068 U	0.67 U	0.072 U	0.067 U	0.068 U	0.067 U	0.067 U	0.35 U	0.066 U	0.067 U	0.069 U	0.066 U	0.066 U
Bis(2-chloroethoxy)methane	0.31 U	6.3 U	0.062 U	0.062 U	0.61 U	0.066 U	0.061 U	0.062 U	0.062 U	0.061 U	0.32 U	0.061 U	0.061 U	0.063 U	0.061 U	0.061 U
Bis(2-chloroethyl)ether	0.35 U	7.1 U	0.070 U	0.070 U	0.69 U	0.074 U	0.069 U	0.070 U	0.069 U	0.069 U	0.36 U	0.068 U	0.069 U	0.071 U	0.068 U	0.068 U
Bis(2-chloroisopropyl)ether	0.42 U	8.5 U	0.083 U	0.084 U	0.82 U	0.089 U	0.082 U	0.083 U	0.083 U	0.083 U	0.43 U	0.081 U	0.082 U	0.085 U	0.081 U	0.082 U
bis(2-Ethylhexyl) phthalate	2.0 U	41 U	0.41 U	0.41 U	4 U	0.43 U	0.40 U	0.41 U	0.40 U	0.40 U	2.1 U	0.40 U	0.4 U	0.41 U	0.40 U	0.40 U
Butyl benzyl phthalate	0.78 U	16 U	0.15 U	0.16 U	1.5 U	0.17 U	0.15 U	0.15 U	0.15 U	0.15 U	0.80 U	0.15 U	0.15 U	0.16 U	0.15 U	0.15 U
Caprolactam	1.1 U	22 U	0.21 U	0.21 U	2.1 U	0.23 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U
Carbazole	0.38 U	7.8 U	0.076 U	0.077 U	160	5.5	0.075 U	0.077 U	0.076 U	0.076 U	0.39 U	0.075 U	0.075 U	11	0.075 U	0.075 U
Chrysene	0.36 U	7.3 U	0.072 U	0.072 U	0.71 U	0.73	0.071 U	0.072 U	0.071 U	0.071 U	0.37 U	0.070 U	0.071 U	0.073 U	0.070 U	0.070 U
Dibenzo(a,h)anthracene	0.34 U	6.9 U	0.068 U	0.068 U	0.67 U	0.072 U	0.067 U	0.068 U	0.067 U	0.067 U	0.35 U	0.066 U	0.067 U	0.069 U	0.066 U	0.066 U
Dibenzofuran	0.29 U	5.9 U	0.058 U	0.058 U	190	3.1 U	0.057 U	0.058 U	0.058 U	0.058 U	0.30 U	0.057 U	0.057 U	16	0.057 U	0.057 U
Diethyl phthalate	0.31 U	6.3 U	0.062 U	0.062 U	0.61 U	0.066 U	0.061 U	0.062 U	0.062 U	0.061 U	0.32 U	0.061 U	0.061 U	0.063 U	0.061 U	0.061 U
Dimethyl phthalate	0.28 U	5.6 U	0.055 U	0.055 U	0.55 U	0.059 U	0.054 U	0.055 U	0.055 U	0.055 U	0.28 U	0.054 U	0.054 U	0.056 U	0.054 U	0.054 U

TABLE E-2
Groundwater Analytical Results
Shallow Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-01S 6/1/2013 Primary	DP13S-02S 6/3/2013 Primary	DP13S-03S 5/21/2013 Primary	DP13S-04S 5/21/2013 Primary	DP13S-05S 5/24/2013 Primary	DP13S-06S 5/29/2013 Primary	DP13S-07S 5/29/2013 Primary	DP13S-08S 6/3/2013 Primary	DP13S-10S 6/4/2013 Primary	DP13S-10S 6/4/2013 Duplicate	DP13S-13S 6/12/2013 Primary	MW-04 5/30/2013 Primary	MW-26 5/24/2013 Primary	PZS-30 5/30/2013 Primary	PZS-40 5/30/2013 Primary	PZS-60 5/29/2013 Primary
Di-n-butyl phthalate	1.7 U	34 U	0.34 U	0.34 U	3.3 U	0.36 U	0.33 U	0.34 U	0.34 U	0.34 U	1.7 U	0.33 U	0.33 U	0.35 U	0.33 U	0.33 U
Di-n-octyl phthalate	0.97 U	20 U	0.19 U	0.19 U	1.9 U	0.21 U	0.19 U	0.19 U	0.19 U	0.19 U	1.0 U	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Fluoranthene	0.39 U	7.9 U	0.077 U	0.078 U	58	14	19	0.077 U	0.077 U	0.077 U	2.8	0.67	0.6	8.5	0.076 U	0.56
Fluorene	0.28 U	5.7 U	0.056 U	0.056 U	340	51	1.6	0.056 U	0.056 U	0.056 U	0.29 U	3.8	0.055 U	19	0.49	0.055 U
Hexachlorobenzene	1.1 U	22 U	0.21 U	0.21 U	2.1 U	0.23 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U
Hexachlorobutadiene	0.49 U	9.8 U	0.097 U	0.097 U	0.96 U	0.10 U	0.095 U	0.097 U	0.096 U	0.096 U	0.50 U	0.095 U	0.095 U	0.099 U	0.095 U	0.095 U
Hexachlorocyclopentadiene	0.44 U	8.9 U	0.088 U	0.089 U	0.87 U	0.094 U	0.087 U	0.088 U	0.088 U	0.087 U	0.45 U	0.086 U	0.087 U	0.090 U	0.086 U	0.086 U
Hexachloroethane	0.43 U	8.7 U	0.085 U	0.086 U	0.84 U	0.091 U	0.084 U	0.085 U	0.085 U	0.084 U	0.44 U	0.083 U	0.084 U	0.087 U	0.083 U	0.083 U
Indeno(1,2,3-cd)pyrene	0.54 U	11 U	0.11 U	0.11 U	1.1 U	0.11 U	0.10 U	0.11 U	0.11 U	0.11 U	0.55 U	0.10 U	0.1 U	0.11 U	0.10 U	0.10 U
Isophorone	0.25 U	5.0 U	0.049 U	0.050 U	0.49 U	0.053 U	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.048 U	0.049 U	0.050 U	0.048 U	0.048 U
Naphthalene	0.31 U	6.3 U	0.062 U	0.062 U	2400	270	0.061 U	0.062 U	0.062 U	0.061 U	0.32 U	0.061 U	1	140	0.061 U	0.061 U
Nitrobenzene	0.32 U	6.4 U	0.063 U	0.063 U	0.62 U	0.067 U	0.062 U	0.063 U	0.063 U	0.062 U	0.32 U	0.062 U	0.062 U	0.064 U	0.062 U	0.062 U
N-Nitrosodiphenylamine	0.34 U	6.9 U	0.068 U	0.068 U	0.67 U	0.072 U	0.067 U	0.068 U	0.067 U	0.067 U	0.35 U	0.066 U	0.067 U	0.069 U	0.066 U	0.066 U
N-Nitrosodipropylamine	0.29 U	5.9 U	0.058 U	0.058 U	0.57 U	0.062 U	0.057 U	0.058 U	0.058 U	0.058 U	0.30 U	0.057 U	0.057 U	0.059 U	0.057 U	0.057 U
Pentachlorophenol	1.7 U	34 U	1	1.1	3.3 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	0.32 U	0.33 U	0.34 U	0.32 U	0.32 U
Phenanthrene	0.30 U	6.1 U	0.060 U	0.060 U	340	48	0.23	0.060 U	0.060 U	0.060 U	4.2	0.4 B	0.26 U	11	0.34 B	0.25
Phenol	0.49 U	9.8 U	0.097 U	0.097 U	0.96 U	0.10 U	0.095 U	0.097 U	0.096 U	0.096 U	0.50 U	0.095 U	0.095 U	0.099 U	0.095 U	0.095 U
Pyrene	0.37 U	7.5 U	0.073 U	0.074 U	30	15	12	0.074 U	0.073 U	0.073 U	0.38 U	2.1	1.4	6.5	0.072 U	3.3
Metals, Method 6020 (ug/l)																
Arsenic	1	14	2.3	4.8	1.5	4.3	5.2	15	2.4	2.5	1.2	15	3	4.6	1.9	83
Arsenic, dissolved	0.078 U	13	0.078 U	1.2	1.2	4.7	1.2	0.078 U	0.078 U	0.078 U	0.078 U	13	1.6	4.3	1.9	85
Chromium	3.3	3.4	4.1	18	0.07 U	0.070 U	39	56	23	23	6.1	0.070 U	4.5	0.070 U	0.070 U	0.070 U
Chromium, dissolved	0.070 U	0.070 U	0.070 U	0.070 U	0.07 U	1.7	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.07 U	0.070 U	0.070 U	0.070 U
Copper	2.8	1.7	4.2	10	1.1	0.22 U	18 B	43	15	16	3.9	0.22 U	3.1	2	0.22 U	0.22 U
Copper, dissolved	1.1	0.22 U	1	0.22 U	0.22 U	1.8 B	0.22 U	1.2	1.3	0.22 U	0.22 U	0.22 U	1.2	0.22 U	0.22 U	0.22 U
Lead	4	2.7	4.1	11	0.069 U	0.069 U	47	69	21	22	3.1	0.069 U	3.7	0.069 U	0.069 U	0.069 U
Lead, dissolved	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	2	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
Zinc	19	19	17	30	1.1 U	1.1 U	51	170	44	46	16	1.1 U	31	1.1 U	1.1 U	1.1 U
Zinc, dissolved	1.1 U	10	1.1 U	1.1 U	1.1 U	27	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

Notes:

ug/l = micrograms per liter

U = result not detected at reported concentration

B = blank contamination

J = estimated result

TABLE E-3
Groundwater Analytical Results
Intermediate Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01I 5/28/2013 Primary	DP13N-02I 5/31/2013 Primary	DP13N-03I 5/28/2013 Primary	DP13N-04I 6/3/2013 Primary	DP13N-05I 6/5/2013 Primary	DP13N-06I 6/11/2013 Primary	DP13N-07I 6/7/2013 Primary	DP13N-08I 6/11/2013 Primary	DP13N-09I 6/11/2013 Primary	DP13N-10I 6/13/2013 Primary	DP13S-01I 6/4/2013 Primary	P-04 5/22/2013 Primary	MW-10 5/23/2013 Primary	MW-12R 5/23/2013 Primary	OW-15 5/28/2013 Primary	OW-16 5/29/2013 Primary	P-05 5/22/2013 Primary
Volatile Organic Compounds, Method 8260B (ug/l)																	
1,1,1-Trichloroethane	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	8.2 U	0.82 U	0.82 U	0.82 U	3.3 U	0.82 U	0.82 U
1,1,2,2-Tetrachloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	3.1 U	0.31 U	0.31 U	0.31 U	1.2 U	0.31 U	0.31 U
1,1,2-Trichloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.92 U	0.23 U	0.23 U
1,1-Dichloroethane	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	0.38 U	1.5 U	0.38 U	0.38 U
1,1-Dichloroethylene	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	2.9 U	0.29 U	0.29 U	0.29 U	1.2 U	0.29 U	0.29 U
1,2,4-Trichlorobenzene	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	1.6 U	0.41 U	0.41 U
1,2-Dibromo-3-chloropropane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	0.39 U
1,2-Dibromoethane	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	7.3 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	0.73 U
1,2-Dichlorobenzene	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	7.9 U	0.79 U	0.79 U	0.79 U	3.2 U	0.79 U	0.79 U
1,2-Dichloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	0.21 U
1,2-Dichloropropane	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	7.2 U	0.72 U	0.72 U	0.72 U	2.9 U	0.72 U	0.72 U
1,3-Dichlorobenzene	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	7.8 U	0.78 U	0.78 U	0.78 U	3.1 U	0.78 U	0.78 U
1,4-Dichlorobenzene	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	8.4 U	0.84 U	0.84 U	0.84 U	3.4 U	0.84 U	0.84 U
2-Butanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	13 U	1.3 U	1.3 U	1.3 U	5.3 U	1.3 U	1.3 U
2-Hexanone	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	12 U	1.2 U	1.2 U	1.2 U	5.0 U	1.2 U	1.2 U
4-Methyl-2-pentanone	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	21 U	2.1 U	2.1 U	2.1 U	8.4 U	2.1 U	2.1 U
Acetone	3 U	3.0 U	3 U	3.0 U	3.0 U	3.0 U	3.0 U	44	22	3.0 U	30 U	3.0 U	3.0 U	11	12 U	3.0 U	3.0 U
Benzene	0.41 U	0.41 U	0.41 U	0.41 U	1	0.41 U	1.8	37	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	12	30	0.41 U
Bromodichloromethane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	0.39 U
Bromoform	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	1.0 U	0.26 U	0.26 U
Bromomethane	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	6.9 U	0.69 U	0.69 U	0.69 U	2.8 U	0.69 U	0.69 U
Carbon disulfide	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.19 U	0.19 U	0.76 U	0.19 U	0.19 U
Carbon Tetrachloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U	0.27 U	0.27 U	0.27 U	1.1 U	0.27 U	0.27 U
Chlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	7.5 U	0.75 U	0.75 U	0.75 U	3.0 U	0.75 U	0.75 U
Chloroethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	3.2 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	0.32 U
Chloroform	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	1.4 U	0.34 U	0.34 U
Chloromethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	0.35 U	1.4 U	0.35 U	0.35 U
cis-1,2-Dichloroethylene	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	8.1 U	0.81 U	0.81 U	0.81 U	3.2 U	0.81 U	0.81 U
cis-1,3-Dichloropropene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	0.36 U
Cyclohexane	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	1.8 U	0.18 U	0.18 U	0.18 U	0.72 U	0.18 U	0.18 U
Dibromochloromethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	3.2 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	0.32 U
Dichlorodifluoromethane	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	6.8 U	0.68 U	0.68 U	0.68 U	2.7 U	0.68 U	0.68 U
Ethylbenzene	0.74 U	0.74 U	0.74 U	0.74 U	23	0.74 U	24	36	0.74 U	0.74 U	7.4 U	0.74 U	0.74 U	5.3	29	61	0.74 U
Isopropylbenzene	0.79 U	0.79 U	0.79 U	0.79 U	3.2	0.79 U	6.3	3.6	0.79 U	0.79 U	7.9 U	0.79 U	0.79 U	1.6	3.2 U	7.3	0.79 U
Methyl Acetate	0.5 U	0.50 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U
Methylcyclohexane	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	0.16 U
Methylene chloride	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	4.4 U	0.44 U	0.44 U	0.44 U	1.8 U	0.44 U	0.44 U
Methyltert-butylether	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	0.16 U
Styrene	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	7.3 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	0.73 U
Tetrachloroethylene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	0.36 U
Toluene	0.51 U	0.51 U	0.51 U	0.51 U	1.2	0.51 U	1	3.4	0.51 U	0.51 U	5.1 U	0.51 U	0.51 U	0.51 U	8.8	30	0.51 U
trans-1,2-Dichloroethene	0.9 U	0.90 U	0.9 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	9.0 U	0.90 U	0.90 U	0.90 U	3.6 U	0.90 U	0.90 U
Trans-1,3-Dichloropropene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	3.7 U	0.37 U	0.37 U	0.37 U	1.5 U	0.37 U	0.37 U
Trichloroethylene	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	1.8 U	0.46 U	0.46 U
Trichlorofluoromethane	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	8.8 U	0.88 U	0.88 U	0.88 U	3.5 U	0.88 U	0.88 U
Vinyl chloride	0.9 U	0.90 U	0.9 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	9.0 U	0.90 U	0.90 U	0.90 U	3.6 U	0.90 U	0.90 U
Xylene (total)	0.66 U	0.66 U	0.66 U	0.66 U	17	0.66 U	23	86	0.66 U	0.66 U	6.6 U	0.66 U	0.66 U	9.7	45	110	0.66 U

TABLE E-3
Groundwater Analytical Results
Intermediate Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01I 5/28/2013 Primary	DP13N-02I 5/31/2013 Primary	DP13N-03I 5/28/2013 Primary	DP13N-04I 6/3/2013 Primary	DP13N-05I 6/5/2013 Primary	DP13N-06I 6/11/2013 Primary	DP13N-07I 6/7/2013 Primary	DP13N-08I 6/11/2013 Primary	DP13N-09I 6/11/2013 Primary	DP13N-10I 6/13/2013 Primary	DP13S-01I 6/4/2013 Primary	P-04 5/22/2013 Primary	MW-10 5/23/2013 Primary	MW-12R 5/23/2013 Primary	OW-15 5/28/2013 Primary	OW-16 5/29/2013 Primary	P-05 5/22/2013 Primary
Semivolatile Organic Compounds, Method 8270C (ug/l)																	
1,1'-Biphenyl	0.17 U	0.033 U	0.17 U	0.035 U	3.2 U	0.17 U	33 U	18 U	0.18 U	0.17 U	0.034 U	0.033 U	0.65 U	1.6 U	3.2 U	32 U	0.032 U
2,4,5-Trichlorophenol	0.32 U	0.063 U	0.32 U	0.066 U	6.2 U	0.32 U	62 U	35 U	0.34 U	0.33 U	0.064 U	0.064 U	1.2 U	3.1 U	6.2 U	62 U	0.062 U
2,4,6-Trichlorophenol	0.35 U	0.070 U	0.35 U	0.073 U	6.9 U	0.36 U	69 U	38 U	0.37 U	0.37 U	0.071 U	0.070 U	1.4 U	3.4 U	6.9 U	69 U	0.069 U
2,4-Dichlorophenol	0.27 U	0.054 U	0.27 U	0.057 U	5.3 U	0.28 U	54 U	30 U	0.29 U	0.28 U	0.055 U	0.055 U	1.1 U	2.7 U	5.3 U	53 U	0.053 U
2,4-Dimethylphenol	1.5 U	0.29 U	1.5 U	0.30 U	29 U	1.5 U	290 U	160 U	1.6 U	1.5 U	0.30 U	0.29 U	5.7 U	14 U	29 U	290 U	0.29 U
2,4-Dinitrophenol	2.9 U	0.58 U	2.9 U	0.61 U	57 U	3.0 U	570 U	320 U	3.1 U	3.0 U	0.59 U	0.59 U	11 U	29 U	57 U	570 U	0.57 U
2,4-Dinitrotoluene	0.17 U	0.033 U	0.17 U	0.035 U	3.2 U	0.17 U	33 U	18 U	0.18 U	0.17 U	0.034 U	0.033 U	0.65 U	1.6 U	3.2 U	32 U	0.032 U
2,6-Dinitrotoluene	0.45 U	0.088 U	0.45 U	0.092 U	8.7 U	0.45 U	87 U	49 U	0.47 U	0.46 U	0.090 U	0.089 U	1.7 U	4.3 U	8.7 U	87 U	0.087 U
2-Chloronaphthalene	0.32 U	0.064 U	0.32 U	0.067 U	6.3 U	0.33 U	63 U	35 U	0.34 U	0.34 U	0.065 U	0.065 U	1.3 U	3.2 U	6.3 U	63 U	0.063 U
2-Chlorophenol	0.32 U	0.064 U	0.32 U	0.067 U	6.3 U	0.33 U	63 U	35 U	0.34 U	0.34 U	0.065 U	0.065 U	1.3 U	3.2 U	6.3 U	63 U	0.063 U
2-Methylnaphthalene	0.25 U	0.050 U	0.25 U	0.053 U	200	0.26 U	50 U	740	0.27 U	0.26 U	0.051 U	0.051 U	22	140	450	50 U	0.049 U
2-Methylphenol	0.69 U	0.14 U	0.69 U	0.14 U	13 U	0.70 U	130 U	75 U	0.73 U	0.71 U	0.14 U	0.14 U	2.7 U	6.7 U	13 U	130 U	0.13 U
2-Nitroaniline	0.47 U	0.092 U	0.47 U	0.097 U	9.1 U	0.47 U	91 U	51 U	0.49 U	0.48 U	0.094 U	0.093 U	1.8 U	4.5 U	9.1 U	91 U	0.090 U
2-Nitrophenol	0.3 U	0.060 U	0.3 U	0.063 U	5.9 U	0.31 U	59 U	33 U	0.32 U	0.32 U	0.061 U	0.061 U	1.2 U	3.0 U	5.9 U	59 U	0.059 U
3,3-Dichlorobenzidine	1.1 U	0.21 U	1.1 U	0.22 U	21 U	1.1 U	210 U	120 U	1.1 U	1.1 U	0.22 U	0.22 U	4.2 U	11 U	21 U	210 U	0.21 U
3-Nitroaniline	0.64 U	0.13 U	0.64 U	0.13 U	12 U	0.65 U	120 U	70 U	0.68 U	0.66 U	0.13 U	0.13 U	2.5 U	6.2 U	12 U	120 U	0.12 U
4,6-Dinitro-2-methylphenol	3.6 U	0.72 U	3.6 U	0.75 U	71 U	3.7 U	710 U	400 U	3.9 U	3.8 U	0.73 U	0.72 U	14 U	35 U	71 U	710 U	0.70 U
4-Bromophenylphenyl ether	0.45 U	0.088 U	0.45 U	0.092 U	8.7 U	0.45 U	87 U	49 U	0.47 U	0.46 U	0.090 U	0.089 U	1.7 U	4.3 U	8.7 U	87 U	0.087 U
4-Chloro-3-methylphenol	0.26 U	0.051 U	0.26 U	0.054 U	5.0 U	0.26 U	51 U	28 U	0.28 U	0.27 U	0.052 U	0.052 U	1.0 U	2.5 U	5.1 U	51 U	0.050 U
4-Chloroaniline	0.64 U	0.13 U	0.64 U	0.13 U	12 U	0.65 U	120 U	70 U	0.68 U	0.66 U	0.13 U	0.13 U	2.5 U	6.2 U	12 U	120 U	0.12 U
4-Chlorophenyl phenyl ether	0.23 U	0.045 U	0.23 U	0.047 U	4.4 U	0.23 U	44 U	25 U	0.24 U	0.23 U	0.045 U	0.045 U	0.87 U	2.2 U	4.4 U	44 U	0.044 U
4-Methylphenol	0.46 U	0.091 U	0.46 U	0.095 U	9.0 U	0.47 U	90 U	50 U	0.49 U	0.48 U	0.093 U	0.092 U	1.8 U	4.5 U	9.0 U	90 U	0.089 U
4-Nitroaniline	0.12 U	0.024 U	0.12 U	0.025 U	2.4 U	0.12 U	24 U	13 U	0.13 U	0.13 U	0.025 U	0.024 U	0.47 U	1.2 U	2.4 U	24 U	0.024 U
4-Nitrophenol	1.9 U	0.38 U	1.9 U	0.40 U	37 U	1.9 U	370 U	210 U	2.0 U	2.0 U	0.38 U	0.38 U	7.4 U	19 U	37 U	370 U	0.37 U
Acenaphthene	0.18 U	0.035 U	0.18 U	0.037 U	260	0.18 U	670	840	0.19 U	0.18 U	0.035 U	0.035 U	190	430	470	480	0.034 U
Acenaphthylene	0.27 U	0.054 U	0.27 U	0.057 U	5.3 U	0.28 U	54 U	30 U	0.29 U	0.28 U	0.055 U	0.055 U	1.1 U	2.7 U	5.3 U	53 U	0.053 U
Acetophenone	0.49 U	0.097 U	0.49 U	0.10 U	9.5 U	0.50 U	96 U	53 U	0.52 U	0.51 U	0.099 U	0.098 U	1.9 U	4.8 U	9.5 U	95 U	0.095 U
Anthracene	0.17 U	0.033 U	0.17 U	0.035 U	3.2 U	0.17 U	33 U	370	0.18 U	0.17 U	0.034 U	0.033 U	14	35	81	32 U	0.032 U
Atrazine	1.4 U	0.28 U	1.4 U	0.29 U	28 U	1.4 U	280 U	160 U	1.5 U	1.5 U	0.29 U	0.28 U	5.5 U	14 U	28 U	280 U	0.28 U
Benzaldehyde	0.37 U	0.073 U	0.37 U	0.076 U	7.1 U	0.37 U	72 U	40 U	0.39 U	0.38 U	0.074 U	0.073 U	1.4 U	3.6 U	7.2 U	72 U	0.071 U
Benzo(a)anthracene	0.17 U	0.033 U	0.17 U	0.035 U	3.2 U	0.17 U	33 U	200	0.18 U	0.17 U	0.034 U	0.033 U	0.65 U	1.6 U	33	32 U	0.032 U
Benzo(a)pyrene	0.64 U	0.13 U	0.64 U	0.13 U	12 U	0.65 U	120 U	70 U	0.68 U	0.66 U	0.13 U	0.13 U	2.5 U	6.2 U	12 U	120 U	0.12 U
Benzo(b)fluoranthene	0.31 U	0.061 U	0.31 U	0.064 U	6.0 U	0.31 U	60 U	34 U	0.33 U	0.32 U	0.062 U	0.062 U	1.2 U	3.0 U	6.0 U	60 U	0.060 U
Benzo(ghi)perylene	0.28 U	0.056 U	0.28 U	0.059 U	5.5 U	0.29 U	56 U	31 U	0.30 U	0.29 U	0.057 U	0.057 U	1.1 U	2.8 U	5.5 U	55 U	0.055 U
Benzo(k)fluoranthene	0.34 U	0.068 U	0.34 U	0.071 U	6.7 U	0.35 U	67 U	37 U	0.36 U	0.36 U	0.069 U	0.068 U	1.3 U	3.3 U	6.7 U	67 U	0.067 U
Bis(2-chloroethoxy)methane	0.31 U	0.062 U	0.31 U	0.065 U	6.1 U	0.43 U	61 U	46 U	0.45 U	0.44 U	0.063 U	0.063 U	1.2 U	3.1 U	8.2 U	61 U	0.061 U
Bis(2-chloroethyl)ether	0.35 U	0.070 U	0.35 U	0.073 U	6.9 U	0.32 U	69 U	34 U	0.33 U	0.33 U	0.071 U	0.070 U	1.4 U	3.4 U	6.1 U	69 U	0.069 U
Bis(2-chloroisopropyl)ether	0.42 U	0.083 U	0.42 U	0.087 U	8.2 U	0.36 U	82 U	38 U	0.37 U	0.37 U	0.085 U	0.084 U	1.6 U	4.1 U	6.9 U	82 U	0.082 U
bis(2-Ethylhexyl) phthalate	2.1 U	11	2.1 U	0.43 U	40 U	2.1 U	400 U	220 U	2.2 U	2.1 U	0.41 U	0.41 U	8.0 U	20 U	40 U	400 U	0.40 U
Butyl benzyl phthalate	0.78 U	0.16 U	0.78 U	0.16 U	15 U	0.80 U	150 U	86 U	0.83 U	0.81 U	0.16 U	0.16 U	3.0 U	7.6 U	15 U	150 U	0.15 U
Caprolactam	1.1 U	0.21 U	1.1 U	0.22 U	21 U	1.1 U	210 U	120 U	1.1 U	1.1 U	0.22 U	0.22 U	4.2 U	11 U	21 U	210 U	0.21 U
Carbazole	0.39 U	0.077 U	0.39 U	0.080 U	7.5 U	0.39 U	76 U	42 U	0.41 U	0.40 U	0.078 U	0.077 U	1.5 U	3.8 U	7.5 U	75 U	0.075 U
Chrysene	0.36 U	0.072 U	0.36 U	0.075 U	7.1 U	0.37 U	71 U	40 U	0.39 U	0.38 U	0.073 U	0.072 U	1.4 U	3.5 U	7.1 U	71 U	0.070 U

TABLE E-3
Groundwater Analytical Results
Intermediate Zone - Northern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13N-01I 5/28/2013 Primary	DP13N-02I 5/31/2013 Primary	DP13N-03I 5/28/2013 Primary	DP13N-04I 6/3/2013 Primary	DP13N-05I 6/5/2013 Primary	DP13N-06I 6/11/2013 Primary	DP13N-07I 6/7/2013 Primary	DP13N-08I 6/11/2013 Primary	DP13N-09I 6/11/2013 Primary	DP13N-10I 6/13/2013 Primary	DP13S-01I 6/4/2013 Primary	P-04 5/22/2013 Primary	MW-10 5/23/2013 Primary	MW-12R 5/23/2013 Primary	OW-15 5/28/2013 Primary	OW-16 5/29/2013 Primary	P-05 5/22/2013 Primary
Dibenzo(a,h)anthracene	0.34 U	0.068 U	0.34 U	0.071 U	6.7 U	0.35 U	67 U	37 U	0.36 U	0.36 U	0.069 U	0.068 U	1.3 U	3.3 U	6.7 U	67 U	0.067 U
Dibenzofuran	0.29 U	0.058 U	0.29 U	0.061 U	5.7 U	0.30 U	57 U	32 U	0.31 U	0.30 U	0.059 U	0.059 U	97	2.9 U	5.7 U	57 U	0.057 U
Diethyl phthalate	0.31 U	0.062 U	0.31 U	0.065 U	6.1 U	0.32 U	61 U	34 U	0.33 U	0.33 U	0.063 U	0.063 U	1.2 U	3.1 U	6.1 U	61 U	0.061 U
Dimethyl phthalate	0.28 U	0.055 U	0.28 U	0.058 U	5.4 U	0.28 U	55 U	30 U	0.30 U	0.29 U	0.056 U	0.056 U	1.1 U	2.7 U	5.4 U	54 U	0.054 U
Di-n-butyl phthalate	1.7 U	0.34 U	1.7 U	0.36 U	33 U	1.7 U	340 U	190 U	31	1.8 U	5.3	0.34 U	6.6 U	17 U	33 U	330 U	0.33 U
Di-n-octyl phthalate	0.98 U	0.19 U	0.98 U	0.20 U	19 U	1.0 U	190 U	110 U	1.0 U	1.0 U	0.20 U	0.20 U	3.8 U	9.6 U	19 U	190 U	0.19 U
Fluoranthene	0.39 U	0.078 U	0.39 U	0.081 U	7.6 U	0.40 U	77 U	1100	4.8	0.41 U	0.079 U	0.078 U	25	46	200	76 U	0.076 U
Fluorene	0.28 U	0.056 U	0.28 U	0.059 U	91	0.29 U	56 U	570	0.30 U	0.29 U	0.057 U	0.057 U	48	83	260	55 U	0.055 U
Hexachlorobenzene	1.1 U	0.21 U	1.1 U	0.22 U	21 U	1.1 U	210 U	120 U	1.1 U	1.1 U	0.22 U	0.22 U	4.2 U	11 U	21 U	210 U	0.21 U
Hexachlorobutadiene	0.49 U	0.097 U	0.49 U	0.10 U	9.5 U	0.50 U	96 U	53 U	0.52 U	0.51 U	0.099 U	0.098 U	1.9 U	4.8 U	9.5 U	95 U	0.095 U
Hexachlorocyclopentadiene	0.45 U	0.088 U	0.45 U	0.092 U	8.7 U	0.45 U	87 U	49 U	0.47 U	0.46 U	0.090 U	0.089 U	1.7 U	4.3 U	8.7 U	87 U	0.087 U
Hexachloroethane	0.43 U	0.085 U	0.43 U	0.089 U	8.4 U	0.44 U	84 U	47 U	0.46 U	0.45 U	0.087 U	0.086 U	1.7 U	4.2 U	8.4 U	84 U	0.084 U
Indeno(1,2,3-cd)pyrene	0.54 U	0.11 U	0.54 U	0.11 U	10 U	0.55 U	110 U	59 U	0.57 U	0.56 U	0.11 U	0.11 U	2.1 U	5.3 U	10 U	100 U	0.10 U
Isophorone	0.25 U	0.049 U	0.25 U	0.052 U	4.9 U	0.25 U	49 U	27 U	0.27 U	0.26 U	0.050 U	0.050 U	0.97 U	2.4 U	4.9 U	49 U	0.049 U
Naphthalene	0.31 U	0.062 U	0.31 U	0.065 U	4600	0.32 U	7500	8500	0.33 U	0.33 U	0.063 U	0.063 U	170	1600	5700	8300	0.061 U
Nitrobenzene	0.32 U	0.063 U	0.32 U	0.066 U	6.2 U	0.32 U	62 U	35 U	0.34 U	0.33 U	0.064 U	0.064 U	1.2 U	3.1 U	6.2 U	62 U	0.062 U
N-Nitrosodiphenylamine	0.34 U	0.068 U	0.34 U	0.071 U	6.7 U	0.35 U	67 U	37 U	0.36 U	0.36 U	0.069 U	0.068 U	1.3 U	3.3 U	6.7 U	67 U	0.067 U
N-Nitrosodipropylamine	0.29 U	0.058 U	0.29 U	0.061 U	5.7 U	0.30 U	57 U	32 U	0.31 U	0.30 U	0.059 U	0.059 U	1.1 U	2.9 U	5.7 U	57 U	0.057 U
Pentachlorophenol	1.7 U	0.33 U	1.7 U	0.35 U	32 U	1.7 U	330 U	180 U	1.8 U	1.7 U	0.34 U	0.33 U	6.5 U	16 U	33 U	320 U	0.32 U
Phenanthrene	2.1	0.060 U	0.3 U	0.22	190	1.7	420	2400	3.5	0.32 U	0.3	0.2	39	73	570	240	0.2
Phenol	0.49 U	0.097 U	0.49 U	0.10 U	9.5 U	0.50 U	96 U	53 U	0.52 U	0.51 U	0.099 U	0.098 U	1.9 U	4.8 U	9.5 U	95 U	0.095 U
Pyrene	0.37 U	0.074 U	0.37 U	0.077 U	7.2 U	0.38 U	73 U	840	3.8	0.39 U	0.075 U	0.074 U	21	41	140	72 U	0.072 U
Metals, Method 6020 (ug/l)																	
Arsenic	8.9	7.4	4.8	6	4.7	3.9	39	7.7	4.7	5.9	2.9	0.078 U	49	29	14	8.6	0.078 U
Arsenic, dissolved	0.078 U	0.078 U	0.078 U	0.078 U	4.1	0.078 U	45	2.2	2.4	0.078 U	0.078 U	0.078 U	47	21	12	8.4	0.078 U
Chromium	270	70	81	130	0.070 U	160	16	190	120	170	26	0.070 U	0.070 U	0.070 U	7.1	0.070 U	0.070 U
Chromium, dissolved	0.07 U	0.070 U	0.07 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
Copper	100	36	35	45	1.1	100	7.5	120	52	84	9.4	0.22 U	0.22 U	0.22 U	5.5	1.2 B	1.8
Copper, dissolved	2.8	1.6	1.4	3.6	1.1	3.8	0.22 U	1.5	4.3	1.7	1.7	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	2.7
Lead	63	45	25	19	0.069 U	17	7.9	48	24	44	7.8	0.069 U	0.069 U	0.069 U	4.9	0.069 U	0.069 U
Lead, dissolved	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
Zinc	490	120	190	140	13	280	37	540	150	200	37	1.1 U	1.1 U	1.1 U	29	1.1 U	1.1 U
Zinc, dissolved	19	1.1 U	11	15	12	15	18	33	15	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

Notes:

ug/l = micrograms per liter

U = result not detected at reported concentration

B = blank contamination

J = estimated result

TABLE E-4
Groundwater Analytical Results
Intermediate Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-02I 6/5/2013 Primary	DP13S-03I 5/22/2013 Primary	DP13S-04I 5/23/2013 Primary	DP13S-06I 5/30/2013 Primary	DP13S-07I 5/30/2013 Primary	DP13S-08I 6/4/2013 Primary	DP13S-09I 6/5/2013 Primary	DP13S-10I 6/6/2013 Primary	DP13S-11I 6/13/2013 Primary	DP13S-12I 6/12/2013 Primary	DP13S-13I 6/13/2013 Primary	P-02R 6/6/2013 Primary	P-03R 5/30/2013 Primary	MW-14R 5/30/2013 Primary	MW-14R 5/30/2013 Duplicate
Volatile Organic Compounds, Method 8260B (ug/l)															
1,1,1-Trichloroethane	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	4.1 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,1,2,2-Tetrachloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	1.6 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.2 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1-Dichloroethane	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,1-Dichloroethylene	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	1.5 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,2,4-Trichlorobenzene	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromo-3-chloropropane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	2.0 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dibromoethane	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
1,2-Dichlorobenzene	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	4.0 U	0.79 U	61	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,2-Dichloroethane	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	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-Dichloropropane	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	3.6 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
1,3-Dichlorobenzene	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
1,4-Dichlorobenzene	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	4.2 U	0.84 U	15	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
2-Butanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	1.3 U	1.2 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Hexanone	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	11 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Acetone	3.0 U	10	3.0 U	22	3.0 U	15 B	15 U	3.0 U	3.0 U	3.0 U	36	3.0 U	33	3.0 U	3.0 U
Benzene	12	0.41 U	0.41 U	33	0.41 U	0.41 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	7.8	1.3	220	200
Bromodichloromethane	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	2.0 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Bromoform	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromomethane	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	3.5 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Carbon disulfide	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.95 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon Tetrachloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Chlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	3.8 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Chloroethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chloromethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
cis-1,2-Dichloroethylene	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	4.1 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
cis-1,3-Dichloropropene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Cyclohexane	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.90 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Dibromochloromethane	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorodifluoromethane	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	3.4 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Ethylbenzene	170	0.74 U	0.74 U	100	0.74 U	0.74 U	3.7 U	0.74 U	0.74 U	0.74 U	0.74 U	37	5.4	150	140
Isopropylbenzene	14	0.79 U	0.79 U	12	0.79 U	0.79 U	4.0 U	0.79 U	0.79 U	0.79 U	0.79 U	5.3	0.79 U	10	11
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.80 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Methylene chloride	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	2.2 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Methyltert-butylether	1.5	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.80 U	2.8	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Styrene	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Tetrachloroethylene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Toluene	39	0.51 U	0.51 U	4	0.51 U	0.51 U	2.6 U	0.51 U	0.51 U	0.51 U	0.51 U	4	7.3	13	13
trans-1,2-Dichloroethene	0.90 U	0.90 U	0.90 U	0.9 U	0.90 U	0.90 U	4.5 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Trans-1,3-Dichloropropene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.9 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Trichloroethylene	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Trichlorofluoromethane	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	4.4 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Vinyl chloride	0.90 U	0.90 U	0.90 U	0.9 U	0.90 U	0.90 U	4.5 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Xylene (total)	270	0.66 U	0.66 U	84	0.66 U	0.66 U	3.3 U	0.66 U	0.66 U	0.66 U	0.66 U	26	20	170	160

TABLE E-4
Groundwater Analytical Results
Intermediate Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-02I 6/5/2013 Primary	DP13S-03I 5/22/2013 Primary	DP13S-04I 5/23/2013 Primary	DP13S-06I 5/30/2013 Primary	DP13S-07I 5/30/2013 Primary	DP13S-08I 6/4/2013 Primary	DP13S-09I 6/5/2013 Primary	DP13S-10I 6/6/2013 Primary	DP13S-11I 6/13/2013 Primary	DP13S-12I 6/12/2013 Primary	DP13S-13I 6/13/2013 Primary	P-02R 6/6/2013 Primary	P-03R 5/30/2013 Primary	MW-14R 5/30/2013 Primary	MW-14R 5/30/2013 Duplicate
Semivolatile Organic Compounds, Method 8270C (ug/l)															
1,1'-Biphenyl	3.7 U	0.033 U	0.034 U	33 U	0.033 U	0.033 U	0.038 U	0.033 U	0.039 U	0.33 U	0.18 U	1.6 U	0.035 U	3.2 U	1.6 U
2,4,5-Trichlorophenol	7.1 U	0.064 U	0.066 U	62 U	0.063 U	0.063 U	0.072 U	0.062 U	0.075 U	0.63 U	0.34 U	3.1 U	0.068 U	6.2 U	3.1 U
2,4,6-Trichlorophenol	7.9 U	0.071 U	0.073 U	69 U	0.070 U	0.069 U	0.079 U	0.069 U	0.083 U	0.70 U	0.38 U	3.5 U	0.075 U	6.8 U	3.4 U
2,4-Dichlorophenol	6.1 U	0.055 U	0.057 U	54 U	0.054 U	0.054 U	0.062 U	0.054 U	1.3	0.54 U	0.29 U	2.7 U	0.058 U	5.3 U	2.7 U
2,4-Dimethylphenol	33 U	0.29 U	0.30 U	290 U	0.29 U	0.29 U	0.33 U	0.29 U	0.35 U	2.9 U	1.6 U	14 U	0.31 U	28 U	14 U
2,4-Dinitrophenol	66 U	0.59 U	0.61 U	570 U	0.58 U	0.58 U	0.66 U	0.57 U	0.69 U	5.8 U	3.1 U	29 U	0.62 U	57 U	29 U
2,4-Dinitrotoluene	3.7 U	0.033 U	0.034 U	33 U	0.033 U	0.033 U	0.038 U	0.033 U	0.039 U	0.33 U	0.18 U	1.6 U	0.035 U	3.2 U	1.6 U
2,6-Dinitrotoluene	10 U	0.089 U	0.092 U	87 U	0.088 U	0.088 U	0.10 U	0.087 U	0.11 U	0.88 U	0.47 U	4.4 U	0.095 U	8.6 U	4.3 U
2-Chloronaphthalene	7.2 U	0.065 U	0.067 U	63 U	0.064 U	0.064 U	0.073 U	0.063 U	0.076 U	0.64 U	0.34 U	3.2 U	0.069 U	6.3 U	3.1 U
2-Chlorophenol	7.2 U	0.065 U	0.067 U	63 U	0.064 U	0.064 U	0.073 U	0.063 U	0.076 U	0.64 U	0.34 U	3.2 U	0.069 U	6.3 U	3.1 U
2-Methylnaphthalene	720	0.051 U	0.052 U	990	3.3	0.050 U	0.057 U	0.050 U	0.060 U	0.50 U	0.27 U	37	37	260	220
2-Methylphenol	15 U	0.14 U	0.14 U	130 U	0.14 U	0.14 U	0.15 U	0.13 U	0.16 U	1.4 U	0.73 U	6.8 U	0.15 U	13 U	6.7 U
2-Nitroaniline	10 U	0.093 U	0.096 U	91 U	0.092 U	0.092 U	0.10 U	0.091 U	0.11 U	0.92 U	0.50 U	4.6 U	0.099 U	9.0 U	4.5 U
2-Nitrophenol	6.8 U	0.061 U	0.063 U	59 U	0.060 U	0.060 U	0.068 U	0.059 U	0.072 U	0.60 U	0.32 U	3.0 U	0.064 U	5.9 U	3.0 U
3,3-Dichlorobenzidine	24 U	0.22 U	0.22 U	210 U	0.21 U	0.21 U	0.24 U	0.21 U	0.25 U	2.1 U	1.1 U	11 U	0.23 U	21 U	10 U
3-Nitroaniline	14 U	0.13 U	0.13 U	120 U	0.13 U	0.13 U	0.14 U	0.12 U	0.15 U	1.3 U	0.68 U	6.3 U	0.14 U	12 U	6.2 U
4,6-Dinitro-2-methylphenol	81 U	0.72 U	0.75 U	710 U	0.72 U	0.71 U	0.82 U	0.71 U	0.85 U	7.2 U	3.9 U	36 U	0.77 U	70 U	35 U
4-Bromophenylphenyl ether	10 U	0.089 U	0.092 U	87 U	0.088 U	0.088 U	0.10 U	0.087 U	0.11 U	0.88 U	0.47 U	4.4 U	0.095 U	8.6 U	4.3 U
4-Chloro-3-methylphenol	5.8 U	0.052 U	0.054 U	51 U	0.051 U	0.051 U	0.059 U	0.051 U	0.061 U	0.51 U	0.28 U	2.6 U	0.055 U	5.0 U	2.5 U
4-Chloroaniline	14 U	0.13 U	0.13 U	120 U	0.13 U	0.13 U	0.14 U	0.12 U	0.15 U	1.3 U	0.68 U	6.3 U	0.14 U	12 U	6.2 U
4-Chlorophenyl phenyl ether	5.0 U	0.045 U	0.046 U	44 U	0.045 U	0.044 U	0.051 U	0.044 U	0.053 U	0.45 U	0.24 U	2.2 U	0.048 U	4.4 U	2.2 U
4-Methylphenol	10 U	0.092 U	0.095 U	90 U	0.091 U	0.091 U	0.10 U	0.090 U	0.11 U	0.91 U	0.49 U	4.5 U	0.098 U	8.9 U	4.5 U
4-Nitroaniline	2.7 U	0.024 U	0.025 U	24 U	0.024 U	0.024 U	0.028 U	0.024 U	0.029 U	0.24 U	0.13 U	1.2 U	0.026 U	2.4 U	1.2 U
4-Nitrophenol	43 U	0.38 U	0.39 U	370 U	0.38 U	0.38 U	0.43 U	0.37 U	0.45 U	3.8 U	2.0 U	19 U	0.41 U	37 U	19 U
Acenaphthene	360	0.035 U	0.036 U	34 U	2.6	0.035 U	0.040 U	0.034 U	0.042 U	0.35 U	0.19 U	220	37	380	310
Acenaphthylene	6.1 U	0.055 U	0.057 U	54 U	0.054 U	0.054 U	0.062 U	0.054 U	0.065 U	0.54 U	0.29 U	2.7 U	0.37	5.3 U	2.7 U
Acetophenone	11 U	0.098 U	0.10 U	96 U	0.097 U	0.097 U	0.11 U	0.096 U	0.12 U	0.97 U	0.52 U	4.8 U	0.10 U	9.5 U	4.8 U
Anthracene	3.7 U	0.033 U	0.034 U	33 U	0.033 U	0.033 U	0.038 U	0.033 U	0.039 U	0.33 U	0.18 U	1.6 U	0.035 U	3.2 U	1.6 U
Atrazine	32 U	0.28 U	0.29 U	280 U	0.28 U	0.28 U	0.32 U	0.28 U	0.34 U	2.8 U	1.5 U	14 U	0.30 U	28 U	14 U
Benzaldehyde	8.2 U	0.073 U	0.076 U	72 U	0.073 U	0.072 U	0.083 U	0.072 U	0.087 U	0.73 U	0.39 U	3.6 U	0.078 U	7.1 U	3.6 U
Benzo(a)anthracene	3.7 U	0.033 U	0.034 U	33 U	0.033 U	0.033 U	0.038 U	0.033 U	0.039 U	0.33 U	0.18 U	1.6 U	0.035 U	3.2 U	1.6 U
Benzo(a)pyrene	14 U	0.13 U	0.13 U	120 U	0.13 U	0.13 U	0.14 U	0.12 U	0.15 U	1.3 U	0.68 U	6.3 U	0.14 U	12 U	6.2 U
Benzo(b)fluoranthene	6.9 U	0.062 U	0.064 U	60 U	0.061 U	0.061 U	0.070 U	0.060 U	0.073 U	0.61 U	0.33 U	3.0 U	0.065 U	6.0 U	3.0 U
Benzo(ghi)perylene	6.4 U	0.057 U	0.059 U	55 U	0.056 U	0.056 U	0.064 U	0.055 U	0.067 U	0.56 U	0.30 U	2.8 U	0.060 U	5.5 U	2.8 U
Benzo(k)fluoranthene	7.7 U	0.069 U	0.071 U	67 U	0.068 U	0.068 U	0.077 U	0.067 U	0.081 U	0.68 U	0.37 U	3.4 U	0.073 U	6.6 U	3.3 U
Bis(2-chloroethoxy)methane	7.0 U	0.063 U	0.065 U	61 U	0.062 U	0.062 U	0.071 U	0.061 U	0.099 U	0.62 U	0.45 U	3.1 U	0.067 U	6.1 U	3.0 U
Bis(2-chloroethyl)ether	7.9 U	0.071 U	0.073 U	69 U	0.070 U	0.069 U	0.079 U	0.069 U	0.074 U	0.70 U	0.33 U	3.5 U	0.075 U	6.8 U	3.4 U
Bis(2-chloroisopropyl)ether	9.4 U	0.084 U	0.087 U	82 U	0.083 U	0.083 U	0.095 U	0.082 U	0.083 U	0.83 U	0.38 U	4.2 U	0.089 U	8.2 U	4.1 U
bis(2-Ethylhexyl) phthalate	46 U	0.41 U	0.42 U	400 U	0.41 U	0.41 U	0.46 U	0.40 U	0.49 U	4.1 U	2.2 U	20 U	0.44 U	40 U	20 U
Butyl benzyl phthalate	18 U	0.16 U	0.16 U	150 U	0.16 U	0.15 U	0.18 U	0.15 U	0.18 U	1.5 U	0.84 U	7.7 U	0.17 U	15 U	7.6 U
Caprolactam	24 U	0.22 U	0.22 U	210 U	0.21 U	0.21 U	0.24 U	0.21 U	0.25 U	2.1 U	1.1 U	11 U	0.23 U	21 U	10 U
Carbazole	8.7 U	0.077 U	0.080 U	76 U	0.077 U	0.076 U	0.087 U	0.076 U	0.091 U	0.76 U	0.41 U	3.8 U	1.6 U	520	430
Chrysene	8.1 U	0.072 U	0.075 U	71 U	0.072 U	0.071 U	0.082 U	0.071 U	0.085 U	0.72 U	0.39 U	3.6 U	0.077 U	7.0 U	3.5 U
Dibenzo(a,h)anthracene	7.7 U	0.069 U	0.071 U	67 U	0.068 U	0.068 U	0.077 U	0.067 U	0.081 U	0.68 U	0.37 U	3.4 U	0.073 U	6.6 U	3.3 U
Dibenzofuran	6.6 U	0.059 U	0.061 U	57 U	0.058 U	0.058 U	0.066 U	0.057 U	0.069 U	0.58 U	0.31 U	2.9 U	8.5	5.7 U	240
Diethyl phthalate	7.0 U	0.75	0.065 U	61 U	0.062 U	0.062 U	0.071 U	0.061 U	0.074 U	0.62 U	0.33 U	3.1 U	0.067 U	6.1 U	3.0 U
Dimethyl phthalate	6.3 U	0.056 U	0.058 U	55 U	0.055 U	0.055 U	0.063 U	0.055 U	0.066 U	0.55 U	0.30 U	2.8 U	0.059 U	5.4 U	2.7 U
Di-n-butyl phthalate	38 U	10	0.35 U	330 U	0.34 U	4	0.39 U	0.33 U	0.40 U	3.4 U	1.8 U	17 U	0.36 U	33 U	17 U

TABLE E-4
Groundwater Analytical Results
Intermediate Zone - Southern Area
South Cavalcade Superfund Site
Houston, Texas

CONSTITUENT	DP13S-02I 6/5/2013 Primary	DP13S-03I 5/22/2013 Primary	DP13S-04I 5/23/2013 Primary	DP13S-06I 5/30/2013 Primary	DP13S-07I 5/30/2013 Primary	DP13S-08I 6/4/2013 Primary	DP13S-09I 6/5/2013 Primary	DP13S-10I 6/6/2013 Primary	DP13S-11I 6/13/2013 Primary	DP13S-12I 6/12/2013 Primary	DP13S-13I 6/13/2013 Primary	P-02R 6/6/2013 Primary	P-03R 5/30/2013 Primary	MW-14R 5/30/2013 Primary	MW-14R 5/30/2013 Duplicate
Di-n-octyl phthalate	22 U	0.20 U	0.20 U	190 U	0.19 U	0.19 U	0.22 U	0.19 U	0.23 U	1.9 U	1.0 U	9.7 U	0.21 U	19 U	9.5 U
Fluoranthene	8.8 U	0.078 U	0.081 U	77 U	1.6	0.077 U	0.67	0.077 U	0.092 U	0.77 U	0.42 U	3.9 U	3.6	7.6 U	3.8 U
Fluorene	140	0.057 U	0.059 U	55 U	1.9	0.056 U	0.064 U	0.055 U	0.067 U	0.56 U	0.30 U	60	0.77	210	170
Hexachlorobenzene	24 U	0.22 U	0.22 U	210 U	0.21 U	0.21 U	0.24 U	0.21 U	0.25 U	2.1 U	1.1 U	11 U	0.23 U	21 U	10 U
Hexachlorobutadiene	11 U	0.098 U	0.10 U	96 U	0.097 U	0.097 U	0.11 U	0.096 U	0.12 U	0.97 U	0.52 U	4.8 U	0.10 U	9.5 U	4.8 U
Hexachlorocyclopentadiene	10 U	0.089 U	0.092 U	87 U	0.088 U	0.088 U	0.10 U	0.087 U	0.11 U	0.88 U	0.47 U	4.4 U	0.095 U	8.6 U	4.3 U
Hexachloroethane	9.7 U	0.086 U	0.089 U	84 U	0.085 U	0.085 U	0.097 U	0.084 U	0.10 U	0.85 U	0.46 U	4.3 U	0.091 U	8.4 U	4.2 U
Indeno(1,2,3-cd)pyrene	12 U	0.11 U	0.11 U	110 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U	1.1 U	0.57 U	5.3 U	0.11 U	10 U	5.2 U
Isophorone	5.6 U	0.050 U	0.051 U	49 U	0.049 U	0.049 U	0.056 U	0.049 U	0.059 U	0.49 U	0.27 U	2.5 U	0.053 U	4.8 U	2.4 U
Naphthalene	12000	0.063 U	0.065 U	11000	38	0.062 U	2.7	0.061 U	0.074 U	0.62 U	0.33 U	1300	1000	9100	7000
Nitrobenzene	7.1 U	0.064 U	0.066 U	62 U	0.063 U	0.063 U	0.072 U	0.062 U	0.075 U	0.63 U	0.34 U	3.1 U	0.068 U	6.2 U	3.1 U
N-Nitrosodiphenylamine	7.7 U	0.069 U	0.071 U	67 U	0.068 U	0.068 U	0.077 U	0.067 U	0.081 U	0.68 U	0.37 U	3.4 U	0.073 U	6.6 U	3.3 U
N-Nitrosodipropylamine	6.6 U	0.059 U	0.061 U	57 U	0.058 U	0.058 U	0.066 U	0.057 U	0.069 U	0.58 U	0.31 U	2.9 U	0.062 U	5.7 U	2.9 U
Pentachlorophenol	37 U	0.33 U	0.34 U	330 U	0.33 U	0.33 U	0.38 U	0.33 U	0.39 U	3.3 U	1.8 U	16 U	0.35 U	32 U	16 U
Phenanthrene	210	0.35	0.063 U	810	1.9	0.060 U	0.91	0.24	0.28	0.60 U	1.1	41	4.4	190	150
Phenol	11 U	0.098 U	0.10 U	96 U	0.097 U	0.097 U	0.11 U	0.096 U	0.12 U	0.97 U	0.52 U	4.8 U	2.6	9.5 U	4.8 U
Pyrene	8.3 U	0.074 U	0.077 U	73 U	1.4	0.073 U	0.084 U	0.073 U	0.088 U	0.74 U	0.40 U	3.7 U	2.1	7.2 U	3.6 U
Metals, Method 6020 (ug/l)															
Arsenic	21	16	3.2	15	11	12	15	1.4	9.9	6.5	28	51	0.078 U	33	35
Arsenic, dissolved	22	0.078 U	0.078 U	15	0.078 U	0.078 U	1.1	1.1	0.078 U	0.078 U	0.078 U	47	0.078 U	33	34
Chromium	210	260	48	91	190	520	620	0.070 U	12	180	450	0.070 U	4.7	0.070 U	0.070 U
Chromium, dissolved	0.070 U	0.070 U	0.070 U	0.07 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	5.1	0.070 U	0.070 U
Copper	72	110	21	42	79	160	220	1.5	9.3	130	170	1.8	1.3	1.5	1.7
Copper, dissolved	1.1	1.4	1.2	2.1	1.3 B	2.1	5.1	1.2	1.5	1.9	2.9	0.22 U	1.9	0.22 U	0.22 U
Lead	51	130	26	22	100	210	100	0.069 U	6.6	49	140	0.069 U	0.069 U	0.069 U	0.069 U
Lead, dissolved	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
Zinc	350	460	68	560	380	550	1700	1.1 U	36	340	590	1.1 U	1.1 U	1.1 U	1.1 U
Zinc, dissolved	28	1.1 U	1.1 U	220	1.1 U	13	59	1.1 U	12	21	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

Notes:

ug/l = micrograms per liter

U = result not detected at reported concentration

B = blank contamination

J = estimated result

ATTACHMENT F

LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
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Tel: (412)963-7058

TestAmerica Job ID: 180-21513-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/5/2013 4:14:31 PM

Veronica Bortot, Project Manager II
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LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21513-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21513-1

Comments
No additional comments.

Receipt
The samples were received on 5/23/2013 3:42 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3º C, 2.8º C, 3.1º C and 3.7º C.

GC/MS VOA
Method(s) 8260B: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: DP13S-04S (180-21513-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following volatile sample(s) was analyzed with headspace in the sample vial(s) due to multiple injections and/or limited volume: DP-13S-03I (180-21513-10).

Method(s) 8260B: The following sample(s) submitted for volatiles analysis was analyzed with insufficient preservation (pH >2): DP-13S-03I (180-21513-10).

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 121756 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following samples contained one acid and/or one base surrogate outside acceptance limits: DP13S-03S (180-21513-9), DP13S-04S (180-21513-8). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122112 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 120756 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 120756 was outside control limits. The recoveries were within quality control acceptance limits in the LCS, therefore the data has been qualitied and reported

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The ICSAB for batch 480-121004 was outside the acceptance limits for element: dissolved zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: The ICSAB for batch 480-121005 was outside the acceptance limits for element: total zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the

Job ID: 180-21513-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

following sample(s): DP-13S-03I (180-21513-10).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21513-1	OW-8	Water	05/22/13 10:55	05/23/13 15:42
180-21513-2	P-04	Water	05/22/13 11:30	05/23/13 15:42
180-21513-3	P-05	Water	05/22/13 12:05	05/23/13 15:42
180-21513-4	MW-03	Water	05/22/13 14:08	05/23/13 15:42
180-21513-5	MW-05	Water	05/22/13 16:28	05/23/13 15:42
180-21513-6	OW-7	Water	05/22/13 17:57	05/23/13 15:42
180-21513-7	Trip Blank	Water	05/22/13 00:00	05/23/13 15:42
180-21513-8	DP13S-04S	Water	05/21/13 13:50	05/23/13 15:42
180-21513-9	DP13S-03S	Water	05/21/13 15:38	05/23/13 15:42
180-21513-10	DP-13S-03I	Water	05/22/13 17:50	05/23/13 15:42
180-21513-11	Trip Blank	Water	05/22/13 00:00	05/23/13 15:42

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: OW-8

Lab Sample ID: 180-21513-1

Date Collected: 05/22/13 10:55

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120574	05/25/13 11:15	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1052.3 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			121756	06/03/13 16:07	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 21:16	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 00:12	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: P-04

Lab Sample ID: 180-21513-2

Date Collected: 05/22/13 11:30

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120574	05/25/13 11:39	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1021.9 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			121756	06/03/13 16:34	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 21:21	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 00:18	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: P-05

Lab Sample ID: 180-21513-3

Date Collected: 05/22/13 12:05

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120574	05/25/13 12:03	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1050.6 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			121756	06/03/13 17:01	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 21:27	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF

Client Sample ID: P-05

Lab Sample ID: 180-21513-3

Date Collected: 05/22/13 12:05

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		1			121005	05/29/13 00:23	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-03

Lab Sample ID: 180-21513-4

Date Collected: 05/22/13 14:08

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 11:16	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048.3 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 00:07	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 21:44	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 00:29	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-05

Lab Sample ID: 180-21513-5

Date Collected: 05/22/13 16:28

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 11:40	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1050.9 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 00:34	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 21:49	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 00:35	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: OW-7

Lab Sample ID: 180-21513-6

Date Collected: 05/22/13 17:57

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 12:04	NQN	TAL BUF

Client Sample ID: OW-7

Lab Sample ID: 180-21513-6

Date Collected: 05/22/13 17:57

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 12:04	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048.4 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			121756	06/03/13 18:23	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:17	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:13	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: Trip Blank

Lab Sample ID: 180-21513-7

Date Collected: 05/22/13 00:00

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 12:28	NQN	TAL BUF
	Instrument ID: HP5973N									

Client Sample ID: DP13S-04S

Lab Sample ID: 180-21513-8

Date Collected: 05/21/13 13:50

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	120660	05/28/13 12:51	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1027.4 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 01:02	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:23	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:19	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-03S

Lab Sample ID: 180-21513-9

Date Collected: 05/21/13 15:38

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 13:15	NQN	TAL BUF

Client Sample ID: DP13S-03S

Lab Sample ID: 180-21513-9

Date Collected: 05/21/13 15:38

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 13:15	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1034.2 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 01:29	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:28	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:24	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP-13S-03I

Lab Sample ID: 180-21513-10

Date Collected: 05/22/13 17:50

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 13:38	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1020.7 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 01:56	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:34	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:30	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		5			121661	05/31/13 21:35	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: Trip Blank

Lab Sample ID: 180-21513-11

Date Collected: 05/22/13 00:00

Matrix: Water

Date Received: 05/23/13 15:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120660	05/28/13 14:02	NQN	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

TG = Taylor Gentner

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-8
Date Collected: 05/22/13 10:55
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
2-Hexanone	5.0	U	5.0		ug/L			05/25/13 11:15	1
2-Butanone (MEK)	10	U	10		ug/L			05/25/13 11:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/25/13 11:15	1
Acetone	10	U	10		ug/L			05/25/13 11:15	1
Benzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Bromoform	1.0	U	1.0		ug/L			05/25/13 11:15	1
Bromomethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Carbon disulfide	1.0	U	1.0		ug/L			05/25/13 11:15	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/25/13 11:15	1
Chlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Chloroethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Chloroform	1.0	U	1.0		ug/L			05/25/13 11:15	1
Chloromethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:15	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Cyclohexane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Ethylbenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Methyl acetate	1.0	U	1.0		ug/L			05/25/13 11:15	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/25/13 11:15	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Methylene Chloride	1.0	U	1.0		ug/L			05/25/13 11:15	1
Styrene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Toluene	1.0	U	1.0		ug/L			05/25/13 11:15	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:15	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Trichloroethene	1.0	U	1.0		ug/L			05/25/13 11:15	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/25/13 11:15	1
Vinyl chloride	1.0	U	1.0		ug/L			05/25/13 11:15	1
Xylenes, Total	2.0	U	2.0		ug/L			05/25/13 11:15	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-8
Date Collected: 05/22/13 10:55
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*05/25/13 11:15*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/25/13 11:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*05/25/13 11:15*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:07	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:07	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/03/13 16:07	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-8
Date Collected: 05/22/13 10:55
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 16:07	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 16:07	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
Phenanthrene	0.19	U	0.19		ug/L		05/28/13 14:16	06/03/13 16:07	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 16:07	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*34 - 132*	*05/28/13 14:16*	*06/03/13 16:07*	*1*
2-Fluorobiphenyl	*67*		*37 - 120*	*05/28/13 14:16*	*06/03/13 16:07*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*05/28/13 14:16*	*06/03/13 16:07*	*1*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/03/13 16:07*	*1*
2-Fluorophenol	*33*		*18 - 120*	*05/28/13 14:16*	*06/03/13 16:07*	*1*
2,4,6-Tribromophenol	*95*		*39 - 146*	*05/28/13 14:16*	*06/03/13 16:07*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:12	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:12	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:12	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:12	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:12	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:16	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:16	1
Copper	**1.0**		1.0		ug/L		05/28/13 13:00	05/28/13 21:16	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:16	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:16	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: P-04
Date Collected: 05/22/13 11:30
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
2-Hexanone	5.0	U	5.0		ug/L			05/25/13 11:39	1
2-Butanone (MEK)	10	U	10		ug/L			05/25/13 11:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/25/13 11:39	1
Acetone	10	U	10		ug/L			05/25/13 11:39	1
Benzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Bromoform	1.0	U	1.0		ug/L			05/25/13 11:39	1
Bromomethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Carbon disulfide	1.0	U	1.0		ug/L			05/25/13 11:39	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/25/13 11:39	1
Chlorobenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Chloroethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Chloroform	1.0	U	1.0		ug/L			05/25/13 11:39	1
Chloromethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:39	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Cyclohexane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Ethylbenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Methyl acetate	1.0	U	1.0		ug/L			05/25/13 11:39	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/25/13 11:39	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Methylene Chloride	1.0	U	1.0		ug/L			05/25/13 11:39	1
Styrene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Toluene	1.0	U	1.0		ug/L			05/25/13 11:39	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 11:39	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Trichloroethene	1.0	U	1.0		ug/L			05/25/13 11:39	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/25/13 11:39	1
Vinyl chloride	1.0	U	1.0		ug/L			05/25/13 11:39	1
Xylenes, Total	2.0	U	2.0		ug/L			05/25/13 11:39	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: P-04
Date Collected: 05/22/13 11:30
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*05/25/13 11:39*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/25/13 11:39*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/25/13 11:39*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4-Dimethylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Chlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Methylnaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Methylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
2-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
3-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Chloroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Methylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
4-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Acenaphthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:34	1
Acetophenone	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Atrazine	2.0	U	2.0		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzaldehyde	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 16:34	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Caprolactam	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Carbazole	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Chrysene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: P-04
Date Collected: 05/22/13 11:30
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Diethyl phthalate	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Dimethyl phthalate	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/28/13 14:16	06/03/13 16:34	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Fluoranthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Fluorene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Hexachlorobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Hexachlorobutadiene	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
Hexachlorocyclopentadiene	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
Hexachloroethane	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Isophorone	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
Naphthalene	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
Nitrobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/03/13 16:34	1
Pentachlorophenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
Phenanthrene	**0.20**		0.20		ug/L		05/28/13 14:16	06/03/13 16:34	1
Phenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/03/13 16:34	1
Pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/03/13 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*80*		*34 - 132*	*05/28/13 14:16*	*06/03/13 16:34*	*1*
2-Fluorobiphenyl	*82*		*37 - 120*	*05/28/13 14:16*	*06/03/13 16:34*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*05/28/13 14:16*	*06/03/13 16:34*	*1*
Phenol-d5	*28*		*11 - 120*	*05/28/13 14:16*	*06/03/13 16:34*	*1*
2-Fluorophenol	*36*		*18 - 120*	*05/28/13 14:16*	*06/03/13 16:34*	*1*
2,4,6-Tribromophenol	*102*		*39 - 146*	*05/28/13 14:16*	*06/03/13 16:34*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:18	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:18	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:18	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:18	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:18	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:21	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:21	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:21	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:21	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:21	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: P-05
Date Collected: 05/22/13 12:05
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
2-Hexanone	5.0	U	5.0		ug/L			05/25/13 12:03	1
2-Butanone (MEK)	10	U	10		ug/L			05/25/13 12:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/25/13 12:03	1
Acetone	10	U	10		ug/L			05/25/13 12:03	1
Benzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Bromoform	1.0	U	1.0		ug/L			05/25/13 12:03	1
Bromomethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Carbon disulfide	1.0	U	1.0		ug/L			05/25/13 12:03	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/25/13 12:03	1
Chlorobenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Chloroethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Chloroform	1.0	U	1.0		ug/L			05/25/13 12:03	1
Chloromethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 12:03	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Cyclohexane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Ethylbenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Methyl acetate	1.0	U	1.0		ug/L			05/25/13 12:03	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/25/13 12:03	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Methylene Chloride	1.0	U	1.0		ug/L			05/25/13 12:03	1
Styrene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Toluene	1.0	U	1.0		ug/L			05/25/13 12:03	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 12:03	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Trichloroethene	1.0	U	1.0		ug/L			05/25/13 12:03	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/25/13 12:03	1
Vinyl chloride	1.0	U	1.0		ug/L			05/25/13 12:03	1
Xylenes, Total	2.0	U	2.0		ug/L			05/25/13 12:03	1

Client Sample ID: P-05
Date Collected: 05/22/13 12:05
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*05/25/13 12:03*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/25/13 12:03*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/25/13 12:03*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 17:01	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 17:01	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/03/13 17:01	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: P-05
Date Collected: 05/22/13 12:05
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 17:01	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 17:01	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
Phenanthrene	**0.20**		0.19		ug/L		05/28/13 14:16	06/03/13 17:01	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 17:01	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*75*		*34 - 132*	*05/28/13 14:16*	*06/03/13 17:01*	*1*
2-Fluorobiphenyl	*76*		*37 - 120*	*05/28/13 14:16*	*06/03/13 17:01*	*1*
p-Terphenyl-d14	*99*		*58 - 147*	*05/28/13 14:16*	*06/03/13 17:01*	*1*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/03/13 17:01*	*1*
2-Fluorophenol	*30*		*18 - 120*	*05/28/13 14:16*	*06/03/13 17:01*	*1*
2,4,6-Tribromophenol	*90*		*39 - 146*	*05/28/13 14:16*	*06/03/13 17:01*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:23	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:23	1
Copper	**1.8**		1.0		ug/L		05/28/13 13:00	05/29/13 00:23	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:23	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:23	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:27	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:27	1
Copper	**2.7**		1.0		ug/L		05/28/13 13:00	05/28/13 21:27	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:27	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:27	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: MW-03
Date Collected: 05/22/13 14:08
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 11:16	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 11:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 11:16	1
Acetone	10	U	10		ug/L			05/28/13 11:16	1
Benzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 11:16	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 11:16	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 11:16	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 11:16	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:16	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 11:16	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 11:16	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 11:16	1
Styrene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Toluene	1.0	U	1.0		ug/L			05/28/13 11:16	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:16	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 11:16	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 11:16	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 11:16	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 11:16	1

Client Sample ID: MW-03
Date Collected: 05/22/13 14:08
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*05/28/13 11:16*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/28/13 11:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/28/13 11:16*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:07	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:07	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 00:07	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: MW-03
Date Collected: 05/22/13 14:08
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 00:07	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:07	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
Phenanthrene	**0.20**		0.19		ug/L		05/28/13 14:16	06/05/13 00:07	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:07	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*34 - 132*	*05/28/13 14:16*	*06/05/13 00:07*	*1*
2-Fluorobiphenyl	*75*		*37 - 120*	*05/28/13 14:16*	*06/05/13 00:07*	*1*
p-Terphenyl-d14	*136*		*58 - 147*	*05/28/13 14:16*	*06/05/13 00:07*	*1*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/05/13 00:07*	*1*
2-Fluorophenol	*33*		*18 - 120*	*05/28/13 14:16*	*06/05/13 00:07*	*1*
2,4,6-Tribromophenol	*104*		*39 - 146*	*05/28/13 14:16*	*06/05/13 00:07*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:29	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:29	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:29	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:29	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:29	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:44	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:44	1
Copper	**1.3**		1.0		ug/L		05/28/13 13:00	05/28/13 21:44	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:44	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:44	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: MW-05
Date Collected: 05/22/13 16:28
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 11:40	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 11:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 11:40	1
Acetone	10	U	10		ug/L			05/28/13 11:40	1
Benzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 11:40	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 11:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 11:40	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 11:40	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 11:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 11:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 11:40	1
Styrene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Toluene	1.0	U	1.0		ug/L			05/28/13 11:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 11:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 11:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 11:40	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 11:40	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 11:40	1

Client Sample ID: MW-05
Date Collected: 05/22/13 16:28
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/28/13 11:40*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/28/13 11:40*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/28/13 11:40*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:34	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 00:34	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 00:34	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: MW-05
Date Collected: 05/22/13 16:28
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 00:34	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 00:34	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
Phenanthrene	**0.22**		0.19		ug/L		05/28/13 14:16	06/05/13 00:34	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 00:34	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*34 - 132*	*05/28/13 14:16*	*06/05/13 00:34*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*05/28/13 14:16*	*06/05/13 00:34*	*1*
p-Terphenyl-d14	*131*		*58 - 147*	*05/28/13 14:16*	*06/05/13 00:34*	*1*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/05/13 00:34*	*1*
2-Fluorophenol	*30*		*18 - 120*	*05/28/13 14:16*	*06/05/13 00:34*	*1*
2,4,6-Tribromophenol	*99*		*39 - 146*	*05/28/13 14:16*	*06/05/13 00:34*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:35	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:35	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:35	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:35	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:35	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:49	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:49	1
Copper	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 21:49	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:49	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:49	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-7
Date Collected: 05/22/13 17:57
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 12:04	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 12:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 12:04	1
Acetone	10	U	10		ug/L			05/28/13 12:04	1
Benzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 12:04	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 12:04	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 12:04	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 12:04	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:04	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 12:04	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 12:04	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 12:04	1
Styrene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Toluene	1.0	U	1.0		ug/L			05/28/13 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:04	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 12:04	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 12:04	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 12:04	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 12:04	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-7
Date Collected: 05/22/13 17:57
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/28/13 12:04*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/28/13 12:04*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/28/13 12:04*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 18:23	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/03/13 18:23	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/03/13 18:23	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: OW-7
Date Collected: 05/22/13 17:57
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-6
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/03/13 18:23	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/03/13 18:23	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
Phenanthrene	0.19	U	0.19		ug/L		05/28/13 14:16	06/03/13 18:23	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/03/13 18:23	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/03/13 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*34 - 132*	*05/28/13 14:16*	*06/03/13 18:23*	*1*
2-Fluorobiphenyl	*63*		*37 - 120*	*05/28/13 14:16*	*06/03/13 18:23*	*1*
p-Terphenyl-d14	*101*		*58 - 147*	*05/28/13 14:16*	*06/03/13 18:23*	*1*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/03/13 18:23*	*1*
2-Fluorophenol	*32*		*18 - 120*	*05/28/13 14:16*	*06/03/13 18:23*	*1*
2,4,6-Tribromophenol	*89*		*39 - 146*	*05/28/13 14:16*	*06/03/13 18:23*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**		1.0		ug/L		05/28/13 13:00	05/29/13 01:13	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 01:13	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:13	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:13	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 01:13	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:17	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:17	1
Copper	**1.6**		1.0		ug/L		05/28/13 13:00	05/28/13 22:17	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:17	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:17	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: Trip Blank
Date Collected: 05/22/13 00:00
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 12:28	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 12:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 12:28	1
Acetone	10	U	10		ug/L			05/28/13 12:28	1
Benzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 12:28	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 12:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 12:28	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 12:28	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 12:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 12:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 12:28	1
Styrene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Toluene	1.0	U	1.0		ug/L			05/28/13 12:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 12:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 12:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 12:28	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 12:28	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 12:28	1

Client Sample ID: Trip Blank

Lab Sample ID: 180-21513-7

Date Collected: 05/22/13 00:00

Matrix: Water

Date Received: 05/23/13 15:42

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/28/13 12:28*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/28/13 12:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/28/13 12:28*	*1*

Client Sample ID: DP13S-04S

Lab Sample ID: 180-21513-8

Date Collected: 05/21/13 13:50

Matrix: Water

Date Received: 05/23/13 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,1,2-Trichloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,1-Dichloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,1-Dichloroethene	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2,4-Trichlorobenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2-Dibromoethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2-Dichlorobenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2-Dichloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,2-Dichloropropane	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,3-Dichlorobenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
1,4-Dichlorobenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
2-Hexanone	25	U	25		ug/L			05/28/13 12:51	5
2-Butanone (MEK)	50	U	50		ug/L			05/28/13 12:51	5
4-Methyl-2-pentanone (MIBK)	25	U	25		ug/L			05/28/13 12:51	5
Acetone	50	U	50		ug/L			05/28/13 12:51	5
Benzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Bromodichloromethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Bromoform	5.0	U	5.0		ug/L			05/28/13 12:51	5
Bromomethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Carbon disulfide	5.0	U	5.0		ug/L			05/28/13 12:51	5
Carbon tetrachloride	5.0	U	5.0		ug/L			05/28/13 12:51	5
Chlorobenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Dibromochloromethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Chloroethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Chloroform	5.0	U	5.0		ug/L			05/28/13 12:51	5
Chloromethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
cis-1,2-Dichloroethene	5.0	U	5.0		ug/L			05/28/13 12:51	5
cis-1,3-Dichloropropene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Cyclohexane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Dichlorodifluoromethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Ethylbenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Isopropylbenzene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Methyl acetate	5.0	U	5.0		ug/L			05/28/13 12:51	5
Methyl tert-butyl ether	**140**		5.0		ug/L			05/28/13 12:51	5
Methylcyclohexane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Methylene Chloride	5.0	U	5.0		ug/L			05/28/13 12:51	5
Styrene	5.0	U	5.0		ug/L			05/28/13 12:51	5

Client Sample ID: DP13S-04S
Date Collected: 05/21/13 13:50
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Toluene	5.0	U	5.0		ug/L			05/28/13 12:51	5
trans-1,2-Dichloroethene	5.0	U	5.0		ug/L			05/28/13 12:51	5
trans-1,3-Dichloropropene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Trichloroethene	5.0	U	5.0		ug/L			05/28/13 12:51	5
Trichlorofluoromethane	5.0	U	5.0		ug/L			05/28/13 12:51	5
Vinyl chloride	5.0	U	5.0		ug/L			05/28/13 12:51	5
Xylenes, Total	10	U	10		ug/L			05/28/13 12:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*05/28/13 12:51*	*5*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/28/13 12:51*	*5*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/28/13 12:51*	*5*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Chlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Methylnaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Methylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
2-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
3-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Chloroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Methylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
4-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Acenaphthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:02	1
Acetophenone	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Benzaldehyde	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:02	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/05/13 01:02	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:02	1

Client Sample ID: DP13S-04S
Date Collected: 05/21/13 13:50
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-8
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:02	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Caprolactam	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Carbazole	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Chrysene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Dibenzofuran	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Diethyl phthalate	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Dimethyl phthalate	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Fluoranthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Fluorene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Hexachlorobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
Hexachloroethane	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Isophorone	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
Naphthalene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
Nitrobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:02	1
Pentachlorophenol	**1.1**		0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
Phenanthrene	0.19	U	0.19		ug/L		05/28/13 14:16	06/05/13 01:02	1
Phenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:02	1
Pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*34 - 132*	*05/28/13 14:16*	*06/05/13 01:02*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*05/28/13 14:16*	*06/05/13 01:02*	*1*
p-Terphenyl-d14	*156*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 01:02*	*1*
Phenol-d5	*28*		*11 - 120*	*05/28/13 14:16*	*06/05/13 01:02*	*1*
2-Fluorophenol	*39*		*18 - 120*	*05/28/13 14:16*	*06/05/13 01:02*	*1*
2,4,6-Tribromophenol	*116*		*39 - 146*	*05/28/13 14:16*	*06/05/13 01:02*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		1.0		ug/L		05/28/13 13:00	05/29/13 01:19	1
Chromium	**18**		1.5		ug/L		05/28/13 13:00	05/29/13 01:19	1
Copper	**10**		1.0		ug/L		05/28/13 13:00	05/29/13 01:19	1
Lead	**11**		1.0		ug/L		05/28/13 13:00	05/29/13 01:19	1
Zinc	**30**		10		ug/L		05/28/13 13:00	05/29/13 01:19	1

Client Sample ID: DP13S-04S

Lab Sample ID: 180-21513-8

Date Collected: 05/21/13 13:50

Matrix: Water

Date Received: 05/23/13 15:42

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 22:23	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:23	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:23	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:23	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:23	1

Client Sample ID: DP13S-03S

Lab Sample ID: 180-21513-9

Date Collected: 05/21/13 15:38

Matrix: Water

Date Received: 05/23/13 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 13:15	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 13:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 13:15	1
Acetone	10	U	10		ug/L			05/28/13 13:15	1
Benzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 13:15	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 13:15	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 13:15	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 13:15	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:15	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 13:15	1
Methyl tert-butyl ether	**1.6**		1.0		ug/L			05/28/13 13:15	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 13:15	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: DP13S-03S
Date Collected: 05/21/13 15:38
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 13:15	1
Styrene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Toluene	1.0	U	1.0		ug/L			05/28/13 13:15	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:15	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 13:15	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 13:15	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 13:15	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*05/28/13 13:15*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/28/13 13:15*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/28/13 13:15*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Methylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Methylphenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:29	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 01:29	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:29	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: DP13S-03S
Date Collected: 05/21/13 15:38
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-9
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/05/13 01:29	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:29	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:29	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 01:29	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 01:29	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
Naphthalene	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 01:29	1
Pentachlorophenol	**1.0**		0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
Phenanthrene	0.19	U	0.19		ug/L		05/28/13 14:16	06/05/13 01:29	1
Phenol	0.97	U	0.97		ug/L		05/28/13 14:16	06/05/13 01:29	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*80*		*34 - 132*	*05/28/13 14:16*	*06/05/13 01:29*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*05/28/13 14:16*	*06/05/13 01:29*	*1*
p-Terphenyl-d14	*152*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 01:29*	*1*
Phenol-d5	*28*		*11 - 120*	*05/28/13 14:16*	*06/05/13 01:29*	*1*
2-Fluorophenol	*41*		*18 - 120*	*05/28/13 14:16*	*06/05/13 01:29*	*1*
2,4,6-Tribromophenol	*109*		*39 - 146*	*05/28/13 14:16*	*06/05/13 01:29*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		1.0		ug/L		05/28/13 13:00	05/29/13 01:24	1
Chromium	**4.1**		1.5		ug/L		05/28/13 13:00	05/29/13 01:24	1
Copper	**4.2**		1.0		ug/L		05/28/13 13:00	05/29/13 01:24	1
Lead	**4.1**		1.0		ug/L		05/28/13 13:00	05/29/13 01:24	1
Zinc	**17**		10		ug/L		05/28/13 13:00	05/29/13 01:24	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: DP13S-03S

Lab Sample ID: 180-21513-9

Date Collected: 05/21/13 15:38

Matrix: Water

Date Received: 05/23/13 15:42

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:28	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:28	1
Copper	**1.0**		1.0		ug/L		05/28/13 13:00	05/28/13 22:28	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:28	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:28	1

Client Sample ID: DP-13S-03I

Lab Sample ID: 180-21513-10

Date Collected: 05/22/13 17:50

Matrix: Water

Date Received: 05/23/13 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 13:38	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 13:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 13:38	1
Acetone	**10**		10		ug/L			05/28/13 13:38	1
Benzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 13:38	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 13:38	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 13:38	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 13:38	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:38	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 13:38	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 13:38	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 13:38	1

Client Sample ID: DP-13S-03I
Date Collected: 05/22/13 17:50
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 13:38	1
Styrene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Toluene	1.0	U	1.0		ug/L			05/28/13 13:38	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 13:38	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 13:38	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 13:38	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 13:38	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*05/28/13 13:38*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/28/13 13:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/28/13 13:38*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4-Dimethylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Chlorophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Methylnaphthalene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Methylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
2-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
3-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Chloroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Methylphenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Nitroaniline	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
4-Nitrophenol	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Acenaphthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:56	1
Acetophenone	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Atrazine	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 01:56	1
Benzaldehyde	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:56	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: DP-13S-03I
Date Collected: 05/22/13 17:50
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-10
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/05/13 01:56	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:56	1
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 01:56	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Caprolactam	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Carbazole	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Chrysene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Dibenzofuran	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Diethyl phthalate	**0.75**		0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Dimethyl phthalate	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Di-n-butyl phthalate	**10**		2.0		ug/L		05/28/13 14:16	06/05/13 01:56	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Fluoranthene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Fluorene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Hexachlorobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Hexachlorobutadiene	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
Hexachlorocyclopentadiene	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
Hexachloroethane	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Isophorone	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
Naphthalene	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
Nitrobenzene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		05/28/13 14:16	06/05/13 01:56	1
Pentachlorophenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
Phenanthrene	**0.35**		0.20		ug/L		05/28/13 14:16	06/05/13 01:56	1
Phenol	0.98	U	0.98		ug/L		05/28/13 14:16	06/05/13 01:56	1
Pyrene	0.49	U	0.49		ug/L		05/28/13 14:16	06/05/13 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*80*		*34 - 132*	*05/28/13 14:16*	*06/05/13 01:56*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*05/28/13 14:16*	*06/05/13 01:56*	*1*
p-Terphenyl-d14	*103*		*58 - 147*	*05/28/13 14:16*	*06/05/13 01:56*	*1*
Phenol-d5	*29*		*11 - 120*	*05/28/13 14:16*	*06/05/13 01:56*	*1*
2-Fluorophenol	*39*		*18 - 120*	*05/28/13 14:16*	*06/05/13 01:56*	*1*
2,4,6-Tribromophenol	*105*		*39 - 146*	*05/28/13 14:16*	*06/05/13 01:56*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		1.0		ug/L		05/28/13 13:00	05/29/13 01:30	1
Chromium	**260**		7.5		ug/L		05/28/13 13:00	05/31/13 21:35	5
Copper	**110**		1.0		ug/L		05/28/13 13:00	05/29/13 01:30	1
Lead	**130**		1.0		ug/L		05/28/13 13:00	05/29/13 01:30	1
Zinc	**460**		10		ug/L		05/28/13 13:00	05/29/13 01:30	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: DP-13S-03I

Lab Sample ID: 180-21513-10

Date Collected: 05/22/13 17:50

Matrix: Water

Date Received: 05/23/13 15:42

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:34	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:34	1
Copper	**1.4**		1.0		ug/L		05/28/13 13:00	05/28/13 22:34	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:34	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:34	1

Client Sample ID: Trip Blank

Lab Sample ID: 180-21513-11

Date Collected: 05/22/13 00:00

Matrix: Water

Date Received: 05/23/13 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 14:02	1
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 14:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 14:02	1
Acetone	10	U	10		ug/L			05/28/13 14:02	1
Benzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 14:02	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 14:02	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 14:02	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 14:02	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 14:02	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 14:02	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 14:02	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 14:02	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21513-1

Client Sample ID: Trip Blank
Date Collected: 05/22/13 00:00
Date Received: 05/23/13 15:42

Lab Sample ID: 180-21513-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 14:02	1
Styrene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Toluene	1.0	U	1.0		ug/L			05/28/13 14:02	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 14:02	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 14:02	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 14:02	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 14:02	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/28/13 14:02*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/28/13 14:02*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/28/13 14:02*	*1*

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

Lab Sample ID: MB 480-120574/5
Matrix: Water
Analysis Batch: 120574

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
2-Hexanone	5.0	U	5.0		ug/L			05/25/13 10:24	1
2-Butanone (MEK)	10	U	10		ug/L			05/25/13 10:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/25/13 10:24	1
Acetone	10	U	10		ug/L			05/25/13 10:24	1
Benzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Bromoform	1.0	U	1.0		ug/L			05/25/13 10:24	1
Bromomethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Carbon disulfide	1.0	U	1.0		ug/L			05/25/13 10:24	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/25/13 10:24	1
Chlorobenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Chloroethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Chloroform	1.0	U	1.0		ug/L			05/25/13 10:24	1
Chloromethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 10:24	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Cyclohexane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Ethylbenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Methyl acetate	1.0	U	1.0		ug/L			05/25/13 10:24	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/25/13 10:24	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Methylene Chloride	1.0	U	1.0		ug/L			05/25/13 10:24	1
Styrene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Toluene	1.0	U	1.0		ug/L			05/25/13 10:24	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/25/13 10:24	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Trichloroethene	1.0	U	1.0		ug/L			05/25/13 10:24	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/25/13 10:24	1
Vinyl chloride	1.0	U	1.0		ug/L			05/25/13 10:24	1
Xylenes, Total	2.0	U	2.0		ug/L			05/25/13 10:24	1

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

Lab Sample ID: MB 480-120574/5
Matrix: Water
Analysis Batch: 120574

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/25/13 10:24*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/25/13 10:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/25/13 10:24*	*1*

Lab Sample ID: LCS 480-120574/4
Matrix: Water
Analysis Batch: 120574

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.4		ug/L		94	71 - 129
1,1-Dichloroethene	25.0	19.4		ug/L		77	58 - 121
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	24.9		ug/L		99	75 - 127
Benzene	25.0	23.7		ug/L		95	71 - 124
Chlorobenzene	25.0	23.6		ug/L		94	72 - 120
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124
Ethylbenzene	25.0	25.0		ug/L		100	77 - 123
Methyl tert-butyl ether	25.0	23.4		ug/L		93	64 - 127
Tetrachloroethene	25.0	22.7		ug/L		91	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	73 - 127
Trichloroethene	25.0	23.8		ug/L		95	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*98*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Lab Sample ID: MB 480-120660/6
Matrix: Water
Analysis Batch: 120660

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
2-Hexanone	5.0	U	5.0		ug/L			05/28/13 10:35	1

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

Lab Sample ID: MB 480-120660/6
Matrix: Water
Analysis Batch: 120660

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			05/28/13 10:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/28/13 10:35	1
Acetone	10	U	10		ug/L			05/28/13 10:35	1
Benzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Bromoform	1.0	U	1.0		ug/L			05/28/13 10:35	1
Bromomethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Carbon disulfide	1.0	U	1.0		ug/L			05/28/13 10:35	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/28/13 10:35	1
Chlorobenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Chloroethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Chloroform	1.0	U	1.0		ug/L			05/28/13 10:35	1
Chloromethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 10:35	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Cyclohexane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Methyl acetate	1.0	U	1.0		ug/L			05/28/13 10:35	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/28/13 10:35	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Methylene Chloride	1.0	U	1.0		ug/L			05/28/13 10:35	1
Styrene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Toluene	1.0	U	1.0		ug/L			05/28/13 10:35	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/28/13 10:35	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Trichloroethene	1.0	U	1.0		ug/L			05/28/13 10:35	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/28/13 10:35	1
Vinyl chloride	1.0	U	1.0		ug/L			05/28/13 10:35	1
Xylenes, Total	2.0	U	2.0		ug/L			05/28/13 10:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/28/13 10:35*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/28/13 10:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/28/13 10:35*	*1*

Lab Sample ID: LCS 480-120660/5
Matrix: Water
Analysis Batch: 120660

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	21.8		ug/L		87	71 - 129
1,1-Dichloroethene	25.0	17.7		ug/L		71	58 - 121
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 127

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

Lab Sample ID: LCS 480-120660/5
Matrix: Water
Analysis Batch: 120660

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.4		ug/L		90	71 - 124
Chlorobenzene	25.0	22.3		ug/L		89	72 - 120
cis-1,2-Dichloroethene	25.0	21.3		ug/L		85	74 - 124
Ethylbenzene	25.0	23.2		ug/L		93	77 - 123
Methyl tert-butyl ether	25.0	23.1		ug/L		92	64 - 127
Tetrachloroethene	25.0	21.7		ug/L		87	74 - 122
Toluene	25.0	22.2		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	73 - 127
Trichloroethene	25.0	22.3		ug/L		89	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*
Toluene-d8 (Surr)	*96*		*71 - 126*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-120756/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Acenaphthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120756/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Acetophenone	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Atrazine	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzaldehyde	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Caprolactam	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Carbazole	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Chrysene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dibenzofuran	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Fluoranthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Fluorene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachloroethane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Isophorone	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Naphthalene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Nitrobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Phenanthrene	0.20	U	0.20		ug/L		05/28/13 14:16	06/05/13 15:01	1
Phenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*34 - 132*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
Phenol-d5	*33*		*11 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2-Fluorophenol	*45*		*18 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2,4,6-Tribromophenol	*87*		*39 - 146*	*05/28/13 14:16*	*06/05/13 15:01*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-120756/2-A
Matrix: Water
Analysis Batch: 121756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120756

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.98		ug/L		100	22 - 167
2-Chlorophenol	8.00	5.69		ug/L		71	44 - 106
4-Chloro-3-methylphenol	8.00	7.14		ug/L		89	60 - 131
4-Nitrophenol	16.0	10.8		ug/L		68	10 - 105
Acenaphthene	8.00	7.10		ug/L		89	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.82		ug/L		98	69 - 136
Fluorene	8.00	7.56		ug/L		94	54 - 137
Hexachloroethane	8.00	5.67		ug/L		71	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.11		ug/L		89	50 - 123
Pentachlorophenol	16.0	13.5		ug/L		85	10 - 131
Phenol	8.00	2.76		ug/L		34	17 - 61
Pyrene	8.00	7.90		ug/L		99	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*83*		*34 - 132*
2-Fluorobiphenyl	*88*		*37 - 120*
p-Terphenyl-d14	*95*		*58 - 147*
Phenol-d5	*33*		*11 - 120*
2-Fluorophenol	*43*		*18 - 120*
2,4,6-Tribromophenol	*103*		*39 - 146*

Lab Sample ID: 180-21513-4 MS
Matrix: Water
Analysis Batch: 121756

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 120756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	4.8	U	15.0	15.2		ug/L		102	70 - 130
2-Chlorophenol	4.8	U	15.0	11.3		ug/L		76	70 - 130
4-Chloro-3-methylphenol	4.8	U	15.0	14.8		ug/L		99	70 - 130
4-Nitrophenol	4.8	U	29.9	31.6		ug/L		106	70 - 130
Acenaphthene	0.48	U	15.0	13.2		ug/L		88	35 - 143
Bis(2-ethylhexyl) phthalate	4.8	U	15.0	13.0		ug/L		87	69 - 136
Fluorene	0.48	U	15.0	13.9		ug/L		93	54 - 137
Hexachloroethane	4.8	U	15.0	10.1	F	ug/L		67	70 - 130
N-Nitrosodi-n-propylamine	4.8	U	15.0	12.7		ug/L		85	70 - 130
Pentachlorophenol	0.95	U	29.9	29.4		ug/L		98	18 - 131
Phenol	0.95	U	15.0	7.28		ug/L		49	7 - 120
Pyrene	0.48	U	15.0	15.9		ug/L		106	85 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*78*		*34 - 132*
2-Fluorobiphenyl	*86*		*37 - 120*
p-Terphenyl-d14	*97*		*58 - 147*
Phenol-d5	*48*		*11 - 120*
2-Fluorophenol	*54*		*18 - 120*
2,4,6-Tribromophenol	*112*		*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 180-21513-4 MSD — **Client Sample ID: MW-03**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121756 — **Prep Batch: 120756**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	4.8	U	15.0	13.3		ug/L		89	70 - 130	13	20
2-Chlorophenol	4.8	U	15.0	9.3	U F	ug/L		61	70 - 130	22	20
4-Chloro-3-methylphenol	4.8	U	15.0	14.1		ug/L		94	70 - 130	5	20
4-Nitrophenol	4.8	U	29.9	28.4		ug/L		95	70 - 130	11	20
Acenaphthene	0.48	U	15.0	11.0		ug/L		73	35 - 143	18	24
Bis(2-ethylhexyl) phthalate	4.8	U	15.0	11.3		ug/L		75	69 - 136	14	15
Fluorene	0.48	U	15.0	12.1		ug/L		81	54 - 137	14	15
Hexachloroethane	4.8	U	15.0	9.3	U F	ug/L		54	70 - 130	22	20
N-Nitrosodi-n-propylamine	4.8	U	15.0	10.2	F	ug/L		68	70 - 130	22	20
Pentachlorophenol	0.95	U	29.9	28.1		ug/L		94	18 - 131	5	37
Phenol	0.95	U	15.0	5.89		ug/L		39	7 - 120	21	34
Pyrene	0.48	U	15.0	14.5		ug/L		97	85 - 139	9	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*65*		*34 - 132*
2-Fluorobiphenyl	*69*		*37 - 120*
p-Terphenyl-d14	*89*		*58 - 147*
Phenol-d5	*39*		*11 - 120*
2-Fluorophenol	*45*		*18 - 120*
2,4,6-Tribromophenol	*103*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-120716/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121005 — **Prep Batch: 120716**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:01	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:01	1

Lab Sample ID: LCS 480-120716/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121005 — **Prep Batch: 120716**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.7		ug/L		108	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.3		ug/L		107	80 - 120
Lead	20.0	20.1		ug/L		101	80 - 120
Zinc	50.0	57.0		ug/L		114	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21513-5 MS
Matrix: Water
Analysis Batch: 121005

Client Sample ID: MW-05
Prep Type: Total/NA
Prep Batch: 120716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	21.8		ug/L		107	75 - 125
Chromium	1.5	U	20.0	18.8		ug/L		93	75 - 125
Copper	1.0	U	20.0	19.0		ug/L		92	75 - 125
Lead	1.0	U	20.0	20.1		ug/L		101	75 - 125
Zinc	10	U	50.0	53.0		ug/L		102	75 - 125

Lab Sample ID: 180-21513-5 MSD
Matrix: Water
Analysis Batch: 121005

Client Sample ID: MW-05
Prep Type: Total/NA
Prep Batch: 120716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	22.5		ug/L		111	75 - 125	3	20
Chromium	1.5	U	20.0	18.9		ug/L		94	75 - 125	1	20
Copper	1.0	U	20.0	19.6		ug/L		95	75 - 125	3	20
Lead	1.0	U	20.0	20.7		ug/L		104	75 - 125	3	20
Zinc	10	U	50.0	54.7		ug/L		105	75 - 125	3	20

Lab Sample ID: MB 480-120622/1-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 120733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:05	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:05	1

Lab Sample ID: LCS 480-120622/2-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.9		ug/L		110	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.6		ug/L		108	80 - 120
Lead	20.0	20.8		ug/L		104	80 - 120
Zinc	50.0	55.8		ug/L		112	80 - 120

Lab Sample ID: 180-21513-5 MS
Matrix: Water
Analysis Batch: 121004

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	23.0		ug/L		113	75 - 125
Chromium	1.5	U	20.0	20.2		ug/L		100	75 - 125
Copper	1.2		20.0	21.0		ug/L		99	75 - 125
Lead	1.0	U	20.0	20.2		ug/L		101	75 - 125
Zinc	10	U	50.0	60.7		ug/L		109	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21513-5 MSD
Matrix: Water
Analysis Batch: 121004

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	23.2		ug/L		114	75 - 125	1	20
Chromium	1.5	U	20.0	20.2		ug/L		100	75 - 125	0	20
Copper	1.2		20.0	21.3		ug/L		100	75 - 125	1	20
Lead	1.0	U	20.0	20.1		ug/L		101	75 - 125	1	20
Zinc	10	U	50.0	60.0		ug/L		107	75 - 125	1	20

GC/MS VOA

Analysis Batch: 120574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Total/NA	Water	8260B	
180-21513-2	P-04	Total/NA	Water	8260B	
180-21513-3	P-05	Total/NA	Water	8260B	
LCS 480-120574/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-120574/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 120660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-4	MW-03	Total/NA	Water	8260B	
180-21513-5	MW-05	Total/NA	Water	8260B	
180-21513-6	OW-7	Total/NA	Water	8260B	
180-21513-7	Trip Blank	Total/NA	Water	8260B	
180-21513-8	DP13S-04S	Total/NA	Water	8260B	
180-21513-9	DP13S-03S	Total/NA	Water	8260B	
180-21513-10	DP-13S-03I	Total/NA	Water	8260B	
180-21513-11	Trip Blank	Total/NA	Water	8260B	
LCS 480-120660/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-120660/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 120756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Total/NA	Water	3510C	
180-21513-2	P-04	Total/NA	Water	3510C	
180-21513-3	P-05	Total/NA	Water	3510C	
180-21513-4	MW-03	Total/NA	Water	3510C	
180-21513-4 MS	MW-03	Total/NA	Water	3510C	
180-21513-4 MSD	MW-03	Total/NA	Water	3510C	
180-21513-5	MW-05	Total/NA	Water	3510C	
180-21513-6	OW-7	Total/NA	Water	3510C	
180-21513-8	DP13S-04S	Total/NA	Water	3510C	
180-21513-9	DP13S-03S	Total/NA	Water	3510C	
180-21513-10	DP-13S-03I	Total/NA	Water	3510C	
LCS 480-120756/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-120756/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 121756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Total/NA	Water	8270C LL	120756
180-21513-2	P-04	Total/NA	Water	8270C LL	120756
180-21513-3	P-05	Total/NA	Water	8270C LL	120756
180-21513-4 MS	MW-03	Total/NA	Water	8270C LL	120756
180-21513-4 MSD	MW-03	Total/NA	Water	8270C LL	120756
180-21513-6	OW-7	Total/NA	Water	8270C LL	120756
LCS 480-120756/2-A	Lab Control Sample	Total/NA	Water	8270C LL	120756

Analysis Batch: 122112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-4	MW-03	Total/NA	Water	8270C LL	120756

GC/MS Semi VOA (Continued)

Analysis Batch: 122112 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-5	MW-05	Total/NA	Water	8270C LL	120756
180-21513-8	DP13S-04S	Total/NA	Water	8270C LL	120756
180-21513-9	DP13S-03S	Total/NA	Water	8270C LL	120756
180-21513-10	DP-13S-03I	Total/NA	Water	8270C LL	120756

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-120756/1-A	Method Blank	Total/NA	Water	8270C LL	120756

Metals

Prep Batch: 120716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Total/NA	Water	3020A	
180-21513-2	P-04	Total/NA	Water	3020A	
180-21513-3	P-05	Total/NA	Water	3020A	
180-21513-4	MW-03	Total/NA	Water	3020A	
180-21513-5	MW-05	Total/NA	Water	3020A	
180-21513-5 MS	MW-05	Total/NA	Water	3020A	
180-21513-5 MSD	MW-05	Total/NA	Water	3020A	
180-21513-6	OW-7	Total/NA	Water	3020A	
180-21513-8	DP13S-04S	Total/NA	Water	3020A	
180-21513-9	DP13S-03S	Total/NA	Water	3020A	
180-21513-10	DP-13S-03I	Total/NA	Water	3020A	
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-120716/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 120733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Dissolved	Water	3020A	
180-21513-2	P-04	Dissolved	Water	3020A	
180-21513-3	P-05	Dissolved	Water	3020A	
180-21513-4	MW-03	Dissolved	Water	3020A	
180-21513-5	MW-05	Dissolved	Water	3020A	
180-21513-5 MS	MW-05	Dissolved	Water	3020A	
180-21513-5 MSD	MW-05	Dissolved	Water	3020A	
180-21513-6	OW-7	Dissolved	Water	3020A	
180-21513-8	DP13S-04S	Dissolved	Water	3020A	
180-21513-9	DP13S-03S	Dissolved	Water	3020A	
180-21513-10	DP-13S-03I	Dissolved	Water	3020A	
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Dissolved	Water	6020	120733
180-21513-2	P-04	Dissolved	Water	6020	120733
180-21513-3	P-05	Dissolved	Water	6020	120733
180-21513-4	MW-03	Dissolved	Water	6020	120733
180-21513-5	MW-05	Dissolved	Water	6020	120733

Metals (Continued)

Analysis Batch: 121004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-5 MS	MW-05	Dissolved	Water	6020	120733
180-21513-5 MSD	MW-05	Dissolved	Water	6020	120733
180-21513-6	OW-7	Dissolved	Water	6020	120733
180-21513-8	DP13S-04S	Dissolved	Water	6020	120733
180-21513-9	DP13S-03S	Dissolved	Water	6020	120733
180-21513-10	DP-13S-03I	Dissolved	Water	6020	120733
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	6020	120733
MB 480-120622/1-B	Method Blank	Dissolved	Water	6020	120733

Analysis Batch: 121005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-1	OW-8	Total/NA	Water	6020	120716
180-21513-2	P-04	Total/NA	Water	6020	120716
180-21513-3	P-05	Total/NA	Water	6020	120716
180-21513-4	MW-03	Total/NA	Water	6020	120716
180-21513-5	MW-05	Total/NA	Water	6020	120716
180-21513-5 MS	MW-05	Total/NA	Water	6020	120716
180-21513-5 MSD	MW-05	Total/NA	Water	6020	120716
180-21513-6	OW-7	Total/NA	Water	6020	120716
180-21513-8	DP13S-04S	Total/NA	Water	6020	120716
180-21513-9	DP13S-03S	Total/NA	Water	6020	120716
180-21513-10	DP-13S-03I	Total/NA	Water	6020	120716
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	6020	120716
MB 480-120716/1-A	Method Blank	Total/NA	Water	6020	120716

Analysis Batch: 121661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21513-10	DP-13S-03I	Total/NA	Water	6020	120716

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	5/22/13	220340
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd. Ave	412-428-9411	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valasky	V. Bartab	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Canada Creek Ti Zone delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C LL (SVOC)	Total Metals 6020	Filter diss. metals 6020	Special Instructions/ Conditions of Receipt
OW-8	5/22/13	1035		X			2		2	3			3	2	1	1	dissolved metals are field filtered
P-04	5/22/13	1130		X			2		2	3			3	2	1	1	
P-05	5/22/13	1205		X			2		2	3			3	2	1	1	
MW-03	5/22/13	1408		X			2		2	3			3	2	1	1	
MW-05	5/22/13	1628		X			2		2	3			3	2	1	1	
OW-7	5/22/13	1757		X			2		2	3			3	2	1	1	
Trip Blank	5/06/13	—		X						2			2				

RS 5/22/13 RS 5/22/13

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		5/22/13	2000	TA DUFF	5.23.13	0900
2.		Date	Time		Date	Time
3.		Date	Time		Date	Time

Comments

3.1, 3.7, 2.3, 2.8 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: KEY ENVIRONMENTAL	Client Project Manager: M. VALESKY / A. GATCHIE	Site Contact: K. SMITH	Lab Contact: V. BORTOT	COC No:
Address: 200 THIRD AVE	Telephone: 412-428-9411 412-780-9466	Telephone: 412-335-1691	Telephone: 412-963-7058	1 of 1 COCs
City/State/Zip: CARNEGIE PA 15106	Email: agatchie.2006@f-ts.com mvalesky@keyenvir.com	Analysis Turnaround Time (in BUS days) TAT if different from below 5 DAYS ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		For lab use only: Walk-in client ☐ Lab pickup ☐ Lab sampling ☐ Job/SDG No:
Phone: 412-429-2694				
Project Name: SOUTH CAVALCADE T1 ZONE DELINEATION	Method of Shipment/Carrier: FED EX			
Project Number: 13665	Shipping/Tracking No:			
P O #				

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	VOCs (8260B)	SVOCs (8270C LL)	TOTAL METALS (6020)	DISSOLVED METALS (6020)	Sample Specific Notes / Special Instructions:
DP13S-04S	5/21/13	1350		x					2	3			2				3	2	1	1	
DP13S-03S	5/21/13	1538		x					2	3			2				3	2	1	1	
DP13S-03I	5/22/13	1750		x					2	3			2				3	2	1	1	
TRIP BLANK	5/22/13	—		x						2							2				

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

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

Special Instructions/QC Requirements & Comments:
* DISSOLVED METALS WERE FIELD FILTERED
* TOTAL + DISSOLVED METALS INCLUDE (As, Cr, Cu, Pb, Zn) * TARGET COMPOUND LIST (TCL) VOCs + SVOCs

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	KEY	5/22/13 1900			
			Received in Laboratory by: [signature]	TA BUFF	5-23-13 0900

3.1, 3.7, 2.3, 2.8 #1

TAL-0018 (1008)

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Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21513-1

Login Number: 21513

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Bortot, Veronica

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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21513-1

Login Number: 21513
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/24/13 01:55 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1, 3.7, 2.3, 2.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21513-1

Login Number: 21513
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/24/13 01:57 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1, 3.2, 2.3, 2.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21558-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/5/2013 4:21:25 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

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

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Job ID: 180-21558-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21558-1

Comments
No additional comments.

Receipt
The samples were received on 5/24/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.1º C, 2.3º C and 2.7º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: MW-01 (180-21558-3), MW-10 (180-21558-2), MW-12R (180-21558-5), PZN-30 (180-21558-4). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following samples contained one acid and/or one base surrogate outside acceptance limits: DP13S-04I (180-21558-7), OW-09 (180-21558-1). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122112 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following sample was diluted due to abundance of target analytes: MW-12R (180-21558-5). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 121756 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The ICSAB for batch 480-121004 was outside the acceptance limits for element: dissolved zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: The ICSAB for batch 480-121005 was outside the acceptance limits for element: total zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13S-04I (180-21558-7).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21558-1	OW-09	Water	05/23/13 10:00	05/24/13 09:15
180-21558-2	MW-10	Water	05/23/13 12:10	05/24/13 09:15
180-21558-3	MW-01	Water	05/23/13 13:28	05/24/13 09:15
180-21558-4	PZN-30	Water	05/23/13 15:01	05/24/13 09:15
180-21558-5	MW-12R	Water	05/23/13 16:40	05/24/13 09:15
180-21558-6	TRIP BLANK	Water	05/23/13 00:00	05/24/13 09:15
180-21558-7	DP13S-04I	Water	05/23/13 14:40	05/24/13 09:15
180-21558-8	TRIP BLANK	Water	05/23/13 00:00	05/24/13 09:15

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: OW-09

Lab Sample ID: 180-21558-1

Date Collected: 05/23/13 10:00

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 11:13	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1050 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 02:23	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:52	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:41	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-10

Lab Sample ID: 180-21558-2

Date Collected: 05/23/13 12:10

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 11:35	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1052.9 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		20			122112	06/05/13 02:50	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 22:57	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:46	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-01

Lab Sample ID: 180-21558-3

Date Collected: 05/23/13 13:28

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 11:56	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1050.8 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		20			122112	06/05/13 03:18	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:03	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF

Client Sample ID: MW-01

Lab Sample ID: 180-21558-3

Date Collected: 05/23/13 13:28

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		1			121005	05/29/13 01:52	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZN-30

Lab Sample ID: 180-21558-4

Date Collected: 05/23/13 15:01

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 12:18	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1049.5 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		50			122112	06/05/13 03:45	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:08	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 01:58	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-12R

Lab Sample ID: 180-21558-5

Date Collected: 05/23/13 16:40

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 12:40	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1046.3 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		50			122112	06/05/13 04:12	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1046.3 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL	DL	250			122234	06/05/13 14:34	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:14	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 02:15	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-21558-6

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 13:02	TRF	TAL BUF
	Instrument ID: HP5973S									

Client Sample ID: DP13S-04I

Lab Sample ID: 180-21558-7

Date Collected: 05/23/13 14:40

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 13:24	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			990.6 mL	1 mL	120756	05/28/13 14:16	TG	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/05/13 04:39	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:19	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 02:24	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		2			121661	05/31/13 21:53	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-21558-8

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120861	05/29/13 14:31	TRF	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

TG = Taylor Gentner

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: OW-09
Date Collected: 05/23/13 10:00
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 11:13	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 11:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 11:13	1
Acetone	10	U	10		ug/L			05/29/13 11:13	1
Benzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 11:13	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 11:13	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 11:13	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 11:13	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:13	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 11:13	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 11:13	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 11:13	1
Styrene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Toluene	1.0	U	1.0		ug/L			05/29/13 11:13	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:13	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 11:13	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 11:13	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 11:13	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 11:13	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: OW-09
Date Collected: 05/23/13 10:00
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*05/29/13 11:13*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/29/13 11:13*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/29/13 11:13*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Methylphenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Acenaphthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Acenaphthylene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 02:23	1
Acetophenone	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Atrazine	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzaldehyde	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/28/13 14:16	06/05/13 02:23	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/28/13 14:16	06/05/13 02:23	1
Caprolactam	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Carbazole	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Chrysene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: OW-09
Date Collected: 05/23/13 10:00
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/28/13 14:16	06/05/13 02:23	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Fluoranthene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Fluorene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
Hexachloroethane	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Isophorone	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
Naphthalene	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
Nitrobenzene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/28/13 14:16	06/05/13 02:23	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
Phenanthrene	0.19	U	0.19		ug/L		05/28/13 14:16	06/05/13 02:23	1
Phenol	0.95	U	0.95		ug/L		05/28/13 14:16	06/05/13 02:23	1
Pyrene	0.48	U	0.48		ug/L		05/28/13 14:16	06/05/13 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*81*		*34 - 132*	*05/28/13 14:16*	*06/05/13 02:23*	*1*
2-Fluorobiphenyl	*86*		*37 - 120*	*05/28/13 14:16*	*06/05/13 02:23*	*1*
p-Terphenyl-d14	*155*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 02:23*	*1*
Phenol-d5	*27*		*11 - 120*	*05/28/13 14:16*	*06/05/13 02:23*	*1*
2-Fluorophenol	*43*		*18 - 120*	*05/28/13 14:16*	*06/05/13 02:23*	*1*
2,4,6-Tribromophenol	*108*		*39 - 146*	*05/28/13 14:16*	*06/05/13 02:23*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:41	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 01:41	1
Copper	**1.4**		1.0		ug/L		05/28/13 13:00	05/29/13 01:41	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:41	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 01:41	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:52	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:52	1
Copper	**2.4**		1.0		ug/L		05/28/13 13:00	05/28/13 22:52	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:52	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-10
Date Collected: 05/23/13 12:10
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 11:35	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 11:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 11:35	1
Acetone	10	U	10		ug/L			05/29/13 11:35	1
Benzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 11:35	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 11:35	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 11:35	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 11:35	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:35	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 11:35	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 11:35	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 11:35	1
Styrene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Toluene	1.0	U	1.0		ug/L			05/29/13 11:35	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:35	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 11:35	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 11:35	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 11:35	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 11:35	1

Client Sample ID: MW-10
Date Collected: 05/23/13 12:10
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*05/29/13 11:35*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 11:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/29/13 11:35*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
bis (2-chloroisopropyl) ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4,5-Trichlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4,6-Trichlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4-Dichlorophenol	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4-Dimethylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4-Dinitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,4-Dinitrotoluene	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2,6-Dinitrotoluene	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Chloronaphthalene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Chlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Methylnaphthalene	**22**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Methylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
2-Nitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
3,3'-Dichlorobenzidine	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
3-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4,6-Dinitro-2-methylphenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Bromophenyl phenyl ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Chloro-3-methylphenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Chloroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Chlorophenyl phenyl ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Methylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
4-Nitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Acenaphthene	**190**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Acenaphthylene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 02:50	20
Acetophenone	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Anthracene	**14**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Atrazine	38	U	38		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzaldehyde	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzo(a)anthracene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzo(a)pyrene	3.4	U	3.4		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzo(b)fluoranthene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzo(g,h,i)perylene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Benzo(k)fluoranthene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 02:50	20
Bis(2-chloroethoxy)methane	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Bis(2-chloroethyl)ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Bis(2-ethylhexyl) phthalate	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Butyl benzyl phthalate	57	U	57		ug/L		05/28/13 14:16	06/05/13 02:50	20
Caprolactam	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Carbazole	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Chrysene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Dibenz(a,h)anthracene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-10
Date Collected: 05/23/13 12:10
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	**97**		95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Diethyl phthalate	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Dimethyl phthalate	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Di-n-butyl phthalate	38	U	38		ug/L		05/28/13 14:16	06/05/13 02:50	20
Di-n-octyl phthalate	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Fluoranthene	**25**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Fluorene	**48**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Hexachlorobenzene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Hexachlorobutadiene	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
Hexachlorocyclopentadiene	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
Hexachloroethane	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Indeno(1,2,3-cd)pyrene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Isophorone	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
Naphthalene	**170**		19		ug/L		05/28/13 14:16	06/05/13 02:50	20
Nitrobenzene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20
N-Nitrosodi-n-propylamine	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
N-Nitrosodiphenylamine	95	U	95		ug/L		05/28/13 14:16	06/05/13 02:50	20
Pentachlorophenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
Phenanthrene	**39**		3.8		ug/L		05/28/13 14:16	06/05/13 02:50	20
Phenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 02:50	20
Pyrene	**21**		9.5		ug/L		05/28/13 14:16	06/05/13 02:50	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*34 - 132*	*05/28/13 14:16*	*06/05/13 02:50*	*20*
2-Fluorobiphenyl	*90*		*37 - 120*	*05/28/13 14:16*	*06/05/13 02:50*	*20*
p-Terphenyl-d14	*174*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 02:50*	*20*
Phenol-d5	*23*		*11 - 120*	*05/28/13 14:16*	*06/05/13 02:50*	*20*
2-Fluorophenol	*41*		*18 - 120*	*05/28/13 14:16*	*06/05/13 02:50*	*20*
2,4,6-Tribromophenol	*118*		*39 - 146*	*05/28/13 14:16*	*06/05/13 02:50*	*20*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**49**		1.0		ug/L		05/28/13 13:00	05/29/13 01:46	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 01:46	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:46	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:46	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 01:46	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**47**		1.0		ug/L		05/28/13 13:00	05/28/13 22:57	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 22:57	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:57	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 22:57	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 22:57	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-01
Date Collected: 05/23/13 13:28
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 11:56	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 11:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 11:56	1
Acetone	10	U	10		ug/L			05/29/13 11:56	1
Benzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 11:56	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 11:56	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 11:56	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 11:56	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:56	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 11:56	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 11:56	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 11:56	1
Styrene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Toluene	1.0	U	1.0		ug/L			05/29/13 11:56	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:56	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 11:56	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 11:56	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 11:56	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 11:56	1

Client Sample ID: MW-01
Date Collected: 05/23/13 13:28
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*05/29/13 11:56*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/29/13 11:56*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/29/13 11:56*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
bis (2-chloroisopropyl) ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4,5-Trichlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4,6-Trichlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4-Dichlorophenol	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4-Dimethylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4-Dinitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,4-Dinitrotoluene	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2,6-Dinitrotoluene	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Chloronaphthalene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Chlorophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Methylnaphthalene	**12**		9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Methylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
2-Nitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
3,3'-Dichlorobenzidine	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
3-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4,6-Dinitro-2-methylphenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Bromophenyl phenyl ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Chloro-3-methylphenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Chloroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Chlorophenyl phenyl ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Methylphenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Nitroaniline	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
4-Nitrophenol	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Acenaphthene	**57**		9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Acenaphthylene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 03:18	20
Acetophenone	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Anthracene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Atrazine	38	U	38		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzaldehyde	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzo(a)anthracene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzo(a)pyrene	3.4	U	3.4		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzo(b)fluoranthene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzo(g,h,i)perylene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Benzo(k)fluoranthene	5.7	U	5.7		ug/L		05/28/13 14:16	06/05/13 03:18	20
Bis(2-chloroethoxy)methane	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Bis(2-chloroethyl)ether	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Bis(2-ethylhexyl) phthalate	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Butyl benzyl phthalate	57	U	57		ug/L		05/28/13 14:16	06/05/13 03:18	20
Caprolactam	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Carbazole	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Chrysene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Dibenz(a,h)anthracene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-01
Date Collected: 05/23/13 13:28
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Diethyl phthalate	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Dimethyl phthalate	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Di-n-butyl phthalate	38	U	38		ug/L		05/28/13 14:16	06/05/13 03:18	20
Di-n-octyl phthalate	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Fluoranthene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Fluorene	**18**		9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Hexachlorobenzene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Hexachlorobutadiene	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
Hexachlorocyclopentadiene	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
Hexachloroethane	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Indeno(1,2,3-cd)pyrene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Isophorone	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
Naphthalene	**330**		19		ug/L		05/28/13 14:16	06/05/13 03:18	20
Nitrobenzene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20
N-Nitrosodi-n-propylamine	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
N-Nitrosodiphenylamine	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:18	20
Pentachlorophenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
Phenanthrene	3.8	U	3.8		ug/L		05/28/13 14:16	06/05/13 03:18	20
Phenol	19	U	19		ug/L		05/28/13 14:16	06/05/13 03:18	20
Pyrene	9.5	U	9.5		ug/L		05/28/13 14:16	06/05/13 03:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*34 - 132*	*05/28/13 14:16*	*06/05/13 03:18*	*20*
2-Fluorobiphenyl	*82*		*37 - 120*	*05/28/13 14:16*	*06/05/13 03:18*	*20*
p-Terphenyl-d14	*160*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 03:18*	*20*
Phenol-d5	*22*		*11 - 120*	*05/28/13 14:16*	*06/05/13 03:18*	*20*
2-Fluorophenol	*45*		*18 - 120*	*05/28/13 14:16*	*06/05/13 03:18*	*20*
2,4,6-Tribromophenol	*118*		*39 - 146*	*05/28/13 14:16*	*06/05/13 03:18*	*20*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**45**		1.0		ug/L		05/28/13 13:00	05/29/13 01:52	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 01:52	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:52	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:52	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 01:52	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**38**		1.0		ug/L		05/28/13 13:00	05/28/13 23:03	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:03	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:03	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:03	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:03	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: PZN-30
Date Collected: 05/23/13 15:01
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 12:18	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 12:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 12:18	1
Acetone	10	U	10		ug/L			05/29/13 12:18	1
Benzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 12:18	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 12:18	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 12:18	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 12:18	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:18	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Ethylbenzene	**1.2**		1.0		ug/L			05/29/13 12:18	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 12:18	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 12:18	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 12:18	1
Styrene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Toluene	1.0	U	1.0		ug/L			05/29/13 12:18	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:18	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 12:18	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 12:18	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 12:18	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 12:18	1

Client Sample ID: PZN-30
Date Collected: 05/23/13 15:01
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*05/29/13 12:18*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/29/13 12:18*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*05/29/13 12:18*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
bis (2-chloroisopropyl) ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4,5-Trichlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4,6-Trichlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4-Dichlorophenol	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4-Dimethylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4-Dinitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,4-Dinitrotoluene	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2,6-Dinitrotoluene	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Chloronaphthalene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Chlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Methylnaphthalene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Methylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
2-Nitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
3,3'-Dichlorobenzidine	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
3-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4,6-Dinitro-2-methylphenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Bromophenyl phenyl ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Chloro-3-methylphenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Chloroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Chlorophenyl phenyl ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Methylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
4-Nitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Acenaphthene	**65**		24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Acenaphthylene	14	U	14		ug/L		05/28/13 14:16	06/05/13 03:45	50
Acetophenone	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Anthracene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Atrazine	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzaldehyde	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzo(a)anthracene	14	U	14		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzo(a)pyrene	8.6	U	8.6		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzo(b)fluoranthene	14	U	14		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzo(g,h,i)perylene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Benzo(k)fluoranthene	14	U	14		ug/L		05/28/13 14:16	06/05/13 03:45	50
Bis(2-chloroethoxy)methane	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Bis(2-chloroethyl)ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Bis(2-ethylhexyl) phthalate	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Butyl benzyl phthalate	140	U	140		ug/L		05/28/13 14:16	06/05/13 03:45	50
Caprolactam	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Carbazole	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Chrysene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Dibenz(a,h)anthracene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: PZN-30
Date Collected: 05/23/13 15:01
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Diethyl phthalate	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Dimethyl phthalate	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Di-n-butyl phthalate	95	U	95		ug/L		05/28/13 14:16	06/05/13 03:45	50
Di-n-octyl phthalate	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Fluoranthene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Fluorene	**24**		24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Hexachlorobenzene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Hexachlorobutadiene	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
Hexachlorocyclopentadiene	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
Hexachloroethane	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Indeno(1,2,3-cd)pyrene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Isophorone	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
Naphthalene	**840**		48		ug/L		05/28/13 14:16	06/05/13 03:45	50
Nitrobenzene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50
N-Nitrosodi-n-propylamine	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
N-Nitrosodiphenylamine	240	U	240		ug/L		05/28/13 14:16	06/05/13 03:45	50
Pentachlorophenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
Phenanthrene	**10**		9.5		ug/L		05/28/13 14:16	06/05/13 03:45	50
Phenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 03:45	50
Pyrene	24	U	24		ug/L		05/28/13 14:16	06/05/13 03:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*103*		*34 - 132*	*05/28/13 14:16*	*06/05/13 03:45*	*50*
2-Fluorobiphenyl	*85*		*37 - 120*	*05/28/13 14:16*	*06/05/13 03:45*	*50*
p-Terphenyl-d14	*203*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 03:45*	*50*
Phenol-d5	*27*		*11 - 120*	*05/28/13 14:16*	*06/05/13 03:45*	*50*
2-Fluorophenol	*35*		*18 - 120*	*05/28/13 14:16*	*06/05/13 03:45*	*50*
2,4,6-Tribromophenol	*107*		*39 - 146*	*05/28/13 14:16*	*06/05/13 03:45*	*50*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:58	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 01:58	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:58	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 01:58	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 01:58	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:08	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:08	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:08	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:08	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:08	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-12R
Date Collected: 05/23/13 16:40
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 12:40	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 12:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 12:40	1
Acetone	**11**		10		ug/L			05/29/13 12:40	1
Benzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 12:40	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 12:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 12:40	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 12:40	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Ethylbenzene	**5.3**		1.0		ug/L			05/29/13 12:40	1
Isopropylbenzene	**1.6**		1.0		ug/L			05/29/13 12:40	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 12:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 12:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 12:40	1
Styrene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Toluene	1.0	U	1.0		ug/L			05/29/13 12:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 12:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 12:40	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 12:40	1
Xylenes, Total	**9.7**		2.0		ug/L			05/29/13 12:40	1

Client Sample ID: MW-12R
Date Collected: 05/23/13 16:40
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*05/29/13 12:40*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/29/13 12:40*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*05/29/13 12:40*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
bis (2-chloroisopropyl) ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4,5-Trichlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4,6-Trichlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4-Dichlorophenol	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4-Dimethylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4-Dinitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,4-Dinitrotoluene	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2,6-Dinitrotoluene	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Chloronaphthalene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Chlorophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Methylnaphthalene	**140**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Methylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
2-Nitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
3,3'-Dichlorobenzidine	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
3-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4,6-Dinitro-2-methylphenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Bromophenyl phenyl ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Chloro-3-methylphenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Chloroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Chlorophenyl phenyl ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Methylphenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Nitroaniline	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
4-Nitrophenol	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Acenaphthene	**430**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Acenaphthylene	14	U	14		ug/L		05/28/13 14:16	06/05/13 04:12	50
Acetophenone	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Anthracene	**35**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Atrazine	96	U	96		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzaldehyde	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzo(a)anthracene	14	U	14		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzo(a)pyrene	8.6	U	8.6		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzo(b)fluoranthene	14	U	14		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzo(g,h,i)perylene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Benzo(k)fluoranthene	14	U	14		ug/L		05/28/13 14:16	06/05/13 04:12	50
Bis(2-chloroethoxy)methane	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Bis(2-chloroethyl)ether	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Bis(2-ethylhexyl) phthalate	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Butyl benzyl phthalate	140	U	140		ug/L		05/28/13 14:16	06/05/13 04:12	50
Caprolactam	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Carbazole	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Chrysene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Dibenz(a,h)anthracene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-12R
Date Collected: 05/23/13 16:40
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Diethyl phthalate	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Dimethyl phthalate	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Di-n-butyl phthalate	96	U	96		ug/L		05/28/13 14:16	06/05/13 04:12	50
Di-n-octyl phthalate	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Fluoranthene	**46**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Fluorene	**83**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Hexachlorobenzene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Hexachlorobutadiene	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
Hexachlorocyclopentadiene	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
Hexachloroethane	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Indeno(1,2,3-cd)pyrene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Isophorone	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
Nitrobenzene	24	U	24		ug/L		05/28/13 14:16	06/05/13 04:12	50
N-Nitrosodi-n-propylamine	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
N-Nitrosodiphenylamine	240	U	240		ug/L		05/28/13 14:16	06/05/13 04:12	50
Pentachlorophenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
Phenanthrene	**73**		9.6		ug/L		05/28/13 14:16	06/05/13 04:12	50
Phenol	48	U	48		ug/L		05/28/13 14:16	06/05/13 04:12	50
Pyrene	**41**		24		ug/L		05/28/13 14:16	06/05/13 04:12	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*34 - 132*	*05/28/13 14:16*	*06/05/13 04:12*	*50*
2-Fluorobiphenyl	*97*		*37 - 120*	*05/28/13 14:16*	*06/05/13 04:12*	*50*
p-Terphenyl-d14	*134*		*58 - 147*	*05/28/13 14:16*	*06/05/13 04:12*	*50*
Phenol-d5	*0*	*X*	*11 - 120*	*05/28/13 14:16*	*06/05/13 04:12*	*50*
2-Fluorophenol	*45*		*18 - 120*	*05/28/13 14:16*	*06/05/13 04:12*	*50*
2,4,6-Tribromophenol	*120*		*39 - 146*	*05/28/13 14:16*	*06/05/13 04:12*	*50*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**1600**		240		ug/L		05/28/13 14:16	06/05/13 14:34	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/28/13 14:16*	*06/05/13 14:34*	*250*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/28/13 14:16*	*06/05/13 14:34*	*250*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 14:34*	*250*
Phenol-d5	*0*	*X*	*11 - 120*	*05/28/13 14:16*	*06/05/13 14:34*	*250*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/28/13 14:16*	*06/05/13 14:34*	*250*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/28/13 14:16*	*06/05/13 14:34*	*250*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**29**		1.0		ug/L		05/28/13 13:00	05/29/13 02:15	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 02:15	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:15	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:15	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 02:15	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: MW-12R

Lab Sample ID: 180-21558-5

Date Collected: 05/23/13 16:40

Matrix: Water

Date Received: 05/24/13 09:15

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	21		1.0		ug/L		05/28/13 13:00	05/28/13 23:14	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:14	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:14	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:14	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:14	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-21558-6

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 13:02	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 13:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 13:02	1
Acetone	10	U	10		ug/L			05/29/13 13:02	1
Benzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 13:02	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 13:02	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 13:02	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 13:02	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:02	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 13:02	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 13:02	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 13:02	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-21558-6

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 13:02	1
Styrene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Toluene	1.0	U	1.0		ug/L			05/29/13 13:02	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:02	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 13:02	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 13:02	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 13:02	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*05/29/13 13:02*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*05/29/13 13:02*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/29/13 13:02*	*1*

Client Sample ID: DP13S-04I

Lab Sample ID: 180-21558-7

Date Collected: 05/23/13 14:40

Matrix: Water

Date Received: 05/24/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 13:24	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 13:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 13:24	1
Acetone	10	U	10		ug/L			05/29/13 13:24	1
Benzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 13:24	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 13:24	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 13:24	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 13:24	1

Client Sample ID: DP13S-04I
Date Collected: 05/23/13 14:40
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:24	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 13:24	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 13:24	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 13:24	1
Styrene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Toluene	1.0	U	1.0		ug/L			05/29/13 13:24	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 13:24	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 13:24	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 13:24	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 13:24	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*05/29/13 13:24*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*05/29/13 13:24*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/29/13 13:24*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: DP13S-04I
Date Collected: 05/23/13 14:40
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-7
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Acenaphthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Acenaphthylene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 04:39	1
Acetophenone	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Atrazine	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzaldehyde	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 04:39	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Caprolactam	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Carbazole	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Chrysene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Dibenzofuran	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Fluoranthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Fluorene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Hexachloroethane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Isophorone	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
Naphthalene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Nitrobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Phenanthrene	0.20	U	0.20		ug/L		05/28/13 14:16	06/05/13 04:39	1
Phenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 04:39	1
Pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 04:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*34 - 132*	*05/28/13 14:16*	*06/05/13 04:39*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*05/28/13 14:16*	*06/05/13 04:39*	*1*
p-Terphenyl-d14	*150*	*X*	*58 - 147*	*05/28/13 14:16*	*06/05/13 04:39*	*1*
Phenol-d5	*30*		*11 - 120*	*05/28/13 14:16*	*06/05/13 04:39*	*1*
2-Fluorophenol	*41*		*18 - 120*	*05/28/13 14:16*	*06/05/13 04:39*	*1*

Client Sample ID: DP13S-04I

Lab Sample ID: 180-21558-7

Date Collected: 05/23/13 14:40

Matrix: Water

Date Received: 05/24/13 09:15

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*39 - 146*	*05/28/13 14:16*	*06/05/13 04:39*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.2**		1.0		ug/L		05/28/13 13:00	05/29/13 02:24	1
Chromium	**48**		3.0		ug/L		05/28/13 13:00	05/31/13 21:53	2
Copper	**21**		1.0		ug/L		05/28/13 13:00	05/29/13 02:24	1
Lead	**26**		1.0		ug/L		05/28/13 13:00	05/29/13 02:24	1
Zinc	**68**		10		ug/L		05/28/13 13:00	05/29/13 02:24	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:19	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:19	1
Copper	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 23:19	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:19	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:19	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-21558-8

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 14:31	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 14:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 14:31	1
Acetone	10	U	10		ug/L			05/29/13 14:31	1
Benzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 14:31	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 14:31	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 14:31	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 14:31	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21558-1

Client Sample ID: TRIP BLANK
Date Collected: 05/23/13 00:00
Date Received: 05/24/13 09:15

Lab Sample ID: 180-21558-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 14:31	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 14:31	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 14:31	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 14:31	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 14:31	1
Styrene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Toluene	1.0	U	1.0		ug/L			05/29/13 14:31	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 14:31	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 14:31	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 14:31	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 14:31	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*05/29/13 14:31*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/29/13 14:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*05/29/13 14:31*	*1*

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

Lab Sample ID: MB 480-120861/7
Matrix: Water
Analysis Batch: 120861

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 10:39	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 10:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 10:39	1
Acetone	10	U	10		ug/L			05/29/13 10:39	1
Benzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 10:39	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 10:39	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 10:39	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 10:39	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 10:39	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 10:39	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 10:39	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 10:39	1
Styrene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Toluene	1.0	U	1.0		ug/L			05/29/13 10:39	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 10:39	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 10:39	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 10:39	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 10:39	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 10:39	1

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

Lab Sample ID: MB 480-120861/7
Matrix: Water
Analysis Batch: 120861

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*05/29/13 10:39*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/29/13 10:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/29/13 10:39*	*1*

Lab Sample ID: LCS 480-120861/6
Matrix: Water
Analysis Batch: 120861

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.5		ug/L		94	71 - 129
1,1-Dichloroethene	25.0	18.8		ug/L		75	58 - 121
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 127
Benzene	25.0	22.7		ug/L		91	71 - 124
Chlorobenzene	25.0	24.6		ug/L		99	72 - 120
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
Ethylbenzene	25.0	23.8		ug/L		95	77 - 123
Methyl tert-butyl ether	25.0	21.4		ug/L		86	64 - 127
Tetrachloroethene	25.0	25.4		ug/L		101	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	73 - 127
Trichloroethene	25.0	24.4		ug/L		98	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-120756/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120756/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Methylphenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Acenaphthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Acenaphthylene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Acetophenone	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Atrazine	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzaldehyde	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Caprolactam	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Carbazole	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Chrysene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dibenzofuran	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Fluoranthene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Fluorene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Hexachloroethane	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Isophorone	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
Naphthalene	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Nitrobenzene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120756/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122234 | **Prep Batch: 120756**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Phenanthrene	0.20	U	0.20		ug/L		05/28/13 14:16	06/05/13 15:01	1
Phenol	1.0	U	1.0		ug/L		05/28/13 14:16	06/05/13 15:01	1
Pyrene	0.50	U	0.50		ug/L		05/28/13 14:16	06/05/13 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*34 - 132*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
Phenol-d5	*33*		*11 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2-Fluorophenol	*45*		*18 - 120*	*05/28/13 14:16*	*06/05/13 15:01*	*1*
2,4,6-Tribromophenol	*87*		*39 - 146*	*05/28/13 14:16*	*06/05/13 15:01*	*1*

Lab Sample ID: LCS 480-120756/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 121756 | **Prep Batch: 120756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.98		ug/L		100	22 - 167
2-Chlorophenol	8.00	5.69		ug/L		71	44 - 106
4-Chloro-3-methylphenol	8.00	7.14		ug/L		89	60 - 131
4-Nitrophenol	16.0	10.8		ug/L		68	10 - 105
Acenaphthene	8.00	7.10		ug/L		89	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.82		ug/L		98	69 - 136
Fluorene	8.00	7.56		ug/L		94	54 - 137
Hexachloroethane	8.00	5.67		ug/L		71	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.11		ug/L		89	50 - 123
Pentachlorophenol	16.0	13.5		ug/L		85	10 - 131
Phenol	8.00	2.76		ug/L		34	17 - 61
Pyrene	8.00	7.90		ug/L		99	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*83*		*34 - 132*
2-Fluorobiphenyl	*88*		*37 - 120*
p-Terphenyl-d14	*95*		*58 - 147*
Phenol-d5	*33*		*11 - 120*
2-Fluorophenol	*43*		*18 - 120*
2,4,6-Tribromophenol	*103*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-120716/1-A
Matrix: Water
Analysis Batch: 121005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:01	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:01	1

Lab Sample ID: LCS 480-120716/2-A
Matrix: Water
Analysis Batch: 121005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.7		ug/L		108	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.3		ug/L		107	80 - 120
Lead	20.0	20.1		ug/L		101	80 - 120
Zinc	50.0	57.0		ug/L		114	80 - 120

Lab Sample ID: MB 480-120622/1-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 120733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:05	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:05	1

Lab Sample ID: LCS 480-120622/2-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.9		ug/L		110	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.6		ug/L		108	80 - 120
Lead	20.0	20.8		ug/L		104	80 - 120
Zinc	50.0	55.8		ug/L		112	80 - 120

GC/MS VOA

Analysis Batch: 120861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Total/NA	Water	8260B	
180-21558-2	MW-10	Total/NA	Water	8260B	
180-21558-3	MW-01	Total/NA	Water	8260B	
180-21558-4	PZN-30	Total/NA	Water	8260B	
180-21558-5	MW-12R	Total/NA	Water	8260B	
180-21558-6	TRIP BLANK	Total/NA	Water	8260B	
180-21558-7	DP13S-04I	Total/NA	Water	8260B	
180-21558-8	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-120861/6	Lab Control Sample	Total/NA	Water	8260B	
MB 480-120861/7	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 120756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Total/NA	Water	3510C	
180-21558-2	MW-10	Total/NA	Water	3510C	
180-21558-3	MW-01	Total/NA	Water	3510C	
180-21558-4	PZN-30	Total/NA	Water	3510C	
180-21558-5	MW-12R	Total/NA	Water	3510C	
180-21558-5 - DL	MW-12R	Total/NA	Water	3510C	
180-21558-7	DP13S-04I	Total/NA	Water	3510C	
LCS 480-120756/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-120756/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 121756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-120756/2-A	Lab Control Sample	Total/NA	Water	8270C LL	120756

Analysis Batch: 122112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Total/NA	Water	8270C LL	120756
180-21558-2	MW-10	Total/NA	Water	8270C LL	120756
180-21558-3	MW-01	Total/NA	Water	8270C LL	120756
180-21558-4	PZN-30	Total/NA	Water	8270C LL	120756
180-21558-5	MW-12R	Total/NA	Water	8270C LL	120756
180-21558-7	DP13S-04I	Total/NA	Water	8270C LL	120756

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-5 - DL	MW-12R	Total/NA	Water	8270C LL	120756
MB 480-120756/1-A	Method Blank	Total/NA	Water	8270C LL	120756

Metals

Prep Batch: 120716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Total/NA	Water	3020A	
180-21558-2	MW-10	Total/NA	Water	3020A	
180-21558-3	MW-01	Total/NA	Water	3020A	

Metals (Continued)

Prep Batch: 120716 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-4	PZN-30	Total/NA	Water	3020A	
180-21558-5	MW-12R	Total/NA	Water	3020A	
180-21558-7	DP13S-04I	Total/NA	Water	3020A	
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-120716/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 120733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Dissolved	Water	3020A	
180-21558-2	MW-10	Dissolved	Water	3020A	
180-21558-3	MW-01	Dissolved	Water	3020A	
180-21558-4	PZN-30	Dissolved	Water	3020A	
180-21558-5	MW-12R	Dissolved	Water	3020A	
180-21558-7	DP13S-04I	Dissolved	Water	3020A	
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Dissolved	Water	6020	120733
180-21558-2	MW-10	Dissolved	Water	6020	120733
180-21558-3	MW-01	Dissolved	Water	6020	120733
180-21558-4	PZN-30	Dissolved	Water	6020	120733
180-21558-5	MW-12R	Dissolved	Water	6020	120733
180-21558-7	DP13S-04I	Dissolved	Water	6020	120733
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	6020	120733
MB 480-120622/1-B	Method Blank	Dissolved	Water	6020	120733

Analysis Batch: 121005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-1	OW-09	Total/NA	Water	6020	120716
180-21558-2	MW-10	Total/NA	Water	6020	120716
180-21558-3	MW-01	Total/NA	Water	6020	120716
180-21558-4	PZN-30	Total/NA	Water	6020	120716
180-21558-5	MW-12R	Total/NA	Water	6020	120716
180-21558-7	DP13S-04I	Total/NA	Water	6020	120716
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	6020	120716
MB 480-120716/1-A	Method Blank	Total/NA	Water	6020	120716

Analysis Batch: 121661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21558-7	DP13S-04I	Total/NA	Water	6020	120716

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

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THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
KEY ENVIRONMENTAL	A. GATCHIE	5/23/13	220337
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 THIRD AVE	412-428-9411	912-963-7058	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
CARNEGIE ~~PA 15106~~ PA 15106	M. VALESKY	V. BORTOT	
Project Name and Location (State)	**Carrier/Waybill Number**		
SOUTH CAVALCADE TI ZONE DELINEATION, HOUSTON, TX	FED EX		
Contract/Purchase Order/Quote No.			
13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TCL VOCs (8260B)	TCL SVOCs (8270C)	TOTAL METALS (6020)	DISS METALS (6020)
DP135-041	5/23/13	1440		X			2		2	3			3	2	1	1
TRIP BLANK	5/23/13	—		X						2			2			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

DISS METALS FIELD FILTERED

Rs 5/23/13

Rs 5/23/13

Rs 5/23/13

Rs 5/23/13

180-21558 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAYS

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Kyle T. Hewitt	5/23/13	1800	TA Buffalo	5/24/13	0915
2.						
3.						

Comments

#2 3C2.1, 2.3, 2.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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THE LEADER IN ENVIRONMENTAL TESTING

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 5/23/13	Chain of Custody Number: 220339
Address: 200 3rd Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bartot		
Project Name and Location (State): South Cavalcade TI Zone delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260 BTEX	8270 CU (SVOCs)	select tot. metals	select diss. metals	Special Instructions/ Conditions of Receipt
OW-09	5/23/13	1000		X			2		2	3			3	2	1	1	Dissolved metals samples are field filtered.
MW-10	5/23/13	1210		X			2		2	3			3	2	1	1	
MW-01	5/23/13	1328		X			2		2	3			3	2	1	1	
PZN-30	5/23/13	1501		X			2		2	3			3	2	1	1	
MW-12R	5/23/13	1640		X			2		2	3			3	2	1	1	
Trip Blank		—		X						2			2				

RS 5/23/13

RS 5/23/13

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STO

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/23/13	1900	1. Received By: [signature] TA BUFFALO	5/24/13	0915
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments

#2 3@2.1, 2.3, 2.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21558-1

Login Number: 21558

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21558-1

Login Number: 21558
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/24/13 02:43 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21590-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/3/2013 2:51:03 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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: 180-21590-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21590-1

Comments
No additional comments.

Receipt
The samples were received on 5/25/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 22174 recovered outside control limits for multiple analytes. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

Method(s) 8270C LL: The laboratory control sample (LCS) for batch 22174 recovered outside control limits for the following analyte: 2,4-Dintrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch 22174 recovered outside control limits for the following analyte: Di-n-octyl phthalate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for multiple analytes associated with batch 121645 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The ICSAB for batch 480-121004 was outside the acceptance limits for element: dissolved zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: The ICSAB for batch 480-121005 was outside the acceptance limits for element: total zinc. No interference correction is being applied for this element, therefore the data have been reported.

No other analytical or quality issues were noted.

Organic Prep
Method(s) 3510C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 120856. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21590-1	DP13N-03S	Water	05/24/13 10:50	05/25/13 09:15
180-21590-2	DP13N-01S	Water	05/24/13 13:10	05/25/13 09:15
180-21590-3	MW-26	Water	05/24/13 09:02	05/25/13 09:15

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: DP13N-03S

Lab Sample ID: 180-21590-1

Date Collected: 05/24/13 10:50

Matrix: Water

Date Received: 05/25/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120880	05/29/13 12:05	ND	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1046.6 mL	1 mL	120856	05/29/13 07:15	JL	TAL BUF
Total/NA	Analysis	8270C LL		1			121645	06/01/13 15:41	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:26	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 02:35	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-01S

Lab Sample ID: 180-21590-2

Date Collected: 05/24/13 13:10

Matrix: Water

Date Received: 05/25/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120880	05/29/13 12:30	ND	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1043.2 mL	1 mL	120856	05/29/13 07:15	JL	TAL BUF
Total/NA	Analysis	8270C LL		1			121645	06/01/13 16:08	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:31	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 02:41	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-26

Lab Sample ID: 180-21590-3

Date Collected: 05/24/13 09:02

Matrix: Water

Date Received: 05/25/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	120880	05/29/13 12:54	ND	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048 mL	1 mL	120856	05/29/13 07:15	JL	TAL BUF
Total/NA	Analysis	8270C LL		1			121645	06/01/13 16:35	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:37	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF

Client Sample ID: MW-26
Date Collected: 05/24/13 09:02
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		1			121005	05/29/13 02:46	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JL = Joseph Larson

JM = Jaclyn Mantell

Batch Type: Analysis

MM = Michael Mosscrop

ND = Nicole Dias

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: DP13N-03S
Date Collected: 05/24/13 10:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 12:05	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 12:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 12:05	1
Acetone	10	U	10		ug/L			05/29/13 12:05	1
Benzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 12:05	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 12:05	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 12:05	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 12:05	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:05	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 12:05	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 12:05	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 12:05	1
Styrene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Toluene	1.0	U	1.0		ug/L			05/29/13 12:05	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:05	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 12:05	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 12:05	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 12:05	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 12:05	1

Client Sample ID: DP13N-03S
Date Collected: 05/24/13 10:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/29/13 12:05*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/29/13 12:05*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/29/13 12:05*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4-Dimethylphenol	0.96	U *	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Methylphenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Methylphenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Acenaphthene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Acenaphthylene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 15:41	1
Acetophenone	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Atrazine	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzaldehyde	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 15:41	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/29/13 07:15	06/01/13 15:41	1
Caprolactam	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Carbazole	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Chrysene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: DP13N-03S
Date Collected: 05/24/13 10:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 15:41	1
Di-n-octyl phthalate	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Fluoranthene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Fluorene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
Hexachloroethane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Isophorone	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
Naphthalene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
Nitrobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 15:41	1
Pentachlorophenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
Phenanthrene	0.19	U	0.19		ug/L		05/29/13 07:15	06/01/13 15:41	1
Phenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 15:41	1
Pyrene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*05/29/13 07:15*	*06/01/13 15:41*	*1*
2-Fluorobiphenyl	*68*		*37 - 120*	*05/29/13 07:15*	*06/01/13 15:41*	*1*
p-Terphenyl-d14	*80*		*58 - 147*	*05/29/13 07:15*	*06/01/13 15:41*	*1*
Phenol-d5	*23*		*11 - 120*	*05/29/13 07:15*	*06/01/13 15:41*	*1*
2-Fluorophenol	*31*		*18 - 120*	*05/29/13 07:15*	*06/01/13 15:41*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*05/29/13 07:15*	*06/01/13 15:41*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:35	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 02:35	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:35	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:35	1
Zinc	**45**		10		ug/L		05/28/13 13:00	05/29/13 02:35	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:26	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:26	1
Copper	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 23:26	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:26	1
Zinc	**43**		10		ug/L		05/28/13 13:00	05/28/13 23:26	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: DP13N-01S
Date Collected: 05/24/13 13:10
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 12:30	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 12:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 12:30	1
Acetone	10	U	10		ug/L			05/29/13 12:30	1
Benzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 12:30	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 12:30	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 12:30	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 12:30	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:30	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 12:30	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 12:30	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 12:30	1
Styrene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Toluene	1.0	U	1.0		ug/L			05/29/13 12:30	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:30	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 12:30	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 12:30	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 12:30	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 12:30	1

Client Sample ID: DP13N-01S
Date Collected: 05/24/13 13:10
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/29/13 12:30*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 12:30*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/29/13 12:30*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4-Dimethylphenol	0.96	U *	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Methylphenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Methylphenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Acenaphthene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Acenaphthylene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:08	1
Acetophenone	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Atrazine	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzaldehyde	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:08	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/29/13 07:15	06/01/13 16:08	1
Caprolactam	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Carbazole	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Chrysene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: DP13N-01S
Date Collected: 05/24/13 13:10
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 16:08	1
Di-n-octyl phthalate	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Fluoranthene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Fluorene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
Hexachloroethane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Isophorone	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
Naphthalene	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
Nitrobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:08	1
Pentachlorophenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
Phenanthrene	0.19	U	0.19		ug/L		05/29/13 07:15	06/01/13 16:08	1
Phenol	0.96	U	0.96		ug/L		05/29/13 07:15	06/01/13 16:08	1
Pyrene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*64*		*34 - 132*	*05/29/13 07:15*	*06/01/13 16:08*	*1*
2-Fluorobiphenyl	*65*		*37 - 120*	*05/29/13 07:15*	*06/01/13 16:08*	*1*
p-Terphenyl-d14	*97*		*58 - 147*	*05/29/13 07:15*	*06/01/13 16:08*	*1*
Phenol-d5	*22*		*11 - 120*	*05/29/13 07:15*	*06/01/13 16:08*	*1*
2-Fluorophenol	*31*		*18 - 120*	*05/29/13 07:15*	*06/01/13 16:08*	*1*
2,4,6-Tribromophenol	*93*		*39 - 146*	*05/29/13 07:15*	*06/01/13 16:08*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**		1.0		ug/L		05/28/13 13:00	05/29/13 02:41	1
Chromium	**5.7**		1.5		ug/L		05/28/13 13:00	05/29/13 02:41	1
Copper	**1.8**		1.0		ug/L		05/28/13 13:00	05/29/13 02:41	1
Lead	**2.1**		1.0		ug/L		05/28/13 13:00	05/29/13 02:41	1
Zinc	**29**		10		ug/L		05/28/13 13:00	05/29/13 02:41	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:31	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:31	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:31	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:31	1
Zinc	**21**		10		ug/L		05/28/13 13:00	05/28/13 23:31	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: MW-26
Date Collected: 05/24/13 09:02
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 12:54	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 12:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 12:54	1
Acetone	10	U	10		ug/L			05/29/13 12:54	1
Benzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 12:54	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 12:54	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 12:54	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 12:54	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:54	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 12:54	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 12:54	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 12:54	1
Styrene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Toluene	1.0	U	1.0		ug/L			05/29/13 12:54	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 12:54	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 12:54	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 12:54	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 12:54	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 12:54	1

Client Sample ID: MW-26
Date Collected: 05/24/13 09:02
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/29/13 12:54*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 12:54*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/29/13 12:54*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4-Dimethylphenol	0.95	U *	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Methylphenol	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Methylphenol	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Acenaphthene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Acenaphthylene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:35	1
Acetophenone	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Atrazine	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzaldehyde	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/29/13 07:15	06/01/13 16:35	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/29/13 07:15	06/01/13 16:35	1
Caprolactam	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Carbazole	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Chrysene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-1

Client Sample ID: MW-26
Date Collected: 05/24/13 09:02
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/29/13 07:15	06/01/13 16:35	1
Di-n-octyl phthalate	4.8	U *	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Fluoranthene	**0.60**		0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Fluorene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
Hexachloroethane	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Isophorone	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
Naphthalene	**1.0**		0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
Nitrobenzene	0.48	U	0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/29/13 07:15	06/01/13 16:35	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
Phenanthrene	**0.26**	**B**	0.19		ug/L		05/29/13 07:15	06/01/13 16:35	1
Phenol	0.95	U	0.95		ug/L		05/29/13 07:15	06/01/13 16:35	1
Pyrene	**1.4**		0.48		ug/L		05/29/13 07:15	06/01/13 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*34 - 132*	*05/29/13 07:15*	*06/01/13 16:35*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*05/29/13 07:15*	*06/01/13 16:35*	*1*
p-Terphenyl-d14	*75*		*58 - 147*	*05/29/13 07:15*	*06/01/13 16:35*	*1*
Phenol-d5	*23*		*11 - 120*	*05/29/13 07:15*	*06/01/13 16:35*	*1*
2-Fluorophenol	*34*		*18 - 120*	*05/29/13 07:15*	*06/01/13 16:35*	*1*
2,4,6-Tribromophenol	*84*		*39 - 146*	*05/29/13 07:15*	*06/01/13 16:35*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.0**		1.0		ug/L		05/28/13 13:00	05/29/13 02:46	1
Chromium	**4.5**		1.5		ug/L		05/28/13 13:00	05/29/13 02:46	1
Copper	**3.1**		1.0		ug/L		05/28/13 13:00	05/29/13 02:46	1
Lead	**3.7**		1.0		ug/L		05/28/13 13:00	05/29/13 02:46	1
Zinc	**31**		10		ug/L		05/28/13 13:00	05/29/13 02:46	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.6**		1.0		ug/L		05/28/13 13:00	05/28/13 23:37	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:37	1
Copper	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 23:37	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:37	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:37	1

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

Lab Sample ID: MB 480-120880/6
Matrix: Water
Analysis Batch: 120880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 11:29	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 11:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 11:29	1
Acetone	10	U	10		ug/L			05/29/13 11:29	1
Benzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 11:29	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Styrene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Toluene	1.0	U	1.0		ug/L			05/29/13 11:29	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 11:29	1

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

Lab Sample ID: MB 480-120880/6
Matrix: Water
Analysis Batch: 120880

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/29/13 11:29*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 11:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/29/13 11:29*	*1*

Lab Sample ID: LCS 480-120880/5
Matrix: Water
Analysis Batch: 120880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.2		ug/L		97	71 - 129
1,1-Dichloroethene	25.0	19.9		ug/L		80	58 - 121
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 127
Benzene	25.0	24.3		ug/L		97	71 - 124
Chlorobenzene	25.0	25.1		ug/L		101	72 - 120
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124
Ethylbenzene	25.0	25.9		ug/L		104	77 - 123
Methyl tert-butyl ether	25.0	24.8		ug/L		99	64 - 127
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
Trichloroethene	25.0	24.6		ug/L		98	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*98*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-120856/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120856/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Methylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acenaphthene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acenaphthylene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acetophenone	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Anthracene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Atrazine	2.0	U	2.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzaldehyde	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Caprolactam	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Carbazole	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Chrysene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dibenzofuran	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Fluoranthene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Fluorene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachloroethane	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Isophorone	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Naphthalene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Nitrobenzene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120856/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Phenanthrene	0.214		0.20		ug/L		05/29/13 07:15	06/01/13 14:19	1
Phenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Pyrene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*34 - 132*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
p-Terphenyl-d14	*107*		*58 - 147*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
Phenol-d5	*34*		*11 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2-Fluorophenol	*46*		*18 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*05/29/13 07:15*	*06/01/13 14:19*	*1*

Lab Sample ID: LCS 480-120856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	8.29		ug/L		104	22 - 167
2-Chlorophenol	8.00	6.27		ug/L		78	44 - 106
4-Chloro-3-methylphenol	8.00	6.79		ug/L		85	60 - 131
4-Nitrophenol	16.0	9.13		ug/L		57	10 - 105
Acenaphthene	8.00	7.16		ug/L		90	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	10.4		ug/L		129	69 - 136
Fluorene	8.00	7.60		ug/L		95	54 - 137
Hexachloroethane	8.00	5.62		ug/L		70	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.69		ug/L		96	50 - 123
Pentachlorophenol	16.0	13.2		ug/L		82	10 - 131
Phenol	8.00	3.05		ug/L		38	17 - 61
Pyrene	8.00	8.30		ug/L		104	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*86*		*34 - 132*
2-Fluorobiphenyl	*88*		*37 - 120*
p-Terphenyl-d14	*104*		*58 - 147*
Phenol-d5	*37*		*11 - 120*
2-Fluorophenol	*49*		*18 - 120*
2,4,6-Tribromophenol	*103*		*39 - 146*

Lab Sample ID: LCSD 480-120856/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	8.76		ug/L		110	22 - 167	6	20
2-Chlorophenol	8.00	6.34		ug/L		79	44 - 106	1	20
4-Chloro-3-methylphenol	8.00	7.92		ug/L		99	60 - 131	15	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-120856/3-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 120856

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	9.81		ug/L		61	10 - 105	7	20
Acenaphthene			8.00	7.41		ug/L		93	35 - 143	3	24
Bis(2-ethylhexyl) phthalate			8.00	10.3		ug/L		128	69 - 136	1	15
Fluorene			8.00	7.97		ug/L		100	54 - 137	5	15
Hexachloroethane			8.00	6.18		ug/L		77	32 - 104	9	20
N-Nitrosodi-n-propylamine			8.00	8.02		ug/L		100	50 - 123	4	20
Pentachlorophenol			16.0	13.6		ug/L		85	10 - 131	3	37
Phenol			8.00	3.26		ug/L		41	17 - 61	6	34
Pyrene			8.00	8.30		ug/L		104	58 - 143	0	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*34 - 132*
2-Fluorobiphenyl	*96*		*37 - 120*
p-Terphenyl-d14	*105*		*58 - 147*
Phenol-d5	*38*		*11 - 120*
2-Fluorophenol	*52*		*18 - 120*
2,4,6-Tribromophenol	*111*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-120716/1-A
Matrix: Water
Analysis Batch: 121005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:01	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:01	1

Lab Sample ID: LCS 480-120716/2-A
Matrix: Water
Analysis Batch: 121005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			20.0	21.7		ug/L		108	80 - 120		
Chromium			20.0	21.8		ug/L		109	80 - 120		
Copper			20.0	21.3		ug/L		107	80 - 120		
Lead			20.0	20.1		ug/L		101	80 - 120		
Zinc			50.0	57.0		ug/L		114	80 - 120		

Lab Sample ID: MB 480-120622/1-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 120733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-120622/1-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 120733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:05	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:05	1

Lab Sample ID: LCS 480-120622/2-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.9		ug/L		110	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.6		ug/L		108	80 - 120
Lead	20.0	20.8		ug/L		104	80 - 120
Zinc	50.0	55.8		ug/L		112	80 - 120

GC/MS VOA

Analysis Batch: 120880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Total/NA	Water	8260B	
180-21590-2	DP13N-01S	Total/NA	Water	8260B	
180-21590-3	MW-26	Total/NA	Water	8260B	
LCS 480-120880/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-120880/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 120856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Total/NA	Water	3510C	
180-21590-2	DP13N-01S	Total/NA	Water	3510C	
180-21590-3	MW-26	Total/NA	Water	3510C	
LCS 480-120856/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-120856/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-120856/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 121645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Total/NA	Water	8270C LL	120856
180-21590-2	DP13N-01S	Total/NA	Water	8270C LL	120856
180-21590-3	MW-26	Total/NA	Water	8270C LL	120856
LCS 480-120856/2-A	Lab Control Sample	Total/NA	Water	8270C LL	120856
LCSD 480-120856/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	120856
MB 480-120856/1-A	Method Blank	Total/NA	Water	8270C LL	120856

Metals

Prep Batch: 120716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Total/NA	Water	3020A	
180-21590-2	DP13N-01S	Total/NA	Water	3020A	
180-21590-3	MW-26	Total/NA	Water	3020A	
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-120716/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 120733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Dissolved	Water	3020A	
180-21590-2	DP13N-01S	Dissolved	Water	3020A	
180-21590-3	MW-26	Dissolved	Water	3020A	
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Dissolved	Water	6020	120733
180-21590-2	DP13N-01S	Dissolved	Water	6020	120733
180-21590-3	MW-26	Dissolved	Water	6020	120733
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	6020	120733

Metals (Continued)

Analysis Batch: 121004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-120622/1-B	Method Blank	Dissolved	Water	6020	120733

Analysis Batch: 121005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-1	DP13N-03S	Total/NA	Water	6020	120716
180-21590-2	DP13N-01S	Total/NA	Water	6020	120716
180-21590-3	MW-26	Total/NA	Water	6020	120716
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	6020	120716
MB 480-120716/1-A	Method Blank	Total/NA	Water	6020	120716

180 - 21590

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental/FTS	Project Manager: Angie Gatchie			Date: 5/24/13	Chain of Custody Number: 220335
Address: 200 3rd Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9461			Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie	State: PA	Zip Code: 15106	Site Contact: M. Valedry	Lab Contact: U. Bartot	
Project Name and Location (State): South Cavalcade TI Zone Delineation			Carrier/Waybill Number: FedEx		
Contract/Purchase Order/Quote No.: 15BE-13665-03					

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C (SVOCs)	6020 select metals (dissolved)	6020 select metals (unfiltered)	Special Instructions/ Conditions of Receipt
DP13N-035	5/24/13	1050		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
DP13N-015	5/24/13	1310		X			2		2	3			3	2	1	1	

RS 5/24/13

RS 5/24/13

180-21590 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		5/24/13	1600	TAB	5-25-13	0915
2.						
3.						

Comments

#2 3,9,42

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

180 - 2159

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental/FTS	Project Manager: Angie Gatchie	Date: 5/24/13	Chain of Custody Number: 220338
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie / State: PA / Zip Code: 15106	Site Contact: M. Valesky	Lab Contact: J. Bartot	
Project Name and Location (State): South Cavalcade T1 Zone delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KDE13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C (SVOC)	Select metals 6010 Total	Select metals 6010 Diss	Special Instructions/ Conditions of Receipt
MW-26	5/24/13	0902		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
~~DP13N-035~~ RS 5/24/13	5/24/13																
DP13S-035	5/24/13	1250		X			2		2	3			3	2	1	1	

RS 5/24/13

RS 5/24/13

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

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

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ~~☒ Other 5 BD~~ ~~2 days~~ RS 5/24/13

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	5/24/13	1600	1. Received By	5-25-13	0915
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

H2 3.9, 4.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21590-1

Login Number: 21590

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21590-1

Login Number: 21590
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 05/25/13 01:11 PM

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

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21590-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/3/2013 2:35:45 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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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Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Job ID: 180-21590-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21590-2

Comments
No additional comments.

Receipt
The samples were received on 5/25/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method(s) 8260B: The following sample was diluted due foaming and also due to the abundance of non-target analytes: DP13S-05S (180-21590-4). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 22174 recovered outside control limits for multiple analytes. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

Method(s) 8270C LL: The laboratory control sample (LCS) for batch 22174 recovered outside control limits for the following analyte: 2,4-Dintrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch 22174 recovered outside control limits for the following analyte: Di-n-octyl phthalate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for multiple analytes associated with batch 121645 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following sample was diluted to bring the concentration of target analytes within the calibration range: DP13S-05S (180-21590-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 121756 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following sample was diluted due to an abundance of target analytes: DP13S-05S (180-21590-4). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The ICSAB for batch 480-121004 was outside the acceptance limits for element: dissolved zinc. No interference correction is being applied for this element, therefore the data have been reported.

Method(s) 6020: The ICSAB for batch 480-121005 was outside the acceptance limits for element: total zinc. No interference correction is being applied for this element, therefore the data have been reported.

No other analytical or quality issues were noted.

Organic Prep

Job ID: 180-21590-2 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

Method(s) 3510C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 120856. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21590-4	DP13S-05S	Water	05/24/13 12:50	05/25/13 09:15

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Client Sample ID: DP13S-05S

Lab Sample ID: 180-21590-4

Date Collected: 05/24/13 12:50

Matrix: Water

Date Received: 05/25/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	120880	05/29/13 13:17	ND	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C	DL		1045.7 mL	1 mL	120856	05/29/13 07:15	JL	TAL BUF
Total/NA	Analysis	8270C LL	DL	200			121756	06/03/13 13:24	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C			1045.7 mL	1 mL	120856	05/29/13 07:15	JL	TAL BUF
Total/NA	Analysis	8270C LL		10			121756	06/03/13 12:29	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	120733	05/28/13 13:00	JM	TAL BUF
Dissolved	Analysis	6020		1			121004	05/28/13 23:42	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	120716	05/28/13 13:00	JM	TAL BUF
Total/NA	Analysis	6020		1			121005	05/29/13 02:52	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JL = Joseph Larson

JM = Jaclyn Mantell

Batch Type: Analysis

MM = Michael Mosscrop

ND = Nicole Dias

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Client Sample ID: DP13S-05S
Date Collected: 05/24/13 12:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,1,2-Trichloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,1-Dichloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,1-Dichloroethene	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2,4-Trichlorobenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2-Dibromoethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2-Dichlorobenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2-Dichloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,2-Dichloropropane	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,3-Dichlorobenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
1,4-Dichlorobenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
2-Hexanone	25	U	25		ug/L			05/29/13 13:17	5
2-Butanone (MEK)	50	U	50		ug/L			05/29/13 13:17	5
4-Methyl-2-pentanone (MIBK)	25	U	25		ug/L			05/29/13 13:17	5
Acetone	50	U	50		ug/L			05/29/13 13:17	5
Benzene	**12**		5.0		ug/L			05/29/13 13:17	5
Bromodichloromethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Bromoform	5.0	U	5.0		ug/L			05/29/13 13:17	5
Bromomethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Carbon disulfide	5.0	U	5.0		ug/L			05/29/13 13:17	5
Carbon tetrachloride	5.0	U	5.0		ug/L			05/29/13 13:17	5
Chlorobenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Dibromochloromethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Chloroethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Chloroform	5.0	U	5.0		ug/L			05/29/13 13:17	5
Chloromethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
cis-1,2-Dichloroethene	5.0	U	5.0		ug/L			05/29/13 13:17	5
cis-1,3-Dichloropropene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Cyclohexane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Dichlorodifluoromethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Ethylbenzene	**19**		5.0		ug/L			05/29/13 13:17	5
Isopropylbenzene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Methyl acetate	5.0	U	5.0		ug/L			05/29/13 13:17	5
Methyl tert-butyl ether	5.0	U	5.0		ug/L			05/29/13 13:17	5
Methylcyclohexane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Methylene Chloride	5.0	U	5.0		ug/L			05/29/13 13:17	5
Styrene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Tetrachloroethene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Toluene	**22**		5.0		ug/L			05/29/13 13:17	5
trans-1,2-Dichloroethene	5.0	U	5.0		ug/L			05/29/13 13:17	5
trans-1,3-Dichloropropene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Trichloroethene	5.0	U	5.0		ug/L			05/29/13 13:17	5
Trichlorofluoromethane	5.0	U	5.0		ug/L			05/29/13 13:17	5
Vinyl chloride	5.0	U	5.0		ug/L			05/29/13 13:17	5
Xylenes, Total	**58**		10		ug/L			05/29/13 13:17	5

Client Sample ID: DP13S-05S
Date Collected: 05/24/13 12:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/29/13 13:17*	*5*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 13:17*	*5*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/29/13 13:17*	*5*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
bis (2-chloroisopropyl) ether	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4,5-Trichlorophenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4,6-Trichlorophenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4-Dichlorophenol	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4-Dimethylphenol	**12**	*	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4-Dinitrophenol	48	U *	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,4-Dinitrotoluene	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2,6-Dinitrotoluene	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2-Chloronaphthalene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
2-Chlorophenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2-Methylphenol	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
2-Nitroaniline	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
2-Nitrophenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
3,3'-Dichlorobenzidine	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
3-Nitroaniline	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4,6-Dinitro-2-methylphenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Bromophenyl phenyl ether	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Chloro-3-methylphenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Chloroaniline	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Chlorophenyl phenyl ether	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Methylphenol	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Nitroaniline	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
4-Nitrophenol	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Acenaphthylene	**7.2**		2.9		ug/L		05/29/13 07:15	06/03/13 12:29	10
Acetophenone	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Anthracene	**47**		4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Atrazine	19	U	19		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzaldehyde	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzo(a)anthracene	**5.3**		2.9		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzo(a)pyrene	1.7	U	1.7		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzo(b)fluoranthene	2.9	U	2.9		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzo(g,h,i)perylene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Benzo(k)fluoranthene	2.9	U	2.9		ug/L		05/29/13 07:15	06/03/13 12:29	10
Bis(2-chloroethoxy)methane	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Bis(2-chloroethyl)ether	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Bis(2-ethylhexyl) phthalate	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Butyl benzyl phthalate	29	U	29		ug/L		05/29/13 07:15	06/03/13 12:29	10
Caprolactam	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Carbazole	**160**		48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Chrysene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Dibenz(a,h)anthracene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Dibenzofuran	**190**		48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Diethyl phthalate	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10

Client Sample ID: DP13S-05S
Date Collected: 05/24/13 12:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Di-n-butyl phthalate	19	U	19		ug/L		05/29/13 07:15	06/03/13 12:29	10
Di-n-octyl phthalate	48	U *	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Fluoranthene	**58**		4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Hexachlorobenzene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Hexachlorobutadiene	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
Hexachlorocyclopentadiene	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
Hexachloroethane	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Indeno(1,2,3-cd)pyrene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Isophorone	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
Nitrobenzene	4.8	U	4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10
N-Nitrosodi-n-propylamine	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
N-Nitrosodiphenylamine	48	U	48		ug/L		05/29/13 07:15	06/03/13 12:29	10
Pentachlorophenol	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
Phenol	9.6	U	9.6		ug/L		05/29/13 07:15	06/03/13 12:29	10
Pyrene	**30**		4.8		ug/L		05/29/13 07:15	06/03/13 12:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*34 - 132*	*05/29/13 07:15*	*06/03/13 12:29*	*10*
2-Fluorobiphenyl	*82*		*37 - 120*	*05/29/13 07:15*	*06/03/13 12:29*	*10*
p-Terphenyl-d14	*59*		*58 - 147*	*05/29/13 07:15*	*06/03/13 12:29*	*10*
Phenol-d5	*26*		*11 - 120*	*05/29/13 07:15*	*06/03/13 12:29*	*10*
2-Fluorophenol	*35*		*18 - 120*	*05/29/13 07:15*	*06/03/13 12:29*	*10*
2,4,6-Tribromophenol	*101*		*39 - 146*	*05/29/13 07:15*	*06/03/13 12:29*	*10*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**220**		96		ug/L		05/29/13 07:15	06/03/13 13:24	200
Acenaphthene	**480**		96		ug/L		05/29/13 07:15	06/03/13 13:24	200
Fluorene	**340**		96		ug/L		05/29/13 07:15	06/03/13 13:24	200
Naphthalene	**2400**		190		ug/L		05/29/13 07:15	06/03/13 13:24	200
Phenanthrene	**340**	**B**	38		ug/L		05/29/13 07:15	06/03/13 13:24	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/29/13 07:15*	*06/03/13 13:24*	*200*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/29/13 07:15*	*06/03/13 13:24*	*200*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/29/13 07:15*	*06/03/13 13:24*	*200*
Phenol-d5	*0*	*X*	*11 - 120*	*05/29/13 07:15*	*06/03/13 13:24*	*200*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/29/13 07:15*	*06/03/13 13:24*	*200*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/29/13 07:15*	*06/03/13 13:24*	*200*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.5**		1.0		ug/L		05/28/13 13:00	05/29/13 02:52	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 02:52	1
Copper	**1.1**		1.0		ug/L		05/28/13 13:00	05/29/13 02:52	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 02:52	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 02:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Client Sample ID: DP13S-05S
Date Collected: 05/24/13 12:50
Date Received: 05/25/13 09:15

Lab Sample ID: 180-21590-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**		1.0		ug/L		05/28/13 13:00	05/28/13 23:42	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 23:42	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:42	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 23:42	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 23:42	1

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

Lab Sample ID: MB 480-120880/6
Matrix: Water
Analysis Batch: 120880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 11:29	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 11:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 11:29	1
Acetone	10	U	10		ug/L			05/29/13 11:29	1
Benzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 11:29	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 11:29	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 11:29	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Styrene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Toluene	1.0	U	1.0		ug/L			05/29/13 11:29	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 11:29	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 11:29	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 11:29	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 11:29	1

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

Lab Sample ID: MB 480-120880/6
Matrix: Water
Analysis Batch: 120880

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*05/29/13 11:29*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/29/13 11:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/29/13 11:29*	*1*

Lab Sample ID: LCS 480-120880/5
Matrix: Water
Analysis Batch: 120880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.2		ug/L		97	71 - 129
1,1-Dichloroethene	25.0	19.9		ug/L		80	58 - 121
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 127
Benzene	25.0	24.3		ug/L		97	71 - 124
Chlorobenzene	25.0	25.1		ug/L		101	72 - 120
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124
Ethylbenzene	25.0	25.9		ug/L		104	77 - 123
Methyl tert-butyl ether	25.0	24.8		ug/L		99	64 - 127
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
Trichloroethene	25.0	24.6		ug/L		98	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*98*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-120856/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120856/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Methylphenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acenaphthene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acenaphthylene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Acetophenone	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Anthracene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Atrazine	2.0	U	2.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzaldehyde	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Caprolactam	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Carbazole	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Chrysene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dibenzofuran	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Fluoranthene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Fluorene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Hexachloroethane	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Isophorone	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
Naphthalene	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Nitrobenzene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-120856/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Phenanthrene	0.214		0.20		ug/L		05/29/13 07:15	06/01/13 14:19	1
Phenol	1.0	U	1.0		ug/L		05/29/13 07:15	06/01/13 14:19	1
Pyrene	0.50	U	0.50		ug/L		05/29/13 07:15	06/01/13 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*34 - 132*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
p-Terphenyl-d14	*107*		*58 - 147*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
Phenol-d5	*34*		*11 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2-Fluorophenol	*46*		*18 - 120*	*05/29/13 07:15*	*06/01/13 14:19*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*05/29/13 07:15*	*06/01/13 14:19*	*1*

Lab Sample ID: LCS 480-120856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	8.29		ug/L		104	22 - 167
2-Chlorophenol	8.00	6.27		ug/L		78	44 - 106
4-Chloro-3-methylphenol	8.00	6.79		ug/L		85	60 - 131
4-Nitrophenol	16.0	9.13		ug/L		57	10 - 105
Acenaphthene	8.00	7.16		ug/L		90	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	10.4		ug/L		129	69 - 136
Fluorene	8.00	7.60		ug/L		95	54 - 137
Hexachloroethane	8.00	5.62		ug/L		70	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.69		ug/L		96	50 - 123
Pentachlorophenol	16.0	13.2		ug/L		82	10 - 131
Phenol	8.00	3.05		ug/L		38	17 - 61
Pyrene	8.00	8.30		ug/L		104	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*86*		*34 - 132*
2-Fluorobiphenyl	*88*		*37 - 120*
p-Terphenyl-d14	*104*		*58 - 147*
Phenol-d5	*37*		*11 - 120*
2-Fluorophenol	*49*		*18 - 120*
2,4,6-Tribromophenol	*103*		*39 - 146*

Lab Sample ID: LCSD 480-120856/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	8.76		ug/L		110	22 - 167	6	20
2-Chlorophenol	8.00	6.34		ug/L		79	44 - 106	1	20
4-Chloro-3-methylphenol	8.00	7.92		ug/L		99	60 - 131	15	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-120856/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 120856**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	9.81		ug/L		61	10 - 105	7	20
Acenaphthene			8.00	7.41		ug/L		93	35 - 143	3	24
Bis(2-ethylhexyl) phthalate			8.00	10.3		ug/L		128	69 - 136	1	15
Fluorene			8.00	7.97		ug/L		100	54 - 137	5	15
Hexachloroethane			8.00	6.18		ug/L		77	32 - 104	9	20
N-Nitrosodi-n-propylamine			8.00	8.02		ug/L		100	50 - 123	4	20
Pentachlorophenol			16.0	13.6		ug/L		85	10 - 131	3	37
Phenol			8.00	3.26		ug/L		41	17 - 61	6	34
Pyrene			8.00	8.30		ug/L		104	58 - 143	0	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*34 - 132*
2-Fluorobiphenyl	*96*		*37 - 120*
p-Terphenyl-d14	*105*		*58 - 147*
Phenol-d5	*38*		*11 - 120*
2-Fluorophenol	*52*		*18 - 120*
2,4,6-Tribromophenol	*111*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-120716/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121005 — **Prep Batch: 120716**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/29/13 00:01	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/29/13 00:01	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/29/13 00:01	1

Lab Sample ID: LCS 480-120716/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121005 — **Prep Batch: 120716**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			20.0	21.7		ug/L		108	80 - 120
Chromium			20.0	21.8		ug/L		109	80 - 120
Copper			20.0	21.3		ug/L		107	80 - 120
Lead			20.0	20.1		ug/L		101	80 - 120
Zinc			50.0	57.0		ug/L		114	80 - 120

Lab Sample ID: MB 480-120622/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 121004 — **Prep Batch: 120733**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21590-2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-120622/1-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 120733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		05/28/13 13:00	05/28/13 21:05	1
Copper	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Lead	1.0	U	1.0		ug/L		05/28/13 13:00	05/28/13 21:05	1
Zinc	10	U	10		ug/L		05/28/13 13:00	05/28/13 21:05	1

Lab Sample ID: LCS 480-120622/2-B
Matrix: Water
Analysis Batch: 121004

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 120733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.9		ug/L		110	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	21.6		ug/L		108	80 - 120
Lead	20.0	20.8		ug/L		104	80 - 120
Zinc	50.0	55.8		ug/L		112	80 - 120

GC/MS VOA

Analysis Batch: 120880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4	DP13S-05S	Total/NA	Water	8260B	
LCS 480-120880/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-120880/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 120856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4 - DL	DP13S-05S	Total/NA	Water	3510C	
180-21590-4	DP13S-05S	Total/NA	Water	3510C	
LCS 480-120856/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-120856/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-120856/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 121645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-120856/2-A	Lab Control Sample	Total/NA	Water	8270C LL	120856
LCSD 480-120856/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	120856
MB 480-120856/1-A	Method Blank	Total/NA	Water	8270C LL	120856

Analysis Batch: 121756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4 - DL	DP13S-05S	Total/NA	Water	8270C LL	120856
180-21590-4	DP13S-05S	Total/NA	Water	8270C LL	120856

Metals

Prep Batch: 120716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4	DP13S-05S	Total/NA	Water	3020A	
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-120716/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 120733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4	DP13S-05S	Dissolved	Water	3020A	
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4	DP13S-05S	Dissolved	Water	6020	120733
LCS 480-120622/2-B	Lab Control Sample	Dissolved	Water	6020	120733
MB 480-120622/1-B	Method Blank	Dissolved	Water	6020	120733

Analysis Batch: 121005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21590-4	DP13S-05S	Total/NA	Water	6020	120716
LCS 480-120716/2-A	Lab Control Sample	Total/NA	Water	6020	120716
MB 480-120716/1-A	Method Blank	Total/NA	Water	6020	120716

180 - 21590

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental/FTS	Angie Gatchie	5/24/13	220335
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd Ave.	412-428-9461	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valedry	U. Bartot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Cavalcade TI Zone Delineation	FedEx		
Contract/Purchase Order/Quote No.			
15BE-13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C LL (SVOC)	6020 select metals (dissolved)	6020 select metals (unfiltered)	Special Instructions/ Conditions of Receipt
DP13N-035	5/24/13	1050		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
DP13N-015	5/24/13	1310		X			2		2	3			3	2	1	1	

RS 5/24/13

RS 5/24/13

180-21590 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		5/24/13	1600	TAB	5-25-13	0915
2.		Date	Time		Date	Time
3.		Date	Time		Date	Time

Comments

#2 3,9,42

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

180 - 2159

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental/FTS	Angie Gatchie	5/24/13	220338
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
200 3rd Ave	412-428-9411	412-963-7058	1 of 1
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	J. Bartot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Cavalcade T1 Zone delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KDE13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C (SVOC)	Select metals (6020 Total)	Select metals (6020 Diss)	Special Instructions/ Conditions of Receipt
MW-26	5/24/13	0902		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
~~DP13N-035~~ RS 5/24/13	5/24/13																
DP13S-035	5/24/13	1250		X			2		2	3			3	2	1	1	

RS 5/24/13

RS 5/24/13

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

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

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ ~~Other~~ ~~2 days~~ 5 BD RS 5/24/13

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	5/24/13	1600	TAS	5-25-13	0915
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

H2 3.9, 4.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21590-2

Login Number: 21590

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21590-2

Login Number: 21590
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 05/25/13 01:11 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21650-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Authorized for release by:
6/4/2013 5:45:55 PM
Debbie Lowe, Lab Director
(412)963-2439
deb.lowe@testamericainc.com

Designee for

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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: 180-21650-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21650-1

Comments
No additional comments.

Receipt
The samples were received on 5/29/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 121756 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The laboratory control sample (LCS) for batch 121116 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch121116 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The continuing calibration verification (CCV) for multiple analytes associated with batch 121645 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13N-01I (180-21650-2), DP13N-03I (180-21650-1).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21650-1	DP13N-03I	Water	05/28/13 17:10	05/29/13 09:30
180-21650-2	DP13N-01I	Water	05/28/13 18:50	05/29/13 09:30
180-21650-3	TB-052811	Water	05/28/13 00:00	05/29/13 09:30

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: DP13N-03I

Lab Sample ID: 180-21650-1

Date Collected: 05/28/13 17:10

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121067	05/30/13 00:21	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1021.3 mL	1 mL	121116	05/30/13 07:37	JL	TAL BUF
Total/NA	Analysis	8270C LL		5			121756	06/03/13 12:56	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121150	05/30/13 09:10	SS	TAL BUF
Total/NA	Analysis	6020		1			121663	06/01/13 01:06	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121152	05/30/13 09:10	SS	TAL BUF
Dissolved	Analysis	6020		1			121665	06/01/13 05:06	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121150	05/30/13 09:10	SS	TAL BUF
Total/NA	Analysis	6020		2			121781	06/01/13 19:18	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-01I

Lab Sample ID: 180-21650-2

Date Collected: 05/28/13 18:50

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121067	05/30/13 00:45	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1020 mL	1 mL	121116	05/30/13 07:37	JL	TAL BUF
Total/NA	Analysis	8270C LL		5			121756	06/03/13 13:51	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121150	05/30/13 09:10	SS	TAL BUF
Total/NA	Analysis	6020		1			121663	06/01/13 01:12	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121152	05/30/13 09:10	SS	TAL BUF
Dissolved	Analysis	6020		1			121665	06/01/13 05:12	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121150	05/30/13 09:10	SS	TAL BUF
Total/NA	Analysis	6020		5			121781	06/01/13 19:30	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-052811

Lab Sample ID: 180-21650-3

Date Collected: 05/28/13 00:00

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121067	05/30/13 01:09	NQN	TAL BUF
	Instrument ID: HP5973N									

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JL = Joseph Larson

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: DP13N-03I
Date Collected: 05/28/13 17:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 00:21	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 00:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 00:21	1
Acetone	10	U	10		ug/L			05/30/13 00:21	1
Benzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 00:21	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 00:21	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 00:21	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 00:21	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:21	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 00:21	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 00:21	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 00:21	1
Styrene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Toluene	1.0	U	1.0		ug/L			05/30/13 00:21	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:21	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 00:21	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 00:21	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 00:21	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 00:21	1

Client Sample ID: DP13N-03I
Date Collected: 05/28/13 17:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*05/30/13 00:21*	*1*
Toluene-d8 (Surr)	*95*		*71 - 126*		*05/30/13 00:21*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*05/30/13 00:21*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
bis (2-chloroisopropyl) ether	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4,5-Trichlorophenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4,6-Trichlorophenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4-Dichlorophenol	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4-Dimethylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4-Dinitrophenol	24	U *	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,4-Dinitrotoluene	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2,6-Dinitrotoluene	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Chloronaphthalene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Chlorophenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Methylnaphthalene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Methylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Nitroaniline	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
2-Nitrophenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
3,3'-Dichlorobenzidine	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
3-Nitroaniline	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4,6-Dinitro-2-methylphenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Bromophenyl phenyl ether	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Chloro-3-methylphenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Chloroaniline	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Chlorophenyl phenyl ether	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Methylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Nitroaniline	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
4-Nitrophenol	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Acenaphthene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Acenaphthylene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 12:56	5
Acetophenone	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Anthracene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Atrazine	9.8	U	9.8		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzaldehyde	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzo(a)pyrene	0.88	U	0.88		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzo(g,h,i)perylene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 12:56	5
Bis(2-chloroethoxy)methane	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Bis(2-chloroethyl)ether	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Bis(2-ethylhexyl) phthalate	24	U *	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Butyl benzyl phthalate	15	U	15		ug/L		05/30/13 07:37	06/03/13 12:56	5
Caprolactam	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Carbazole	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Chrysene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Dibenz(a,h)anthracene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: DP13N-03I
Date Collected: 05/28/13 17:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Diethyl phthalate	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Dimethyl phthalate	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Di-n-butyl phthalate	9.8	U	9.8		ug/L		05/30/13 07:37	06/03/13 12:56	5
Di-n-octyl phthalate	24	U *	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Fluoranthene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Fluorene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Hexachlorobenzene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Hexachlorobutadiene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
Hexachlorocyclopentadiene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
Hexachloroethane	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Indeno(1,2,3-cd)pyrene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Isophorone	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
Naphthalene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
Nitrobenzene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5
N-Nitrosodi-n-propylamine	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
N-Nitrosodiphenylamine	24	U	24		ug/L		05/30/13 07:37	06/03/13 12:56	5
Pentachlorophenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
Phenanthrene	0.98	U	0.98		ug/L		05/30/13 07:37	06/03/13 12:56	5
Phenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 12:56	5
Pyrene	2.4	U	2.4		ug/L		05/30/13 07:37	06/03/13 12:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*34 - 132*	*05/30/13 07:37*	*06/03/13 12:56*	*5*
2-Fluorobiphenyl	*62*		*37 - 120*	*05/30/13 07:37*	*06/03/13 12:56*	*5*
p-Terphenyl-d14	*71*		*58 - 147*	*05/30/13 07:37*	*06/03/13 12:56*	*5*
Phenol-d5	*23*		*11 - 120*	*05/30/13 07:37*	*06/03/13 12:56*	*5*
2-Fluorophenol	*31*		*18 - 120*	*05/30/13 07:37*	*06/03/13 12:56*	*5*
2,4,6-Tribromophenol	*83*		*39 - 146*	*05/30/13 07:37*	*06/03/13 12:56*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		1.0		ug/L		05/30/13 09:10	06/01/13 01:06	1
Chromium	**81**		3.0		ug/L		05/30/13 09:10	06/01/13 19:18	2
Copper	**35**		1.0		ug/L		05/30/13 09:10	06/01/13 01:06	1
Lead	**25**		1.0		ug/L		05/30/13 09:10	06/01/13 01:06	1
Zinc	**190**		10		ug/L		05/30/13 09:10	06/01/13 01:06	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 05:06	1
Chromium	1.5	U	1.5		ug/L		05/30/13 09:10	06/01/13 05:06	1
Copper	**1.4**		1.0		ug/L		05/30/13 09:10	06/01/13 05:06	1
Lead	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 05:06	1
Zinc	**11**		10		ug/L		05/30/13 09:10	06/01/13 05:06	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: DP13N-01I
Date Collected: 05/28/13 18:50
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 00:45	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 00:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 00:45	1
Acetone	10	U	10		ug/L			05/30/13 00:45	1
Benzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 00:45	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 00:45	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 00:45	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 00:45	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:45	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 00:45	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 00:45	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 00:45	1
Styrene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Toluene	1.0	U	1.0		ug/L			05/30/13 00:45	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 00:45	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 00:45	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 00:45	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 00:45	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 00:45	1

Client Sample ID: DP13N-01I
Date Collected: 05/28/13 18:50
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*05/30/13 00:45*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/30/13 00:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/30/13 00:45*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
bis (2-chloroisopropyl) ether	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4,5-Trichlorophenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4,6-Trichlorophenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4-Dichlorophenol	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4-Dimethylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4-Dinitrophenol	25	U *	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,4-Dinitrotoluene	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2,6-Dinitrotoluene	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Chloronaphthalene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Chlorophenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Methylnaphthalene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Methylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Nitroaniline	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
2-Nitrophenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
3,3'-Dichlorobenzidine	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
3-Nitroaniline	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4,6-Dinitro-2-methylphenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Bromophenyl phenyl ether	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Chloro-3-methylphenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Chloroaniline	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Chlorophenyl phenyl ether	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Methylphenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Nitroaniline	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
4-Nitrophenol	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Acenaphthene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Acenaphthylene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Acetophenone	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Anthracene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Atrazine	9.8	U	9.8		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzaldehyde	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzo(a)pyrene	0.88	U	0.88		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzo(g,h,i)perylene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Bis(2-chloroethoxy)methane	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Bis(2-chloroethyl)ether	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Bis(2-ethylhexyl) phthalate	25	U *	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Butyl benzyl phthalate	15	U	15		ug/L		05/30/13 07:37	06/03/13 13:51	5
Caprolactam	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Carbazole	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Chrysene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Dibenz(a,h)anthracene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: DP13N-01I
Date Collected: 05/28/13 18:50
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Diethyl phthalate	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Dimethyl phthalate	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Di-n-butyl phthalate	9.8	U	9.8		ug/L		05/30/13 07:37	06/03/13 13:51	5
Di-n-octyl phthalate	25	U *	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Fluoranthene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Fluorene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Hexachlorobenzene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Hexachlorobutadiene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
Hexachlorocyclopentadiene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
Hexachloroethane	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Indeno(1,2,3-cd)pyrene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Isophorone	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
Naphthalene	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
Nitrobenzene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5
N-Nitrosodi-n-propylamine	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
N-Nitrosodiphenylamine	25	U	25		ug/L		05/30/13 07:37	06/03/13 13:51	5
Pentachlorophenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
Phenanthrene	**2.1**		0.98		ug/L		05/30/13 07:37	06/03/13 13:51	5
Phenol	4.9	U	4.9		ug/L		05/30/13 07:37	06/03/13 13:51	5
Pyrene	2.5	U	2.5		ug/L		05/30/13 07:37	06/03/13 13:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*34 - 132*	*05/30/13 07:37*	*06/03/13 13:51*	*5*
2-Fluorobiphenyl	*83*		*37 - 120*	*05/30/13 07:37*	*06/03/13 13:51*	*5*
p-Terphenyl-d14	*88*		*58 - 147*	*05/30/13 07:37*	*06/03/13 13:51*	*5*
Phenol-d5	*32*		*11 - 120*	*05/30/13 07:37*	*06/03/13 13:51*	*5*
2-Fluorophenol	*43*		*18 - 120*	*05/30/13 07:37*	*06/03/13 13:51*	*5*
2,4,6-Tribromophenol	*97*		*39 - 146*	*05/30/13 07:37*	*06/03/13 13:51*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.9**		1.0		ug/L		05/30/13 09:10	06/01/13 01:12	1
Chromium	**270**		7.5		ug/L		05/30/13 09:10	06/01/13 19:30	5
Copper	**100**		1.0		ug/L		05/30/13 09:10	06/01/13 01:12	1
Lead	**63**		1.0		ug/L		05/30/13 09:10	06/01/13 01:12	1
Zinc	**490**		10		ug/L		05/30/13 09:10	06/01/13 01:12	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 05:12	1
Chromium	1.5	U	1.5		ug/L		05/30/13 09:10	06/01/13 05:12	1
Copper	**2.8**		1.0		ug/L		05/30/13 09:10	06/01/13 05:12	1
Lead	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 05:12	1
Zinc	**19**		10		ug/L		05/30/13 09:10	06/01/13 05:12	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: TB-052811
Date Collected: 05/28/13 00:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 01:09	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 01:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 01:09	1
Acetone	10	U	10		ug/L			05/30/13 01:09	1
Benzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 01:09	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 01:09	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 01:09	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 01:09	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 01:09	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 01:09	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 01:09	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 01:09	1
Styrene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Toluene	1.0	U	1.0		ug/L			05/30/13 01:09	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 01:09	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 01:09	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 01:09	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 01:09	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 01:09	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21650-1

Client Sample ID: TB-052811
Date Collected: 05/28/13 00:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21650-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		05/30/13 01:09	1
Toluene-d8 (Surr)	94		71 - 126		05/30/13 01:09	1
4-Bromofluorobenzene (Surr)	98		73 - 120		05/30/13 01:09	1

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

Lab Sample ID: MB 480-121067/5
Matrix: Water
Analysis Batch: 121067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
2-Hexanone	5.0	U	5.0		ug/L			05/29/13 23:24	1
2-Butanone (MEK)	10	U	10		ug/L			05/29/13 23:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/29/13 23:24	1
Acetone	10	U	10		ug/L			05/29/13 23:24	1
Benzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Bromoform	1.0	U	1.0		ug/L			05/29/13 23:24	1
Bromomethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Carbon disulfide	1.0	U	1.0		ug/L			05/29/13 23:24	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/29/13 23:24	1
Chlorobenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Chloroethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Chloroform	1.0	U	1.0		ug/L			05/29/13 23:24	1
Chloromethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 23:24	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Cyclohexane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Ethylbenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Methyl acetate	1.0	U	1.0		ug/L			05/29/13 23:24	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/29/13 23:24	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Methylene Chloride	1.0	U	1.0		ug/L			05/29/13 23:24	1
Styrene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Toluene	1.0	U	1.0		ug/L			05/29/13 23:24	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/29/13 23:24	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Trichloroethene	1.0	U	1.0		ug/L			05/29/13 23:24	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/29/13 23:24	1
Vinyl chloride	1.0	U	1.0		ug/L			05/29/13 23:24	1
Xylenes, Total	2.0	U	2.0		ug/L			05/29/13 23:24	1

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

Lab Sample ID: MB 480-121067/5
Matrix: Water
Analysis Batch: 121067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		05/29/13 23:24	1
Toluene-d8 (Surr)	95		71 - 126		05/29/13 23:24	1
4-Bromofluorobenzene (Surr)	97		73 - 120		05/29/13 23:24	1

Lab Sample ID: LCS 480-121067/4
Matrix: Water
Analysis Batch: 121067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.1		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	21.3		ug/L		85	58 - 121
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	26.4		ug/L		105	75 - 127
Benzene	25.0	24.4		ug/L		98	71 - 124
Chlorobenzene	25.0	25.1		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	23.1		ug/L		92	74 - 124
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
Methyl tert-butyl ether	25.0	24.6		ug/L		98	64 - 127
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	25.0		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	24.6		ug/L		99	73 - 127
Trichloroethene	25.0	24.3		ug/L		97	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	101		73 - 120

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121116/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121116/1-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Methylphenol	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Acenaphthene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Acenaphthylene	0.30	U	0.30		ug/L		05/30/13 07:37	06/01/13 17:30	1
Acetophenone	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Anthracene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Atrazine	2.0	U	2.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzaldehyde	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/30/13 07:37	06/01/13 17:30	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Caprolactam	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Carbazole	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Chrysene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Dibenzofuran	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Fluoranthene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Fluorene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Hexachloroethane	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Isophorone	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
Naphthalene	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Nitrobenzene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121116/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 121116**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Phenanthrene	0.20	U	0.20		ug/L		05/30/13 07:37	06/01/13 17:30	1
Phenol	1.0	U	1.0		ug/L		05/30/13 07:37	06/01/13 17:30	1
Pyrene	0.50	U	0.50		ug/L		05/30/13 07:37	06/01/13 17:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*34 - 132*	*05/30/13 07:37*	*06/01/13 17:30*	*1*
2-Fluorobiphenyl	*65*		*37 - 120*	*05/30/13 07:37*	*06/01/13 17:30*	*1*
p-Terphenyl-d14	*105*		*58 - 147*	*05/30/13 07:37*	*06/01/13 17:30*	*1*
Phenol-d5	*23*		*11 - 120*	*05/30/13 07:37*	*06/01/13 17:30*	*1*
2-Fluorophenol	*35*		*18 - 120*	*05/30/13 07:37*	*06/01/13 17:30*	*1*
2,4,6-Tribromophenol	*72*		*39 - 146*	*05/30/13 07:37*	*06/01/13 17:30*	*1*

Lab Sample ID: LCS 480-121116/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 121116**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.94		ug/L		99	22 - 167
2-Chlorophenol	8.00	5.34		ug/L		67	44 - 106
4-Chloro-3-methylphenol	8.00	7.45		ug/L		93	60 - 131
4-Nitrophenol	16.0	7.10		ug/L		44	10 - 105
Acenaphthene	8.00	6.49		ug/L		81	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	11.0	*	ug/L		137	69 - 136
Fluorene	8.00	7.13		ug/L		89	54 - 137
Hexachloroethane	8.00	5.0	U	ug/L		46	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.35		ug/L		79	50 - 123
Pentachlorophenol	16.0	12.4		ug/L		78	10 - 131
Phenol	8.00	2.47		ug/L		31	17 - 61
Pyrene	8.00	8.86		ug/L		111	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*68*		*34 - 132*
2-Fluorobiphenyl	*73*		*37 - 120*
p-Terphenyl-d14	*113*		*58 - 147*
Phenol-d5	*30*		*11 - 120*
2-Fluorophenol	*41*		*18 - 120*
2,4,6-Tribromophenol	*104*		*39 - 146*

Lab Sample ID: LCSD 480-121116/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 121645 — **Prep Batch: 121116**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	7.41		ug/L		93	22 - 167	7	20
2-Chlorophenol	8.00	5.20		ug/L		65	44 - 106	3	20
4-Chloro-3-methylphenol	8.00	7.11		ug/L		89	60 - 131	5	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-121116/3-A
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 121116

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	7.97		ug/L		50	10 - 105	12	20
Acenaphthene			8.00	6.14		ug/L		77	35 - 143	6	24
Bis(2-ethylhexyl) phthalate			8.00	10.6		ug/L		132	69 - 136	4	15
Fluorene			8.00	6.57		ug/L		82	54 - 137	8	15
Hexachloroethane			8.00	5.0	U	ug/L		47	32 - 104	1	20
N-Nitrosodi-n-propylamine			8.00	5.92		ug/L		74	50 - 123	7	20
Pentachlorophenol			16.0	12.2		ug/L		76	10 - 131	1	37
Phenol			8.00	2.44		ug/L		30	17 - 61	1	34
Pyrene			8.00	8.56		ug/L		107	58 - 143	3	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*68*		*34 - 132*
2-Fluorobiphenyl	*67*		*37 - 120*
p-Terphenyl-d14	*112*		*58 - 147*
Phenol-d5	*30*		*11 - 120*
2-Fluorophenol	*40*		*18 - 120*
2,4,6-Tribromophenol	*98*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121150/1-A
Matrix: Water
Analysis Batch: 121663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 00:09	1
Chromium	1.5	U	1.5		ug/L		05/30/13 09:10	06/01/13 00:09	1
Copper	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 00:09	1
Lead	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 00:09	1
Zinc	10	U	10		ug/L		05/30/13 09:10	06/01/13 00:09	1

Lab Sample ID: LCS 480-121150/2-A
Matrix: Water
Analysis Batch: 121663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121150

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			20.0	20.8		ug/L		104	80 - 120		
Chromium			20.0	21.3		ug/L		106	80 - 120		
Copper			20.0	20.7		ug/L		104	80 - 120		
Lead			20.0	20.2		ug/L		101	80 - 120		
Zinc			50.0	51.9		ug/L		104	80 - 120		

Lab Sample ID: MB 480-120622/13-B
Matrix: Water
Analysis Batch: 121665

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121152

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 04:21	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-120622/13-B
Matrix: Water
Analysis Batch: 121665

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121152

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		05/30/13 09:10	06/01/13 04:21	1
Copper	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 04:21	1
Lead	1.0	U	1.0		ug/L		05/30/13 09:10	06/01/13 04:21	1
Zinc	10	U	10		ug/L		05/30/13 09:10	06/01/13 04:21	1

Lab Sample ID: LCS 480-120622/14-B
Matrix: Water
Analysis Batch: 121665

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 121152

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.9		ug/L		104	80 - 120
Chromium	20.0	20.9		ug/L		105	80 - 120
Copper	20.0	20.5		ug/L		102	80 - 120
Lead	20.0	20.4		ug/L		102	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Lab Sample ID: 180-21650-2 MS
Matrix: Water
Analysis Batch: 121665

Client Sample ID: DP13N-01I
Prep Type: Dissolved
Prep Batch: 121152

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	21.6		ug/L		105	75 - 125
Chromium	1.5	U	20.0	19.2		ug/L		92	75 - 125
Copper	2.8		20.0	21.8		ug/L		95	75 - 125
Lead	1.0	U	20.0	20.1		ug/L		100	75 - 125
Zinc	19		50.0	68.1		ug/L		99	75 - 125

Lab Sample ID: 180-21650-2 MSD
Matrix: Water
Analysis Batch: 121665

Client Sample ID: DP13N-01I
Prep Type: Dissolved
Prep Batch: 121152

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	21.7		ug/L		105	75 - 125	0	20
Chromium	1.5	U	20.0	19.2		ug/L		92	75 - 125	0	20
Copper	2.8		20.0	21.5		ug/L		93	75 - 125	2	20
Lead	1.0	U	20.0	20.3		ug/L		101	75 - 125	1	20
Zinc	19		50.0	67.8		ug/L		99	75 - 125	0	20

GC/MS VOA

Analysis Batch: 121067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	8260B	
180-21650-2	DP13N-01I	Total/NA	Water	8260B	
180-21650-3	TB-052811	Total/NA	Water	8260B	
LCS 480-121067/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121067/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	3510C	
180-21650-2	DP13N-01I	Total/NA	Water	3510C	
LCS 480-121116/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-121116/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-121116/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 121645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121116/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121116
LCSD 480-121116/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	121116
MB 480-121116/1-A	Method Blank	Total/NA	Water	8270C LL	121116

Analysis Batch: 121756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	8270C LL	121116
180-21650-2	DP13N-01I	Total/NA	Water	8270C LL	121116

Metals

Prep Batch: 121150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	3020A	
180-21650-2	DP13N-01I	Total/NA	Water	3020A	
LCS 480-121150/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121150/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 121152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Dissolved	Water	3020A	
180-21650-2	DP13N-01I	Dissolved	Water	3020A	
180-21650-2 MS	DP13N-01I	Dissolved	Water	3020A	
180-21650-2 MSD	DP13N-01I	Dissolved	Water	3020A	
LCS 480-120622/14-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/13-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	6020	121150
180-21650-2	DP13N-01I	Total/NA	Water	6020	121150
LCS 480-121150/2-A	Lab Control Sample	Total/NA	Water	6020	121150

Metals (Continued)

Analysis Batch: 121663 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-121150/1-A	Method Blank	Total/NA	Water	6020	121150

Analysis Batch: 121665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Dissolved	Water	6020	121152
180-21650-2	DP13N-01I	Dissolved	Water	6020	121152
180-21650-2 MS	DP13N-01I	Dissolved	Water	6020	121152
180-21650-2 MSD	DP13N-01I	Dissolved	Water	6020	121152
LCS 480-120622/14-B	Lab Control Sample	Dissolved	Water	6020	121152
MB 480-120622/13-B	Method Blank	Dissolved	Water	6020	121152

Analysis Batch: 121781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21650-1	DP13N-03I	Total/NA	Water	6020	121150
180-21650-2	DP13N-01I	Total/NA	Water	6020	121150

180 21650

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental	Angie Catchie	5/24/13	220336
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd Ave	412-428-9411	412-963-7058	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	V. Bortot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Cavalcade TI Zone delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE-13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270C (SVOA)	Select Metals 6020 Total	Select Metals 6020 Diss	Special Instructions/ Conditions of Receipt
DP13N-03I	5/28/13	1710		X			2		2	3			3	2	1	1	Diss Metals are field filtered.
DP13N-01I	5/28/13	1850		X			2		2	3			3	2	1	1	
TB-052811	5/28/13	—		X			1			1			1				

Analysis (Attach list if more space is needed)

Rel 5/28/13

Rel 5/28/13

Rel 5/28/13

180-21650 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAY

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	5/28/13	2005	1. Received By	5/29/13	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

3,0,2,7,2,1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21650-1

Login Number: 21650

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21650-1

Login Number: 21650
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 05/29/13 03:53 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21665-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 7:04:18 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21665-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21665-1

Comments
No additional comments.

Receipt
The samples were received on 5/29/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.1º C, 2.7º C and 3.0º C.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the abundance of non-target analytes: OW-15 (180-21665-5), PZN-40 (180-21665-3), PZN-50 (180-21665-2), PZN-99A (180-21665-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: PZN-20 (180-21665-1), PZN-20 (180-21665-1 MS), PZN-20 (180-21665-1 MSD). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octy phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: OW-15 (180-21665-5), PZN-20 (180-21665-1), PZN-20 (180-21665-1 MS), PZN-20 (180-21665-1 MSD), PZN-40 (180-21665-3), PZN-50 (180-21665-2), PZN-99A (180-21665-4). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: PZN-20 (180-21665-1 MS), PZN-20 (180-21665-1 MSD). As such, surrogate and spike recoveries were diluted out.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octy phthalate and 4-Nitrophenol associated with batch 122358 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: OW-15 (180-21665-5), PZN-20 (180-21665-1), PZN-20 (180-21665-1 MS), PZN-20 (180-21665-1 MSD), PZN-40 (180-21665-3), PZN-50 (180-21665-2), PZN-99A (180-21665-4). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following sample was diluted due to abundance of target analytes: PZN-20 (180-21665-1 MS), PZN-20 (180-21665-1 MSD). As such, surrogate and spike recoveries were diluted out.

Method(s) 8270C LL: The continuing calibration verification (CCV) for analytical batch 122499 recovered outside control limits for mulltiple analytes. These analytes are not reported in the associated samples, therefore the data have been qualified and reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122746 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Dissolved metals results for the following sample(s) are slightly greater than the corresponding total metals results for

Job ID: 180-21665-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

arsenic: PZN-20 (180-21665-1), PZN-99A (180-21665-4).

Method(s) 6020: Dissolved metals results for the following sample(s) are slightly greater than the corresponding total metals results for chromium: PZN-99A (180-21665-4).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits
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.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21665-1	PZN-20	Water	05/28/13 13:25	05/29/13 09:30
180-21665-2	PZN-50	Water	05/28/13 15:30	05/29/13 09:30
180-21665-3	PZN-40	Water	05/28/13 13:20	05/29/13 09:30
180-21665-4	PZN-99A	Water	05/28/13 20:00	05/29/13 09:30
180-21665-5	OW-15	Water	05/28/13 15:10	05/29/13 09:30
180-21665-6	TB-052813	Water	05/28/13 12:00	05/29/13 09:30

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: PZN-20

Lab Sample ID: 180-21665-1

Date Collected: 05/28/13 13:25

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	121335	05/31/13 01:07	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1049.3 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		100			122358	06/05/13 18:57	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1049.3 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL	DL	2000			122499	06/06/13 12:50	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121315	05/31/13 07:20	SS	TAL BUF
Total/NA	Analysis	6020		1			121664	06/01/13 02:36	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 09:22	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZN-50

Lab Sample ID: 180-21665-2

Date Collected: 05/28/13 15:30

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	121155	05/30/13 11:33	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1050 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		100			122358	06/05/13 19:24	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1050 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL	DL	1000			122499	06/06/13 13:17	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121315	05/31/13 07:20	SS	TAL BUF
Total/NA	Analysis	6020		1			121664	06/01/13 03:06	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:01	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZN-40

Lab Sample ID: 180-21665-3

Date Collected: 05/28/13 13:20

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	121155	05/30/13 11:57	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1040.6 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF

Client Sample ID: PZN-40

Lab Sample ID: 180-21665-3

Date Collected: 05/28/13 13:20

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C LL		100			122358	06/05/13 19:51	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1040.6 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL	DL	2000			122499	06/06/13 13:45	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121315	05/31/13 07:20	SS	TAL BUF
Total/NA	Analysis	6020		1			121664	06/01/13 03:12	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:07	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZN-99A

Lab Sample ID: 180-21665-4

Date Collected: 05/28/13 20:00

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	121155	05/30/13 12:21	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1045.8 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		100			122358	06/05/13 20:18	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1045.8 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL	DL	2000			122499	06/06/13 14:12	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121315	05/31/13 07:20	SS	TAL BUF
Total/NA	Analysis	6020		1			121664	06/01/13 03:30	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:12	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: OW-15

Lab Sample ID: 180-21665-5

Date Collected: 05/28/13 15:10

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	121155	05/30/13 12:45	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048.3 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		100			122358	06/05/13 20:45	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1048.3 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF

Client Sample ID: OW-15

Lab Sample ID: 180-21665-5

Date Collected: 05/28/13 15:10

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C LL	DL	1000			122499	06/06/13 14:39	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121315	05/31/13 07:20	SS	TAL BUF
Total/NA	Analysis	6020		1			121664	06/01/13 03:37	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:18	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-052813

Lab Sample ID: 180-21665-6

Date Collected: 05/28/13 12:00

Matrix: Water

Date Received: 05/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121155	05/30/13 13:09	RL	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

DE = David Evers

JM = Jaclyn Mantell

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RL = Renee Larson

RMM = Ryan McKernan

Client Sample ID: PZN-20
Date Collected: 05/28/13 13:25
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,1,2-Trichloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,1-Dichloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,1-Dichloroethene	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2,4-Trichlorobenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2-Dibromoethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2-Dichlorobenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2-Dichloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,2-Dichloropropane	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,3-Dichlorobenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
1,4-Dichlorobenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
2-Hexanone	20	U	20		ug/L			05/31/13 01:07	4
2-Butanone (MEK)	40	U	40		ug/L			05/31/13 01:07	4
4-Methyl-2-pentanone (MIBK)	20	U	20		ug/L			05/31/13 01:07	4
Acetone	40	U	40		ug/L			05/31/13 01:07	4
Benzene	**13**		4.0		ug/L			05/31/13 01:07	4
Bromodichloromethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Bromoform	4.0	U	4.0		ug/L			05/31/13 01:07	4
Bromomethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Carbon disulfide	4.0	U	4.0		ug/L			05/31/13 01:07	4
Carbon tetrachloride	4.0	U	4.0		ug/L			05/31/13 01:07	4
Chlorobenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Dibromochloromethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Chloroethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Chloroform	4.0	U	4.0		ug/L			05/31/13 01:07	4
Chloromethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
cis-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/31/13 01:07	4
cis-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Cyclohexane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Dichlorodifluoromethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Ethylbenzene	**44**		4.0		ug/L			05/31/13 01:07	4
Isopropylbenzene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Methyl acetate	4.0	U	4.0		ug/L			05/31/13 01:07	4
Methyl tert-butyl ether	4.0	U	4.0		ug/L			05/31/13 01:07	4
Methylcyclohexane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Methylene Chloride	4.0	U	4.0		ug/L			05/31/13 01:07	4
Styrene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Tetrachloroethene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Toluene	**27**		4.0		ug/L			05/31/13 01:07	4
trans-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/31/13 01:07	4
trans-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Trichloroethene	4.0	U	4.0		ug/L			05/31/13 01:07	4
Trichlorofluoromethane	4.0	U	4.0		ug/L			05/31/13 01:07	4
Vinyl chloride	4.0	U	4.0		ug/L			05/31/13 01:07	4
Xylenes, Total	**110**		8.0		ug/L			05/31/13 01:07	4

Client Sample ID: PZN-20
Date Collected: 05/28/13 13:25
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*05/31/13 01:07*	*4*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/31/13 01:07*	*4*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/31/13 01:07*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4,5-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4,6-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4-Dichlorophenol	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4-Dimethylphenol	**200**		95		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4-Dinitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,4-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2,6-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Chloronaphthalene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Chlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Methylnaphthalene	**400**		48		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
2-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
3-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Chloro-3-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Chloroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
4-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Acenaphthene	**300**		48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Acenaphthylene	29	U	29		ug/L		05/31/13 07:08	06/05/13 18:57	100
Acetophenone	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Atrazine	190	U	190		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzaldehyde	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzo(a)anthracene	29	U	29		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzo(a)pyrene	17	U	17		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzo(b)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzo(g,h,i)perylene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Benzo(k)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 18:57	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Butyl benzyl phthalate	290	U	290		ug/L		05/31/13 07:08	06/05/13 18:57	100
Caprolactam	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Carbazole	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Chrysene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Dibenz(a,h)anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100

Client Sample ID: PZN-20
Date Collected: 05/28/13 13:25
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Diethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Dimethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Di-n-butyl phthalate	190	U	190		ug/L		05/31/13 07:08	06/05/13 18:57	100
Di-n-octyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Fluoranthene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Fluorene	**120**		48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Hexachlorobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Hexachlorobutadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
Hexachlorocyclopentadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
Hexachloroethane	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Isophorone	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
Nitrobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
N-Nitrosodiphenylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 18:57	100
Pentachlorophenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
Phenanthrene	**56**		19		ug/L		05/31/13 07:08	06/05/13 18:57	100
Phenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 18:57	100
Pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 18:57	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/05/13 18:57*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/05/13 18:57*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/05/13 18:57*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/05/13 18:57*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/05/13 18:57*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/05/13 18:57*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**8100**		1900		ug/L		05/31/13 07:08	06/06/13 12:50	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 12:50*	*2000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**33**		1.0		ug/L		05/31/13 07:20	06/01/13 02:36	1
Chromium	1.5	U	1.5		ug/L		05/31/13 07:20	06/01/13 02:36	1
Copper	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 02:36	1
Lead	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 02:36	1
Zinc	10	U	10		ug/L		05/31/13 07:20	06/01/13 02:36	1

Client Sample ID: PZN-20

Lab Sample ID: 180-21665-1

Date Collected: 05/28/13 13:25

Matrix: Water

Date Received: 05/29/13 09:30

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**37**		1.0		ug/L		05/31/13 10:30	06/04/13 09:22	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 09:22	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:22	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:22	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 09:22	1

Client Sample ID: PZN-50

Lab Sample ID: 180-21665-2

Date Collected: 05/28/13 15:30

Matrix: Water

Date Received: 05/29/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,1,2-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,1-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,1-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2,4-Trichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2-Dibromoethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,2-Dichloropropane	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,3-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
1,4-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
2-Hexanone	20	U	20		ug/L			05/30/13 11:33	4
2-Butanone (MEK)	40	U	40		ug/L			05/30/13 11:33	4
4-Methyl-2-pentanone (MIBK)	20	U	20		ug/L			05/30/13 11:33	4
Acetone	40	U	40		ug/L			05/30/13 11:33	4
Benzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Bromodichloromethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Bromoform	4.0	U	4.0		ug/L			05/30/13 11:33	4
Bromomethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Carbon disulfide	4.0	U	4.0		ug/L			05/30/13 11:33	4
Carbon tetrachloride	4.0	U	4.0		ug/L			05/30/13 11:33	4
Chlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Dibromochloromethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Chloroethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Chloroform	4.0	U	4.0		ug/L			05/30/13 11:33	4
Chloromethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
cis-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:33	4
cis-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Cyclohexane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Dichlorodifluoromethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Ethylbenzene	**21**		4.0		ug/L			05/30/13 11:33	4
Isopropylbenzene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Methyl acetate	4.0	U	4.0		ug/L			05/30/13 11:33	4
Methyl tert-butyl ether	4.0	U	4.0		ug/L			05/30/13 11:33	4
Methylcyclohexane	4.0	U	4.0		ug/L			05/30/13 11:33	4

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: PZN-50
Date Collected: 05/28/13 15:30
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.0	U	4.0		ug/L			05/30/13 11:33	4
Styrene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Tetrachloroethene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Toluene	4.0	U	4.0		ug/L			05/30/13 11:33	4
trans-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:33	4
trans-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Trichloroethene	4.0	U	4.0		ug/L			05/30/13 11:33	4
Trichlorofluoromethane	4.0	U	4.0		ug/L			05/30/13 11:33	4
Vinyl chloride	4.0	U	4.0		ug/L			05/30/13 11:33	4
Xylenes, Total	**19**		8.0		ug/L			05/30/13 11:33	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*05/30/13 11:33*	*4*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/30/13 11:33*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/30/13 11:33*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4,5-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4,6-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4-Dichlorophenol	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4-Dimethylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4-Dinitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,4-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2,6-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Chloronaphthalene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Chlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Methylnaphthalene	**66**		48		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
2-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
3-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Chloro-3-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Chloroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
4-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Acenaphthene	**170**		48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Acenaphthylene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:24	100
Acetophenone	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Atrazine	190	U	190		ug/L		05/31/13 07:08	06/05/13 19:24	100
Benzaldehyde	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Benzo(a)anthracene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:24	100

Client Sample ID: PZN-50
Date Collected: 05/28/13 15:30
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	17	U	17		ug/L		05/31/13 07:08	06/05/13 19:24	100
Benzo(b)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:24	100
Benzo(g,h,i)perylene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Benzo(k)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:24	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Butyl benzyl phthalate	290	U	290		ug/L		05/31/13 07:08	06/05/13 19:24	100
Caprolactam	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Carbazole	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Chrysene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Dibenz(a,h)anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Dibenzofuran	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Diethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Dimethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Di-n-butyl phthalate	190	U	190		ug/L		05/31/13 07:08	06/05/13 19:24	100
Di-n-octyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Fluoranthene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Fluorene	**66**		48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Hexachlorobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Hexachlorobutadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
Hexachlorocyclopentadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
Hexachloroethane	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Isophorone	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
Nitrobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
N-Nitrosodiphenylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:24	100
Pentachlorophenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
Phenanthrene	**51**		19		ug/L		05/31/13 07:08	06/05/13 19:24	100
Phenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 19:24	100
Pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/05/13 19:24*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/05/13 19:24*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/05/13 19:24*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/05/13 19:24*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/05/13 19:24*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/05/13 19:24*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**3600**		950		ug/L		05/31/13 07:08	06/06/13 13:17	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*

Client Sample ID: PZN-50

Lab Sample ID: 180-21665-2

Date Collected: 05/28/13 15:30

Matrix: Water

Date Received: 05/29/13 09:30

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 13:17*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.5**		1.0		ug/L		05/31/13 07:20	06/01/13 03:06	1
Chromium	1.5	U	1.5		ug/L		05/31/13 07:20	06/01/13 03:06	1
Copper	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:06	1
Lead	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:06	1
Zinc	10	U	10		ug/L		05/31/13 07:20	06/01/13 03:06	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.5**		1.0		ug/L		05/31/13 10:30	06/04/13 10:01	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:01	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:01	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:01	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:01	1

Client Sample ID: PZN-40

Lab Sample ID: 180-21665-3

Date Collected: 05/28/13 13:20

Matrix: Water

Date Received: 05/29/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,1,2-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,1-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,1-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2,4-Trichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2-Dibromoethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,2-Dichloropropane	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,3-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:57	4
1,4-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:57	4
2-Hexanone	20	U	20		ug/L			05/30/13 11:57	4
2-Butanone (MEK)	40	U	40		ug/L			05/30/13 11:57	4
4-Methyl-2-pentanone (MIBK)	20	U	20		ug/L			05/30/13 11:57	4
Acetone	**240**		40		ug/L			05/30/13 11:57	4
Benzene	**13**		4.0		ug/L			05/30/13 11:57	4
Bromodichloromethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Bromoform	4.0	U	4.0		ug/L			05/30/13 11:57	4
Bromomethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Carbon disulfide	4.0	U	4.0		ug/L			05/30/13 11:57	4
Carbon tetrachloride	4.0	U	4.0		ug/L			05/30/13 11:57	4
Chlorobenzene	4.0	U	4.0		ug/L			05/30/13 11:57	4

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: PZN-40
Date Collected: 05/28/13 13:20
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Chloroethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Chloroform	4.0	U	4.0		ug/L			05/30/13 11:57	4
Chloromethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
cis-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:57	4
cis-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 11:57	4
Cyclohexane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Dichlorodifluoromethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Ethylbenzene	**53**		4.0		ug/L			05/30/13 11:57	4
Isopropylbenzene	**4.2**		4.0		ug/L			05/30/13 11:57	4
Methyl acetate	4.0	U	4.0		ug/L			05/30/13 11:57	4
Methyl tert-butyl ether	4.0	U	4.0		ug/L			05/30/13 11:57	4
Methylcyclohexane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Methylene Chloride	4.0	U	4.0		ug/L			05/30/13 11:57	4
Styrene	4.0	U	4.0		ug/L			05/30/13 11:57	4
Tetrachloroethene	4.0	U	4.0		ug/L			05/30/13 11:57	4
Toluene	**65**		4.0		ug/L			05/30/13 11:57	4
trans-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 11:57	4
trans-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 11:57	4
Trichloroethene	4.0	U	4.0		ug/L			05/30/13 11:57	4
Trichlorofluoromethane	4.0	U	4.0		ug/L			05/30/13 11:57	4
Vinyl chloride	4.0	U	4.0		ug/L			05/30/13 11:57	4
Xylenes, Total	**170**		8.0		ug/L			05/30/13 11:57	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*05/30/13 11:57*	*4*
Toluene-d8 (Surr)	*95*		*71 - 126*		*05/30/13 11:57*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/30/13 11:57*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4,5-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4,6-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4-Dichlorophenol	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4-Dimethylphenol	**390**		96		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4-Dinitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,4-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2,6-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Chloronaphthalene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Chlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Methylnaphthalene	**680**		48		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Methylphenol	96	U	96		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
2-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
3-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100

Client Sample ID: PZN-40
Date Collected: 05/28/13 13:20
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Chloroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Methylphenol	96	U	96		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
4-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Acenaphthene	**480**		48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Acenaphthylene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:51	100
Acetophenone	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Atrazine	190	U	190		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzaldehyde	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzo(a)anthracene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzo(a)pyrene	17	U	17		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzo(b)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzo(g,h,i)perylene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Benzo(k)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 19:51	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Butyl benzyl phthalate	290	U	290		ug/L		05/31/13 07:08	06/05/13 19:51	100
Caprolactam	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Carbazole	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Chrysene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Dibenz(a,h)anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Dibenzofuran	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Diethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Dimethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Di-n-butyl phthalate	190	U	190		ug/L		05/31/13 07:08	06/05/13 19:51	100
Di-n-octyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Fluoranthene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Fluorene	**220**		48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Hexachlorobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Hexachlorobutadiene	96	U	96		ug/L		05/31/13 07:08	06/05/13 19:51	100
Hexachlorocyclopentadiene	96	U	96		ug/L		05/31/13 07:08	06/05/13 19:51	100
Hexachloroethane	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Isophorone	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
Nitrobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
N-Nitrosodiphenylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 19:51	100
Pentachlorophenol	**120**		96		ug/L		05/31/13 07:08	06/05/13 19:51	100
Phenanthrene	**260**		19		ug/L		05/31/13 07:08	06/05/13 19:51	100
Phenol	96	U	96		ug/L		05/31/13 07:08	06/05/13 19:51	100
Pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 19:51	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/05/13 19:51*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/05/13 19:51*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/05/13 19:51*	*100*

Client Sample ID: PZN-40

Date Collected: 05/28/13 13:20
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/05/13 19:51*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/05/13 19:51*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/05/13 19:51*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**11000**		1900		ug/L		05/31/13 07:08	06/06/13 13:45	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 13:45*	*2000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**550**		1.0		ug/L		05/31/13 07:20	06/01/13 03:12	1
Chromium	**5.7**		1.5		ug/L		05/31/13 07:20	06/01/13 03:12	1
Copper	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:12	1
Lead	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:12	1
Zinc	**11**		10		ug/L		05/31/13 07:20	06/01/13 03:12	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**540**		1.0		ug/L		05/31/13 10:30	06/04/13 10:07	1
Chromium	**5.3**		1.5		ug/L		05/31/13 10:30	06/04/13 10:07	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:07	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:07	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:07	1

Client Sample ID: PZN-99A

Date Collected: 05/28/13 20:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,1,2-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,1-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,1-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2,4-Trichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2-Dibromoethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,2-Dichloropropane	4.0	U	4.0		ug/L			05/30/13 12:21	4

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: PZN-99A
Date Collected: 05/28/13 20:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:21	4
1,4-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:21	4
2-Hexanone	20	U	20		ug/L			05/30/13 12:21	4
2-Butanone (MEK)	40	U	40		ug/L			05/30/13 12:21	4
4-Methyl-2-pentanone (MIBK)	20	U	20		ug/L			05/30/13 12:21	4
Acetone	**240**		40		ug/L			05/30/13 12:21	4
Benzene	**13**		4.0		ug/L			05/30/13 12:21	4
Bromodichloromethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Bromoform	4.0	U	4.0		ug/L			05/30/13 12:21	4
Bromomethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Carbon disulfide	4.0	U	4.0		ug/L			05/30/13 12:21	4
Carbon tetrachloride	4.0	U	4.0		ug/L			05/30/13 12:21	4
Chlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Dibromochloromethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Chloroethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Chloroform	4.0	U	4.0		ug/L			05/30/13 12:21	4
Chloromethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
cis-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:21	4
cis-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Cyclohexane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Dichlorodifluoromethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Ethylbenzene	**52**		4.0		ug/L			05/30/13 12:21	4
Isopropylbenzene	**4.1**		4.0		ug/L			05/30/13 12:21	4
Methyl acetate	4.0	U	4.0		ug/L			05/30/13 12:21	4
Methyl tert-butyl ether	4.0	U	4.0		ug/L			05/30/13 12:21	4
Methylcyclohexane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Methylene Chloride	4.0	U	4.0		ug/L			05/30/13 12:21	4
Styrene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Tetrachloroethene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Toluene	**63**		4.0		ug/L			05/30/13 12:21	4
trans-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:21	4
trans-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Trichloroethene	4.0	U	4.0		ug/L			05/30/13 12:21	4
Trichlorofluoromethane	4.0	U	4.0		ug/L			05/30/13 12:21	4
Vinyl chloride	4.0	U	4.0		ug/L			05/30/13 12:21	4
Xylenes, Total	**170**		8.0		ug/L			05/30/13 12:21	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*05/30/13 12:21*	*4*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/30/13 12:21*	*4*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/30/13 12:21*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,4,5-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,4,6-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,4-Dichlorophenol	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,4-Dimethylphenol	**560**		96		ug/L		05/31/13 07:08	06/05/13 20:18	100

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: PZN-99A
Date Collected: 05/28/13 20:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,4-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2,6-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Chloronaphthalene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Chlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Methylnaphthalene	**690**		48		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Methylphenol	**120**		96		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
2-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
3-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Chloro-3-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Chloroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Methylphenol	**130**		96		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
4-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Acenaphthene	**510**		48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Acenaphthylene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:18	100
Acetophenone	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Atrazine	190	U	190		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzaldehyde	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzo(a)anthracene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzo(a)pyrene	17	U	17		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzo(b)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzo(g,h,i)perylene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Benzo(k)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:18	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Butyl benzyl phthalate	290	U	290		ug/L		05/31/13 07:08	06/05/13 20:18	100
Caprolactam	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Carbazole	**530**		480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Chrysene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Dibenz(a,h)anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Dibenzofuran	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Diethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Dimethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Di-n-butyl phthalate	190	U	190		ug/L		05/31/13 07:08	06/05/13 20:18	100
Di-n-octyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Fluoranthene	**61**		48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Fluorene	**250**		48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Hexachlorobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Hexachlorobutadiene	96	U	96		ug/L		05/31/13 07:08	06/05/13 20:18	100
Hexachlorocyclopentadiene	96	U	96		ug/L		05/31/13 07:08	06/05/13 20:18	100
Hexachloroethane	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100

Client Sample ID: PZN-99A
Date Collected: 05/28/13 20:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Isophorone	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
Nitrobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
N-Nitrosodiphenylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:18	100
Pentachlorophenol	**120**		96		ug/L		05/31/13 07:08	06/05/13 20:18	100
Phenanthrene	**330**		19		ug/L		05/31/13 07:08	06/05/13 20:18	100
Phenol	96	U	96		ug/L		05/31/13 07:08	06/05/13 20:18	100
Pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:18	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/05/13 20:18*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/05/13 20:18*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/05/13 20:18*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/05/13 20:18*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/05/13 20:18*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/05/13 20:18*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**11000**		1900		ug/L		05/31/13 07:08	06/06/13 14:12	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 14:12*	*2000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**540**		1.0		ug/L		05/31/13 07:20	06/01/13 03:30	1
Chromium	**5.5**		1.5		ug/L		05/31/13 07:20	06/01/13 03:30	1
Copper	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:30	1
Lead	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 03:30	1
Zinc	**10**		10		ug/L		05/31/13 07:20	06/01/13 03:30	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**570**		1.0		ug/L		05/31/13 10:30	06/04/13 10:12	1
Chromium	**5.8**		1.5		ug/L		05/31/13 10:30	06/04/13 10:12	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:12	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:12	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:12	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: OW-15
Date Collected: 05/28/13 15:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,1,2-Trichloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,1-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,1-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2,4-Trichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2-Dibromoethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2-Dichloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,2-Dichloropropane	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,3-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
1,4-Dichlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
2-Hexanone	20	U	20		ug/L			05/30/13 12:45	4
2-Butanone (MEK)	40	U	40		ug/L			05/30/13 12:45	4
4-Methyl-2-pentanone (MIBK)	20	U	20		ug/L			05/30/13 12:45	4
Acetone	40	U	40		ug/L			05/30/13 12:45	4
Benzene	**12**		4.0		ug/L			05/30/13 12:45	4
Bromodichloromethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Bromoform	4.0	U	4.0		ug/L			05/30/13 12:45	4
Bromomethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Carbon disulfide	4.0	U	4.0		ug/L			05/30/13 12:45	4
Carbon tetrachloride	4.0	U	4.0		ug/L			05/30/13 12:45	4
Chlorobenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Dibromochloromethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Chloroethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Chloroform	4.0	U	4.0		ug/L			05/30/13 12:45	4
Chloromethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
cis-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:45	4
cis-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Cyclohexane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Dichlorodifluoromethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Ethylbenzene	**29**		4.0		ug/L			05/30/13 12:45	4
Isopropylbenzene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Methyl acetate	4.0	U	4.0		ug/L			05/30/13 12:45	4
Methyl tert-butyl ether	4.0	U	4.0		ug/L			05/30/13 12:45	4
Methylcyclohexane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Methylene Chloride	4.0	U	4.0		ug/L			05/30/13 12:45	4
Styrene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Tetrachloroethene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Toluene	**8.8**		4.0		ug/L			05/30/13 12:45	4
trans-1,2-Dichloroethene	4.0	U	4.0		ug/L			05/30/13 12:45	4
trans-1,3-Dichloropropene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Trichloroethene	4.0	U	4.0		ug/L			05/30/13 12:45	4
Trichlorofluoromethane	4.0	U	4.0		ug/L			05/30/13 12:45	4
Vinyl chloride	4.0	U	4.0		ug/L			05/30/13 12:45	4
Xylenes, Total	**45**		8.0		ug/L			05/30/13 12:45	4

Client Sample ID: OW-15
Date Collected: 05/28/13 15:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*05/30/13 12:45*	*4*
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/30/13 12:45*	*4*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/30/13 12:45*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4,5-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4,6-Trichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4-Dichlorophenol	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4-Dimethylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4-Dinitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,4-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2,6-Dinitrotoluene	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Chloronaphthalene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Chlorophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Methylnaphthalene	**450**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
2-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
3-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Chloro-3-methylphenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Chloroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Methylphenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Nitroaniline	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
4-Nitrophenol	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Acenaphthene	**470**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Acenaphthylene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:45	100
Acetophenone	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Anthracene	**81**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Atrazine	190	U	190		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzaldehyde	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzo(a)anthracene	**33**		29		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzo(a)pyrene	17	U	17		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzo(b)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzo(g,h,i)perylene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Benzo(k)fluoranthene	29	U	29		ug/L		05/31/13 07:08	06/05/13 20:45	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Butyl benzyl phthalate	290	U	290		ug/L		05/31/13 07:08	06/05/13 20:45	100
Caprolactam	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Carbazole	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Chrysene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Dibenz(a,h)anthracene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: OW-15
Date Collected: 05/28/13 15:10
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Diethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Dimethyl phthalate	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Di-n-butyl phthalate	190	U	190		ug/L		05/31/13 07:08	06/05/13 20:45	100
Di-n-octyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Fluoranthene	**200**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Fluorene	**260**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Hexachlorobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Hexachlorobutadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
Hexachlorocyclopentadiene	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
Hexachloroethane	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Isophorone	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
Nitrobenzene	48	U	48		ug/L		05/31/13 07:08	06/05/13 20:45	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
N-Nitrosodiphenylamine	480	U	480		ug/L		05/31/13 07:08	06/05/13 20:45	100
Pentachlorophenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
Phenanthrene	**570**		19		ug/L		05/31/13 07:08	06/05/13 20:45	100
Phenol	95	U	95		ug/L		05/31/13 07:08	06/05/13 20:45	100
Pyrene	**140**		48		ug/L		05/31/13 07:08	06/05/13 20:45	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/05/13 20:45*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/05/13 20:45*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/05/13 20:45*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/05/13 20:45*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/05/13 20:45*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/05/13 20:45*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**5700**		950		ug/L		05/31/13 07:08	06/06/13 14:39	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 14:39*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		1.0		ug/L		05/31/13 07:20	06/01/13 03:37	1
Chromium	**7.1**		1.5		ug/L		05/31/13 07:20	06/01/13 03:37	1
Copper	**5.5**		1.0		ug/L		05/31/13 07:20	06/01/13 03:37	1
Lead	**4.9**		1.0		ug/L		05/31/13 07:20	06/01/13 03:37	1
Zinc	**29**		10		ug/L		05/31/13 07:20	06/01/13 03:37	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: OW-15

Lab Sample ID: 180-21665-5

Date Collected: 05/28/13 15:10

Matrix: Water

Date Received: 05/29/13 09:30

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		1.0		ug/L		05/31/13 10:30	06/04/13 10:18	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:18	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:18	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:18	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:18	1

Client Sample ID: TB-052813

Lab Sample ID: 180-21665-6

Date Collected: 05/28/13 12:00

Matrix: Water

Date Received: 05/29/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 13:09	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 13:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 13:09	1
Acetone	10	U	10		ug/L			05/30/13 13:09	1
Benzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 13:09	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 13:09	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 13:09	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 13:09	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 13:09	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 13:09	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 13:09	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 13:09	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21665-1

Client Sample ID: TB-052813
Date Collected: 05/28/13 12:00
Date Received: 05/29/13 09:30

Lab Sample ID: 180-21665-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 13:09	1
Styrene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Toluene	1.0	U	1.0		ug/L			05/30/13 13:09	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 13:09	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 13:09	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 13:09	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 13:09	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*05/30/13 13:09*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/30/13 13:09*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/30/13 13:09*	*1*

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

Lab Sample ID: MB 480-121155/5
Matrix: Water
Analysis Batch: 121155

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 10:45	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 10:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 10:45	1
Acetone	10	U	10		ug/L			05/30/13 10:45	1
Benzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 10:45	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 10:45	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 10:45	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 10:45	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 10:45	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 10:45	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 10:45	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 10:45	1
Styrene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Toluene	1.0	U	1.0		ug/L			05/30/13 10:45	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 10:45	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 10:45	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 10:45	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 10:45	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 10:45	1

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

Lab Sample ID: MB 480-121155/5
Matrix: Water
Analysis Batch: 121155

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*05/30/13 10:45*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/30/13 10:45*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/30/13 10:45*	*1*

Lab Sample ID: LCS 480-121155/4
Matrix: Water
Analysis Batch: 121155

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	21.5		ug/L		86	71 - 129
1,1-Dichloroethene	25.0	20.8		ug/L		83	58 - 121
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	23.0		ug/L		92	75 - 127
Benzene	25.0	21.3		ug/L		85	71 - 124
Chlorobenzene	25.0	22.1		ug/L		88	72 - 120
cis-1,2-Dichloroethene	25.0	21.5		ug/L		86	74 - 124
Ethylbenzene	25.0	22.7		ug/L		91	77 - 123
Methyl tert-butyl ether	25.0	24.7		ug/L		99	64 - 127
Tetrachloroethene	25.0	21.7		ug/L		87	74 - 122
Toluene	25.0	21.7		ug/L		87	80 - 122
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	73 - 127
Trichloroethene	25.0	21.9		ug/L		88	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*100*		*71 - 126*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*

Lab Sample ID: MB 480-121335/5
Matrix: Water
Analysis Batch: 121335

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 22:28	1

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

Lab Sample ID: MB 480-121335/5
Matrix: Water
Analysis Batch: 121335

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 22:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 22:28	1
Acetone	10	U	10		ug/L			05/30/13 22:28	1
Benzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 22:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Styrene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Toluene	1.0	U	1.0		ug/L			05/30/13 22:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 22:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*05/30/13 22:28*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/30/13 22:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/30/13 22:28*	*1*

Lab Sample ID: LCS 480-121335/4
Matrix: Water
Analysis Batch: 121335

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.8		ug/L		99	71 - 129
1,1-Dichloroethene	25.0	22.7		ug/L		91	58 - 121
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 127

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

Lab Sample ID: LCS 480-121335/4
Matrix: Water
Analysis Batch: 121335

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	25.0	25.8		ug/L		103	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	27.1		ug/L		108	77 - 123
Methyl tert-butyl ether	25.0	25.1		ug/L		100	64 - 127
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
Trichloroethene	25.0	25.5		ug/L		102	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*

Lab Sample ID: 180-21665-1 MS
Matrix: Water
Analysis Batch: 121335

Client Sample ID: PZN-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	4.0	U	100	94.3		ug/L		94	71 - 129
1,1-Dichloroethene	4.0	U	100	84.2		ug/L		84	58 - 121
1,2-Dichlorobenzene	4.0	U	100	102		ug/L		102	80 - 124
1,2-Dichloroethane	4.0	U	100	101		ug/L		101	75 - 127
Benzene	13		100	107		ug/L		94	71 - 124
Chlorobenzene	4.0	U	100	98.6		ug/L		99	72 - 120
cis-1,2-Dichloroethene	4.0	U	100	92.8		ug/L		93	74 - 124
Ethylbenzene	44		100	138		ug/L		94	77 - 123
Methyl tert-butyl ether	4.0	U	100	98.1		ug/L		98	64 - 127
Tetrachloroethene	4.0	U	100	96.4		ug/L		96	74 - 122
Toluene	27		100	117		ug/L		90	80 - 122
trans-1,2-Dichloroethene	4.0	U	100	101		ug/L		101	73 - 127
Trichloroethene	4.0	U	100	96.7		ug/L		97	74 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*97*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 121335

Client Sample ID: PZN-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	4.0	U	100	93.7		ug/L		94	71 - 129	1	20
1,1-Dichloroethene	4.0	U	100	83.8		ug/L		84	58 - 121	1	16
1,2-Dichlorobenzene	4.0	U	100	100		ug/L		100	80 - 124	2	20
1,2-Dichloroethane	4.0	U	100	98.0		ug/L		98	75 - 127	3	20

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

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 121335

Client Sample ID: PZN-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	13		100	109		ug/L		96	71 - 124	2	13
Chlorobenzene	4.0	U	100	97.7		ug/L		98	72 - 120	1	25
cis-1,2-Dichloroethene	4.0	U	100	94.2		ug/L		94	74 - 124	2	15
Ethylbenzene	44		100	138		ug/L		94	77 - 123	0	15
Methyl tert-butyl ether	4.0	U	100	101		ug/L		101	64 - 127	2	37
Tetrachloroethene	4.0	U	100	95.3		ug/L		95	74 - 122	1	20
Toluene	27		100	118		ug/L		91	80 - 122	1	15
trans-1,2-Dichloroethene	4.0	U	100	99.7		ug/L		100	73 - 127	2	20
Trichloroethene	4.0	U	100	95.4		ug/L		95	74 - 123	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*96*		*71 - 126*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121374/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Acenaphthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121374/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Acetophenone	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Atrazine	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzaldehyde	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Caprolactam	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Carbazole	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Chrysene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dibenzofuran	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Fluoranthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Fluorene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachloroethane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Isophorone	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Naphthalene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Nitrobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Phenanthrene	0.20	U	0.20		ug/L		05/31/13 07:08	06/05/13 15:28	1
Phenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*34 - 132*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2-Fluorobiphenyl	*81*		*37 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
Phenol-d5	*31*		*11 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2-Fluorophenol	*44*		*18 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2,4,6-Tribromophenol	*87*		*39 - 146*	*05/31/13 07:08*	*06/05/13 15:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-121374/2-A
Matrix: Water
Analysis Batch: 122746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.61		ug/L		95	22 - 167
2-Chlorophenol	8.00	5.86		ug/L		73	44 - 106
4-Chloro-3-methylphenol	8.00	7.74		ug/L		97	60 - 131
4-Nitrophenol	16.0	11.1		ug/L		69	10 - 105
Acenaphthene	8.00	6.69		ug/L		84	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.50		ug/L		106	69 - 136
Fluorene	8.00	6.95		ug/L		87	54 - 137
Hexachloroethane	8.00	5.48		ug/L		69	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	14.1		ug/L		88	10 - 131
Phenol	8.00	2.57		ug/L		32	17 - 61
Pyrene	8.00	7.31		ug/L		91	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*82*		*34 - 132*
2-Fluorobiphenyl	*84*		*37 - 120*
p-Terphenyl-d14	*93*		*58 - 147*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*44*		*18 - 120*
2,4,6-Tribromophenol	*106*		*39 - 146*

Lab Sample ID: 180-21665-1 MS
Matrix: Water
Analysis Batch: 122358

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	480	U	7.96	500	U F	ug/L		0	70 - 130
2-Chlorophenol	480	U	7.96	500	U F	ug/L		0	70 - 130
4-Chloro-3-methylphenol	480	U	7.96	500	U F	ug/L		0	70 - 130
4-Nitrophenol	480	U	15.9	500	U	ug/L		NC	70 - 130
Acenaphthene	300		7.96	317	4	ug/L		236	35 - 143
Bis(2-ethylhexyl) phthalate	480	U	7.96	500	U	ug/L		NC	69 - 136
Fluorene	120		7.96	135	4	ug/L		163	54 - 137
Hexachloroethane	480	U	7.96	500	U	ug/L		NC	70 - 130
N-Nitrosodi-n-propylamine	480	U	7.96	500	U F	ug/L		0	70 - 130
Pentachlorophenol	95	U	15.9	105		ug/L		NC	18 - 131
Phenol	95	U	7.96	99	U	ug/L		NC	7 - 120
Pyrene	48	U	7.96	50	U	ug/L		97	85 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*0*	*X*	*34 - 132*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*
p-Terphenyl-d14	*0*	*X*	*58 - 147*
Phenol-d5	*0*	*X*	*11 - 120*
2-Fluorophenol	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 122358

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	480	U	7.64	480	U F	ug/L		0	70 - 130	NC	20
2-Chlorophenol	480	U	7.64	480	U F	ug/L		0	70 - 130	NC	20
4-Chloro-3-methylphenol	480	U	7.64	480	U F	ug/L		501	70 - 130	NC	20
4-Nitrophenol	480	U	15.3	480	U	ug/L		NC	70 - 130	NC	20
Acenaphthene	300		7.64	311	4	ug/L		177	35 - 143	2	24
Bis(2-ethylhexyl) phthalate	480	U	7.64	480	U	ug/L		NC	69 - 136	NC	15
Fluorene	120		7.64	134	4	ug/L		161	54 - 137	1	15
Hexachloroethane	480	U	7.64	480	U	ug/L		NC	70 - 130	11	20
N-Nitrosodi-n-propylamine	480	U	7.64	480	U F	ug/L		0	70 - 130	NC	20
Pentachlorophenol	95	U	15.3	100		ug/L		NC	18 - 131	5	37
Phenol	95	U	7.64	96	U	ug/L		NC	7 - 120	NC	34
Pyrene	48	U	7.64	48	U	ug/L		113	85 - 139	11	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*0*	*X*	*34 - 132*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*
p-Terphenyl-d14	*0*	*X*	*58 - 147*
Phenol-d5	*0*	*X*	*11 - 120*
2-Fluorophenol	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Lab Sample ID: 180-21665-1 MS
Matrix: Water
Analysis Batch: 122499

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121374

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*0*	*X*	*34 - 132*
2-Fluorobiphenyl - DL	*0*	*X*	*37 - 120*
p-Terphenyl-d14 - DL	*0*	*X*	*58 - 147*
Phenol-d5 - DL	*0*	*X*	*11 - 120*
2-Fluorophenol - DL	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol - DL	*0*	*X*	*39 - 146*

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 122499

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121374

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*0*	*X*	*34 - 132*
2-Fluorobiphenyl - DL	*0*	*X*	*37 - 120*
p-Terphenyl-d14 - DL	*0*	*X*	*58 - 147*
Phenol-d5 - DL	*0*	*X*	*11 - 120*
2-Fluorophenol - DL	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol - DL	*0*	*X*	*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121315/1-A
Matrix: Water
Analysis Batch: 121664

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 01:26	1
Chromium	1.5	U	1.5		ug/L		05/31/13 07:20	06/01/13 01:26	1
Copper	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 01:26	1
Lead	1.0	U	1.0		ug/L		05/31/13 07:20	06/01/13 01:26	1
Zinc	10	U	10		ug/L		05/31/13 07:20	06/01/13 01:26	1

Lab Sample ID: LCS 480-121315/2-A
Matrix: Water
Analysis Batch: 121664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.2		ug/L		101	80 - 120
Chromium	20.0	20.6		ug/L		103	80 - 120
Copper	20.0	20.5		ug/L		102	80 - 120
Lead	20.0	20.0		ug/L		100	80 - 120
Zinc	50.0	52.3		ug/L		105	80 - 120

Lab Sample ID: 180-21665-1 MS
Matrix: Water
Analysis Batch: 121664

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121315

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	33		20.0	54.9		ug/L		111	75 - 125
Chromium	1.5	U	20.0	19.8		ug/L		92	75 - 125
Copper	1.0	U	20.0	18.9		ug/L		93	75 - 125
Lead	1.0	U	20.0	19.8		ug/L		98	75 - 125
Zinc	10	U	50.0	51.6		ug/L		99	75 - 125

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 121664

Client Sample ID: PZN-20
Prep Type: Total/NA
Prep Batch: 121315

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	33		20.0	57.9	F	ug/L		126	75 - 125	5	20
Chromium	1.5	U	20.0	20.4		ug/L		95	75 - 125	3	20
Copper	1.0	U	20.0	19.7		ug/L		97	75 - 125	4	20
Lead	1.0	U	20.0	20.3		ug/L		101	75 - 125	3	20
Zinc	10	U	50.0	52.6		ug/L		101	75 - 125	2	20

Lab Sample ID: MB 480-120622/29-B
Matrix: Water
Analysis Batch: 122091

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 09:11	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 09:11	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-120622/30-B
Matrix: Water
Analysis Batch: 122091

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 121441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.0		ug/L		105	80 - 120
Chromium	20.0	20.4		ug/L		102	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	20.5		ug/L		103	80 - 120
Zinc	50.0	53.6		ug/L		107	80 - 120

Lab Sample ID: 180-21665-1 MS
Matrix: Water
Analysis Batch: 122091

Client Sample ID: PZN-20
Prep Type: Dissolved
Prep Batch: 121441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	37		20.0	57.4		ug/L		103	75 - 125
Chromium	1.5	U	20.0	20.0		ug/L		94	75 - 125
Copper	1.0	U	20.0	19.6		ug/L		97	75 - 125
Lead	1.0	U	20.0	20.2		ug/L		101	75 - 125
Zinc	10	U	50.0	52.3		ug/L		100	75 - 125

Lab Sample ID: 180-21665-1 MSD
Matrix: Water
Analysis Batch: 122091

Client Sample ID: PZN-20
Prep Type: Dissolved
Prep Batch: 121441

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	37		20.0	58.3		ug/L		108	75 - 125	2	20
Chromium	1.5	U	20.0	20.1		ug/L		94	75 - 125	0	20
Copper	1.0	U	20.0	19.6		ug/L		97	75 - 125	0	20
Lead	1.0	U	20.0	20.2		ug/L		101	75 - 125	0	20
Zinc	10	U	50.0	52.5		ug/L		101	75 - 125	1	20

GC/MS VOA

Analysis Batch: 121155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-2	PZN-50	Total/NA	Water	8260B	
180-21665-3	PZN-40	Total/NA	Water	8260B	
180-21665-4	PZN-99A	Total/NA	Water	8260B	
180-21665-5	OW-15	Total/NA	Water	8260B	
180-21665-6	TB-052813	Total/NA	Water	8260B	
LCS 480-121155/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121155/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 121335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Total/NA	Water	8260B	
180-21665-1 MS	PZN-20	Total/NA	Water	8260B	
180-21665-1 MSD	PZN-20	Total/NA	Water	8260B	
LCS 480-121335/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121335/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Total/NA	Water	3510C	
180-21665-1 - DL	PZN-20	Total/NA	Water	3510C	
180-21665-1 MS	PZN-20	Total/NA	Water	3510C	
180-21665-1 MS - DL	PZN-20	Total/NA	Water	3510C	
180-21665-1 MSD	PZN-20	Total/NA	Water	3510C	
180-21665-1 MSD - DL	PZN-20	Total/NA	Water	3510C	
180-21665-2	PZN-50	Total/NA	Water	3510C	
180-21665-2 - DL	PZN-50	Total/NA	Water	3510C	
180-21665-3	PZN-40	Total/NA	Water	3510C	
180-21665-3 - DL	PZN-40	Total/NA	Water	3510C	
180-21665-4	PZN-99A	Total/NA	Water	3510C	
180-21665-4 - DL	PZN-99A	Total/NA	Water	3510C	
180-21665-5	OW-15	Total/NA	Water	3510C	
180-21665-5 - DL	OW-15	Total/NA	Water	3510C	
LCS 480-121374/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-121374/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-121374/1-A	Method Blank	Total/NA	Water	8270C LL	121374

Analysis Batch: 122358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-1 MS	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-1 MSD	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-2	PZN-50	Total/NA	Water	8270C LL	121374
180-21665-3	PZN-40	Total/NA	Water	8270C LL	121374
180-21665-4	PZN-99A	Total/NA	Water	8270C LL	121374
180-21665-5	OW-15	Total/NA	Water	8270C LL	121374

GC/MS Semi VOA (Continued)

Analysis Batch: 122499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1 - DL	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-1 MS - DL	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-1 MSD - DL	PZN-20	Total/NA	Water	8270C LL	121374
180-21665-2 - DL	PZN-50	Total/NA	Water	8270C LL	121374
180-21665-3 - DL	PZN-40	Total/NA	Water	8270C LL	121374
180-21665-4 - DL	PZN-99A	Total/NA	Water	8270C LL	121374
180-21665-5 - DL	OW-15	Total/NA	Water	8270C LL	121374

Analysis Batch: 122746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121374/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121374

Metals

Prep Batch: 121315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Total/NA	Water	3020A	
180-21665-1 MS	PZN-20	Total/NA	Water	3020A	
180-21665-1 MSD	PZN-20	Total/NA	Water	3020A	
180-21665-2	PZN-50	Total/NA	Water	3020A	
180-21665-3	PZN-40	Total/NA	Water	3020A	
180-21665-4	PZN-99A	Total/NA	Water	3020A	
180-21665-5	OW-15	Total/NA	Water	3020A	
LCS 480-121315/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121315/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 121441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Dissolved	Water	3020A	
180-21665-1 MS	PZN-20	Dissolved	Water	3020A	
180-21665-1 MSD	PZN-20	Dissolved	Water	3020A	
180-21665-2	PZN-50	Dissolved	Water	3020A	
180-21665-3	PZN-40	Dissolved	Water	3020A	
180-21665-4	PZN-99A	Dissolved	Water	3020A	
180-21665-5	OW-15	Dissolved	Water	3020A	
LCS 480-120622/30-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/29-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 121664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Total/NA	Water	6020	121315
180-21665-1 MS	PZN-20	Total/NA	Water	6020	121315
180-21665-1 MSD	PZN-20	Total/NA	Water	6020	121315
180-21665-2	PZN-50	Total/NA	Water	6020	121315
180-21665-3	PZN-40	Total/NA	Water	6020	121315
180-21665-4	PZN-99A	Total/NA	Water	6020	121315
180-21665-5	OW-15	Total/NA	Water	6020	121315
LCS 480-121315/2-A	Lab Control Sample	Total/NA	Water	6020	121315
MB 480-121315/1-A	Method Blank	Total/NA	Water	6020	121315

Metals (Continued)

Analysis Batch: 122091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21665-1	PZN-20	Dissolved	Water	6020	121441
180-21665-1 MS	PZN-20	Dissolved	Water	6020	121441
180-21665-1 MSD	PZN-20	Dissolved	Water	6020	121441
180-21665-2	PZN-50	Dissolved	Water	6020	121441
180-21665-3	PZN-40	Dissolved	Water	6020	121441
180-21665-4	PZN-99A	Dissolved	Water	6020	121441
180-21665-5	OW-15	Dissolved	Water	6020	121441
LCS 480-120622/30-B	Lab Control Sample	Dissolved	Water	6020	121441
MB 480-120622/29-B	Method Blank	Dissolved	Water	6020	121441

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/28/13	Chain of Custody Number: 220326
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-944	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bortot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed EX		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BTEX-8260B	SVOCs-8270	Select Metals Total 6020	Select Metals Diss 6020	Special Instructions/ Conditions of Receipt
PZN-20	5/28/13	1325		X			2		2	3			3	2	1	1	Diss. Metals are
PZN-20 MS/MSD	5/28/13	1325		X			4		4	6			6	4	2	2	field filtered
PZN-50	5/28/13	1530		X			2		2	3			3	2	1	1	
PZN-40	5/28/13	1320		X			2		2	3			3	2	1	1	
PZN-99A	5/28/13	2000		X			2		2	3			3	2	1	1	
OW-15	5/28/13	1510		X			2		2	3			3	2	1	1	
TB-052813	5/28/13	—		X						1			1				

AC 5/28/13

AC 5/28/13

180-21665 Login
PM: Bortot, Veronica
Company: Field & Technical Services LLC

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/28/13	2008	1. Received By: [signature]	5/29/13	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 3.0, 2.7, 2.1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21665-1

Login Number: 21665

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Skowronek, Elyse N

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21665-1

Login Number: 21665
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/30/13 08:21 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1, 2.7, 3.0 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21665-1

Login Number: 21665
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/30/13 08:23 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1, 2.7, 3.0 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21680-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 12:58:00 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21680-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21680-1

Comments
No additional comments.

Receipt
The samples were received on 5/30/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.8º C, 3.9º C and 4.0º C.

GC/MS VOA
Method(s) 8260B: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: PZS-60 (180-21680-6). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octy phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octy phthalate and 4-Nitrophenol associated with batch 122358 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122746 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following sample was diluted due to abundance of target analytes: DP13S-06S (180-21680-8). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-butyl phthalate associated with batch 122802 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following sample contained one base surrogate outside acceptance limits: DP13S-07S (180-21680-9). The laboratory's SOP allows one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21680-1	OW-14	Water	05/29/13 09:25	05/30/13 09:30
180-21680-2	OW-16	Water	05/29/13 09:20	05/30/13 09:30
180-21680-3	OW-13	Water	05/29/13 14:50	05/30/13 09:30
180-21680-4	FB-052913	Water	05/29/13 15:15	05/30/13 09:30
180-21680-5	EB-052913	Water	05/29/13 15:45	05/30/13 09:30
180-21680-6	PZS-60	Water	05/29/13 14:47	05/30/13 09:30
180-21680-7	TB-052913	Water	05/29/13 00:00	05/30/13 09:30
180-21680-8	DP13S-06S	Water	05/29/13 11:50	05/30/13 09:30
180-21680-9	DP13S-07S	Water	05/29/13 11:50	05/30/13 09:30
180-21680-10	TB-052913	Water	05/29/13 00:00	05/30/13 09:30

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: OW-14

Lab Sample ID: 180-21680-1

Date Collected: 05/29/13 09:25

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 02:17	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1028.9 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1000			122568	06/06/13 18:19	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:25	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:04	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: OW-16

Lab Sample ID: 180-21680-2

Date Collected: 05/29/13 09:20

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 02:41	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048.8 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1000			122568	06/06/13 18:46	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:30	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:09	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: OW-13

Lab Sample ID: 180-21680-3

Date Collected: 05/29/13 14:50

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 03:05	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1041 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122358	06/05/13 22:07	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:47	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF

Client Sample ID: OW-13

Lab Sample ID: 180-21680-3

Date Collected: 05/29/13 14:50

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		1			122861	06/07/13 03:15	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: FB-052913

Lab Sample ID: 180-21680-4

Date Collected: 05/29/13 15:15

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 03:28	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1008.1 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122358	06/05/13 22:34	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:52	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:20	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: EB-052913

Lab Sample ID: 180-21680-5

Date Collected: 05/29/13 15:45

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 03:52	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1045.1 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122358	06/05/13 23:01	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 10:58	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:37	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZS-60

Lab Sample ID: 180-21680-6

Date Collected: 05/29/13 14:47

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	121335	05/31/13 04:16	NQN	TAL BUF

Client Sample ID: PZS-60

Lab Sample ID: 180-21680-6

Date Collected: 05/29/13 14:47

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	121335	05/31/13 04:16	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1054.6 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122802	06/07/13 14:04	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 11:03	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:42	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-052913

Lab Sample ID: 180-21680-7

Date Collected: 05/29/13 00:00

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 04:39	NQN	TAL BUF
	Instrument ID: HP5973N									

Client Sample ID: DP13S-06S

Lab Sample ID: 180-21680-8

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 05:03	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			969.4 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122568	06/06/13 19:40	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		969.4 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL	DL	50			122746	06/07/13 12:39	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 11:09	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:48	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-07S

Lab Sample ID: 180-21680-9

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 05:27	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1048.2 mL	1 mL	121374	05/31/13 07:08	DE	TAL BUF
Total/NA	Analysis	8270C LL		1			122568	06/06/13 20:07	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	121441	05/31/13 10:30	JM	TAL BUF
Dissolved	Analysis	6020		1			122091	06/04/13 11:14	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121609	06/01/13 13:00	SS	TAL BUF
Total/NA	Analysis	6020		1			122861	06/07/13 03:53	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-052913

Lab Sample ID: 180-21680-10

Date Collected: 05/29/13 00:00

Matrix: Water

Date Received: 05/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121335	05/31/13 05:51	NQN	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

DE = David Evers

JM = Jaclyn Mantell

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-14
Date Collected: 05/29/13 09:25
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 02:17	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 02:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 02:17	1
Acetone	10	U	10		ug/L			05/31/13 02:17	1
Benzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 02:17	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 02:17	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 02:17	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 02:17	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:17	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Ethylbenzene	**14**		1.0		ug/L			05/31/13 02:17	1
Isopropylbenzene	**2.8**		1.0		ug/L			05/31/13 02:17	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 02:17	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 02:17	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 02:17	1
Styrene	**3.5**		1.0		ug/L			05/31/13 02:17	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Toluene	**9.8**		1.0		ug/L			05/31/13 02:17	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:17	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 02:17	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 02:17	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 02:17	1
Xylenes, Total	**47**		2.0		ug/L			05/31/13 02:17	1

Client Sample ID: OW-14
Date Collected: 05/29/13 09:25
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*05/31/13 02:17*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/31/13 02:17*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/31/13 02:17*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
bis (2-chloroisopropyl) ether	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4,5-Trichlorophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4,6-Trichlorophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4-Dichlorophenol	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4-Dimethylphenol	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4-Dinitrophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,4-Dinitrotoluene	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2,6-Dinitrotoluene	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Chloronaphthalene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Chlorophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Methylnaphthalene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Methylphenol	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Nitroaniline	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
2-Nitrophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
3,3'-Dichlorobenzidine	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
3-Nitroaniline	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4,6-Dinitro-2-methylphenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Bromophenyl phenyl ether	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Chloro-3-methylphenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Chloroaniline	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Chlorophenyl phenyl ether	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Methylphenol	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Nitroaniline	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
4-Nitrophenol	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Acenaphthene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Acenaphthylene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Acetophenone	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Anthracene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Atrazine	1900	U	1900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzaldehyde	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzo(a)anthracene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzo(a)pyrene	170	U	170		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzo(b)fluoranthene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzo(g,h,i)perylene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Benzo(k)fluoranthene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Bis(2-chloroethoxy)methane	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Bis(2-chloroethyl)ether	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Bis(2-ethylhexyl) phthalate	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Butyl benzyl phthalate	2900	U	2900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Caprolactam	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Carbazole	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Chrysene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Dibenz(a,h)anthracene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-14
Date Collected: 05/29/13 09:25
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Diethyl phthalate	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Dimethyl phthalate	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Di-n-butyl phthalate	1900	U	1900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Di-n-octyl phthalate	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Fluoranthene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Fluorene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Hexachlorobenzene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Hexachlorobutadiene	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Hexachlorocyclopentadiene	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Hexachloroethane	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Indeno(1,2,3-cd)pyrene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Isophorone	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Naphthalene	**3200**		970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Nitrobenzene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000
N-Nitrosodi-n-propylamine	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
N-Nitrosodiphenylamine	4900	U	4900		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Pentachlorophenol	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Phenanthrene	**250**		190		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Phenol	970	U	970		ug/L		05/31/13 07:08	06/06/13 18:19	1000
Pyrene	490	U	490		ug/L		05/31/13 07:08	06/06/13 18:19	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 18:19*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19**		1.0		ug/L		06/01/13 13:00	06/07/13 03:04	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:04	1
Copper	**1.3**		1.0		ug/L		06/01/13 13:00	06/07/13 03:04	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:04	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:04	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17**		1.0		ug/L		05/31/13 10:30	06/04/13 10:25	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:25	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:25	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:25	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:25	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-16
Date Collected: 05/29/13 09:20
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:41	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:41	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 02:41	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 02:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 02:41	1
Acetone	10	U	10		ug/L			05/31/13 02:41	1
Benzene	**30**		1.0		ug/L			05/31/13 02:41	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 02:41	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 02:41	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 02:41	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 02:41	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:41	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Ethylbenzene	**61**		1.0		ug/L			05/31/13 02:41	1
Isopropylbenzene	**7.3**		1.0		ug/L			05/31/13 02:41	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 02:41	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 02:41	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 02:41	1
Styrene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Toluene	**30**		1.0		ug/L			05/31/13 02:41	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 02:41	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 02:41	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 02:41	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 02:41	1
Xylenes, Total	**110**		2.0		ug/L			05/31/13 02:41	1

Client Sample ID: OW-16
Date Collected: 05/29/13 09:20
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*05/31/13 02:41*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/31/13 02:41*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/31/13 02:41*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
bis (2-chloroisopropyl) ether	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4,5-Trichlorophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4,6-Trichlorophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4-Dichlorophenol	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4-Dimethylphenol	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4-Dinitrophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,4-Dinitrotoluene	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2,6-Dinitrotoluene	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Chloronaphthalene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Chlorophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Methylnaphthalene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Methylphenol	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Nitroaniline	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
2-Nitrophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
3,3'-Dichlorobenzidine	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
3-Nitroaniline	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4,6-Dinitro-2-methylphenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Bromophenyl phenyl ether	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Chloro-3-methylphenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Chloroaniline	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Chlorophenyl phenyl ether	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Methylphenol	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Nitroaniline	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
4-Nitrophenol	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Acenaphthene	**480**		480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Acenaphthylene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Acetophenone	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Anthracene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Atrazine	1900	U	1900		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzaldehyde	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzo(a)anthracene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzo(a)pyrene	170	U	170		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzo(b)fluoranthene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzo(g,h,i)perylene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Benzo(k)fluoranthene	290	U	290		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Bis(2-chloroethoxy)methane	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Bis(2-chloroethyl)ether	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Bis(2-ethylhexyl) phthalate	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Butyl benzyl phthalate	2900	U	2900		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Caprolactam	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Carbazole	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Chrysene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Dibenz(a,h)anthracene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-16
Date Collected: 05/29/13 09:20
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Diethyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Dimethyl phthalate	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Di-n-butyl phthalate	1900	U	1900		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Di-n-octyl phthalate	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Fluoranthene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Fluorene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Hexachlorobenzene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Hexachlorobutadiene	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Hexachlorocyclopentadiene	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Hexachloroethane	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Indeno(1,2,3-cd)pyrene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Isophorone	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Naphthalene	**8300**		950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Nitrobenzene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000
N-Nitrosodi-n-propylamine	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
N-Nitrosodiphenylamine	4800	U	4800		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Pentachlorophenol	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Phenanthrene	**240**		190		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Phenol	950	U	950		ug/L		05/31/13 07:08	06/06/13 18:46	1000
Pyrene	480	U	480		ug/L		05/31/13 07:08	06/06/13 18:46	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/06/13 18:46*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.6**		1.0		ug/L		06/01/13 13:00	06/07/13 03:09	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:09	1
Copper	**1.2**		1.0		ug/L		06/01/13 13:00	06/07/13 03:09	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:09	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:09	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.4**		1.0		ug/L		05/31/13 10:30	06/04/13 10:30	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:30	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:30	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:30	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:30	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-13
Date Collected: 05/29/13 14:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 03:05	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 03:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 03:05	1
Acetone	10	U	10		ug/L			05/31/13 03:05	1
Benzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 03:05	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 03:05	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 03:05	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 03:05	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:05	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 03:05	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 03:05	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 03:05	1
Styrene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Toluene	1.0	U	1.0		ug/L			05/31/13 03:05	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:05	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 03:05	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 03:05	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 03:05	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 03:05	1

Client Sample ID: OW-13
Date Collected: 05/29/13 14:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 137*		*05/31/13 03:05*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/31/13 03:05*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/31/13 03:05*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Methylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Methylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Acenaphthene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Acenaphthylene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 22:07	1
Acetophenone	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Atrazine	1.9	U	1.9		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzaldehyde	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 22:07	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/31/13 07:08	06/05/13 22:07	1
Caprolactam	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Carbazole	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Chrysene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: OW-13
Date Collected: 05/29/13 14:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/31/13 07:08	06/05/13 22:07	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Fluoranthene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Fluorene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
Hexachloroethane	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Isophorone	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
Naphthalene	**2.6**		0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
Nitrobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 22:07	1
Pentachlorophenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
Phenanthrene	**0.37**		0.19		ug/L		05/31/13 07:08	06/05/13 22:07	1
Phenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 22:07	1
Pyrene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*44*		*34 - 132*	*05/31/13 07:08*	*06/05/13 22:07*	*1*
2-Fluorobiphenyl	*53*		*37 - 120*	*05/31/13 07:08*	*06/05/13 22:07*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*05/31/13 07:08*	*06/05/13 22:07*	*1*
Phenol-d5	*17*		*11 - 120*	*05/31/13 07:08*	*06/05/13 22:07*	*1*
2-Fluorophenol	*23*		*18 - 120*	*05/31/13 07:08*	*06/05/13 22:07*	*1*
2,4,6-Tribromophenol	*85*		*39 - 146*	*05/31/13 07:08*	*06/05/13 22:07*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**		1.0		ug/L		06/01/13 13:00	06/07/13 03:15	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:15	1
Copper	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:15	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:15	1
Zinc	**82**		10		ug/L		06/01/13 13:00	06/07/13 03:15	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:47	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:47	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:47	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:47	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:47	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: FB-052913
Date Collected: 05/29/13 15:15
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 03:28	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 03:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 03:28	1
Acetone	10	U	10		ug/L			05/31/13 03:28	1
Benzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 03:28	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 03:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 03:28	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 03:28	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 03:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 03:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 03:28	1
Styrene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Toluene	1.0	U	1.0		ug/L			05/31/13 03:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 03:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 03:28	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 03:28	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 03:28	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: FB-052913
Date Collected: 05/29/13 15:15
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 137*		*05/31/13 03:28*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/31/13 03:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/31/13 03:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4-Dimethylphenol	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Methylphenol	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Methylphenol	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Acenaphthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Acenaphthylene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 22:34	1
Acetophenone	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Atrazine	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzaldehyde	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 22:34	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Caprolactam	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Carbazole	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Chrysene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: FB-052913
Date Collected: 05/29/13 15:15
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Fluoranthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Fluorene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Hexachlorobutadiene	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
Hexachlorocyclopentadiene	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
Hexachloroethane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Isophorone	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
Naphthalene	**2.2**		0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
Nitrobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 22:34	1
Pentachlorophenol	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
Phenanthrene	0.20	U	0.20		ug/L		05/31/13 07:08	06/05/13 22:34	1
Phenol	0.99	U	0.99		ug/L		05/31/13 07:08	06/05/13 22:34	1
Pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*34 - 132*	*05/31/13 07:08*	*06/05/13 22:34*	*1*
2-Fluorobiphenyl	*62*		*37 - 120*	*05/31/13 07:08*	*06/05/13 22:34*	*1*
p-Terphenyl-d14	*99*		*58 - 147*	*05/31/13 07:08*	*06/05/13 22:34*	*1*
Phenol-d5	*22*		*11 - 120*	*05/31/13 07:08*	*06/05/13 22:34*	*1*
2-Fluorophenol	*31*		*18 - 120*	*05/31/13 07:08*	*06/05/13 22:34*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*05/31/13 07:08*	*06/05/13 22:34*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:20	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:20	1
Copper	**5.3**		1.0		ug/L		06/01/13 13:00	06/07/13 03:20	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:20	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:20	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:52	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:52	1
Copper	**3.5**		1.0		ug/L		05/31/13 10:30	06/04/13 10:52	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:52	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: EB-052913
Date Collected: 05/29/13 15:45
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 03:52	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 03:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 03:52	1
Acetone	10	U	10		ug/L			05/31/13 03:52	1
Benzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 03:52	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 03:52	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 03:52	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 03:52	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:52	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 03:52	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 03:52	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 03:52	1
Styrene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Toluene	1.0	U	1.0		ug/L			05/31/13 03:52	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 03:52	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 03:52	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 03:52	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 03:52	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 03:52	1

Client Sample ID: EB-052913
Date Collected: 05/29/13 15:45
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 137*		*05/31/13 03:52*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/31/13 03:52*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/31/13 03:52*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Methylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Methylphenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
4-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Acenaphthene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Acenaphthylene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 23:01	1
Acetophenone	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Atrazine	1.9	U	1.9		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzaldehyde	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/05/13 23:01	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/31/13 07:08	06/05/13 23:01	1
Caprolactam	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Carbazole	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Chrysene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: EB-052913
Date Collected: 05/29/13 15:45
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/31/13 07:08	06/05/13 23:01	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Fluoranthene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Fluorene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
Hexachloroethane	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Isophorone	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
Naphthalene	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
Nitrobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/05/13 23:01	1
Pentachlorophenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
Phenanthrene	0.19	U	0.19		ug/L		05/31/13 07:08	06/05/13 23:01	1
Phenol	0.96	U	0.96		ug/L		05/31/13 07:08	06/05/13 23:01	1
Pyrene	0.48	U	0.48		ug/L		05/31/13 07:08	06/05/13 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*34 - 132*	*05/31/13 07:08*	*06/05/13 23:01*	*1*
2-Fluorobiphenyl	*74*		*37 - 120*	*05/31/13 07:08*	*06/05/13 23:01*	*1*
p-Terphenyl-d14	*93*		*58 - 147*	*05/31/13 07:08*	*06/05/13 23:01*	*1*
Phenol-d5	*25*		*11 - 120*	*05/31/13 07:08*	*06/05/13 23:01*	*1*
2-Fluorophenol	*35*		*18 - 120*	*05/31/13 07:08*	*06/05/13 23:01*	*1*
2,4,6-Tribromophenol	*68*		*39 - 146*	*05/31/13 07:08*	*06/05/13 23:01*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:37	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:37	1
Copper	**4.3**		1.0		ug/L		06/01/13 13:00	06/07/13 03:37	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:37	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:37	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:58	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 10:58	1
Copper	**4.2**		1.0		ug/L		05/31/13 10:30	06/04/13 10:58	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 10:58	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 10:58	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: PZS-60
Date Collected: 05/29/13 14:47
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,1,2-Trichloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,1-Dichloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,1-Dichloroethene	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2,4-Trichlorobenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2-Dibromoethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2-Dichlorobenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2-Dichloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,2-Dichloropropane	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,3-Dichlorobenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
1,4-Dichlorobenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
2-Hexanone	10	U	10		ug/L			05/31/13 04:16	2
2-Butanone (MEK)	20	U	20		ug/L			05/31/13 04:16	2
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			05/31/13 04:16	2
Acetone	20	U	20		ug/L			05/31/13 04:16	2
Benzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Bromodichloromethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Bromoform	2.0	U	2.0		ug/L			05/31/13 04:16	2
Bromomethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Carbon disulfide	2.0	U	2.0		ug/L			05/31/13 04:16	2
Carbon tetrachloride	2.0	U	2.0		ug/L			05/31/13 04:16	2
Chlorobenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Dibromochloromethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Chloroethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Chloroform	2.0	U	2.0		ug/L			05/31/13 04:16	2
Chloromethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
cis-1,2-Dichloroethene	2.0	U	2.0		ug/L			05/31/13 04:16	2
cis-1,3-Dichloropropene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Cyclohexane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Dichlorodifluoromethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Ethylbenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Isopropylbenzene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Methyl acetate	2.0	U	2.0		ug/L			05/31/13 04:16	2
Methyl tert-butyl ether	2.0	U	2.0		ug/L			05/31/13 04:16	2
Methylcyclohexane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Methylene Chloride	2.0	U	2.0		ug/L			05/31/13 04:16	2
Styrene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Tetrachloroethene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Toluene	2.0	U	2.0		ug/L			05/31/13 04:16	2
trans-1,2-Dichloroethene	2.0	U	2.0		ug/L			05/31/13 04:16	2
trans-1,3-Dichloropropene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Trichloroethene	2.0	U	2.0		ug/L			05/31/13 04:16	2
Trichlorofluoromethane	2.0	U	2.0		ug/L			05/31/13 04:16	2
Vinyl chloride	2.0	U	2.0		ug/L			05/31/13 04:16	2
Xylenes, Total	4.0	U	4.0		ug/L			05/31/13 04:16	2

Client Sample ID: PZS-60
Date Collected: 05/29/13 14:47
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 137*		*05/31/13 04:16*	*2*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/31/13 04:16*	*2*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/31/13 04:16*	*2*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
bis (2-chloroisopropyl) ether	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4,5-Trichlorophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4,6-Trichlorophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4-Dichlorophenol	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4-Dinitrophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,4-Dinitrotoluene	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2,6-Dinitrotoluene	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Chloronaphthalene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Chlorophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Methylnaphthalene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Methylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Nitroaniline	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
2-Nitrophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
3,3'-Dichlorobenzidine	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
3-Nitroaniline	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Bromophenyl phenyl ether	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Chloro-3-methylphenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Chloroaniline	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Chlorophenyl phenyl ether	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Methylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Nitroaniline	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
4-Nitrophenol	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Acenaphthene	**13**		0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Acenaphthylene	0.28	U	0.28		ug/L		05/31/13 07:08	06/07/13 14:04	1
Acetophenone	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Anthracene	**1.1**		0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Atrazine	1.9	U	1.9		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzaldehyde	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzo(a)anthracene	0.28	U	0.28		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzo(b)fluoranthene	0.28	U	0.28		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzo(g,h,i)perylene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Benzo(k)fluoranthene	0.28	U	0.28		ug/L		05/31/13 07:08	06/07/13 14:04	1
Bis(2-chloroethoxy)methane	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Bis(2-chloroethyl)ether	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Bis(2-ethylhexyl) phthalate	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Butyl benzyl phthalate	2.8	U	2.8		ug/L		05/31/13 07:08	06/07/13 14:04	1
Caprolactam	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Carbazole	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Chrysene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Dibenz(a,h)anthracene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: PZS-60
Date Collected: 05/29/13 14:47
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-6
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Diethyl phthalate	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Dimethyl phthalate	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/31/13 07:08	06/07/13 14:04	1
Di-n-octyl phthalate	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Fluoranthene	**0.56**		0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Fluorene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Hexachlorobenzene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
Hexachloroethane	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Indeno(1,2,3-cd)pyrene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Isophorone	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
Naphthalene	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
Nitrobenzene	0.47	U	0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1
N-Nitrosodi-n-propylamine	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
N-Nitrosodiphenylamine	4.7	U	4.7		ug/L		05/31/13 07:08	06/07/13 14:04	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
Phenanthrene	**0.25**		0.19		ug/L		05/31/13 07:08	06/07/13 14:04	1
Phenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/07/13 14:04	1
Pyrene	**3.3**		0.47		ug/L		05/31/13 07:08	06/07/13 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*34 - 132*	*05/31/13 07:08*	*06/07/13 14:04*	*1*
2-Fluorobiphenyl	*72*		*37 - 120*	*05/31/13 07:08*	*06/07/13 14:04*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*05/31/13 07:08*	*06/07/13 14:04*	*1*
Phenol-d5	*25*		*11 - 120*	*05/31/13 07:08*	*06/07/13 14:04*	*1*
2-Fluorophenol	*38*		*18 - 120*	*05/31/13 07:08*	*06/07/13 14:04*	*1*
2,4,6-Tribromophenol	*93*		*39 - 146*	*05/31/13 07:08*	*06/07/13 14:04*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**83**		1.0		ug/L		06/01/13 13:00	06/07/13 03:42	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:42	1
Copper	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:42	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:42	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:42	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**85**		1.0		ug/L		05/31/13 10:30	06/04/13 11:03	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 11:03	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 11:03	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 11:03	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 11:03	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: TB-052913
Date Collected: 05/29/13 00:00
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 04:39	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 04:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 04:39	1
Acetone	10	U	10		ug/L			05/31/13 04:39	1
Benzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 04:39	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 04:39	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 04:39	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 04:39	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 04:39	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 04:39	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 04:39	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 04:39	1
Styrene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Toluene	1.0	U	1.0		ug/L			05/31/13 04:39	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 04:39	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 04:39	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 04:39	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 04:39	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 04:39	1

Client Sample ID: TB-052913

Lab Sample ID: 180-21680-7

Date Collected: 05/29/13 00:00

Matrix: Water

Date Received: 05/30/13 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 137*		*05/31/13 04:39*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/31/13 04:39*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/31/13 04:39*	*1*

Client Sample ID: DP13S-06S

Lab Sample ID: 180-21680-8

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 05:03	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 05:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 05:03	1
Acetone	10	U	10		ug/L			05/31/13 05:03	1
Benzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 05:03	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 05:03	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 05:03	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 05:03	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:03	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 05:03	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 05:03	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 05:03	1
Styrene	1.0	U	1.0		ug/L			05/31/13 05:03	1

Client Sample ID: DP13S-06S
Date Collected: 05/29/13 11:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Toluene	1.0	U	1.0		ug/L			05/31/13 05:03	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:03	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 05:03	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 05:03	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 05:03	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*05/31/13 05:03*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*05/31/13 05:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/31/13 05:03*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	**20**		5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
bis (2-chloroisopropyl) ether	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4,5-Trichlorophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4,6-Trichlorophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4-Dichlorophenol	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4-Dinitrophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,4-Dinitrotoluene	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2,6-Dinitrotoluene	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2-Chloronaphthalene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
2-Chlorophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
2-Nitroaniline	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
2-Nitrophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
3,3'-Dichlorobenzidine	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
3-Nitroaniline	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4,6-Dinitro-2-methylphenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Bromophenyl phenyl ether	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Chloro-3-methylphenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Chloroaniline	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Chlorophenyl phenyl ether	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Nitroaniline	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
4-Nitrophenol	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Acenaphthylene	**1.6**		0.31		ug/L		05/31/13 07:08	06/06/13 19:40	1
Acetophenone	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Anthracene	**6.2**		0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Atrazine	2.1	U	2.1		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzaldehyde	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzo(a)anthracene	**1.0**		0.31		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzo(a)pyrene	0.19	U	0.19		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzo(b)fluoranthene	0.31	U	0.31		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzo(g,h,i)perylene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Benzo(k)fluoranthene	0.31	U	0.31		ug/L		05/31/13 07:08	06/06/13 19:40	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: DP13S-06S
Date Collected: 05/29/13 11:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-8
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Bis(2-chloroethyl)ether	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Butyl benzyl phthalate	3.1	U	3.1		ug/L		05/31/13 07:08	06/06/13 19:40	1
Caprolactam	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Carbazole	**5.5**		5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Chrysene	**0.73**		0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Dibenz(a,h)anthracene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Diethyl phthalate	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Dimethyl phthalate	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Di-n-butyl phthalate	2.1	U	2.1		ug/L		05/31/13 07:08	06/06/13 19:40	1
Di-n-octyl phthalate	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Fluoranthene	**14**		0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Hexachlorobenzene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
Hexachloroethane	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Indeno(1,2,3-cd)pyrene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Isophorone	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
Nitrobenzene	0.52	U	0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1
N-Nitrosodi-n-propylamine	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
N-Nitrosodiphenylamine	5.2	U	5.2		ug/L		05/31/13 07:08	06/06/13 19:40	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
Phenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/06/13 19:40	1
Pyrene	**15**		0.52		ug/L		05/31/13 07:08	06/06/13 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*05/31/13 07:08*	*06/06/13 19:40*	*1*
2-Fluorobiphenyl	*75*		*37 - 120*	*05/31/13 07:08*	*06/06/13 19:40*	*1*
p-Terphenyl-d14	*86*		*58 - 147*	*05/31/13 07:08*	*06/06/13 19:40*	*1*
Phenol-d5	*27*		*11 - 120*	*05/31/13 07:08*	*06/06/13 19:40*	*1*
2-Fluorophenol	*37*		*18 - 120*	*05/31/13 07:08*	*06/06/13 19:40*	*1*
2,4,6-Tribromophenol	*95*		*39 - 146*	*05/31/13 07:08*	*06/06/13 19:40*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**140**		26		ug/L		05/31/13 07:08	06/07/13 12:39	50
Acenaphthene	**87**		26		ug/L		05/31/13 07:08	06/07/13 12:39	50
Dibenzofuran	260	U	260		ug/L		05/31/13 07:08	06/07/13 12:39	50
Fluorene	**51**		26		ug/L		05/31/13 07:08	06/07/13 12:39	50
Naphthalene	**270**		52		ug/L		05/31/13 07:08	06/07/13 12:39	50
Phenanthrene	**48**		10		ug/L		05/31/13 07:08	06/07/13 12:39	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*05/31/13 07:08*	*06/07/13 12:39*	*50*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/31/13 07:08*	*06/07/13 12:39*	*50*
p-Terphenyl-d14	*76*		*58 - 147*	*05/31/13 07:08*	*06/07/13 12:39*	*50*
Phenol-d5	*19*		*11 - 120*	*05/31/13 07:08*	*06/07/13 12:39*	*50*
2-Fluorophenol	*0*	*X*	*18 - 120*	*05/31/13 07:08*	*06/07/13 12:39*	*50*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*05/31/13 07:08*	*06/07/13 12:39*	*50*

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: DP13S-06S

Lab Sample ID: 180-21680-8

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.3**		1.0		ug/L		06/01/13 13:00	06/07/13 03:48	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 03:48	1
Copper	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:48	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 03:48	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 03:48	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0		ug/L		05/31/13 10:30	06/04/13 11:09	1
Chromium	**1.7**		1.5		ug/L		05/31/13 10:30	06/04/13 11:09	1
Copper	**1.8**		1.0		ug/L		05/31/13 10:30	06/04/13 11:09	1
Lead	**2.0**		1.0		ug/L		05/31/13 10:30	06/04/13 11:09	1
Zinc	**27**		10		ug/L		05/31/13 10:30	06/04/13 11:09	1

Client Sample ID: DP13S-07S

Lab Sample ID: 180-21680-9

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 05:27	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 05:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 05:27	1
Acetone	10	U	10		ug/L			05/31/13 05:27	1
Benzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 05:27	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 05:27	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 05:27	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 05:27	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:27	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: DP13S-07S
Date Collected: 05/29/13 11:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 05:27	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 05:27	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 05:27	1
Styrene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Toluene	1.0	U	1.0		ug/L			05/31/13 05:27	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:27	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 05:27	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 05:27	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 05:27	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*05/31/13 05:27*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/31/13 05:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/31/13 05:27*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Chlorophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Methylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
2-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
3-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Chloroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Methylphenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
4-Nitroaniline	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: DP13S-07S
Date Collected: 05/29/13 11:50
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-9
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Acenaphthene	**2.5**		0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Acenaphthylene	0.29	U	0.29		ug/L		05/31/13 07:08	06/06/13 20:07	1
Acetophenone	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Atrazine	1.9	U	1.9		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzaldehyde	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		05/31/13 07:08	06/06/13 20:07	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		05/31/13 07:08	06/06/13 20:07	1
Caprolactam	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Carbazole	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Chrysene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Dibenzofuran	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Diethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Dimethyl phthalate	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		05/31/13 07:08	06/06/13 20:07	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Fluoranthene	**19**		0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Fluorene	**1.6**		0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Hexachlorobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
Hexachloroethane	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Isophorone	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
Naphthalene	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
Nitrobenzene	0.48	U	0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		05/31/13 07:08	06/06/13 20:07	1
Pentachlorophenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
Phenanthrene	**0.23**		0.19		ug/L		05/31/13 07:08	06/06/13 20:07	1
Phenol	0.95	U	0.95		ug/L		05/31/13 07:08	06/06/13 20:07	1
Pyrene	**12**		0.48		ug/L		05/31/13 07:08	06/06/13 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*55*		*34 - 132*	*05/31/13 07:08*	*06/06/13 20:07*	*1*
2-Fluorobiphenyl	*57*		*37 - 120*	*05/31/13 07:08*	*06/06/13 20:07*	*1*
p-Terphenyl-d14	*56*	*X*	*58 - 147*	*05/31/13 07:08*	*06/06/13 20:07*	*1*
Phenol-d5	*20*		*11 - 120*	*05/31/13 07:08*	*06/06/13 20:07*	*1*
2-Fluorophenol	*27*		*18 - 120*	*05/31/13 07:08*	*06/06/13 20:07*	*1*
2,4,6-Tribromophenol	*75*		*39 - 146*	*05/31/13 07:08*	*06/06/13 20:07*	*1*

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: DP13S-07S

Lab Sample ID: 180-21680-9

Date Collected: 05/29/13 11:50

Matrix: Water

Date Received: 05/30/13 09:30

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.2		1.0		ug/L		06/01/13 13:00	06/07/13 03:53	1
Chromium	39		1.5		ug/L		06/01/13 13:00	06/07/13 03:53	1
Copper	18		1.0		ug/L		06/01/13 13:00	06/07/13 03:53	1
Lead	47		1.0		ug/L		06/01/13 13:00	06/07/13 03:53	1
Zinc	51		10		ug/L		06/01/13 13:00	06/07/13 03:53	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		1.0		ug/L		05/31/13 10:30	06/04/13 11:14	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 11:14	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 11:14	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 11:14	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 11:14	1

Client Sample ID: TB-052913

Lab Sample ID: 180-21680-10

Date Collected: 05/29/13 00:00

Matrix: Water

Date Received: 05/30/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
2-Hexanone	5.0	U	5.0		ug/L			05/31/13 05:51	1
2-Butanone (MEK)	10	U	10		ug/L			05/31/13 05:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/31/13 05:51	1
Acetone	10	U	10		ug/L			05/31/13 05:51	1
Benzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Bromoform	1.0	U	1.0		ug/L			05/31/13 05:51	1
Bromomethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Carbon disulfide	1.0	U	1.0		ug/L			05/31/13 05:51	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/31/13 05:51	1
Chlorobenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Chloroethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Chloroform	1.0	U	1.0		ug/L			05/31/13 05:51	1
Chloromethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:51	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21680-1

Client Sample ID: TB-052913
Date Collected: 05/29/13 00:00
Date Received: 05/30/13 09:30

Lab Sample ID: 180-21680-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Cyclohexane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Ethylbenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Methyl acetate	1.0	U	1.0		ug/L			05/31/13 05:51	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/31/13 05:51	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Methylene Chloride	1.0	U	1.0		ug/L			05/31/13 05:51	1
Styrene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Toluene	1.0	U	1.0		ug/L			05/31/13 05:51	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/31/13 05:51	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Trichloroethene	1.0	U	1.0		ug/L			05/31/13 05:51	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/31/13 05:51	1
Vinyl chloride	1.0	U	1.0		ug/L			05/31/13 05:51	1
Xylenes, Total	2.0	U	2.0		ug/L			05/31/13 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 137*		*05/31/13 05:51*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/31/13 05:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/31/13 05:51*	*1*

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

Lab Sample ID: MB 480-121335/5
Matrix: Water
Analysis Batch: 121335

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
2-Hexanone	5.0	U	5.0		ug/L			05/30/13 22:28	1
2-Butanone (MEK)	10	U	10		ug/L			05/30/13 22:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			05/30/13 22:28	1
Acetone	10	U	10		ug/L			05/30/13 22:28	1
Benzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromoform	1.0	U	1.0		ug/L			05/30/13 22:28	1
Bromomethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Carbon disulfide	1.0	U	1.0		ug/L			05/30/13 22:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chlorobenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloroethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloroform	1.0	U	1.0		ug/L			05/30/13 22:28	1
Chloromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Cyclohexane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Ethylbenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methyl acetate	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Methylene Chloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Styrene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Toluene	1.0	U	1.0		ug/L			05/30/13 22:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Trichloroethene	1.0	U	1.0		ug/L			05/30/13 22:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			05/30/13 22:28	1
Vinyl chloride	1.0	U	1.0		ug/L			05/30/13 22:28	1
Xylenes, Total	2.0	U	2.0		ug/L			05/30/13 22:28	1

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

Lab Sample ID: MB 480-121335/5
Matrix: Water
Analysis Batch: 121335

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*05/30/13 22:28*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/30/13 22:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/30/13 22:28*	*1*

Lab Sample ID: LCS 480-121335/4
Matrix: Water
Analysis Batch: 121335

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.8		ug/L		99	71 - 129
1,1-Dichloroethene	25.0	22.7		ug/L		91	58 - 121
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 127
Benzene	25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	25.0	25.8		ug/L		103	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	27.1		ug/L		108	77 - 123
Methyl tert-butyl ether	25.0	25.1		ug/L		100	64 - 127
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
Trichloroethene	25.0	25.5		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121374/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Chlorophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121374/1-A
Matrix: Water
Analysis Batch: 122234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
2-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
3-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chloroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Methylphenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Nitroaniline	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
4-Nitrophenol	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Acenaphthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Acenaphthylene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Acetophenone	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Atrazine	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzaldehyde	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Caprolactam	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Carbazole	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Chrysene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dibenzofuran	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Diethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Dimethyl phthalate	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Fluoranthene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Fluorene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Hexachloroethane	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Isophorone	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
Naphthalene	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Nitrobenzene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121374/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122234 | **Prep Batch: 121374**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Pentachlorophenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Phenanthrene	0.20	U	0.20		ug/L		05/31/13 07:08	06/05/13 15:28	1
Phenol	1.0	U	1.0		ug/L		05/31/13 07:08	06/05/13 15:28	1
Pyrene	0.50	U	0.50		ug/L		05/31/13 07:08	06/05/13 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*34 - 132*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2-Fluorobiphenyl	*81*		*37 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
Phenol-d5	*31*		*11 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2-Fluorophenol	*44*		*18 - 120*	*05/31/13 07:08*	*06/05/13 15:28*	*1*
2,4,6-Tribromophenol	*87*		*39 - 146*	*05/31/13 07:08*	*06/05/13 15:28*	*1*

Lab Sample ID: LCS 480-121374/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122746 | **Prep Batch: 121374**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.61		ug/L		95	22 - 167
2-Chlorophenol	8.00	5.86		ug/L		73	44 - 106
4-Chloro-3-methylphenol	8.00	7.74		ug/L		97	60 - 131
4-Nitrophenol	16.0	11.1		ug/L		69	10 - 105
Acenaphthene	8.00	6.69		ug/L		84	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.50		ug/L		106	69 - 136
Fluorene	8.00	6.95		ug/L		87	54 - 137
Hexachloroethane	8.00	5.48		ug/L		69	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	14.1		ug/L		88	10 - 131
Phenol	8.00	2.57		ug/L		32	17 - 61
Pyrene	8.00	7.31		ug/L		91	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*82*		*34 - 132*
2-Fluorobiphenyl	*84*		*37 - 120*
p-Terphenyl-d14	*93*		*58 - 147*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*44*		*18 - 120*
2,4,6-Tribromophenol	*106*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121609/1-A
Matrix: Water
Analysis Batch: 122861

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121609

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 01:30	1
Chromium	1.5	U	1.5		ug/L		06/01/13 13:00	06/07/13 01:30	1
Copper	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 01:30	1
Lead	1.0	U	1.0		ug/L		06/01/13 13:00	06/07/13 01:30	1
Zinc	10	U	10		ug/L		06/01/13 13:00	06/07/13 01:30	1

Lab Sample ID: LCS 480-121609/2-A
Matrix: Water
Analysis Batch: 122861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121609

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.0		ug/L		105	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.7		ug/L		108	80 - 120
Lead	20.0	20.7		ug/L		104	80 - 120
Zinc	50.0	55.0		ug/L		110	80 - 120

Lab Sample ID: MB 480-120622/29-B
Matrix: Water
Analysis Batch: 122091

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Chromium	1.5	U	1.5		ug/L		05/31/13 10:30	06/04/13 09:11	1
Copper	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Lead	1.0	U	1.0		ug/L		05/31/13 10:30	06/04/13 09:11	1
Zinc	10	U	10		ug/L		05/31/13 10:30	06/04/13 09:11	1

Lab Sample ID: LCS 480-120622/30-B
Matrix: Water
Analysis Batch: 122091

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 121441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.0		ug/L		105	80 - 120
Chromium	20.0	20.4		ug/L		102	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	20.5		ug/L		103	80 - 120
Zinc	50.0	53.6		ug/L		107	80 - 120

GC/MS VOA

Analysis Batch: 121335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Total/NA	Water	8260B	
180-21680-2	OW-16	Total/NA	Water	8260B	
180-21680-3	OW-13	Total/NA	Water	8260B	
180-21680-4	FB-052913	Total/NA	Water	8260B	
180-21680-5	EB-052913	Total/NA	Water	8260B	
180-21680-6	PZS-60	Total/NA	Water	8260B	
180-21680-7	TB-052913	Total/NA	Water	8260B	
180-21680-8	DP13S-06S	Total/NA	Water	8260B	
180-21680-9	DP13S-07S	Total/NA	Water	8260B	
180-21680-10	TB-052913	Total/NA	Water	8260B	
LCS 480-121335/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121335/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Total/NA	Water	3510C	
180-21680-2	OW-16	Total/NA	Water	3510C	
180-21680-3	OW-13	Total/NA	Water	3510C	
180-21680-4	FB-052913	Total/NA	Water	3510C	
180-21680-5	EB-052913	Total/NA	Water	3510C	
180-21680-6	PZS-60	Total/NA	Water	3510C	
180-21680-8	DP13S-06S	Total/NA	Water	3510C	
180-21680-8 - DL	DP13S-06S	Total/NA	Water	3510C	
180-21680-9	DP13S-07S	Total/NA	Water	3510C	
LCS 480-121374/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-121374/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-121374/1-A	Method Blank	Total/NA	Water	8270C LL	121374

Analysis Batch: 122358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-3	OW-13	Total/NA	Water	8270C LL	121374
180-21680-4	FB-052913	Total/NA	Water	8270C LL	121374
180-21680-5	EB-052913	Total/NA	Water	8270C LL	121374

Analysis Batch: 122568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Total/NA	Water	8270C LL	121374
180-21680-2	OW-16	Total/NA	Water	8270C LL	121374
180-21680-8	DP13S-06S	Total/NA	Water	8270C LL	121374
180-21680-9	DP13S-07S	Total/NA	Water	8270C LL	121374

Analysis Batch: 122746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-8 - DL	DP13S-06S	Total/NA	Water	8270C LL	121374
LCS 480-121374/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121374

GC/MS Semi VOA (Continued)

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-6	PZS-60	Total/NA	Water	8270C LL	121374

Metals

Prep Batch: 121441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Dissolved	Water	3020A	
180-21680-2	OW-16	Dissolved	Water	3020A	
180-21680-3	OW-13	Dissolved	Water	3020A	
180-21680-4	FB-052913	Dissolved	Water	3020A	
180-21680-5	EB-052913	Dissolved	Water	3020A	
180-21680-6	PZS-60	Dissolved	Water	3020A	
180-21680-8	DP13S-06S	Dissolved	Water	3020A	
180-21680-9	DP13S-07S	Dissolved	Water	3020A	
LCS 480-120622/30-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-120622/29-B	Method Blank	Dissolved	Water	3020A	

Prep Batch: 121609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Total/NA	Water	3020A	
180-21680-2	OW-16	Total/NA	Water	3020A	
180-21680-3	OW-13	Total/NA	Water	3020A	
180-21680-4	FB-052913	Total/NA	Water	3020A	
180-21680-5	EB-052913	Total/NA	Water	3020A	
180-21680-6	PZS-60	Total/NA	Water	3020A	
180-21680-8	DP13S-06S	Total/NA	Water	3020A	
180-21680-9	DP13S-07S	Total/NA	Water	3020A	
LCS 480-121609/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121609/1-A	Method Blank	Total/NA	Water	3020A	

Analysis Batch: 122091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Dissolved	Water	6020	121441
180-21680-2	OW-16	Dissolved	Water	6020	121441
180-21680-3	OW-13	Dissolved	Water	6020	121441
180-21680-4	FB-052913	Dissolved	Water	6020	121441
180-21680-5	EB-052913	Dissolved	Water	6020	121441
180-21680-6	PZS-60	Dissolved	Water	6020	121441
180-21680-8	DP13S-06S	Dissolved	Water	6020	121441
180-21680-9	DP13S-07S	Dissolved	Water	6020	121441
LCS 480-120622/30-B	Lab Control Sample	Dissolved	Water	6020	121441
MB 480-120622/29-B	Method Blank	Dissolved	Water	6020	121441

Analysis Batch: 122861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-1	OW-14	Total/NA	Water	6020	121609
180-21680-2	OW-16	Total/NA	Water	6020	121609
180-21680-3	OW-13	Total/NA	Water	6020	121609
180-21680-4	FB-052913	Total/NA	Water	6020	121609
180-21680-5	EB-052913	Total/NA	Water	6020	121609

Metals (Continued)

Analysis Batch: 122861 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21680-6	PZS-60	Total/NA	Water	6020	121609
180-21680-8	DP13S-06S	Total/NA	Water	6020	121609
180-21680-9	DP13S-07S	Total/NA	Water	6020	121609
LCS 480-121609/2-A	Lab Control Sample	Total/NA	Water	6020	121609
MB 480-121609/1-A	Method Blank	Total/NA	Water	6020	121609

180-21680

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/29/13	Chain of Custody Number: 220333
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bortot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: 13665-04			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BTEX-8260B	SVOCs/PAHs 8270LL	Total Metals-6020	Diss. Metals-6020	Special Instructions/ Conditions of Receipt
OW-14	5/29/13	0925		X			2		2	3			3	2	1	1	Dissolved Metals
OW-16	5/29/13	0920		X			2		2	3			3	2	1	1	are field filtered.
OW-13	5/29/13	1450		X			2		2	3			3	2	1	1	
FB-052913	5/29/13	1515		X			2		2	3			3	2	1	1	
EB-052913	5/29/13	1545		X			2		2	3			3	2	1	1	
PZS-60	5/29/13	1447		X			2		2	3			3	2	1	1	
TB-052913	5/29/13	—		X			~~2~~		~~2~~	~~3~~ 1			1				

AC 5/29/13

AC 5/29/13

AC 5/29/13

180-21680 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/29/13	1730	1. Received By: [signature] TAB	5-30-13	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#2 3.8, 4.0, 3.9

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

IVO-21680

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/29/13	Chain of Custody Number: 220331
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bortot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: 13665-03			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BTEX-8260B	PAHs-8270 LL	Total Selected Metals 6020	Diss. Selected Metals-6020	Special Instructions/ Conditions of Receipt
KS 5/29/13 ~~DPS~~ DP13S-06S	5/29/13	1150		X			2		2	3			3	2	1	1	Dissolved Metals
DP13S-07S	5/29/13	1150		X			2		2	3			3	2	1	1	are field filtered.
TB-052913	5/29/13	—		X						1			1				

AC 5/29/13

AC 5/29/13

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

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

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By			1. Received By: [signature] TAB	5-30-13	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#7 3.8, 4.0, 3.9

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21680-1

Login Number: 21680

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21680-1

Login Number: 21680
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 05/30/13 03:21 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21739-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/6/2013 3:46:43 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21739-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21739-1

Comments
No additional comments.

Receipt
The samples were received on 5/31/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.7º C, 3.9º C, 4.1º C and 4.3º C.

GC/MS VOA
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 121868 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-14R (180-21739-5), PZN-99B (180-21739-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) was analyzed with headspace in the sample vial: TB-053013 (180-21739-12).

Method(s) 8260B: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 122120: Bromomethane and Trichlorofluoromethane. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for 6 analytes to be outside limits; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octy phthalate associated with batch 122001 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122054 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 121598 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 121598 was outside control limits. The recoveries were within quality control acceptace limits and in quality control acceptance limits in the LCS; therefore the data has been qualified and reported.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: MW-14R (180-21739-5), P-03R (180-21739-4), PZN-99B (180-21739-6). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122112 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: PZS-30 (180-21739-7). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122234 recovered above

Job ID: 180-21739-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals

Method(s) 6020: The recovery of Post Spike, (180-21739-3 PDS), associated with batch 480-121732 exhibited results outside quality control limits for total arsenic. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary.

Method(s) 6020: The recovery of Post Spike, (180-21739-3 PDS), associated with batch 480-121734 exhibited results outside quality control limits for dissolved arsenic. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary.

Method(s) 6020: Dissolved metals results for the following sample(s) are slightly greater than the corresponding total metals results for copper: P-03R (180-21739-4).

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits
E	Result exceeded calibration range.
F	RPD of the MS and MSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21739-1	PZS-40	Water	05/30/13 10:10	05/30/13 20:00
180-21739-2	FB-02-053013	Water	05/30/13 10:48	05/30/13 20:00
180-21739-3	MW-04	Water	05/30/13 11:52	05/30/13 20:00
180-21739-4	P-03R	Water	05/30/13 14:52	05/30/13 20:00
180-21739-5	MW-14R	Water	05/30/13 17:30	05/30/13 20:00
180-21739-6	PZN-99B	Water	05/30/13 20:00	05/30/13 20:00
180-21739-7	PZS-30	Water	05/30/13 17:35	05/30/13 20:00
180-21739-8	TB-053013	Water	05/30/13 00:00	05/30/13 20:00
180-21739-12	TB-053013	Water	05/30/13 00:00	05/30/13 20:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZS-40

Lab Sample ID: 180-21739-1

Date Collected: 05/30/13 10:10

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/03/13 22:48	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1055.7 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122054	06/04/13 15:49	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/03/13 23:12	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 01:53	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: FB-02-053013

Lab Sample ID: 180-21739-2

Date Collected: 05/30/13 10:48

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/03/13 23:09	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1056.5 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122054	06/04/13 16:16	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/03/13 23:18	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 02:10	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-04

Lab Sample ID: 180-21739-3

Date Collected: 05/30/13 11:52

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/03/13 23:30	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1055.5 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122054	06/04/13 16:43	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/03/13 23:23	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF

Client Sample ID: MW-04

Date Collected: 05/30/13 11:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		1			122084	06/04/13 02:16	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: P-03R

Date Collected: 05/30/13 14:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 00:32	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			962 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122054	06/04/13 17:11	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL2		962 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL2	200			122112	06/04/13 21:24	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		962 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL	20			122112	06/04/13 19:35	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:02	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 02:43	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-14R

Date Collected: 05/30/13 17:30
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 00:52	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Analysis	8260B	DL	4	5 mL	5 mL	121963	06/04/13 12:12	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C	DL		1053.5 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL	2000			122112	06/04/13 21:51	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C			1053.5 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		100			122112	06/04/13 20:03	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:08	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: MW-14R

Lab Sample ID: 180-21739-5

Date Collected: 05/30/13 17:30

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 02:49	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZN-99B

Lab Sample ID: 180-21739-6

Date Collected: 05/30/13 20:00

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 01:13	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Analysis	8260B	DL	4	5 mL	5 mL	121963	06/04/13 12:33	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C	DL		1050.6 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL	2500			122112	06/04/13 22:18	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C			1050.6 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		50			122112	06/04/13 20:30	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:14	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 02:55	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: PZS-30

Lab Sample ID: 180-21739-7

Date Collected: 05/30/13 17:35

Matrix: Water

Date Received: 05/30/13 20:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 01:33	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1014.2 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/04/13 20:57	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1014.2 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL	50			122234	06/05/13 13:12	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:20	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZS-30

Lab Sample ID: 180-21739-7

Date Collected: 05/30/13 17:35
Date Received: 05/30/13 20:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		1			122084	06/04/13 03:01	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-053013

Lab Sample ID: 180-21739-8

Date Collected: 05/30/13 00:00
Date Received: 05/30/13 20:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 01:55	LH	TAL BUF
	Instrument ID: HP5975D									

Client Sample ID: TB-053013

Lab Sample ID: 180-21739-12

Date Collected: 05/30/13 00:00
Date Received: 05/30/13 20:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122120	06/05/13 03:21	TRF	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

MZ = Michael Zeimer

Batch Type: Analysis

LH = Leah Hill

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZS-40
Date Collected: 05/30/13 10:10
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 22:48	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 22:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 22:48	1
Acetone	10	U	10		ug/L			06/03/13 22:48	1
Benzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 22:48	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 22:48	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 22:48	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 22:48	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 22:48	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 22:48	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 22:48	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 22:48	1
Styrene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Toluene	1.0	U	1.0		ug/L			06/03/13 22:48	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 22:48	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 22:48	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 22:48	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 22:48	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 22:48	1

Client Sample ID: PZS-40
Date Collected: 05/30/13 10:10
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*06/03/13 22:48*	*1*
Toluene-d8 (Surr)	*91*		*71 - 126*		*06/03/13 22:48*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/03/13 22:48*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
bis (2-chloroisopropyl) ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4,5-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4,6-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4-Dichlorophenol	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4-Dinitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,4-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2,6-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Chloronaphthalene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Chlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Methylnaphthalene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
2-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
3,3'-Dichlorobenzidine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
3-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Bromophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Chloro-3-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Chloroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Chlorophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
4-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Acenaphthene	**2.1**		0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Acenaphthylene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 15:49	1
Acetophenone	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Atrazine	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzaldehyde	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzo(a)anthracene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzo(b)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzo(g,h,i)perylene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Benzo(k)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 15:49	1
Bis(2-chloroethoxy)methane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Bis(2-chloroethyl)ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Bis(2-ethylhexyl) phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Butyl benzyl phthalate	2.8	U	2.8		ug/L		06/01/13 07:15	06/04/13 15:49	1
Caprolactam	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Carbazole	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Chrysene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Dibenz(a,h)anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZS-40
Date Collected: 05/30/13 10:10
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Diethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Dimethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 15:49	1
Di-n-octyl phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Fluoranthene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Fluorene	**0.49**		0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Hexachlorobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
Hexachloroethane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Indeno(1,2,3-cd)pyrene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Isophorone	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
Naphthalene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
Nitrobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1
N-Nitrosodi-n-propylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
N-Nitrosodiphenylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 15:49	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
Phenanthrene	**0.34**		0.19		ug/L		06/01/13 07:15	06/04/13 15:49	1
Phenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 15:49	1
Pyrene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*57*		*34 - 132*	*06/01/13 07:15*	*06/04/13 15:49*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*06/01/13 07:15*	*06/04/13 15:49*	*1*
p-Terphenyl-d14	*93*		*58 - 147*	*06/01/13 07:15*	*06/04/13 15:49*	*1*
Phenol-d5	*22*		*11 - 120*	*06/01/13 07:15*	*06/04/13 15:49*	*1*
2-Fluorophenol	*28*		*18 - 120*	*06/01/13 07:15*	*06/04/13 15:49*	*1*
2,4,6-Tribromophenol	*106*		*39 - 146*	*06/01/13 07:15*	*06/04/13 15:49*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.9**		1.0		ug/L		06/03/13 09:40	06/03/13 23:12	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:12	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:12	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:12	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:12	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.9**		1.0		ug/L		06/03/13 09:40	06/04/13 01:53	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 01:53	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:53	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:53	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 01:53	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: FB-02-053013
Date Collected: 05/30/13 10:48
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 23:09	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 23:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 23:09	1
Acetone	10	U	10		ug/L			06/03/13 23:09	1
Benzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 23:09	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 23:09	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 23:09	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 23:09	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:09	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 23:09	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 23:09	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 23:09	1
Styrene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Toluene	1.0	U	1.0		ug/L			06/03/13 23:09	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:09	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 23:09	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 23:09	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 23:09	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 23:09	1

Client Sample ID: FB-02-053013
Date Collected: 05/30/13 10:48
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*06/03/13 23:09*	*1*
Toluene-d8 (Surr)	*92*		*71 - 126*		*06/03/13 23:09*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/03/13 23:09*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
bis (2-chloroisopropyl) ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4,5-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4,6-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4-Dichlorophenol	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4-Dinitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,4-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2,6-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Chloronaphthalene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Chlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Methylnaphthalene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
2-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
3,3'-Dichlorobenzidine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
3-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Bromophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Chloro-3-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Chloroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Chlorophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
4-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Acenaphthene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Acenaphthylene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:16	1
Acetophenone	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Atrazine	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzaldehyde	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzo(a)anthracene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzo(b)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzo(g,h,i)perylene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Benzo(k)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:16	1
Bis(2-chloroethoxy)methane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Bis(2-chloroethyl)ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Bis(2-ethylhexyl) phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Butyl benzyl phthalate	2.8	U	2.8		ug/L		06/01/13 07:15	06/04/13 16:16	1
Caprolactam	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Carbazole	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Chrysene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Dibenz(a,h)anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: FB-02-053013
Date Collected: 05/30/13 10:48
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Diethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Dimethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 16:16	1
Di-n-octyl phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Fluoranthene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Fluorene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Hexachlorobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
Hexachloroethane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Indeno(1,2,3-cd)pyrene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Isophorone	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
Naphthalene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
Nitrobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1
N-Nitrosodi-n-propylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
N-Nitrosodiphenylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:16	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
Phenanthrene	**0.20**		0.19		ug/L		06/01/13 07:15	06/04/13 16:16	1
Phenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:16	1
Pyrene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*34 - 132*	*06/01/13 07:15*	*06/04/13 16:16*	*1*
2-Fluorobiphenyl	*78*		*37 - 120*	*06/01/13 07:15*	*06/04/13 16:16*	*1*
p-Terphenyl-d14	*103*		*58 - 147*	*06/01/13 07:15*	*06/04/13 16:16*	*1*
Phenol-d5	*26*		*11 - 120*	*06/01/13 07:15*	*06/04/13 16:16*	*1*
2-Fluorophenol	*35*		*18 - 120*	*06/01/13 07:15*	*06/04/13 16:16*	*1*
2,4,6-Tribromophenol	*89*		*39 - 146*	*06/01/13 07:15*	*06/04/13 16:16*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:18	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:18	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:18	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:18	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:18	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:10	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 02:10	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:10	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:10	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 02:10	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: MW-04
Date Collected: 05/30/13 11:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 23:30	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 23:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 23:30	1
Acetone	10	U	10		ug/L			06/03/13 23:30	1
Benzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 23:30	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 23:30	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 23:30	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 23:30	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:30	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 23:30	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 23:30	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 23:30	1
Styrene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Toluene	1.0	U	1.0		ug/L			06/03/13 23:30	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 23:30	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 23:30	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 23:30	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 23:30	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 23:30	1

Client Sample ID: MW-04

Date Collected: 05/30/13 11:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*06/03/13 23:30*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*06/03/13 23:30*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*06/03/13 23:30*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
bis (2-chloroisopropyl) ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4,5-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4,6-Trichlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4-Dichlorophenol	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4-Dinitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,4-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2,6-Dinitrotoluene	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Chloronaphthalene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Chlorophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Methylnaphthalene	**1.3**		0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
2-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
3,3'-Dichlorobenzidine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
3-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Bromophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Chloro-3-methylphenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Chloroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Chlorophenyl phenyl ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Methylphenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Nitroaniline	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
4-Nitrophenol	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Acenaphthene	**17**		0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Acenaphthylene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:43	1
Acetophenone	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Atrazine	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzaldehyde	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzo(a)anthracene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzo(b)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzo(g,h,i)perylene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Benzo(k)fluoranthene	0.28	U	0.28		ug/L		06/01/13 07:15	06/04/13 16:43	1
Bis(2-chloroethoxy)methane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Bis(2-chloroethyl)ether	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Bis(2-ethylhexyl) phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Butyl benzyl phthalate	2.8	U	2.8		ug/L		06/01/13 07:15	06/04/13 16:43	1
Caprolactam	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Carbazole	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Chrysene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Dibenz(a,h)anthracene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: MW-04
Date Collected: 05/30/13 11:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Diethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Dimethyl phthalate	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 16:43	1
Di-n-octyl phthalate	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Fluoranthene	**0.67**		0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Fluorene	**3.8**		0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Hexachlorobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
Hexachloroethane	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Indeno(1,2,3-cd)pyrene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Isophorone	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
Naphthalene	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
Nitrobenzene	0.47	U	0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1
N-Nitrosodi-n-propylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
N-Nitrosodiphenylamine	4.7	U	4.7		ug/L		06/01/13 07:15	06/04/13 16:43	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
Phenanthrene	**0.40**		0.19		ug/L		06/01/13 07:15	06/04/13 16:43	1
Phenol	0.95	U	0.95		ug/L		06/01/13 07:15	06/04/13 16:43	1
Pyrene	**2.1**		0.47		ug/L		06/01/13 07:15	06/04/13 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*34 - 132*	*06/01/13 07:15*	*06/04/13 16:43*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*06/01/13 07:15*	*06/04/13 16:43*	*1*
p-Terphenyl-d14	*71*		*58 - 147*	*06/01/13 07:15*	*06/04/13 16:43*	*1*
Phenol-d5	*24*		*11 - 120*	*06/01/13 07:15*	*06/04/13 16:43*	*1*
2-Fluorophenol	*31*		*18 - 120*	*06/01/13 07:15*	*06/04/13 16:43*	*1*
2,4,6-Tribromophenol	*99*		*39 - 146*	*06/01/13 07:15*	*06/04/13 16:43*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		1.0		ug/L		06/03/13 09:40	06/03/13 23:23	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:23	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:23	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:23	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:23	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**13**		1.0		ug/L		06/03/13 09:40	06/04/13 02:16	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 02:16	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:16	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:16	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 02:16	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: P-03R
Date Collected: 05/30/13 14:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 00:32	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 00:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 00:32	1
Acetone	**33**		10		ug/L			06/04/13 00:32	1
Benzene	**1.3**		1.0		ug/L			06/04/13 00:32	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 00:32	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 00:32	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 00:32	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 00:32	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:32	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Ethylbenzene	**5.4**		1.0		ug/L			06/04/13 00:32	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 00:32	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 00:32	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 00:32	1
Styrene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Toluene	**7.3**		1.0		ug/L			06/04/13 00:32	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:32	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 00:32	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 00:32	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 00:32	1
Xylenes, Total	**20**		2.0		ug/L			06/04/13 00:32	1

Client Sample ID: P-03R
Date Collected: 05/30/13 14:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*06/04/13 00:32*	*1*
Toluene-d8 (Surr)	*87*		*71 - 126*		*06/04/13 00:32*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/04/13 00:32*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
bis (2-chloroisopropyl) ether	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4,5-Trichlorophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4,6-Trichlorophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4-Dichlorophenol	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4-Dinitrophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,4-Dinitrotoluene	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2,6-Dinitrotoluene	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2-Chloronaphthalene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
2-Chlorophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
2-Nitroaniline	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
2-Nitrophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
3,3'-Dichlorobenzidine	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
3-Nitroaniline	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4,6-Dinitro-2-methylphenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Bromophenyl phenyl ether	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Chloro-3-methylphenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Chloroaniline	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Chlorophenyl phenyl ether	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Nitroaniline	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
4-Nitrophenol	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Acenaphthylene	**0.37**		0.31		ug/L		06/01/13 07:15	06/04/13 17:11	1
Acetophenone	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Anthracene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Atrazine	2.1	U	2.1		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzaldehyde	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzo(a)anthracene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzo(a)pyrene	0.19	U	0.19		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzo(b)fluoranthene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzo(g,h,i)perylene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Benzo(k)fluoranthene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 17:11	1
Bis(2-chloroethoxy)methane	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Bis(2-chloroethyl)ether	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Butyl benzyl phthalate	3.1	U	3.1		ug/L		06/01/13 07:15	06/04/13 17:11	1
Caprolactam	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Chrysene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Dibenz(a,h)anthracene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Dibenzofuran	**8.5**		5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Diethyl phthalate	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Dimethyl phthalate	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1

Client Sample ID: P-03R
Date Collected: 05/30/13 14:52
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	2.1	U	2.1		ug/L		06/01/13 07:15	06/04/13 17:11	1
Di-n-octyl phthalate	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Fluoranthene	**3.6**		0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Fluorene	**0.77**		0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Hexachlorobenzene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
Hexachloroethane	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Indeno(1,2,3-cd)pyrene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Isophorone	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
Nitrobenzene	0.52	U	0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1
N-Nitrosodi-n-propylamine	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
N-Nitrosodiphenylamine	5.2	U	5.2		ug/L		06/01/13 07:15	06/04/13 17:11	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
Phenanthrene	**4.4**		0.21		ug/L		06/01/13 07:15	06/04/13 17:11	1
Phenol	**2.6**		1.0		ug/L		06/01/13 07:15	06/04/13 17:11	1
Pyrene	**2.1**		0.52		ug/L		06/01/13 07:15	06/04/13 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*34 - 132*	*06/01/13 07:15*	*06/04/13 17:11*	*1*
2-Fluorobiphenyl	*87*		*37 - 120*	*06/01/13 07:15*	*06/04/13 17:11*	*1*
p-Terphenyl-d14	*112*		*58 - 147*	*06/01/13 07:15*	*06/04/13 17:11*	*1*
Phenol-d5	*41*		*11 - 120*	*06/01/13 07:15*	*06/04/13 17:11*	*1*
2-Fluorophenol	*49*		*18 - 120*	*06/01/13 07:15*	*06/04/13 17:11*	*1*
2,4,6-Tribromophenol	*112*		*39 - 146*	*06/01/13 07:15*	*06/04/13 17:11*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**37**		10		ug/L		06/01/13 07:15	06/04/13 19:35	20
Acenaphthene	**37**		10		ug/L		06/01/13 07:15	06/04/13 19:35	20
Carbazole	100	U	100		ug/L		06/01/13 07:15	06/04/13 19:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*34 - 132*	*06/01/13 07:15*	*06/04/13 19:35*	*20*
2-Fluorobiphenyl	*85*		*37 - 120*	*06/01/13 07:15*	*06/04/13 19:35*	*20*
p-Terphenyl-d14	*124*		*58 - 147*	*06/01/13 07:15*	*06/04/13 19:35*	*20*
Phenol-d5	*35*		*11 - 120*	*06/01/13 07:15*	*06/04/13 19:35*	*20*
2-Fluorophenol	*58*		*18 - 120*	*06/01/13 07:15*	*06/04/13 19:35*	*20*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/01/13 07:15*	*06/04/13 19:35*	*20*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**1000**		210		ug/L		06/01/13 07:15	06/04/13 21:24	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/04/13 21:24*	*200*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/04/13 21:24*	*200*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/04/13 21:24*	*200*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/04/13 21:24*	*200*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/04/13 21:24*	*200*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/04/13 21:24*	*200*

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: P-03R

Lab Sample ID: 180-21739-4

Date Collected: 05/30/13 14:52

Matrix: Water

Date Received: 05/30/13 20:00

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:02	1
Chromium	**4.7**		1.5		ug/L		06/03/13 09:40	06/04/13 00:02	1
Copper	**1.3**		1.0		ug/L		06/03/13 09:40	06/04/13 00:02	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:02	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 00:02	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:43	1
Chromium	**5.1**		1.5		ug/L		06/03/13 09:40	06/04/13 02:43	1
Copper	**1.9**		1.0		ug/L		06/03/13 09:40	06/04/13 02:43	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:43	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 02:43	1

Client Sample ID: MW-14R

Lab Sample ID: 180-21739-5

Date Collected: 05/30/13 17:30

Matrix: Water

Date Received: 05/30/13 20:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:52	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:52	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 00:52	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 00:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 00:52	1
Acetone	10	U	10		ug/L			06/04/13 00:52	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 00:52	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 00:52	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 00:52	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 00:52	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 00:52	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:52	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 00:52	1

Client Sample ID: MW-14R
Date Collected: 05/30/13 17:30
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Isopropylbenzene	**10**		1.0		ug/L			06/04/13 00:52	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 00:52	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 00:52	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 00:52	1
Styrene	1.0	U	1.0		ug/L			06/04/13 00:52	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 00:52	1
Toluene	**13**		1.0		ug/L			06/04/13 00:52	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 00:52	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 00:52	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 00:52	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 00:52	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 00:52	1
Xylenes, Total	**170**		2.0		ug/L			06/04/13 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*06/04/13 00:52*	*1*
Toluene-d8 (Surr)	*89*		*71 - 126*		*06/04/13 00:52*	*1*
4-Bromofluorobenzene (Surr)	*115*		*73 - 120*		*06/04/13 00:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**220**		4.0		ug/L			06/04/13 12:12	4
Ethylbenzene	**150**		4.0		ug/L			06/04/13 12:12	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*06/04/13 12:12*	*4*
Toluene-d8 (Surr)	*89*		*71 - 126*		*06/04/13 12:12*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/04/13 12:12*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
bis (2-chloroisopropyl) ether	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4,5-Trichlorophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4,6-Trichlorophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4-Dichlorophenol	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4-Dimethylphenol	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4-Dinitrophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,4-Dinitrotoluene	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2,6-Dinitrotoluene	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Chloronaphthalene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Chlorophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Methylnaphthalene	**260**		47		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Methylphenol	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Nitroaniline	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
2-Nitrophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
3,3'-Dichlorobenzidine	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: MW-14R
Date Collected: 05/30/13 17:30
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4,6-Dinitro-2-methylphenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Bromophenyl phenyl ether	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Chloro-3-methylphenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Chloroaniline	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Chlorophenyl phenyl ether	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Methylphenol	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Nitroaniline	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
4-Nitrophenol	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Acenaphthene	**380**		47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Acenaphthylene	28	U	28		ug/L		06/01/13 07:15	06/04/13 20:03	100
Acetophenone	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Anthracene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Atrazine	190	U	190		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzaldehyde	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzo(a)anthracene	28	U	28		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzo(a)pyrene	17	U	17		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzo(b)fluoranthene	28	U	28		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzo(g,h,i)perylene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Benzo(k)fluoranthene	28	U	28		ug/L		06/01/13 07:15	06/04/13 20:03	100
Bis(2-chloroethoxy)methane	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Bis(2-chloroethyl)ether	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Bis(2-ethylhexyl) phthalate	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Butyl benzyl phthalate	280	U	280		ug/L		06/01/13 07:15	06/04/13 20:03	100
Caprolactam	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Carbazole	**520**		470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Chrysene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Dibenz(a,h)anthracene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Dibenzofuran	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Diethyl phthalate	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Dimethyl phthalate	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Di-n-butyl phthalate	190	U	190		ug/L		06/01/13 07:15	06/04/13 20:03	100
Di-n-octyl phthalate	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Fluoranthene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Fluorene	**210**		47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Hexachlorobenzene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Hexachlorobutadiene	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
Hexachlorocyclopentadiene	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
Hexachloroethane	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Indeno(1,2,3-cd)pyrene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Isophorone	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
Nitrobenzene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100
N-Nitrosodi-n-propylamine	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
N-Nitrosodiphenylamine	470	U	470		ug/L		06/01/13 07:15	06/04/13 20:03	100
Pentachlorophenol	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
Phenanthrene	**190**		19		ug/L		06/01/13 07:15	06/04/13 20:03	100
Phenol	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:03	100
Pyrene	47	U	47		ug/L		06/01/13 07:15	06/04/13 20:03	100

Client Sample ID: MW-14R

Date Collected: 05/30/13 17:30
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/04/13 20:03*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/04/13 20:03*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/04/13 20:03*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/04/13 20:03*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/04/13 20:03*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/04/13 20:03*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**9100**		1900		ug/L		06/01/13 07:15	06/04/13 21:51	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/04/13 21:51*	*2000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**33**		1.0		ug/L		06/03/13 09:40	06/04/13 00:08	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 00:08	1
Copper	**1.5**		1.0		ug/L		06/03/13 09:40	06/04/13 00:08	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:08	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 00:08	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**33**		1.0		ug/L		06/03/13 09:40	06/04/13 02:49	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 02:49	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:49	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:49	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 02:49	1

Client Sample ID: PZN-99B

Date Collected: 05/30/13 20:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:13	1

Client Sample ID: PZN-99B
Date Collected: 05/30/13 20:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:13	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:13	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 01:13	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 01:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 01:13	1
Acetone	10	U	10		ug/L			06/04/13 01:13	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 01:13	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 01:13	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 01:13	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 01:13	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:13	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Isopropylbenzene	**11**		1.0		ug/L			06/04/13 01:13	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 01:13	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 01:13	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 01:13	1
Styrene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Toluene	**13**		1.0		ug/L			06/04/13 01:13	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:13	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 01:13	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 01:13	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 01:13	1
Xylenes, Total	**160**		2.0		ug/L			06/04/13 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*06/04/13 01:13*	*1*
Toluene-d8 (Surr)	*91*		*71 - 126*		*06/04/13 01:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/04/13 01:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**200**		4.0		ug/L			06/04/13 12:33	4
Ethylbenzene	**140**		4.0		ug/L			06/04/13 12:33	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/04/13 12:33*	*4*
Toluene-d8 (Surr)	*88*		*71 - 126*		*06/04/13 12:33*	*4*

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZN-99B
Date Collected: 05/30/13 20:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*06/04/13 12:33*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
bis (2-chloroisopropyl) ether	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4,5-Trichlorophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4,6-Trichlorophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4-Dichlorophenol	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4-Dimethylphenol	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4-Dinitrophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,4-Dinitrotoluene	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2,6-Dinitrotoluene	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Chloronaphthalene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Chlorophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Methylnaphthalene	**220**		24		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Methylphenol	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Nitroaniline	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
2-Nitrophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
3,3'-Dichlorobenzidine	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
3-Nitroaniline	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4,6-Dinitro-2-methylphenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Bromophenyl phenyl ether	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Chloro-3-methylphenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Chloroaniline	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Chlorophenyl phenyl ether	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Methylphenol	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Nitroaniline	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
4-Nitrophenol	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Acenaphthene	**310**		24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Acenaphthylene	14	U	14		ug/L		06/01/13 07:15	06/04/13 20:30	50
Acetophenone	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Anthracene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Atrazine	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzaldehyde	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzo(a)anthracene	14	U	14		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzo(a)pyrene	8.6	U	8.6		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzo(b)fluoranthene	14	U	14		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzo(g,h,i)perylene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Benzo(k)fluoranthene	14	U	14		ug/L		06/01/13 07:15	06/04/13 20:30	50
Bis(2-chloroethoxy)methane	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Bis(2-chloroethyl)ether	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Bis(2-ethylhexyl) phthalate	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Butyl benzyl phthalate	140	U	140		ug/L		06/01/13 07:15	06/04/13 20:30	50
Caprolactam	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Carbazole	**430**		240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Chrysene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Dibenz(a,h)anthracene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Dibenzofuran	**240**		240		ug/L		06/01/13 07:15	06/04/13 20:30	50

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZN-99B
Date Collected: 05/30/13 20:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-6
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Dimethyl phthalate	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Di-n-butyl phthalate	95	U	95		ug/L		06/01/13 07:15	06/04/13 20:30	50
Di-n-octyl phthalate	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Fluoranthene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Fluorene	**170**		24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Hexachlorobenzene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Hexachlorobutadiene	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
Hexachlorocyclopentadiene	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
Hexachloroethane	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Indeno(1,2,3-cd)pyrene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Isophorone	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
Nitrobenzene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50
N-Nitrosodi-n-propylamine	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
N-Nitrosodiphenylamine	240	U	240		ug/L		06/01/13 07:15	06/04/13 20:30	50
Pentachlorophenol	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
Phenanthrene	**150**		9.5		ug/L		06/01/13 07:15	06/04/13 20:30	50
Phenol	48	U	48		ug/L		06/01/13 07:15	06/04/13 20:30	50
Pyrene	24	U	24		ug/L		06/01/13 07:15	06/04/13 20:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/04/13 20:30*	*50*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/04/13 20:30*	*50*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/04/13 20:30*	*50*
Phenol-d5	*18*		*11 - 120*	*06/01/13 07:15*	*06/04/13 20:30*	*50*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/04/13 20:30*	*50*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/04/13 20:30*	*50*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**7000**		2400		ug/L		06/01/13 07:15	06/04/13 22:18	2500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/04/13 22:18*	*2500*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**35**		1.0		ug/L		06/03/13 09:40	06/04/13 00:14	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 00:14	1
Copper	**1.7**		1.0		ug/L		06/03/13 09:40	06/04/13 00:14	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:14	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 00:14	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**34**		1.0		ug/L		06/03/13 09:40	06/04/13 02:55	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: PZN-99B — **Lab Sample ID: 180-21739-6**
Date Collected: 05/30/13 20:00 — **Matrix: Water**
Date Received: 05/30/13 20:00

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 02:55	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:55	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 02:55	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 02:55	1

Client Sample ID: PZS-30 — **Lab Sample ID: 180-21739-7**
Date Collected: 05/30/13 17:35 — **Matrix: Water**
Date Received: 05/30/13 20:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 01:33	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 01:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 01:33	1
Acetone	10	U	10		ug/L			06/04/13 01:33	1
Benzene	**6.2**		1.0		ug/L			06/04/13 01:33	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 01:33	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 01:33	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 01:33	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 01:33	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:33	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Ethylbenzene	**3.3**		1.0		ug/L			06/04/13 01:33	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 01:33	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 01:33	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 01:33	1

Client Sample ID: PZS-30
Date Collected: 05/30/13 17:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Toluene	1.0	U	1.0		ug/L			06/04/13 01:33	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:33	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 01:33	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 01:33	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 01:33	1
Xylenes, Total	**3.6**		2.0		ug/L			06/04/13 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*06/04/13 01:33*	*1*
Toluene-d8 (Surr)	*92*		*71 - 126*		*06/04/13 01:33*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/04/13 01:33*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4-Dimethylphenol	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Chlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Methylnaphthalene	**9.5**		0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Methylphenol	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
2-Nitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
3-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Chloroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Methylphenol	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
4-Nitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Acenaphthylene	**0.61**		0.30		ug/L		06/01/13 07:15	06/04/13 20:57	1
Acetophenone	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Anthracene	**1.8**		0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Atrazine	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 20:57	1
Benzaldehyde	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 20:57	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/01/13 07:15	06/04/13 20:57	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 20:57	1

Client Sample ID: PZS-30
Date Collected: 05/30/13 17:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-7
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 20:57	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/01/13 07:15	06/04/13 20:57	1
Caprolactam	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Carbazole	**11**		4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Chrysene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Dibenzofuran	**16**		4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Diethyl phthalate	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Dimethyl phthalate	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 20:57	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Fluoranthene	**8.5**		0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Fluorene	**19**		0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Hexachlorobenzene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Hexachlorobutadiene	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
Hexachlorocyclopentadiene	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
Hexachloroethane	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Isophorone	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
Nitrobenzene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 20:57	1
Pentachlorophenol	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
Phenanthrene	**11**		0.20		ug/L		06/01/13 07:15	06/04/13 20:57	1
Phenol	0.99	U	0.99		ug/L		06/01/13 07:15	06/04/13 20:57	1
Pyrene	**6.5**		0.49		ug/L		06/01/13 07:15	06/04/13 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*56*		*34 - 132*	*06/01/13 07:15*	*06/04/13 20:57*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*06/01/13 07:15*	*06/04/13 20:57*	*1*
p-Terphenyl-d14	*119*		*58 - 147*	*06/01/13 07:15*	*06/04/13 20:57*	*1*
Phenol-d5	*22*		*11 - 120*	*06/01/13 07:15*	*06/04/13 20:57*	*1*
2-Fluorophenol	*28*		*18 - 120*	*06/01/13 07:15*	*06/04/13 20:57*	*1*
2,4,6-Tribromophenol	*95*		*39 - 146*	*06/01/13 07:15*	*06/04/13 20:57*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**66**		25		ug/L		06/01/13 07:15	06/05/13 13:12	50
Naphthalene	**140**		49		ug/L		06/01/13 07:15	06/05/13 13:12	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/05/13 13:12*	*50*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/05/13 13:12*	*50*
p-Terphenyl-d14	*79*		*58 - 147*	*06/01/13 07:15*	*06/05/13 13:12*	*50*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/05/13 13:12*	*50*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/05/13 13:12*	*50*

Client Sample ID: PZS-30

Lab Sample ID: 180-21739-7

Date Collected: 05/30/13 17:35

Matrix: Water

Date Received: 05/30/13 20:00

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/05/13 13:12*	*50*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.6**		1.0		ug/L		06/03/13 09:40	06/04/13 00:20	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 00:20	1
Copper	**2.0**		1.0		ug/L		06/03/13 09:40	06/04/13 00:20	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:20	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 00:20	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.3**		1.0		ug/L		06/03/13 09:40	06/04/13 03:01	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 03:01	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:01	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:01	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 03:01	1

Client Sample ID: TB-053013

Lab Sample ID: 180-21739-8

Date Collected: 05/30/13 00:00

Matrix: Water

Date Received: 05/30/13 20:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 01:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 01:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 01:55	1
Acetone	10	U	10		ug/L			06/04/13 01:55	1
Benzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 01:55	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 01:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 01:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 01:55	1

Client Sample ID: TB-053013
Date Collected: 05/30/13 00:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 01:55	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 01:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 01:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 01:55	1
Styrene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Toluene	1.0	U	1.0		ug/L			06/04/13 01:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 01:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 01:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 01:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 01:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*06/04/13 01:55*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/04/13 01:55*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*06/04/13 01:55*	*1*

Client Sample ID: TB-053013
Date Collected: 05/30/13 00:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 03:21	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 03:21	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-1

Client Sample ID: TB-053013
Date Collected: 05/30/13 00:00
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 03:21	1
Acetone	10	U	10		ug/L			06/05/13 03:21	1
Benzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 03:21	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 03:21	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 03:21	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 03:21	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 03:21	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 03:21	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 03:21	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 03:21	1
Styrene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Toluene	1.0	U	1.0		ug/L			06/05/13 03:21	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 03:21	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 03:21	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 03:21	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 03:21	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 137*		*06/05/13 03:21*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/05/13 03:21*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*06/05/13 03:21*	*1*

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 21:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 21:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 21:55	1
Acetone	10	U	10		ug/L			06/03/13 21:55	1
Benzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Styrene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Toluene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 21:55	1

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		66 - 137		06/03/13 21:55	1
Toluene-d8 (Surr)	91		71 - 126		06/03/13 21:55	1
4-Bromofluorobenzene (Surr)	91		73 - 120		06/03/13 21:55	1

Lab Sample ID: LCS 480-121868/5
Matrix: Water
Analysis Batch: 121868

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	20.2		ug/L		81	58 - 121
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	27.7		ug/L		111	75 - 127
Benzene	25.0	26.6		ug/L		106	71 - 124
Chlorobenzene	25.0	23.0		ug/L		92	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
Methyl tert-butyl ether	25.0	24.5		ug/L		98	64 - 127
Tetrachloroethene	25.0	21.0		ug/L		84	74 - 122
Toluene	25.0	24.3		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
Trichloroethene	25.0	25.9		ug/L		104	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	88		71 - 126
4-Bromofluorobenzene (Surr)	95		73 - 120

Lab Sample ID: 180-21739-3 MS
Matrix: Water
Analysis Batch: 121868

Client Sample ID: MW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.0	U	25.0	32.3		ug/L		129	71 - 129
1,1-Dichloroethene	1.0	U	25.0	26.5		ug/L		106	58 - 121
1,2-Dichlorobenzene	1.0	U	25.0	30.1		ug/L		120	80 - 124
1,2-Dichloroethane	1.0	U	25.0	33.6	F	ug/L		134	75 - 127
Benzene	1.0	U	25.0	34.4	F	ug/L		137	71 - 124
Chlorobenzene	1.0	U	25.0	28.2		ug/L		113	72 - 120
cis-1,2-Dichloroethene	1.0	U	25.0	31.8	F	ug/L		127	74 - 124
Ethylbenzene	1.0	U	25.0	30.9		ug/L		123	77 - 123
Methyl tert-butyl ether	1.0	U	25.0	30.9		ug/L		124	64 - 127
Tetrachloroethene	1.0	U	25.0	24.8		ug/L		99	74 - 122
Toluene	1.0	U	25.0	29.0		ug/L		116	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	34.0	F	ug/L		136	73 - 127
Trichloroethene	1.0	U	25.0	32.0	F	ug/L		128	74 - 123

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

Lab Sample ID: 180-21739-3 MS
Matrix: Water
Analysis Batch: 121868

Client Sample ID: MW-04
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*
Toluene-d8 (Surr)	*93*		*71 - 126*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*

Lab Sample ID: 180-21739-3 MSD
Matrix: Water
Analysis Batch: 121868

Client Sample ID: MW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	1.0	U	25.0	29.9		ug/L		119	71 - 129	8	20
1,1-Dichloroethene	1.0	U	25.0	24.1		ug/L		96	58 - 121	10	16
1,2-Dichlorobenzene	1.0	U	25.0	30.2		ug/L		121	80 - 124	0	20
1,2-Dichloroethane	1.0	U	25.0	33.1	F	ug/L		132	75 - 127	2	20
Benzene	1.0	U	25.0	32.8	F	ug/L		131	71 - 124	5	13
Chlorobenzene	1.0	U	25.0	28.2		ug/L		113	72 - 120	0	25
cis-1,2-Dichloroethene	1.0	U	25.0	27.7		ug/L		111	74 - 124	14	15
Ethylbenzene	1.0	U	25.0	30.4		ug/L		122	77 - 123	1	15
Methyl tert-butyl ether	1.0	U	25.0	26.9		ug/L		107	64 - 127	14	37
Tetrachloroethene	1.0	U	25.0	25.4		ug/L		102	74 - 122	2	20
Toluene	1.0	U	25.0	30.6	F	ug/L		123	80 - 122	5	15
trans-1,2-Dichloroethene	1.0	U	25.0	29.6		ug/L		118	73 - 127	14	20
Trichloroethene	1.0	U	25.0	30.6		ug/L		123	74 - 123	4	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*
Toluene-d8 (Surr)	*100*		*71 - 126*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*

Lab Sample ID: MB 480-121963/5
Matrix: Water
Analysis Batch: 121963

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 10:56	1

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

Lab Sample ID: MB 480-121963/5
Matrix: Water
Analysis Batch: 121963

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 10:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 10:56	1
Acetone	10	U	10		ug/L			06/04/13 10:56	1
Benzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 10:56	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Styrene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Toluene	1.0	U	1.0		ug/L			06/04/13 10:56	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*06/04/13 10:56*	*1*
Toluene-d8 (Surr)	*90*		*71 - 126*		*06/04/13 10:56*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*06/04/13 10:56*	*1*

Lab Sample ID: LCS 480-121963/4
Matrix: Water
Analysis Batch: 121963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	28.2		ug/L		113	71 - 129
1,1-Dichloroethene	25.0	20.9		ug/L		84	58 - 121
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	30.3		ug/L		121	75 - 127

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

Lab Sample ID: LCS 480-121963/4
Matrix: Water
Analysis Batch: 121963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	28.6		ug/L		114	71 - 124
Chlorobenzene	25.0	25.0		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	74 - 124
Ethylbenzene	25.0	26.9		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	27.2		ug/L		109	64 - 127
Tetrachloroethene	25.0	21.8		ug/L		87	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	27.5		ug/L		110	73 - 127
Trichloroethene	25.0	26.4		ug/L		106	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*
Toluene-d8 (Surr)	*88*		*71 - 126*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*

Lab Sample ID: MB 480-122120/6
Matrix: Water
Analysis Batch: 122120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 23:05	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 23:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 23:05	1
Acetone	10	U	10		ug/L			06/04/13 23:05	1
Benzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 23:05	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 23:05	1

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

Lab Sample ID: MB 480-122120/6
Matrix: Water
Analysis Batch: 122120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Styrene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Toluene	1.0	U	1.0		ug/L			06/04/13 23:05	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 23:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*06/04/13 23:05*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/04/13 23:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/04/13 23:05*	*1*

Lab Sample ID: LCS 480-122120/32
Matrix: Water
Analysis Batch: 122120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.9		ug/L		104	71 - 129
1,1-Dichloroethene	25.0	21.8		ug/L		87	58 - 121
1,2-Dichlorobenzene	25.0	28.3		ug/L		113	80 - 124
1,2-Dichloroethane	25.0	26.7		ug/L		107	75 - 127
Benzene	25.0	24.7		ug/L		99	71 - 124
Chlorobenzene	25.0	27.5		ug/L		110	72 - 120
cis-1,2-Dichloroethene	25.0	28.8		ug/L		115	74 - 124
Ethylbenzene	25.0	27.3		ug/L		109	77 - 123
Methyl tert-butyl ether	25.0	23.9		ug/L		96	64 - 127
Tetrachloroethene	25.0	30.3		ug/L		121	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	73 - 127
Trichloroethene	25.0	27.2		ug/L		109	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*

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

Lab Sample ID: LCS 480-122120/32
Matrix: Water
Analysis Batch: 122120

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acenaphthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acenaphthylene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acetophenone	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Atrazine	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzaldehyde	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Caprolactam	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Carbazole	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Chrysene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenzofuran	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluoranthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluorene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachloroethane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Isophorone	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Naphthalene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Nitrobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenanthrene	0.20	U	0.20		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*34 - 132*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
p-Terphenyl-d14	*99*		*58 - 147*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
Phenol-d5	*33*		*11 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/01/13 07:15*	*06/04/13 11:38*	*1*

Lab Sample ID: LCS 480-121598/2-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.55		ug/L		94	22 - 167
2-Chlorophenol	8.00	5.33		ug/L		67	44 - 106
4-Chloro-3-methylphenol	8.00	7.38		ug/L		92	60 - 131
4-Nitrophenol	16.0	9.76		ug/L		61	10 - 105
Acenaphthene	8.00	6.74		ug/L		84	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.21		ug/L		103	69 - 136
Fluorene	8.00	7.10		ug/L		89	54 - 137

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-121598/2-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	8.00	5.0	U	ug/L		58	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.89		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.8		ug/L		80	10 - 131
Phenol	8.00	2.72		ug/L		34	17 - 61
Pyrene	8.00	7.51		ug/L		94	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*80*		*37 - 120*
p-Terphenyl-d14	*93*		*58 - 147*
Phenol-d5	*34*		*11 - 120*
2-Fluorophenol	*43*		*18 - 120*
2,4,6-Tribromophenol	*104*		*39 - 146*

Lab Sample ID: 180-21739-3 MS
Matrix: Water
Analysis Batch: 122054

Client Sample ID: MW-04
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	4.7	U	7.59	7.75		ug/L		102	70 - 130
2-Chlorophenol	4.7	U	7.59	4.7	U F	ug/L		55	70 - 130
4-Chloro-3-methylphenol	4.7	U	7.59	6.81		ug/L		90	70 - 130
4-Nitrophenol	4.7	U	15.2	10.4	F	ug/L		68	70 - 130
Acenaphthene	17		7.59	23.0	E	ug/L		81	35 - 143
Bis(2-ethylhexyl) phthalate	4.7	U	7.59	4.7	U F	ug/L		54	69 - 136
Fluorene	3.8		7.59	10.3		ug/L		85	54 - 137
Hexachloroethane	4.7	U	7.59	4.7	U F	ug/L		48	70 - 130
N-Nitrosodi-n-propylamine	4.7	U	7.59	5.09	F	ug/L		67	70 - 130
Pentachlorophenol	0.95	U	15.2	15.5		ug/L		102	18 - 131
Phenol	0.95	U	7.59	1.95		ug/L		26	7 - 120
Pyrene	2.1		7.59	10.7		ug/L		114	85 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*61*		*34 - 132*
2-Fluorobiphenyl	*76*		*37 - 120*
p-Terphenyl-d14	*72*		*58 - 147*
Phenol-d5	*25*		*11 - 120*
2-Fluorophenol	*31*		*18 - 120*
2,4,6-Tribromophenol	*109*		*39 - 146*

Lab Sample ID: 180-21739-3 MSD
Matrix: Water
Analysis Batch: 122054

Client Sample ID: MW-04
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	4.7	U	7.58	7.80		ug/L		103	70 - 130	1	20
2-Chlorophenol	4.7	U	7.58	4.7	U F	ug/L		53	70 - 130	3	20
4-Chloro-3-methylphenol	4.7	U	7.58	6.60		ug/L		87	70 - 130	3	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 180-21739-3 MSD — **Client Sample ID: MW-04**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122054 — **Prep Batch: 121598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol	4.7	U	15.2	10.5	F	ug/L		69	70 - 130	2	20
Acenaphthene	17		7.58	22.6	E	ug/L		76	35 - 143	2	24
Bis(2-ethylhexyl) phthalate	4.7	U	7.58	4.7	U F	ug/L		42	69 - 136	26	15
Fluorene	3.8		7.58	10.5		ug/L		89	54 - 137	2	15
Hexachloroethane	4.7	U	7.58	4.7	U F	ug/L		46	70 - 130	5	20
N-Nitrosodi-n-propylamine	4.7	U	7.58	4.83	F	ug/L		64	70 - 130	5	20
Pentachlorophenol	0.95	U	15.2	16.8		ug/L		111	18 - 131	8	37
Phenol	0.95	U	7.58	1.90		ug/L		25	7 - 120	2	34
Pyrene	2.1		7.58	10.5		ug/L		112	85 - 139	1	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*60*		*34 - 132*
2-Fluorobiphenyl	*72*		*37 - 120*
p-Terphenyl-d14	*63*		*58 - 147*
Phenol-d5	*25*		*11 - 120*
2-Fluorophenol	*30*		*18 - 120*
2,4,6-Tribromophenol	*112*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121732/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122083 — **Prep Batch: 121732**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:01	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:01	1

Lab Sample ID: LCS 480-121732/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122083 — **Prep Batch: 121732**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.2		ug/L		111	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	22.1		ug/L		110	80 - 120
Lead	20.0	21.5		ug/L		107	80 - 120
Zinc	50.0	57.8		ug/L		116	80 - 120

Lab Sample ID: 180-21739-3 MS — **Client Sample ID: MW-04**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122083 — **Prep Batch: 121732**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	15		20.0	38.3		ug/L		114	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21739-3 MS — **Client Sample ID: MW-04**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122083 — **Prep Batch: 121732**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.5	U	20.0	19.8		ug/L		97	75 - 125
Copper	1.0	U	20.0	21.0		ug/L		101	75 - 125
Lead	1.0	U	20.0	21.5		ug/L		104	75 - 125
Zinc	10	U	50.0	57.8		ug/L		108	75 - 125

Lab Sample ID: 180-21739-3 MSD — **Client Sample ID: MW-04**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122083 — **Prep Batch: 121732**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	15		20.0	38.5		ug/L		115	75 - 125	0	20
Chromium	1.5	U	20.0	20.2		ug/L		99	75 - 125	2	20
Copper	1.0	U	20.0	21.2		ug/L		103	75 - 125	1	20
Lead	1.0	U	20.0	21.8		ug/L		105	75 - 125	1	20
Zinc	10	U	50.0	61.5		ug/L		116	75 - 125	6	20

Lab Sample ID: MB 480-121735/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 122084 — **Prep Batch: 121734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 01:43	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 01:43	1

Lab Sample ID: LCS 480-121735/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 122084 — **Prep Batch: 121734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.4		ug/L		112	80 - 120
Chromium	20.0	21.6		ug/L		108	80 - 120
Copper	20.0	22.0		ug/L		110	80 - 120
Lead	20.0	21.7		ug/L		109	80 - 120
Zinc	50.0	56.9		ug/L		114	80 - 120

Lab Sample ID: 180-21739-3 MS — **Client Sample ID: MW-04**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 122084 — **Prep Batch: 121734**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	13		20.0	34.6		ug/L		107	75 - 125
Chromium	1.5	U	20.0	19.2		ug/L		95	75 - 125
Copper	1.0	U	20.0	19.7		ug/L		97	75 - 125
Lead	1.0	U	20.0	20.2		ug/L		101	75 - 125
Zinc	10	U	50.0	52.6		ug/L		105	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21739-3 MSD
Matrix: Water
Analysis Batch: 122084

Client Sample ID: MW-04
Prep Type: Dissolved
Prep Batch: 121734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	13		20.0	35.1		ug/L		110	75 - 125	1	20
Chromium	1.5	U	20.0	19.2		ug/L		95	75 - 125	0	20
Copper	1.0	U	20.0	19.9		ug/L		98	75 - 125	1	20
Lead	1.0	U	20.0	20.6		ug/L		103	75 - 125	2	20
Zinc	10	U	50.0	53.4		ug/L		107	75 - 125	2	20

GC/MS VOA

Analysis Batch: 121868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Total/NA	Water	8260B	
180-21739-2	FB-02-053013	Total/NA	Water	8260B	
180-21739-3	MW-04	Total/NA	Water	8260B	
180-21739-3 MS	MW-04	Total/NA	Water	8260B	
180-21739-3 MSD	MW-04	Total/NA	Water	8260B	
180-21739-4	P-03R	Total/NA	Water	8260B	
180-21739-5	MW-14R	Total/NA	Water	8260B	
180-21739-6	PZN-99B	Total/NA	Water	8260B	
180-21739-7	PZS-30	Total/NA	Water	8260B	
180-21739-8	TB-053013	Total/NA	Water	8260B	
LCS 480-121868/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121868/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 121963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-5 - DL	MW-14R	Total/NA	Water	8260B	
180-21739-6 - DL	PZN-99B	Total/NA	Water	8260B	
LCS 480-121963/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121963/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 122120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-12	TB-053013	Total/NA	Water	8260B	
LCS 480-122120/32	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122120/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Total/NA	Water	3510C	
180-21739-2	FB-02-053013	Total/NA	Water	3510C	
180-21739-3	MW-04	Total/NA	Water	3510C	
180-21739-3 MS	MW-04	Total/NA	Water	3510C	
180-21739-3 MSD	MW-04	Total/NA	Water	3510C	
180-21739-4	P-03R	Total/NA	Water	3510C	
180-21739-4 - DL2	P-03R	Total/NA	Water	3510C	
180-21739-4 - DL	P-03R	Total/NA	Water	3510C	
180-21739-5 - DL	MW-14R	Total/NA	Water	3510C	
180-21739-5	MW-14R	Total/NA	Water	3510C	
180-21739-6 - DL	PZN-99B	Total/NA	Water	3510C	
180-21739-6	PZN-99B	Total/NA	Water	3510C	
180-21739-7	PZS-30	Total/NA	Water	3510C	
180-21739-7 - DL	PZS-30	Total/NA	Water	3510C	
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-121598/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121598

GC/MS Semi VOA (Continued)

Analysis Batch: 122001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-121598/1-A	Method Blank	Total/NA	Water	8270C LL	121598

Analysis Batch: 122054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Total/NA	Water	8270C LL	121598
180-21739-2	FB-02-053013	Total/NA	Water	8270C LL	121598
180-21739-3	MW-04	Total/NA	Water	8270C LL	121598
180-21739-3 MS	MW-04	Total/NA	Water	8270C LL	121598
180-21739-3 MSD	MW-04	Total/NA	Water	8270C LL	121598
180-21739-4	P-03R	Total/NA	Water	8270C LL	121598

Analysis Batch: 122112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-4 - DL2	P-03R	Total/NA	Water	8270C LL	121598
180-21739-4 - DL	P-03R	Total/NA	Water	8270C LL	121598
180-21739-5 - DL	MW-14R	Total/NA	Water	8270C LL	121598
180-21739-5	MW-14R	Total/NA	Water	8270C LL	121598
180-21739-6 - DL	PZN-99B	Total/NA	Water	8270C LL	121598
180-21739-6	PZN-99B	Total/NA	Water	8270C LL	121598
180-21739-7	PZS-30	Total/NA	Water	8270C LL	121598

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-7 - DL	PZS-30	Total/NA	Water	8270C LL	121598

Metals

Prep Batch: 121732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Total/NA	Water	3020A	
180-21739-2	FB-02-053013	Total/NA	Water	3020A	
180-21739-3	MW-04	Total/NA	Water	3020A	
180-21739-3 MS	MW-04	Total/NA	Water	3020A	
180-21739-3 MSD	MW-04	Total/NA	Water	3020A	
180-21739-4	P-03R	Total/NA	Water	3020A	
180-21739-5	MW-14R	Total/NA	Water	3020A	
180-21739-6	PZN-99B	Total/NA	Water	3020A	
180-21739-7	PZS-30	Total/NA	Water	3020A	
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121732/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 121734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Dissolved	Water	3020A	
180-21739-2	FB-02-053013	Dissolved	Water	3020A	
180-21739-3	MW-04	Dissolved	Water	3020A	
180-21739-3 MS	MW-04	Dissolved	Water	3020A	
180-21739-3 MSD	MW-04	Dissolved	Water	3020A	
180-21739-4	P-03R	Dissolved	Water	3020A	
180-21739-5	MW-14R	Dissolved	Water	3020A	

Metals (Continued)

Prep Batch: 121734 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-6	PZN-99B	Dissolved	Water	3020A	
180-21739-7	PZS-30	Dissolved	Water	3020A	
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Total/NA	Water	6020	121732
180-21739-2	FB-02-053013	Total/NA	Water	6020	121732
180-21739-3	MW-04	Total/NA	Water	6020	121732
180-21739-3 MS	MW-04	Total/NA	Water	6020	121732
180-21739-3 MSD	MW-04	Total/NA	Water	6020	121732
180-21739-4	P-03R	Total/NA	Water	6020	121732
180-21739-5	MW-14R	Total/NA	Water	6020	121732
180-21739-6	PZN-99B	Total/NA	Water	6020	121732
180-21739-7	PZS-30	Total/NA	Water	6020	121732
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	6020	121732
MB 480-121732/1-A	Method Blank	Total/NA	Water	6020	121732

Analysis Batch: 122084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-1	PZS-40	Dissolved	Water	6020	121734
180-21739-2	FB-02-053013	Dissolved	Water	6020	121734
180-21739-3	MW-04	Dissolved	Water	6020	121734
180-21739-3 MS	MW-04	Dissolved	Water	6020	121734
180-21739-3 MSD	MW-04	Dissolved	Water	6020	121734
180-21739-4	P-03R	Dissolved	Water	6020	121734
180-21739-5	MW-14R	Dissolved	Water	6020	121734
180-21739-6	PZN-99B	Dissolved	Water	6020	121734
180-21739-7	PZS-30	Dissolved	Water	6020	121734
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	6020	121734
MB 480-121735/1-B	Method Blank	Dissolved	Water	6020	121734

21739 Job 1 5d4y
21739 Job 2 48HR

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 5/30/13	Chain of Custody Number: 220330
Address: 200 3rd Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: J. Bartob		
Project Name and Location (State): KBE13665	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: South Cavalcade T1 Delineation			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270 CLL (SVOCs)	6020 select metals diss.	6020 select metal total
PZS-40	5/30/13	1010		X			2		2	3			3	2	1	1
FB-02-053013	5/30/13	1048		X			2		2	3			3	2	1	1
MW-04 (MS/MSD)	5/30/13	1152		X			6		6	9			9	6	3	3
P-03R	5/30/13	1452		X			2		2	3			3	2	1	1
MW-14R	5/30/13	1730		X			2		2	3			3	2	1	1
PZN-99B	5/30/13	2000		X			2		2	3			3	2	1	1
PZS-30	5/30/13	1735		X			2		2	3			3	2	1	1
TB-053013	5/30/13	—		X						1			1			

RS 5/30/13

RS 5/30/13

Special Instructions/ Conditions of Receipt

Diss. Metal are field filters.
used store bought DI H_2O

180-21739 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/30/13	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 4.1 4.3 3.9 3.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/30/13	Chain of Custody Number: 220329
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bartot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: 13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BTEX-8260B	PAHs-8270LL	Total Selected Metals 6020	Diss. Selected Metals 6020	Special Instructions/ Conditions of Receipt
DP13S-07I	5/30/13	1005		X			2		2	3			3	2	1	1	Dissolved Metals
DP13S-06I	5/30/13	1340		X			2		2	3			3	2	1	1	are field filtered.
FB-053013	5/30/13	1535		X			2		2	3			3	2	1	1	
TB-053013	5/30/13	—		X						1			1				

AC 5/30/13

AC 5/30/13

180-21739-02 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAY*

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/30/13	1800	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: NOTE! DP13S-06I NEEDS 48 HOUR TAT!

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-1

Login Number: 21739

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-1

Login Number: 21739
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/31/13 03:50 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 3.9 4.1 4.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21739-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Authorized for release by:
6/6/2013 9:18:24 AM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21739-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21739-2

Comments
No additional comments.

Receipt
The samples were received on 5/31/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.7º C, 3.9º C, 4.1º C and 4.3º C.

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: EB-053013 (180-21739-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 122120: Bromomethane and Trichlorofluoromethane. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for 6 analytes to be outside limits; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122112 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122001 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13S-07I (180-21739-9). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13S-07I (180-21739-9).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21739-9	DP13S-07I	Water	05/30/13 10:05	05/30/13 20:00
180-21739-11	EB-053013	Water	05/30/13 15:35	05/30/13 20:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Client Sample ID: DP13S-07I

Date Collected: 05/30/13 10:05
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 02:15	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1030.6 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/04/13 22:46	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1030.6 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL	DL	20			122234	06/05/13 13:39	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:26	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 03:19	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		5			122110	06/04/13 17:21	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: EB-053013

Date Collected: 05/30/13 15:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 02:57	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Analysis	8260B	DL	200	5 mL	5 mL	122120	06/05/13 03:00	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			983.6 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1			122112	06/04/13 23:40	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:38	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 03:31	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

MZ = Michael Zeimer

Batch Type: Analysis

LH = Leah Hill

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Client Sample ID: DP13S-07I
Date Collected: 05/30/13 10:05
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 02:15	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 02:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 02:15	1
Acetone	10	U	10		ug/L			06/04/13 02:15	1
Benzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 02:15	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 02:15	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 02:15	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 02:15	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:15	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 02:15	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 02:15	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 02:15	1
Styrene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Toluene	1.0	U	1.0		ug/L			06/04/13 02:15	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:15	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 02:15	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 02:15	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 02:15	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 02:15	1

Client Sample ID: DP13S-07I
Date Collected: 05/30/13 10:05
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-9
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*06/04/13 02:15*	*1*
Toluene-d8 (Surr)	*90*		*71 - 126*		*06/04/13 02:15*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/04/13 02:15*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Chlorophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Methylnaphthalene	**3.3**		0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Methylphenol	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
2-Nitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
3-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Chloroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Methylphenol	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Nitroaniline	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
4-Nitrophenol	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Acenaphthene	**2.6**		0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Acenaphthylene	0.29	U	0.29		ug/L		06/01/13 07:15	06/04/13 22:46	1
Acetophenone	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Anthracene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Atrazine	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzaldehyde	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/01/13 07:15	06/04/13 22:46	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Caprolactam	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Carbazole	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Chrysene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1

Client Sample ID: DP13S-07I
Date Collected: 05/30/13 10:05
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-9
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Diethyl phthalate	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Dimethyl phthalate	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Fluoranthene	**1.6**		0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Fluorene	**1.9**		0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Hexachlorobenzene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
Hexachloroethane	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Isophorone	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
Nitrobenzene	0.49	U	0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		06/01/13 07:15	06/04/13 22:46	1
Pentachlorophenol	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
Phenanthrene	**1.9**		0.19		ug/L		06/01/13 07:15	06/04/13 22:46	1
Phenol	0.97	U	0.97		ug/L		06/01/13 07:15	06/04/13 22:46	1
Pyrene	**1.4**		0.49		ug/L		06/01/13 07:15	06/04/13 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*74*		*34 - 132*	*06/01/13 07:15*	*06/04/13 22:46*	*1*
2-Fluorobiphenyl	*75*		*37 - 120*	*06/01/13 07:15*	*06/04/13 22:46*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*06/01/13 07:15*	*06/04/13 22:46*	*1*
Phenol-d5	*25*		*11 - 120*	*06/01/13 07:15*	*06/04/13 22:46*	*1*
2-Fluorophenol	*36*		*18 - 120*	*06/01/13 07:15*	*06/04/13 22:46*	*1*
2,4,6-Tribromophenol	*98*		*39 - 146*	*06/01/13 07:15*	*06/04/13 22:46*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**38**		19		ug/L		06/01/13 07:15	06/05/13 13:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/05/13 13:39*	*20*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/05/13 13:39*	*20*
p-Terphenyl-d14	*72*		*58 - 147*	*06/01/13 07:15*	*06/05/13 13:39*	*20*
Phenol-d5	*17*		*11 - 120*	*06/01/13 07:15*	*06/05/13 13:39*	*20*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/05/13 13:39*	*20*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/05/13 13:39*	*20*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**11**		1.0		ug/L		06/03/13 09:40	06/04/13 00:26	1
Chromium	**190**		7.5		ug/L		06/03/13 09:40	06/04/13 17:21	5
Copper	**79**		1.0		ug/L		06/03/13 09:40	06/04/13 00:26	1
Lead	**100**		1.0		ug/L		06/03/13 09:40	06/04/13 00:26	1
Zinc	**380**		10		ug/L		06/03/13 09:40	06/04/13 00:26	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Client Sample ID: DP13S-07I

Lab Sample ID: 180-21739-9

Date Collected: 05/30/13 10:05

Matrix: Water

Date Received: 05/30/13 20:00

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:19	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 03:19	1
Copper	**1.3**		1.0		ug/L		06/03/13 09:40	06/04/13 03:19	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:19	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 03:19	1

Client Sample ID: EB-053013

Lab Sample ID: 180-21739-11

Date Collected: 05/30/13 15:35

Matrix: Water

Date Received: 05/30/13 20:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 02:57	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 02:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 02:57	1
Benzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 02:57	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 02:57	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 02:57	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 02:57	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:57	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 02:57	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 02:57	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 02:57	1

Client Sample ID: EB-053013
Date Collected: 05/30/13 15:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Toluene	1.0	U	1.0		ug/L			06/04/13 02:57	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:57	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 02:57	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 02:57	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 02:57	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*06/04/13 02:57*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/04/13 02:57*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/04/13 02:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2000	U	2000		ug/L			06/05/13 03:00	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*06/05/13 03:00*	*200*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/05/13 03:00*	*200*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/05/13 03:00*	*200*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
bis (2-chloroisopropyl) ether	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4,5-Trichlorophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4,6-Trichlorophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4-Dichlorophenol	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4-Dinitrophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,4-Dinitrotoluene	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2,6-Dinitrotoluene	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Chloronaphthalene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Chlorophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Methylnaphthalene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Nitroaniline	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
2-Nitrophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
3,3'-Dichlorobenzidine	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
3-Nitroaniline	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4,6-Dinitro-2-methylphenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Bromophenyl phenyl ether	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Chloro-3-methylphenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Chloroaniline	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Chlorophenyl phenyl ether	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
4-Nitroaniline	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Client Sample ID: EB-053013
Date Collected: 05/30/13 15:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-11
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Acenaphthene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Acenaphthylene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 23:40	1
Acetophenone	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Anthracene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Atrazine	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzaldehyde	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzo(a)anthracene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzo(b)fluoranthene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzo(g,h,i)perylene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Benzo(k)fluoranthene	0.31	U	0.31		ug/L		06/01/13 07:15	06/04/13 23:40	1
Bis(2-chloroethoxy)methane	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Bis(2-chloroethyl)ether	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Butyl benzyl phthalate	3.1	U	3.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Caprolactam	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Carbazole	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Chrysene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Dibenz(a,h)anthracene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Dibenzofuran	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Diethyl phthalate	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Dimethyl phthalate	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Di-n-octyl phthalate	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Fluoranthene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Fluorene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Hexachlorobenzene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Hexachloroethane	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Indeno(1,2,3-cd)pyrene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Isophorone	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
Naphthalene	**5.0**		1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Nitrobenzene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1
N-Nitrosodi-n-propylamine	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
N-Nitrosodiphenylamine	5.1	U	5.1		ug/L		06/01/13 07:15	06/04/13 23:40	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Phenanthrene	**0.30**		0.20		ug/L		06/01/13 07:15	06/04/13 23:40	1
Phenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 23:40	1
Pyrene	0.51	U	0.51		ug/L		06/01/13 07:15	06/04/13 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*34 - 132*	*06/01/13 07:15*	*06/04/13 23:40*	*1*
2-Fluorobiphenyl	*87*		*37 - 120*	*06/01/13 07:15*	*06/04/13 23:40*	*1*
p-Terphenyl-d14	*140*		*58 - 147*	*06/01/13 07:15*	*06/04/13 23:40*	*1*
Phenol-d5	*30*		*11 - 120*	*06/01/13 07:15*	*06/04/13 23:40*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/01/13 07:15*	*06/04/13 23:40*	*1*
2,4,6-Tribromophenol	*108*		*39 - 146*	*06/01/13 07:15*	*06/04/13 23:40*	*1*

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-2

Client Sample ID: EB-053013
Date Collected: 05/30/13 15:35
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-11
Matrix: Water

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:38	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 00:38	1
Copper	**3.7**		1.0		ug/L		06/03/13 09:40	06/04/13 00:38	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 00:38	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 00:38	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:31	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 03:31	1
Copper	**4.2**		1.0		ug/L		06/03/13 09:40	06/04/13 03:31	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:31	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 03:31	1

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 21:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 21:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 21:55	1
Acetone	10	U	10		ug/L			06/03/13 21:55	1
Benzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Styrene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Toluene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 21:55	1

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*06/03/13 21:55*	*1*
Toluene-d8 (Surr)	*91*		*71 - 126*		*06/03/13 21:55*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*06/03/13 21:55*	*1*

Lab Sample ID: LCS 480-121868/5
Matrix: Water
Analysis Batch: 121868

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	20.2		ug/L		81	58 - 121
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	27.7		ug/L		111	75 - 127
Benzene	25.0	26.6		ug/L		106	71 - 124
Chlorobenzene	25.0	23.0		ug/L		92	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
Methyl tert-butyl ether	25.0	24.5		ug/L		98	64 - 127
Tetrachloroethene	25.0	21.0		ug/L		84	74 - 122
Toluene	25.0	24.3		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
Trichloroethene	25.0	25.9		ug/L		104	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*
Toluene-d8 (Surr)	*88*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 480-122120/6
Matrix: Water
Analysis Batch: 122120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 23:05	1

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

Lab Sample ID: MB 480-122120/6
Matrix: Water
Analysis Batch: 122120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 23:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 23:05	1
Acetone	10	U	10		ug/L			06/04/13 23:05	1
Benzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 23:05	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 23:05	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 23:05	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Styrene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Toluene	1.0	U	1.0		ug/L			06/04/13 23:05	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 23:05	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 23:05	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 23:05	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 23:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*06/04/13 23:05*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/04/13 23:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/04/13 23:05*	*1*

Lab Sample ID: LCS 480-122120/32
Matrix: Water
Analysis Batch: 122120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.9		ug/L		104	71 - 129
1,1-Dichloroethene	25.0	21.8		ug/L		87	58 - 121
1,2-Dichlorobenzene	25.0	28.3		ug/L		113	80 - 124
1,2-Dichloroethane	25.0	26.7		ug/L		107	75 - 127

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

Lab Sample ID: LCS 480-122120/32
Matrix: Water
Analysis Batch: 122120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.7		ug/L		99	71 - 124
Chlorobenzene	25.0	27.5		ug/L		110	72 - 120
cis-1,2-Dichloroethene	25.0	28.8		ug/L		115	74 - 124
Ethylbenzene	25.0	27.3		ug/L		109	77 - 123
Methyl tert-butyl ether	25.0	23.9		ug/L		96	64 - 127
Tetrachloroethene	25.0	30.3		ug/L		121	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	73 - 127
Trichloroethene	25.0	27.2		ug/L		109	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acenaphthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acetophenone	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Atrazine	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzaldehyde	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Caprolactam	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Carbazole	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Chrysene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenzofuran	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluoranthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluorene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachloroethane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Isophorone	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Naphthalene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Nitrobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenanthrene	0.20	U	0.20		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*34 - 132*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
p-Terphenyl-d14	*99*		*58 - 147*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
Phenol-d5	*33*		*11 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/01/13 07:15*	*06/04/13 11:38*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-121598/2-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.55		ug/L		94	22 - 167
2-Chlorophenol	8.00	5.33		ug/L		67	44 - 106
4-Chloro-3-methylphenol	8.00	7.38		ug/L		92	60 - 131
4-Nitrophenol	16.0	9.76		ug/L		61	10 - 105
Acenaphthene	8.00	6.74		ug/L		84	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.21		ug/L		103	69 - 136
Fluorene	8.00	7.10		ug/L		89	54 - 137
Hexachloroethane	8.00	5.0	U	ug/L		58	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.89		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.8		ug/L		80	10 - 131
Phenol	8.00	2.72		ug/L		34	17 - 61
Pyrene	8.00	7.51		ug/L		94	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*80*		*37 - 120*
p-Terphenyl-d14	*93*		*58 - 147*
Phenol-d5	*34*		*11 - 120*
2-Fluorophenol	*43*		*18 - 120*
2,4,6-Tribromophenol	*104*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121732/1-A
Matrix: Water
Analysis Batch: 122083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:01	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:01	1

Lab Sample ID: LCS 480-121732/2-A
Matrix: Water
Analysis Batch: 122083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.2		ug/L		111	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	22.1		ug/L		110	80 - 120
Lead	20.0	21.5		ug/L		107	80 - 120
Zinc	50.0	57.8		ug/L		116	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-121735/1-B
Matrix: Water
Analysis Batch: 122084

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 01:43	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 01:43	1

Lab Sample ID: LCS 480-121735/2-B
Matrix: Water
Analysis Batch: 122084

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 121734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.4		ug/L		112	80 - 120
Chromium	20.0	21.6		ug/L		108	80 - 120
Copper	20.0	22.0		ug/L		110	80 - 120
Lead	20.0	21.7		ug/L		109	80 - 120
Zinc	50.0	56.9		ug/L		114	80 - 120

GC/MS VOA

Analysis Batch: 121868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	8260B	
180-21739-11	EB-053013	Total/NA	Water	8260B	
LCS 480-121868/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121868/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 122120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-11 - DL	EB-053013	Total/NA	Water	8260B	
LCS 480-122120/32	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122120/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	3510C	
180-21739-9 - DL	DP13S-07I	Total/NA	Water	3510C	
180-21739-11	EB-053013	Total/NA	Water	3510C	
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-121598/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121598
MB 480-121598/1-A	Method Blank	Total/NA	Water	8270C LL	121598

Analysis Batch: 122112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	8270C LL	121598
180-21739-11	EB-053013	Total/NA	Water	8270C LL	121598

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9 - DL	DP13S-07I	Total/NA	Water	8270C LL	121598

Metals

Prep Batch: 121732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	3020A	
180-21739-11	EB-053013	Total/NA	Water	3020A	
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121732/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 121734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Dissolved	Water	3020A	
180-21739-11	EB-053013	Dissolved	Water	3020A	
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/1-B	Method Blank	Dissolved	Water	3020A	

Metals (Continued)

Analysis Batch: 122083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	6020	121732
180-21739-11	EB-053013	Total/NA	Water	6020	121732
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	6020	121732
MB 480-121732/1-A	Method Blank	Total/NA	Water	6020	121732

Analysis Batch: 122084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Dissolved	Water	6020	121734
180-21739-11	EB-053013	Dissolved	Water	6020	121734
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	6020	121734
MB 480-121735/1-B	Method Blank	Dissolved	Water	6020	121734

Analysis Batch: 122110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-9	DP13S-07I	Total/NA	Water	6020	121732

21739 Job 1 SDG
21739 Job 2 48th St.
21739 Temperature on Receipt ____

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes ☐ No ☒

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	5/30/13	220330
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
200 3rd Ave.	412-428-9411	412-963-7058	1 of 1
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	V. Bartob	
Project Name and Location (State)	**Carrier/Waybill Number**		
KBE13665	Fed Ex		
Contract/Purchase Order/Quote No.			
South Cavalcade TI Delineation			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C LL (SVOCs)	6020 dissolved metals	6020 total metals	Special Instructions/ Conditions of Receipt
PZS-40	5/30/13	1010		X			2		2	3			3	2	1	1	Diss. Metal are field
FB-02-053013	5/30/13	1048		X			2		2	3			3	2	1	1	filters.
MW-04 (MS/MSD)	5/30/13	1152		X			6		6	9			9	6	3	3	used store bought DI H_2O
P-03R	5/30/13	1452		X			2		2	3			3	2	1	1	
MW-14R	5/30/13	1730		X			2		2	3			3	2	1	1	
PZN-99B	5/30/13	2000		X			2		2	3			3	2	1	1	
PZS-30	5/30/13	1735		X			2		2	3			3	2	1	1	
TB-053013	5/30/13	—		X						1			1				
RS	5/30/13																RS 5/30/13

180-21739 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		5/30/13	2000			
2.						
3.						

Comments

4.1 4.3 3.9 3.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/30/13	Chain of Custody Number: 220329
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bartot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: 13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BTEX-8260B	PAHs-8270LL	Total Selected Metals 6020	Diss. Selected Metals 6020	Special Instructions/ Conditions of Receipt
DP13S-07I	5/30/13	1005		X			2		2	3			3	2	1	1	Dissolved Metals
DP13S-06I	5/30/13	1340		X			2		2	3			3	2	1	1	are field filtered.
FB-053013	5/30/13	1535		X			2		2	3			3	2	1	1	
TB-053013	5/30/13	—		X						1			1				

AC 5/30/13

AC 5/30/13

180-21739-02 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAY*

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/30/13	1800	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: NOTE! DP13S-06I NEEDS 48 HOUR TAT!

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-2

Login Number: 21739

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-2

Login Number: 21739
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/31/13 03:50 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 3.9 4.1 4.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21739-3
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/5/2013 4:18:48 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

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

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Job ID: 180-21739-3

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21739-3

Comments
No additional comments.

Receipt
The samples were received on 5/31/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.7º C, 3.9º C, 4.1º C and 4.3º C.

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: DP13S-06I (180-21739-10). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13S-06I (180-21739-10). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122234 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-octyl phthalate associated with batch 122001 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13S-06I (180-21739-10).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21739-10	DP13S-06I	Water	05/30/13 13:40	05/30/13 20:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: DP13S-06I
Date Collected: 05/30/13 13:40
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	121868	06/04/13 02:36	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	121963	06/04/13 11:31	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1045.5 mL	1 mL	121598	06/01/13 07:15	MZ	TAL BUF
Total/NA	Analysis	8270C LL		1000			122234	06/05/13 14:07	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			122083	06/04/13 00:32	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	121734	06/03/13 09:40	JM	TAL BUF
Dissolved	Analysis	6020		1			122084	06/04/13 03:25	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	121732	06/03/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		2			122110	06/04/13 17:32	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

MZ = Michael Zeimer

Batch Type: Analysis

LH = Leah Hill

MM = Michael Mosscrop

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Client Sample ID: DP13S-06I
Date Collected: 05/30/13 13:40
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:36	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:36	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 02:36	1
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 02:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 02:36	1
Acetone	**22**		10		ug/L			06/04/13 02:36	1
Benzene	**33**		1.0		ug/L			06/04/13 02:36	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 02:36	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 02:36	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 02:36	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 02:36	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:36	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Isopropylbenzene	**12**		1.0		ug/L			06/04/13 02:36	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 02:36	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 02:36	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 02:36	1
Styrene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Toluene	**4.0**		1.0		ug/L			06/04/13 02:36	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 02:36	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 02:36	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 02:36	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 02:36	1
Xylenes, Total	**84**		2.0		ug/L			06/04/13 02:36	1

Client Sample ID: DP13S-06I
Date Collected: 05/30/13 13:40
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-10
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*66 - 137*		*06/04/13 02:36*	*1*
Toluene-d8 (Surr)	*88*		*71 - 126*		*06/04/13 02:36*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/04/13 02:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**100**		2.0		ug/L			06/04/13 11:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*06/04/13 11:31*	*2*
Toluene-d8 (Surr)	*90*		*71 - 126*		*06/04/13 11:31*	*2*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*06/04/13 11:31*	*2*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
bis (2-chloroisopropyl) ether	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4,5-Trichlorophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4,6-Trichlorophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4-Dichlorophenol	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4-Dimethylphenol	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4-Dinitrophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,4-Dinitrotoluene	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2,6-Dinitrotoluene	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Chloronaphthalene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Chlorophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Methylnaphthalene	**990**		480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Methylphenol	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Nitroaniline	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
2-Nitrophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
3,3'-Dichlorobenzidine	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
3-Nitroaniline	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4,6-Dinitro-2-methylphenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Bromophenyl phenyl ether	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Chloro-3-methylphenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Chloroaniline	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Chlorophenyl phenyl ether	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Methylphenol	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Nitroaniline	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
4-Nitrophenol	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Acenaphthene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Acenaphthylene	290	U	290		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Acetophenone	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Anthracene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Atrazine	1900	U	1900		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzaldehyde	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzo(a)anthracene	290	U	290		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzo(a)pyrene	170	U	170		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzo(b)fluoranthene	290	U	290		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzo(g,h,i)perylene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Benzo(k)fluoranthene	290	U	290		ug/L		06/01/13 07:15	06/05/13 14:07	1000

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Client Sample ID: DP13S-06I
Date Collected: 05/30/13 13:40
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-10
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Bis(2-chloroethyl)ether	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Bis(2-ethylhexyl) phthalate	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Butyl benzyl phthalate	2900	U	2900		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Caprolactam	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Carbazole	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Chrysene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Dibenz(a,h)anthracene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Dibenzofuran	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Diethyl phthalate	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Dimethyl phthalate	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Di-n-butyl phthalate	1900	U	1900		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Di-n-octyl phthalate	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Fluoranthene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Fluorene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Hexachlorobenzene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Hexachlorobutadiene	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Hexachlorocyclopentadiene	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Hexachloroethane	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Indeno(1,2,3-cd)pyrene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Isophorone	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Naphthalene	**11000**		960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Nitrobenzene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000
N-Nitrosodi-n-propylamine	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
N-Nitrosodiphenylamine	4800	U	4800		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Pentachlorophenol	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Phenanthrene	**810**		190		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Phenol	960	U	960		ug/L		06/01/13 07:15	06/05/13 14:07	1000
Pyrene	480	U	480		ug/L		06/01/13 07:15	06/05/13 14:07	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/01/13 07:15*	*06/05/13 14:07*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		1.0		ug/L		06/03/13 09:40	06/04/13 00:32	1
Chromium	**91**		3.0		ug/L		06/03/13 09:40	06/04/13 17:32	2
Copper	**42**		1.0		ug/L		06/03/13 09:40	06/04/13 00:32	1
Lead	**22**		1.0		ug/L		06/03/13 09:40	06/04/13 00:32	1
Zinc	**560**		10		ug/L		06/03/13 09:40	06/04/13 00:32	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		1.0		ug/L		06/03/13 09:40	06/04/13 03:25	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 03:25	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21739-3

Client Sample ID: DP13S-06I
Date Collected: 05/30/13 13:40
Date Received: 05/30/13 20:00

Lab Sample ID: 180-21739-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.1		1.0		ug/L		06/03/13 09:40	06/04/13 03:25	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 03:25	1
Zinc	220		10		ug/L		06/03/13 09:40	06/04/13 03:25	1

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/03/13 21:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/03/13 21:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/03/13 21:55	1
Acetone	10	U	10		ug/L			06/03/13 21:55	1
Benzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromoform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Bromomethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/03/13 21:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloroform	1.0	U	1.0		ug/L			06/03/13 21:55	1
Chloromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Methylene Chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Styrene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Toluene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/03/13 21:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/03/13 21:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/03/13 21:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/03/13 21:55	1

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

Lab Sample ID: MB 480-121868/6
Matrix: Water
Analysis Batch: 121868

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*06/03/13 21:55*	*1*
Toluene-d8 (Surr)	*91*		*71 - 126*		*06/03/13 21:55*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*06/03/13 21:55*	*1*

Lab Sample ID: LCS 480-121868/5
Matrix: Water
Analysis Batch: 121868

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	20.2		ug/L		81	58 - 121
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	27.7		ug/L		111	75 - 127
Benzene	25.0	26.6		ug/L		106	71 - 124
Chlorobenzene	25.0	23.0		ug/L		92	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
Methyl tert-butyl ether	25.0	24.5		ug/L		98	64 - 127
Tetrachloroethene	25.0	21.0		ug/L		84	74 - 122
Toluene	25.0	24.3		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
Trichloroethene	25.0	25.9		ug/L		104	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*
Toluene-d8 (Surr)	*88*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 480-121963/5
Matrix: Water
Analysis Batch: 121963

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
2-Hexanone	5.0	U	5.0		ug/L			06/04/13 10:56	1

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

Lab Sample ID: MB 480-121963/5
Matrix: Water
Analysis Batch: 121963

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			06/04/13 10:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/04/13 10:56	1
Acetone	10	U	10		ug/L			06/04/13 10:56	1
Benzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromoform	1.0	U	1.0		ug/L			06/04/13 10:56	1
Bromomethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Carbon disulfide	1.0	U	1.0		ug/L			06/04/13 10:56	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chlorobenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloroethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloroform	1.0	U	1.0		ug/L			06/04/13 10:56	1
Chloromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Cyclohexane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Ethylbenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methyl acetate	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Methylene Chloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Styrene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Toluene	1.0	U	1.0		ug/L			06/04/13 10:56	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Trichloroethene	1.0	U	1.0		ug/L			06/04/13 10:56	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/04/13 10:56	1
Vinyl chloride	1.0	U	1.0		ug/L			06/04/13 10:56	1
Xylenes, Total	2.0	U	2.0		ug/L			06/04/13 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*06/04/13 10:56*	*1*
Toluene-d8 (Surr)	*90*		*71 - 126*		*06/04/13 10:56*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*06/04/13 10:56*	*1*

Lab Sample ID: LCS 480-121963/4
Matrix: Water
Analysis Batch: 121963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	28.2		ug/L		113	71 - 129
1,1-Dichloroethene	25.0	20.9		ug/L		84	58 - 121
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	30.3		ug/L		121	75 - 127

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

Lab Sample ID: LCS 480-121963/4
Matrix: Water
Analysis Batch: 121963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	28.6		ug/L		114	71 - 124
Chlorobenzene	25.0	25.0		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	74 - 124
Ethylbenzene	25.0	26.9		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	27.2		ug/L		109	64 - 127
Tetrachloroethene	25.0	21.8		ug/L		87	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	27.5		ug/L		110	73 - 127
Trichloroethene	25.0	26.4		ug/L		106	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*
Toluene-d8 (Surr)	*88*		*71 - 126*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Methylphenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acenaphthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-121598/1-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Acetophenone	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Atrazine	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzaldehyde	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Caprolactam	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Carbazole	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Chrysene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dibenzofuran	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluoranthene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Fluorene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Hexachloroethane	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Isophorone	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
Naphthalene	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Nitrobenzene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenanthrene	0.20	U	0.20		ug/L		06/01/13 07:15	06/04/13 11:38	1
Phenol	1.0	U	1.0		ug/L		06/01/13 07:15	06/04/13 11:38	1
Pyrene	0.50	U	0.50		ug/L		06/01/13 07:15	06/04/13 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*34 - 132*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
p-Terphenyl-d14	*99*		*58 - 147*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
Phenol-d5	*33*		*11 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/01/13 07:15*	*06/04/13 11:38*	*1*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/01/13 07:15*	*06/04/13 11:38*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-121598/2-A
Matrix: Water
Analysis Batch: 122001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.55		ug/L		94	22 - 167
2-Chlorophenol	8.00	5.33		ug/L		67	44 - 106
4-Chloro-3-methylphenol	8.00	7.38		ug/L		92	60 - 131
4-Nitrophenol	16.0	9.76		ug/L		61	10 - 105
Acenaphthene	8.00	6.74		ug/L		84	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.21		ug/L		103	69 - 136
Fluorene	8.00	7.10		ug/L		89	54 - 137
Hexachloroethane	8.00	5.0	U	ug/L		58	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.89		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.8		ug/L		80	10 - 131
Phenol	8.00	2.72		ug/L		34	17 - 61
Pyrene	8.00	7.51		ug/L		94	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*80*		*37 - 120*
p-Terphenyl-d14	*93*		*58 - 147*
Phenol-d5	*34*		*11 - 120*
2-Fluorophenol	*43*		*18 - 120*
2,4,6-Tribromophenol	*104*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-121732/1-A
Matrix: Water
Analysis Batch: 122083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 121732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/03/13 23:01	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/03/13 23:01	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/03/13 23:01	1

Lab Sample ID: LCS 480-121732/2-A
Matrix: Water
Analysis Batch: 122083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 121732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.2		ug/L		111	80 - 120
Chromium	20.0	21.8		ug/L		109	80 - 120
Copper	20.0	22.1		ug/L		110	80 - 120
Lead	20.0	21.5		ug/L		107	80 - 120
Zinc	50.0	57.8		ug/L		116	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-121735/1-B
Matrix: Water
Analysis Batch: 122084

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 121734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Chromium	1.5	U	1.5		ug/L		06/03/13 09:40	06/04/13 01:43	1
Copper	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Lead	1.0	U	1.0		ug/L		06/03/13 09:40	06/04/13 01:43	1
Zinc	10	U	10		ug/L		06/03/13 09:40	06/04/13 01:43	1

Lab Sample ID: LCS 480-121735/2-B
Matrix: Water
Analysis Batch: 122084

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 121734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.4		ug/L		112	80 - 120
Chromium	20.0	21.6		ug/L		108	80 - 120
Copper	20.0	22.0		ug/L		110	80 - 120
Lead	20.0	21.7		ug/L		109	80 - 120
Zinc	50.0	56.9		ug/L		114	80 - 120

GC/MS VOA

Analysis Batch: 121868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	8260B	
LCS 480-121868/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121868/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 121963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10 - DL	DP13S-06I	Total/NA	Water	8260B	
LCS 480-121963/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-121963/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 121598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	3510C	
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-121598/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121598/2-A	Lab Control Sample	Total/NA	Water	8270C LL	121598
MB 480-121598/1-A	Method Blank	Total/NA	Water	8270C LL	121598

Analysis Batch: 122234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	8270C LL	121598

Metals

Prep Batch: 121732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	3020A	
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-121732/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 121734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Dissolved	Water	3020A	
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/1-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	6020	121732
LCS 480-121732/2-A	Lab Control Sample	Total/NA	Water	6020	121732
MB 480-121732/1-A	Method Blank	Total/NA	Water	6020	121732

Analysis Batch: 122084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Dissolved	Water	6020	121734

Metals (Continued)

Analysis Batch: 122084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-121735/2-B	Lab Control Sample	Dissolved	Water	6020	121734
MB 480-121735/1-B	Method Blank	Dissolved	Water	6020	121734

Analysis Batch: 122110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21739-10	DP13S-06I	Total/NA	Water	6020	121732

21739 Job 1 5d 4 y
21739 Job 2 48 HR

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 5/30/13	Chain of Custody Number: 220330
Address: 200 3rd Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: J. Bartob		
Project Name and Location (State): KBE13665	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: South Cavalcade T1 Delineation			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270 CLL (SVOCs)	6020 select metals diss.	6020 select metal total
PZS-40	5/30/13	1010		X			2		2	3			3	2	1	1
FB-02-053013	5/30/13	1048		X			2		2	3			3	2	1	1
MW-04 (MS/MSD)	5/30/13	1152		X			6		6	9			9	6	3	3
P-03R	5/30/13	1452		X			2		2	3			3	2	1	1
MW-14R	5/30/13	1730		X			2		2	3			3	2	1	1
PZN-99B	5/30/13	2000		X			2		2	3			3	2	1	1
PZS-30	5/30/13	1735		X			2		2	3			3	2	1	1
TB-053013	5/30/13	—		X						1			1			

RS 5/30/13

RS 5/30/13

Special Instructions/ Conditions of Receipt

Diss. Metal are field filters.
used store bought DI H_2O

180-21739 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/30/13	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 4.1 4.3 3.9 3.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client: Key Environmental	Project Manager: Angie Gatchie	Date: 5/30/13	Chain of Custody Number: 220329
Address: 200 3rd Ave	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bartot		
Project Name and Location (State): South Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: 13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): BTEX-8260B	PAHs-8270LL	Total Selected Metals 6020	Diss. Selected Metals 6020	Special Instructions/ Conditions of Receipt
DP13S-07I	5/30/13	1005		X			2		2	3			3	2	1	1	Dissolved Metals
DP13S-06I	5/30/13	1340		X			2		2	3			3	2	1	1	are field filtered.
FB-053013	5/30/13	1535		X			2		2	3			3	2	1	1	
TB-053013	5/30/13	—		X						1			1				

AC 5/30/13

AC 5/30/13

180-21739-02 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAY*

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/30/13	1800	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: NOTE! DP13S-06I NEEDS 48 HOUR TAT!

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-3

Login Number: 21739

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21739-3

Login Number: 21739
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 05/31/13 03:50 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 3.9 4.1 4.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21781-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/11/2013 3:41:22 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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: 180-21781-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21781-1

Comments
No additional comments.

Receipt
The samples were received on 6/1/2013 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-butyl phthalate associated with batch 122802 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13N-02I (180-21781-1).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21781-1	DP13N-02I	Water	05/31/13 13:07	06/01/13 11:00
180-21781-2	DP13N-04S	Water	05/31/13 16:46	06/01/13 11:00
180-21781-3	DP13N-99A	Water	05/31/13 20:00	06/01/13 11:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-02I

Lab Sample ID: 180-21781-1

Date Collected: 05/31/13 13:07

Matrix: Water

Date Received: 06/01/13 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122184	06/05/13 13:02	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1032.2 mL	1 mL	122147	06/05/13 05:37	KB	TAL BUF
Total/NA	Analysis	8270C LL		1			122802	06/07/13 14:31	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 22:49	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122183	06/05/13 09:45	SS	TAL BUF
Total/NA	Analysis	6020		1			122862	06/07/13 07:22	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122183	06/05/13 09:45	SS	TAL BUF
Total/NA	Analysis	6020		2			123130	06/08/13 22:38	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-04S

Lab Sample ID: 180-21781-2

Date Collected: 05/31/13 16:46

Matrix: Water

Date Received: 06/01/13 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122184	06/05/13 13:23	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1052 mL	1 mL	122147	06/05/13 05:37	KB	TAL BUF
Total/NA	Analysis	8270C LL		1			122802	06/07/13 14:58	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 22:55	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122183	06/05/13 09:45	SS	TAL BUF
Total/NA	Analysis	6020		1			122862	06/07/13 07:28	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-99A

Lab Sample ID: 180-21781-3

Date Collected: 05/31/13 20:00

Matrix: Water

Date Received: 06/01/13 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122184	06/05/13 13:43	LH	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			1050.6 mL	1 mL	122147	06/05/13 05:37	KB	TAL BUF
Total/NA	Analysis	8270C LL		1			122802	06/07/13 15:25	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF

Client Sample ID: DP13N-99A
Date Collected: 05/31/13 20:00
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		1			122514	06/05/13 23:00	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122183	06/05/13 09:45	SS	TAL BUF
Total/NA	Analysis	6020		1			122862	06/07/13 07:33	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

KB = Kate Bonk

SS = Steven Setang

Batch Type: Analysis

LH = Leah Hill

MM = Michael Mosscrop

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-02I
Date Collected: 05/31/13 13:07
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 13:02	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 13:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 13:02	1
Acetone	10	U	10		ug/L			06/05/13 13:02	1
Benzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 13:02	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 13:02	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 13:02	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 13:02	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:02	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 13:02	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 13:02	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 13:02	1
Styrene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Toluene	1.0	U	1.0		ug/L			06/05/13 13:02	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:02	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 13:02	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 13:02	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 13:02	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 13:02	1

Client Sample ID: DP13N-02I
Date Collected: 05/31/13 13:07
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*66 - 137*		*06/05/13 13:02*	*1*
Toluene-d8 (Surr)	*87*		*71 - 126*		*06/05/13 13:02*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/05/13 13:02*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Methylphenol	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Methylphenol	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:31	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:31	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Bis(2-ethylhexyl) phthalate	**11**		4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 05:37	06/07/13 14:31	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-02I
Date Collected: 05/31/13 13:07
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 14:31	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
Naphthalene	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:31	1
Pentachlorophenol	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 05:37	06/07/13 14:31	1
Phenol	0.97	U	0.97		ug/L		06/05/13 05:37	06/07/13 14:31	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*34 - 132*	*06/05/13 05:37*	*06/07/13 14:31*	*1*
2-Fluorobiphenyl	*71*		*37 - 120*	*06/05/13 05:37*	*06/07/13 14:31*	*1*
p-Terphenyl-d14	*76*		*58 - 147*	*06/05/13 05:37*	*06/07/13 14:31*	*1*
Phenol-d5	*22*		*11 - 120*	*06/05/13 05:37*	*06/07/13 14:31*	*1*
2-Fluorophenol	*31*		*18 - 120*	*06/05/13 05:37*	*06/07/13 14:31*	*1*
2,4,6-Tribromophenol	*84*		*39 - 146*	*06/05/13 05:37*	*06/07/13 14:31*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.4**		1.0		ug/L		06/05/13 09:45	06/07/13 07:22	1
Chromium	**70**		3.0		ug/L		06/05/13 09:45	06/08/13 22:38	2
Copper	**36**		1.0		ug/L		06/05/13 09:45	06/07/13 07:22	1
Lead	**45**		1.0		ug/L		06/05/13 09:45	06/07/13 07:22	1
Zinc	**120**		10		ug/L		06/05/13 09:45	06/07/13 07:22	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:49	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 22:49	1
Copper	**1.6**		1.0		ug/L		06/05/13 13:50	06/05/13 22:49	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:49	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 22:49	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-04S
Date Collected: 05/31/13 16:46
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 13:23	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 13:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 13:23	1
Acetone	10	U	10		ug/L			06/05/13 13:23	1
Benzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 13:23	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 13:23	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 13:23	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 13:23	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:23	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 13:23	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 13:23	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 13:23	1
Styrene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Toluene	1.0	U	1.0		ug/L			06/05/13 13:23	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:23	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 13:23	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 13:23	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 13:23	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 13:23	1

Client Sample ID: DP13N-04S
Date Collected: 05/31/13 16:46
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*06/05/13 13:23*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/05/13 13:23*	*1*
4-Bromofluorobenzene (Surr)	*85*		*73 - 120*		*06/05/13 13:23*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Methylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Methylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:58	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 14:58	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 05:37	06/07/13 14:58	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-04S
Date Collected: 05/31/13 16:46
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 14:58	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
Naphthalene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 14:58	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 05:37	06/07/13 14:58	1
Phenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 14:58	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*34 - 132*	*06/05/13 05:37*	*06/07/13 14:58*	*1*
2-Fluorobiphenyl	*73*		*37 - 120*	*06/05/13 05:37*	*06/07/13 14:58*	*1*
p-Terphenyl-d14	*95*		*58 - 147*	*06/05/13 05:37*	*06/07/13 14:58*	*1*
Phenol-d5	*23*		*11 - 120*	*06/05/13 05:37*	*06/07/13 14:58*	*1*
2-Fluorophenol	*34*		*18 - 120*	*06/05/13 05:37*	*06/07/13 14:58*	*1*
2,4,6-Tribromophenol	*98*		*39 - 146*	*06/05/13 05:37*	*06/07/13 14:58*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 07:28	1
Chromium	1.5	U	1.5		ug/L		06/05/13 09:45	06/07/13 07:28	1
Copper	**1.5**		1.0		ug/L		06/05/13 09:45	06/07/13 07:28	1
Lead	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 07:28	1
Zinc	10	U	10		ug/L		06/05/13 09:45	06/07/13 07:28	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:55	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 22:55	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:55	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:55	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 22:55	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-99A
Date Collected: 05/31/13 20:00
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 13:43	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 13:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 13:43	1
Acetone	10	U	10		ug/L			06/05/13 13:43	1
Benzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 13:43	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 13:43	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 13:43	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 13:43	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:43	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 13:43	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 13:43	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 13:43	1
Styrene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Toluene	1.0	U	1.0		ug/L			06/05/13 13:43	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 13:43	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 13:43	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 13:43	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 13:43	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 13:43	1

Client Sample ID: DP13N-99A
Date Collected: 05/31/13 20:00
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*06/05/13 13:43*	*1*
Toluene-d8 (Surr)	*91*		*71 - 126*		*06/05/13 13:43*	*1*
4-Bromofluorobenzene (Surr)	*85*		*73 - 120*		*06/05/13 13:43*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Methylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Methylphenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 15:25	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 05:37	06/07/13 15:25	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 05:37	06/07/13 15:25	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21781-1

Client Sample ID: DP13N-99A
Date Collected: 05/31/13 20:00
Date Received: 06/01/13 11:00

Lab Sample ID: 180-21781-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 05:37	06/07/13 15:25	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
Naphthalene	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 05:37	06/07/13 15:25	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 05:37	06/07/13 15:25	1
Phenol	0.95	U	0.95		ug/L		06/05/13 05:37	06/07/13 15:25	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 05:37	06/07/13 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*34 - 132*	*06/05/13 05:37*	*06/07/13 15:25*	*1*
2-Fluorobiphenyl	*73*		*37 - 120*	*06/05/13 05:37*	*06/07/13 15:25*	*1*
p-Terphenyl-d14	*97*		*58 - 147*	*06/05/13 05:37*	*06/07/13 15:25*	*1*
Phenol-d5	*24*		*11 - 120*	*06/05/13 05:37*	*06/07/13 15:25*	*1*
2-Fluorophenol	*35*		*18 - 120*	*06/05/13 05:37*	*06/07/13 15:25*	*1*
2,4,6-Tribromophenol	*97*		*39 - 146*	*06/05/13 05:37*	*06/07/13 15:25*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 07:33	1
Chromium	**1.5**		1.5		ug/L		06/05/13 09:45	06/07/13 07:33	1
Copper	**1.1**		1.0		ug/L		06/05/13 09:45	06/07/13 07:33	1
Lead	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 07:33	1
Zinc	10	U	10		ug/L		06/05/13 09:45	06/07/13 07:33	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:00	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:00	1
Copper	**1.2**		1.0		ug/L		06/05/13 13:50	06/05/13 23:00	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:00	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 23:00	1

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

Lab Sample ID: MB 480-122184/5
Matrix: Water
Analysis Batch: 122184

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 11:43	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 11:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 11:43	1
Acetone	10	U	10		ug/L			06/05/13 11:43	1
Benzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 11:43	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 11:43	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 11:43	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 11:43	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 11:43	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 11:43	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 11:43	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 11:43	1
Styrene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Toluene	1.0	U	1.0		ug/L			06/05/13 11:43	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 11:43	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 11:43	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 11:43	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 11:43	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 11:43	1

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

Lab Sample ID: MB 480-122184/5
Matrix: Water
Analysis Batch: 122184

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*06/05/13 11:43*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*06/05/13 11:43*	*1*
4-Bromofluorobenzene (Surr)	*81*		*73 - 120*		*06/05/13 11:43*	*1*

Lab Sample ID: LCS 480-122184/4
Matrix: Water
Analysis Batch: 122184

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	29.1		ug/L		116	71 - 129
1,1-Dichloroethene	25.0	22.3		ug/L		89	58 - 121
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	30.5		ug/L		122	75 - 127
Benzene	25.0	28.9		ug/L		116	71 - 124
Chlorobenzene	25.0	24.1		ug/L		97	72 - 120
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	27.9		ug/L		111	64 - 127
Tetrachloroethene	25.0	20.6		ug/L		82	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	27.7		ug/L		111	73 - 127
Trichloroethene	25.0	26.2		ug/L		105	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*120*		*66 - 137*
Toluene-d8 (Surr)	*89*		*71 - 126*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122147/1-A
Matrix: Water
Analysis Batch: 122568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122147/1-A
Matrix: Water
Analysis Batch: 122568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Acenaphthene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 05:37	06/06/13 20:34	1
Acetophenone	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Anthracene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzaldehyde	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 05:37	06/06/13 20:34	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Caprolactam	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Carbazole	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Chrysene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Dibenzofuran	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Fluoranthene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Fluorene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Hexachloroethane	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Isophorone	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Nitrobenzene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122147/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122568 — **Prep Batch: 122147**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Phenanthrene	0.20	U	0.20		ug/L		06/05/13 05:37	06/06/13 20:34	1
Phenol	1.0	U	1.0		ug/L		06/05/13 05:37	06/06/13 20:34	1
Pyrene	0.50	U	0.50		ug/L		06/05/13 05:37	06/06/13 20:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*34 - 132*	*06/05/13 05:37*	*06/06/13 20:34*	*1*
2-Fluorobiphenyl	*77*		*37 - 120*	*06/05/13 05:37*	*06/06/13 20:34*	*1*
p-Terphenyl-d14	*108*		*58 - 147*	*06/05/13 05:37*	*06/06/13 20:34*	*1*
Phenol-d5	*29*		*11 - 120*	*06/05/13 05:37*	*06/06/13 20:34*	*1*
2-Fluorophenol	*41*		*18 - 120*	*06/05/13 05:37*	*06/06/13 20:34*	*1*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/05/13 05:37*	*06/06/13 20:34*	*1*

Lab Sample ID: LCS 480-122147/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122568 — **Prep Batch: 122147**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.44		ug/L		93	22 - 167
2-Chlorophenol	8.00	5.92		ug/L		74	44 - 106
4-Chloro-3-methylphenol	8.00	7.31		ug/L		91	60 - 131
4-Nitrophenol	16.0	10.3		ug/L		65	10 - 105
Acenaphthene	8.00	6.86		ug/L		86	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	9.20		ug/L		115	69 - 136
Fluorene	8.00	7.02		ug/L		88	54 - 137
Hexachloroethane	8.00	5.57		ug/L		70	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.11		ug/L		89	50 - 123
Pentachlorophenol	16.0	13.5		ug/L		85	10 - 131
Phenol	8.00	2.64		ug/L		33	17 - 61
Pyrene	8.00	9.04		ug/L		113	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*82*		*34 - 132*
2-Fluorobiphenyl	*85*		*37 - 120*
p-Terphenyl-d14	*112*		*58 - 147*
Phenol-d5	*31*		*11 - 120*
2-Fluorophenol	*45*		*18 - 120*
2,4,6-Tribromophenol	*105*		*39 - 146*

Lab Sample ID: LCSD 480-122147/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122568 — **Prep Batch: 122147**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	7.45		ug/L		93	22 - 167	0	20
2-Chlorophenol	8.00	6.04		ug/L		76	44 - 106	2	20
4-Chloro-3-methylphenol	8.00	7.29		ug/L		91	60 - 131	0	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-122147/3-A
Matrix: Water
Analysis Batch: 122568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122147

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	9.93		ug/L		62	10 - 105	4	20
Acenaphthene			8.00	6.88		ug/L		86	35 - 143	0	24
Bis(2-ethylhexyl) phthalate			8.00	9.03		ug/L		113	69 - 136	2	15
Fluorene			8.00	6.95		ug/L		87	54 - 137	1	15
Hexachloroethane			8.00	5.77		ug/L		72	32 - 104	4	20
N-Nitrosodi-n-propylamine			8.00	7.05		ug/L		88	50 - 123	1	20
Pentachlorophenol			16.0	13.1		ug/L		82	10 - 131	3	37
Phenol			8.00	2.72		ug/L		34	17 - 61	3	34
Pyrene			8.00	8.74		ug/L		109	58 - 143	3	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*83*		*34 - 132*
2-Fluorobiphenyl	*87*		*37 - 120*
p-Terphenyl-d14	*112*		*58 - 147*
Phenol-d5	*33*		*11 - 120*
2-Fluorophenol	*47*		*18 - 120*
2,4,6-Tribromophenol	*101*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122183/1-A
Matrix: Water
Analysis Batch: 122862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122183

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 04:07	1
Chromium	1.5	U	1.5		ug/L		06/05/13 09:45	06/07/13 04:07	1
Copper	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 04:07	1
Lead	1.0	U	1.0		ug/L		06/05/13 09:45	06/07/13 04:07	1
Zinc	10	U	10		ug/L		06/05/13 09:45	06/07/13 04:07	1

Lab Sample ID: LCS 480-122183/2-A
Matrix: Water
Analysis Batch: 122862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122183

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			20.0	21.1		ug/L		106	80 - 120		
Chromium			20.0	21.1		ug/L		106	80 - 120		
Copper			20.0	20.9		ug/L		105	80 - 120		
Lead			20.0	20.8		ug/L		104	80 - 120		
Zinc			50.0	54.1		ug/L		108	80 - 120		

Lab Sample ID: MB 480-121735/7-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-121735/7-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:36	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:36	1

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.3		ug/L		106	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.1		ug/L		105	80 - 120
Lead	20.0	21.0		ug/L		105	80 - 120
Zinc	50.0	53.5		ug/L		107	80 - 120

GC/MS VOA

Analysis Batch: 122184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	8260B	
180-21781-2	DP13N-04S	Total/NA	Water	8260B	
180-21781-3	DP13N-99A	Total/NA	Water	8260B	
LCS 480-122184/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122184/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	3510C	
180-21781-2	DP13N-04S	Total/NA	Water	3510C	
180-21781-3	DP13N-99A	Total/NA	Water	3510C	
LCS 480-122147/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-122147/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-122147/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122147/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122147
LCSD 480-122147/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	122147
MB 480-122147/1-A	Method Blank	Total/NA	Water	8270C LL	122147

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	8270C LL	122147
180-21781-2	DP13N-04S	Total/NA	Water	8270C LL	122147
180-21781-3	DP13N-99A	Total/NA	Water	8270C LL	122147

Metals

Prep Batch: 122183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	3020A	
180-21781-2	DP13N-04S	Total/NA	Water	3020A	
180-21781-3	DP13N-99A	Total/NA	Water	3020A	
LCS 480-122183/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122183/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Dissolved	Water	3020A	
180-21781-2	DP13N-04S	Dissolved	Water	3020A	
180-21781-3	DP13N-99A	Dissolved	Water	3020A	
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Dissolved	Water	6020	122277

Metals (Continued)

Analysis Batch: 122514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-2	DP13N-04S	Dissolved	Water	6020	122277
180-21781-3	DP13N-99A	Dissolved	Water	6020	122277
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	6020	122277
MB 480-121735/7-B	Method Blank	Dissolved	Water	6020	122277

Analysis Batch: 122862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	6020	122183
180-21781-2	DP13N-04S	Total/NA	Water	6020	122183
180-21781-3	DP13N-99A	Total/NA	Water	6020	122183
LCS 480-122183/2-A	Lab Control Sample	Total/NA	Water	6020	122183
MB 480-122183/1-A	Method Blank	Total/NA	Water	6020	122183

Analysis Batch: 123130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21781-1	DP13N-02I	Total/NA	Water	6020	122183

180-21781

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	5/31/13	220372
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd Ave.	412-428-9911	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	V. Bartolb	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Cavalcade TI Zone Delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): BTEX?	SVOC's	6020 dissolved metals (Diss.)?	6020 total metals (Tot.)?	Special Instructions/ Conditions of Receipt
DP13N-02I	5/31/13	1307		X			2		2	3			3	2	1	1	Dissolved Metals are Field Filtered.
~~DP13N-01A~~	~~5/31/13~~	~~2000~~		X			2		2	3			3	2	1	1	RJ 5/31/13
DP13N-03S	5/31/13	1646		X			2		2	3			3	2	1	1	
DP13N-99A	5/31/13	2000		X			2		2	3			3	2	1	1	

180-21781 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	5/31/13	1900	1. Received By	6/1/13	1100
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: Temp 4.3 ICE#1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21781-1

Login Number: 21781

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21781-1

Login Number: 21781
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/04/13 02:01 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21834-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 12:37:49 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21834-2	TB-060313	Water	06/03/13 00:00	06/04/13 17:51
180-21834-3	DP13N-04I	Water	06/03/13 09:45	06/04/13 17:51
180-21834-4	DP12S-08S	Water	06/03/13 14:03	06/04/13 17:51
180-21834-5	DP13M-05S	Water	06/03/13 12:11	06/04/13 17:51
180-21834-6	DP13S-02S	Water	06/03/13 15:30	06/04/13 17:51
180-21834-7	TB-060313	Water	06/03/13 00:00	06/04/13 17:51

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: TB-060313

Lab Sample ID: 180-21834-2

Date Collected: 06/03/13 00:00

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 14:53	NQN	TAL BUF
	Instrument ID: HP5975T									

Client Sample ID: DP13N-04I

Lab Sample ID: 180-21834-3

Date Collected: 06/03/13 09:45

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122475	06/06/13 16:09	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			984.3 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 18:36	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 21:53	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122597	06/06/13 14:03	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		2			122597	06/06/13 15:08	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP12S-08S

Lab Sample ID: 180-21834-4

Date Collected: 06/03/13 14:03

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 16:28	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1032.3 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 19:31	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 22:21	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 05:40	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		5			122597	06/06/13 15:41	MM	TAL BUF
	Instrument ID: ELAN									

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP13M-05S

Lab Sample ID: 180-21834-5

Date Collected: 06/03/13 12:11

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 16:52	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1050.6 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 19:58	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 22:26	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 05:45	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-02S

Lab Sample ID: 180-21834-6

Date Collected: 06/03/13 15:30

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 17:16	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1016.8 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		100			122870	06/07/13 20:25	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 22:43	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:02	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060313

Lab Sample ID: 180-21834-7

Date Collected: 06/03/13 00:00

Matrix: Water

Date Received: 06/04/13 17:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 17:40	NQN	TAL BUF
	Instrument ID: HP5975T									

Laboratory References:

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

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RL = Renee Larson

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: TB-060313
Date Collected: 06/03/13 00:00
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 14:53	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 14:53	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 14:53	1
Acetone	10	U	10		ug/L			06/05/13 14:53	1
Benzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 14:53	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 14:53	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 14:53	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 14:53	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:53	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 14:53	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 14:53	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 14:53	1
Styrene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Toluene	1.0	U	1.0		ug/L			06/05/13 14:53	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:53	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 14:53	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 14:53	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 14:53	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 14:53	1

Client Sample ID: TB-060313
Date Collected: 06/03/13 00:00
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/05/13 14:53*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/05/13 14:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 14:53*	*1*

Client Sample ID: DP13N-04I
Date Collected: 06/03/13 09:45
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
2-Hexanone	5.0	U	5.0		ug/L			06/06/13 16:09	1
2-Butanone (MEK)	10	U	10		ug/L			06/06/13 16:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/06/13 16:09	1
Acetone	10	U	10		ug/L			06/06/13 16:09	1
Benzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Bromoform	1.0	U	1.0		ug/L			06/06/13 16:09	1
Bromomethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Carbon disulfide	1.0	U	1.0		ug/L			06/06/13 16:09	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/06/13 16:09	1
Chlorobenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Chloroethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Chloroform	1.0	U	1.0		ug/L			06/06/13 16:09	1
Chloromethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 16:09	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Cyclohexane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Ethylbenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Methyl acetate	1.0	U	1.0		ug/L			06/06/13 16:09	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/06/13 16:09	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Methylene Chloride	1.0	U	1.0		ug/L			06/06/13 16:09	1
Styrene	1.0	U	1.0		ug/L			06/06/13 16:09	1

Client Sample ID: DP13N-04I
Date Collected: 06/03/13 09:45
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Toluene	1.0	U	1.0		ug/L			06/06/13 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 16:09	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Trichloroethene	1.0	U	1.0		ug/L			06/06/13 16:09	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/06/13 16:09	1
Vinyl chloride	1.0	U	1.0		ug/L			06/06/13 16:09	1
Xylenes, Total	2.0	U	2.0		ug/L			06/06/13 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*06/06/13 16:09*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/06/13 16:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/06/13 16:09*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
bis (2-chloroisopropyl) ether	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4,5-Trichlorophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4,6-Trichlorophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4-Dichlorophenol	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4-Dinitrophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,4-Dinitrotoluene	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2,6-Dinitrotoluene	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Chloronaphthalene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Chlorophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Methylnaphthalene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Nitroaniline	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
2-Nitrophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
3,3'-Dichlorobenzidine	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
3-Nitroaniline	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4,6-Dinitro-2-methylphenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Bromophenyl phenyl ether	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Chloro-3-methylphenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Chloroaniline	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Chlorophenyl phenyl ether	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Nitroaniline	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
4-Nitrophenol	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Acenaphthene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 18:36	1
Acetophenone	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Anthracene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Benzaldehyde	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 18:36	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 18:36	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 18:36	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP13N-04I
Date Collected: 06/03/13 09:45
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(g,h,i)perylene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 18:36	1
Bis(2-chloroethoxy)methane	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Bis(2-chloroethyl)ether	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Caprolactam	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Carbazole	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Chrysene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Dibenz(a,h)anthracene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Dibenzofuran	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Diethyl phthalate	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Dimethyl phthalate	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Di-n-octyl phthalate	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Fluoranthene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Fluorene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Hexachlorobenzene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Hexachloroethane	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Indeno(1,2,3-cd)pyrene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Isophorone	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Nitrobenzene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1
N-Nitrosodi-n-propylamine	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
N-Nitrosodiphenylamine	5.1	U	5.1		ug/L		06/05/13 14:10	06/07/13 18:36	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Phenanthrene	**0.22**		0.20		ug/L		06/05/13 14:10	06/07/13 18:36	1
Phenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 18:36	1
Pyrene	0.51	U	0.51		ug/L		06/05/13 14:10	06/07/13 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*34 - 132*	*06/05/13 14:10*	*06/07/13 18:36*	*1*
2-Fluorobiphenyl	*68*		*37 - 120*	*06/05/13 14:10*	*06/07/13 18:36*	*1*
p-Terphenyl-d14	*68*		*58 - 147*	*06/05/13 14:10*	*06/07/13 18:36*	*1*
Phenol-d5	*29*		*11 - 120*	*06/05/13 14:10*	*06/07/13 18:36*	*1*
2-Fluorophenol	*35*		*18 - 120*	*06/05/13 14:10*	*06/07/13 18:36*	*1*
2,4,6-Tribromophenol	*81*		*39 - 146*	*06/05/13 14:10*	*06/07/13 18:36*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.0**		1.0		ug/L		06/05/13 13:50	06/06/13 14:03	1
Chromium	**130**		3.0		ug/L		06/05/13 13:50	06/06/13 15:08	2
Copper	**45**		1.0		ug/L		06/05/13 13:50	06/06/13 14:03	1
Lead	**19**		1.0		ug/L		06/05/13 13:50	06/06/13 14:03	1
Zinc	**140**		10		ug/L		06/05/13 13:50	06/06/13 14:03	1

Client Sample ID: DP13N-04I

Lab Sample ID: 180-21834-3

Date Collected: 06/03/13 09:45

Matrix: Water

Date Received: 06/04/13 17:51

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:53	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:53	1
Copper	**3.6**		1.0		ug/L		06/05/13 13:50	06/05/13 21:53	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:53	1
Zinc	**15**		10		ug/L		06/05/13 13:50	06/05/13 21:53	1

Client Sample ID: DP12S-08S

Lab Sample ID: 180-21834-4

Date Collected: 06/03/13 14:03

Matrix: Water

Date Received: 06/04/13 17:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 16:28	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 16:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 16:28	1
Acetone	10	U	10		ug/L			06/05/13 16:28	1
Benzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 16:28	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 16:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 16:28	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 16:28	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 16:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 16:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 16:28	1

Client Sample ID: DP12S-08S
Date Collected: 06/03/13 14:03
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 16:28	1
Styrene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Toluene	1.0	U	1.0		ug/L			06/05/13 16:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 16:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 16:28	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 16:28	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*06/05/13 16:28*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/05/13 16:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 16:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Methylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Methylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:31	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 19:31	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:31	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP12S-08S
Date Collected: 06/03/13 14:03
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 19:31	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:31	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:31	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 19:31	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 19:31	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
Naphthalene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:31	1
Pentachlorophenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 19:31	1
Phenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:31	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*60*		*34 - 132*	*06/05/13 14:10*	*06/07/13 19:31*	*1*
2-Fluorobiphenyl	*55*		*37 - 120*	*06/05/13 14:10*	*06/07/13 19:31*	*1*
p-Terphenyl-d14	*66*		*58 - 147*	*06/05/13 14:10*	*06/07/13 19:31*	*1*
Phenol-d5	*22*		*11 - 120*	*06/05/13 14:10*	*06/07/13 19:31*	*1*
2-Fluorophenol	*30*		*18 - 120*	*06/05/13 14:10*	*06/07/13 19:31*	*1*
2,4,6-Tribromophenol	*88*		*39 - 146*	*06/05/13 14:10*	*06/07/13 19:31*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		1.0		ug/L		06/05/13 13:50	06/06/13 05:40	1
Chromium	**56**		7.5		ug/L		06/05/13 13:50	06/06/13 15:41	5
Copper	**43**		1.0		ug/L		06/05/13 13:50	06/06/13 05:40	1
Lead	**69**		1.0		ug/L		06/05/13 13:50	06/06/13 05:40	1
Zinc	**170**		10		ug/L		06/05/13 13:50	06/06/13 05:40	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP12S-08S

Lab Sample ID: 180-21834-4

Date Collected: 06/03/13 14:03

Matrix: Water

Date Received: 06/04/13 17:51

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:21	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 22:21	1
Copper	**1.2**		1.0		ug/L		06/05/13 13:50	06/05/13 22:21	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:21	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 22:21	1

Client Sample ID: DP13M-05S

Lab Sample ID: 180-21834-5

Date Collected: 06/03/13 12:11

Matrix: Water

Date Received: 06/04/13 17:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 16:52	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 16:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 16:52	1
Acetone	10	U	10		ug/L			06/05/13 16:52	1
Benzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 16:52	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 16:52	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 16:52	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 16:52	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:52	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 16:52	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 16:52	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 16:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP13M-05S
Date Collected: 06/03/13 12:11
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 16:52	1
Styrene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Toluene	1.0	U	1.0		ug/L			06/05/13 16:52	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 16:52	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 16:52	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 16:52	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 16:52	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/05/13 16:52*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 16:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/05/13 16:52*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Methylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Methylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:58	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 19:58	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:58	1

Client Sample ID: DP13M-05S
Date Collected: 06/03/13 12:11
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 19:58	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:58	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 19:58	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 19:58	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 19:58	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
Naphthalene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 19:58	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 19:58	1
Phenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 19:58	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*54*		*34 - 132*	*06/05/13 14:10*	*06/07/13 19:58*	*1*
2-Fluorobiphenyl	*50*		*37 - 120*	*06/05/13 14:10*	*06/07/13 19:58*	*1*
p-Terphenyl-d14	*89*		*58 - 147*	*06/05/13 14:10*	*06/07/13 19:58*	*1*
Phenol-d5	*19*		*11 - 120*	*06/05/13 14:10*	*06/07/13 19:58*	*1*
2-Fluorophenol	*25*		*18 - 120*	*06/05/13 14:10*	*06/07/13 19:58*	*1*
2,4,6-Tribromophenol	*83*		*39 - 146*	*06/05/13 14:10*	*06/07/13 19:58*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:45	1
Chromium	**2.5**		1.5		ug/L		06/05/13 13:50	06/06/13 05:45	1
Copper	**1.7**		1.0		ug/L		06/05/13 13:50	06/06/13 05:45	1
Lead	**2.4**		1.0		ug/L		06/05/13 13:50	06/06/13 05:45	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 05:45	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP13M-05S

Lab Sample ID: 180-21834-5

Date Collected: 06/03/13 12:11

Matrix: Water

Date Received: 06/04/13 17:51

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:26	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 22:26	1
Copper	**1.1**		1.0		ug/L		06/05/13 13:50	06/05/13 22:26	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:26	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 22:26	1

Client Sample ID: DP13S-02S

Lab Sample ID: 180-21834-6

Date Collected: 06/03/13 15:30

Matrix: Water

Date Received: 06/04/13 17:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 17:16	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 17:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 17:16	1
Acetone	**51**		10		ug/L			06/05/13 17:16	1
Benzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 17:16	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 17:16	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 17:16	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 17:16	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:16	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 17:16	1
Methyl tert-butyl ether	**1.6**		1.0		ug/L			06/05/13 17:16	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 17:16	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: DP13S-02S
Date Collected: 06/03/13 15:30
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 17:16	1
Styrene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Toluene	1.0	U	1.0		ug/L			06/05/13 17:16	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:16	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 17:16	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 17:16	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 17:16	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/05/13 17:16*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 17:16*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/05/13 17:16*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
bis (2-chloroisopropyl) ether	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4,5-Trichlorophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4,6-Trichlorophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4-Dichlorophenol	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4-Dimethylphenol	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4-Dinitrophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,4-Dinitrotoluene	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2,6-Dinitrotoluene	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Chloronaphthalene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Chlorophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Methylnaphthalene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Methylphenol	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Nitroaniline	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
2-Nitrophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
3,3'-Dichlorobenzidine	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
3-Nitroaniline	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4,6-Dinitro-2-methylphenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Bromophenyl phenyl ether	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Chloro-3-methylphenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Chloroaniline	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Chlorophenyl phenyl ether	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Methylphenol	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Nitroaniline	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
4-Nitrophenol	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Acenaphthene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Acenaphthylene	30	U	30		ug/L		06/05/13 14:10	06/07/13 20:25	100
Acetophenone	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Anthracene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Atrazine	200	U	200		ug/L		06/05/13 14:10	06/07/13 20:25	100
Benzaldehyde	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Benzo(a)anthracene	30	U	30		ug/L		06/05/13 14:10	06/07/13 20:25	100

Client Sample ID: DP13S-02S
Date Collected: 06/03/13 15:30
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-6
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	18	U	18		ug/L		06/05/13 14:10	06/07/13 20:25	100
Benzo(b)fluoranthene	30	U	30		ug/L		06/05/13 14:10	06/07/13 20:25	100
Benzo(g,h,i)perylene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Benzo(k)fluoranthene	30	U	30		ug/L		06/05/13 14:10	06/07/13 20:25	100
Bis(2-chloroethoxy)methane	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Bis(2-chloroethyl)ether	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Bis(2-ethylhexyl) phthalate	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Butyl benzyl phthalate	300	U	300		ug/L		06/05/13 14:10	06/07/13 20:25	100
Caprolactam	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Carbazole	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Chrysene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Dibenz(a,h)anthracene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Dibenzofuran	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Diethyl phthalate	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Dimethyl phthalate	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Di-n-butyl phthalate	200	U	200		ug/L		06/05/13 14:10	06/07/13 20:25	100
Di-n-octyl phthalate	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Fluoranthene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Fluorene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Hexachlorobenzene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Hexachlorobutadiene	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
Hexachlorocyclopentadiene	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
Hexachloroethane	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Indeno(1,2,3-cd)pyrene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Isophorone	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
Naphthalene	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
Nitrobenzene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100
N-Nitrosodi-n-propylamine	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
N-Nitrosodiphenylamine	490	U	490		ug/L		06/05/13 14:10	06/07/13 20:25	100
Pentachlorophenol	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
Phenanthrene	20	U	20		ug/L		06/05/13 14:10	06/07/13 20:25	100
Phenol	98	U	98		ug/L		06/05/13 14:10	06/07/13 20:25	100
Pyrene	49	U	49		ug/L		06/05/13 14:10	06/07/13 20:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/05/13 14:10*	*06/07/13 20:25*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/05/13 14:10*	*06/07/13 20:25*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/05/13 14:10*	*06/07/13 20:25*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*06/05/13 14:10*	*06/07/13 20:25*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/05/13 14:10*	*06/07/13 20:25*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/05/13 14:10*	*06/07/13 20:25*	*100*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		1.0		ug/L		06/05/13 13:50	06/06/13 06:02	1
Chromium	**3.4**		1.5		ug/L		06/05/13 13:50	06/06/13 06:02	1
Copper	**1.7**		1.0		ug/L		06/05/13 13:50	06/06/13 06:02	1
Lead	**2.7**		1.0		ug/L		06/05/13 13:50	06/06/13 06:02	1
Zinc	**19**		10		ug/L		06/05/13 13:50	06/06/13 06:02	1

Client Sample ID: DP13S-02S

Lab Sample ID: 180-21834-6

Date Collected: 06/03/13 15:30

Matrix: Water

Date Received: 06/04/13 17:51

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		1.0		ug/L		06/05/13 13:50	06/05/13 22:43	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 22:43	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:43	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 22:43	1
Zinc	10		10		ug/L		06/05/13 13:50	06/05/13 22:43	1

Client Sample ID: TB-060313

Lab Sample ID: 180-21834-7

Date Collected: 06/03/13 00:00

Matrix: Water

Date Received: 06/04/13 17:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 17:40	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 17:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 17:40	1
Acetone	10	U	10		ug/L			06/05/13 17:40	1
Benzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 17:40	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 17:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 17:40	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 17:40	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 17:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 17:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 17:40	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-1

Client Sample ID: TB-060313
Date Collected: 06/03/13 00:00
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 17:40	1
Styrene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Toluene	1.0	U	1.0		ug/L			06/05/13 17:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 17:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 17:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 17:40	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 17:40	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/05/13 17:40*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 17:40*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/05/13 17:40*	*1*

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

Lab Sample ID: MB 480-122164/8
Matrix: Water
Analysis Batch: 122164

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 12:17	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 12:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 12:17	1
Acetone	10	U	10		ug/L			06/05/13 12:17	1
Benzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 12:17	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Styrene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Toluene	1.0	U	1.0		ug/L			06/05/13 12:17	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 12:17	1

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

Lab Sample ID: MB 480-122164/8
Matrix: Water
Analysis Batch: 122164

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/05/13 12:17*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 12:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 12:17*	*1*

Lab Sample ID: LCS 480-122164/5
Matrix: Water
Analysis Batch: 122164

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.0		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	23.7		ug/L		95	58 - 121
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 127
Benzene	25.0	24.0		ug/L		96	71 - 124
Chlorobenzene	25.0	24.3		ug/L		97	72 - 120
cis-1,2-Dichloroethene	25.0	24.1		ug/L		97	74 - 124
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
Methyl tert-butyl ether	25.0	24.9		ug/L		99	64 - 127
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	73 - 127
Trichloroethene	25.0	25.2		ug/L		101	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*102*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

Lab Sample ID: MB 480-122475/7
Matrix: Water
Analysis Batch: 122475

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
2-Hexanone	5.0	U	5.0		ug/L			06/06/13 12:41	1

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

Lab Sample ID: MB 480-122475/7
Matrix: Water
Analysis Batch: 122475

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			06/06/13 12:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/06/13 12:41	1
Acetone	10	U	10		ug/L			06/06/13 12:41	1
Benzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Bromoform	1.0	U	1.0		ug/L			06/06/13 12:41	1
Bromomethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Carbon disulfide	1.0	U	1.0		ug/L			06/06/13 12:41	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/06/13 12:41	1
Chlorobenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Chloroethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Chloroform	1.0	U	1.0		ug/L			06/06/13 12:41	1
Chloromethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 12:41	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Cyclohexane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Ethylbenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Methyl acetate	1.0	U	1.0		ug/L			06/06/13 12:41	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/06/13 12:41	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Methylene Chloride	1.0	U	1.0		ug/L			06/06/13 12:41	1
Styrene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Toluene	1.0	U	1.0		ug/L			06/06/13 12:41	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 12:41	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Trichloroethene	1.0	U	1.0		ug/L			06/06/13 12:41	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/06/13 12:41	1
Vinyl chloride	1.0	U	1.0		ug/L			06/06/13 12:41	1
Xylenes, Total	2.0	U	2.0		ug/L			06/06/13 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*06/06/13 12:41*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*06/06/13 12:41*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/06/13 12:41*	*1*

Lab Sample ID: LCS 480-122475/6
Matrix: Water
Analysis Batch: 122475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.1		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	21.5		ug/L		86	58 - 121
1,2-Dichlorobenzene	25.0	26.1		ug/L		104	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 127

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

Lab Sample ID: LCS 480-122475/6
Matrix: Water
Analysis Batch: 122475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.0		ug/L		100	71 - 124
Chlorobenzene	25.0	24.9		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	74 - 124
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
Methyl tert-butyl ether	25.0	25.3		ug/L		101	64 - 127
Tetrachloroethene	25.0	24.8		ug/L		99	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73 - 127
Trichloroethene	25.0	24.2		ug/L		97	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*

Lab Sample ID: 180-21834-3 MS
Matrix: Water
Analysis Batch: 122475

Client Sample ID: DP13N-04I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.0	U	25.0	25.7		ug/L		103	71 - 129
1,1-Dichloroethene	1.0	U	25.0	23.7		ug/L		95	58 - 121
1,2-Dichlorobenzene	1.0	U	25.0	27.2		ug/L		109	80 - 124
1,2-Dichloroethane	1.0	U	25.0	27.6		ug/L		110	75 - 127
Benzene	1.0	U	25.0	26.6		ug/L		106	71 - 124
Chlorobenzene	1.0	U	25.0	26.7		ug/L		107	72 - 120
cis-1,2-Dichloroethene	1.0	U	25.0	24.8		ug/L		99	74 - 124
Ethylbenzene	1.0	U	25.0	28.4		ug/L		113	77 - 123
Methyl tert-butyl ether	1.0	U	25.0	25.2		ug/L		101	64 - 127
Tetrachloroethene	1.0	U	25.0	27.4		ug/L		110	74 - 122
Toluene	1.0	U	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	27.2		ug/L		109	73 - 127
Trichloroethene	1.0	U	25.0	26.9		ug/L		108	74 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*

Lab Sample ID: 180-21834-3 MSD
Matrix: Water
Analysis Batch: 122475

Client Sample ID: DP13N-04I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	1.0	U	25.0	26.9		ug/L		108	71 - 129	5	20
1,1-Dichloroethene	1.0	U	25.0	24.7		ug/L		99	58 - 121	4	16
1,2-Dichlorobenzene	1.0	U	25.0	28.4		ug/L		114	80 - 124	4	20
1,2-Dichloroethane	1.0	U	25.0	28.9		ug/L		116	75 - 127	5	20

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

Lab Sample ID: 180-21834-3 MSD
Matrix: Water
Analysis Batch: 122475

Client Sample ID: DP13N-04I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	1.0	U	25.0	27.8		ug/L		111	71 - 124	4	13
Chlorobenzene	1.0	U	25.0	28.4		ug/L		113	72 - 120	6	25
cis-1,2-Dichloroethene	1.0	U	25.0	25.7		ug/L		103	74 - 124	3	15
Ethylbenzene	1.0	U	25.0	29.6		ug/L		118	77 - 123	4	15
Methyl tert-butyl ether	1.0	U	25.0	26.2		ug/L		105	64 - 127	4	37
Tetrachloroethene	1.0	U	25.0	27.7		ug/L		111	74 - 122	1	20
Toluene	1.0	U	25.0	28.0		ug/L		112	80 - 122	4	15
trans-1,2-Dichloroethene	1.0	U	25.0	28.3		ug/L		113	73 - 127	4	20
Trichloroethene	1.0	U	25.0	27.9		ug/L		112	74 - 123	4	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acetophenone	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzaldehyde	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Caprolactam	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Carbazole	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Chrysene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenzofuran	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluoranthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluorene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachloroethane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Isophorone	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Nitrobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenanthrene	0.20	U	0.20		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
Phenol-d5	*26*		*11 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorophenol	*33*		*18 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*06/05/13 14:10*	*06/07/13 15:53*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-122296/2-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.17		ug/L		90	22 - 167
2-Chlorophenol	8.00	5.29		ug/L		66	44 - 106
4-Chloro-3-methylphenol	8.00	6.80		ug/L		85	60 - 131
4-Nitrophenol	16.0	10.2		ug/L		64	10 - 105
Acenaphthene	8.00	6.35		ug/L		79	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.26		ug/L		91	69 - 136
Fluorene	8.00	6.57		ug/L		82	54 - 137
Hexachloroethane	8.00	5.18		ug/L		65	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.5		ug/L		78	10 - 131
Phenol	8.00	2.52		ug/L		32	17 - 61
Pyrene	8.00	7.65		ug/L		96	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*78*		*37 - 120*
p-Terphenyl-d14	*91*		*58 - 147*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*96*		*39 - 146*

Lab Sample ID: 180-21834-3 MS
Matrix: Water
Analysis Batch: 122802

Client Sample ID: DP13N-04I
Prep Type: Total/NA
Prep Batch: 122296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	5.1	U	7.61	6.16		ug/L		81	70 - 130
2-Chlorophenol	5.1	U	7.61	4.8	U F	ug/L		54	70 - 130
4-Chloro-3-methylphenol	5.1	U	7.61	5.77		ug/L		76	70 - 130
4-Nitrophenol	5.1	U	15.2	9.01	F	ug/L		59	70 - 130
Acenaphthene	0.51	U	7.61	5.58		ug/L		73	35 - 143
Bis(2-ethylhexyl) phthalate	5.1	U	7.61	4.8	U F	ug/L		43	69 - 136
Fluorene	0.51	U	7.61	5.65		ug/L		74	54 - 137
Hexachloroethane	5.1	U	7.61	4.8	U F	ug/L		53	70 - 130
N-Nitrosodi-n-propylamine	5.1	U	7.61	5.25	F	ug/L		69	70 - 130
Pentachlorophenol	1.0	U	15.2	11.5		ug/L		76	18 - 131
Phenol	1.0	U	7.61	2.10		ug/L		28	7 - 120
Pyrene	0.51	U	7.61	6.60		ug/L		85	85 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*68*		*34 - 132*
2-Fluorobiphenyl	*71*		*37 - 120*
p-Terphenyl-d14	*59*		*58 - 147*
Phenol-d5	*26*		*11 - 120*
2-Fluorophenol	*34*		*18 - 120*
2,4,6-Tribromophenol	*91*		*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 180-21834-3 MSD | **Client Sample ID: DP13N-04I**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122802 | **Prep Batch: 122296**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	5.1	U	7.71	6.87		ug/L		89	70 - 130	11	20
2-Chlorophenol	5.1	U	7.71	4.8	U F	ug/L		61	70 - 130	14	20
4-Chloro-3-methylphenol	5.1	U	7.71	6.19		ug/L		80	70 - 130	7	20
4-Nitrophenol	5.1	U	15.4	9.95	F	ug/L		64	70 - 130	10	20
Acenaphthene	0.51	U	7.71	6.22		ug/L		81	35 - 143	11	24
Bis(2-ethylhexyl) phthalate	5.1	U	7.71	4.8	U F	ug/L		38	69 - 136	7	15
Fluorene	0.51	U	7.71	6.55		ug/L		85	54 - 137	15	15
Hexachloroethane	5.1	U	7.71	4.95	F	ug/L		64	70 - 130	21	20
N-Nitrosodi-n-propylamine	5.1	U	7.71	6.38		ug/L		83	70 - 130	19	20
Pentachlorophenol	1.0	U	15.4	12.8		ug/L		83	18 - 131	10	37
Phenol	1.0	U	7.71	2.38		ug/L		31	7 - 120	13	34
Pyrene	0.51	U	7.71	8.11	F	ug/L		103	85 - 139	20	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*77*		*34 - 132*
2-Fluorobiphenyl	*76*		*37 - 120*
p-Terphenyl-d14	*80*		*58 - 147*
Phenol-d5	*31*		*11 - 120*
2-Fluorophenol	*37*		*18 - 120*
2,4,6-Tribromophenol	*98*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122276/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122516 | **Prep Batch: 122276**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/06/13 05:02	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 05:02	1

Lab Sample ID: LCS 480-122276/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122516 | **Prep Batch: 122276**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.5		ug/L		103	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	19.8		ug/L		99	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21834-3 MS — **Client Sample ID: DP13N-04I**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122597 — **Prep Batch: 122276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.0		20.0	22.8		ug/L		84	75 - 125
Copper	45		20.0	62.1		ug/L		87	75 - 125
Lead	19		20.0	38.2		ug/L		95	75 - 125
Zinc	140		50.0	192		ug/L		94	75 - 125

Lab Sample ID: 180-21834-3 MS — **Client Sample ID: DP13N-04I**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122597 — **Prep Batch: 122276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	130		20.0	142	4	ug/L		63	75 - 125

Lab Sample ID: 180-21834-3 MSD — **Client Sample ID: DP13N-04I**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122597 — **Prep Batch: 122276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	6.0		20.0	22.7		ug/L		83	75 - 125	1	20
Copper	45		20.0	62.3		ug/L		88	75 - 125	0	20
Lead	19		20.0	37.8		ug/L		93	75 - 125	1	20
Zinc	140		50.0	193		ug/L		96	75 - 125	0	20

Lab Sample ID: 180-21834-3 MSD — **Client Sample ID: DP13N-04I**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122597 — **Prep Batch: 122276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	130		20.0	144	4	ug/L		74	75 - 125	2	20

Lab Sample ID: MB 480-121735/7-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 122514 — **Prep Batch: 122277**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:36	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:36	1

Lab Sample ID: LCS 480-121735/8-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 122514 — **Prep Batch: 122277**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.3		ug/L		106	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.1		ug/L		105	80 - 120
Lead	20.0	21.0		ug/L		105	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	50.0	53.5		ug/L		107	80 - 120

Lab Sample ID: 180-21834-3 MS
Matrix: Water
Analysis Batch: 122514

Client Sample ID: DP13N-04I
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	23.3		ug/L		113	75 - 125
Chromium	1.5	U	20.0	19.5		ug/L		97	75 - 125
Copper	3.6		20.0	23.6		ug/L		100	75 - 125
Lead	1.0	U	20.0	21.0		ug/L		105	75 - 125
Zinc	15		50.0	67.5		ug/L		105	75 - 125

Lab Sample ID: 180-21834-3 MSD
Matrix: Water
Analysis Batch: 122514

Client Sample ID: DP13N-04I
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	23.0		ug/L		111	75 - 125	2	20
Chromium	1.5	U	20.0	19.4		ug/L		97	75 - 125	0	20
Copper	3.6		20.0	23.5		ug/L		100	75 - 125	0	20
Lead	1.0	U	20.0	21.1		ug/L		105	75 - 125	0	20
Zinc	15		50.0	66.6		ug/L		103	75 - 125	1	20

GC/MS VOA

Analysis Batch: 122164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-2	TB-060313	Total/NA	Water	8260B	
180-21834-4	DP12S-08S	Total/NA	Water	8260B	
180-21834-5	DP13M-05S	Total/NA	Water	8260B	
180-21834-6	DP13S-02S	Total/NA	Water	8260B	
180-21834-7	TB-060313	Total/NA	Water	8260B	
LCS 480-122164/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122164/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 122475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Total/NA	Water	8260B	
180-21834-3 MS	DP13N-04I	Total/NA	Water	8260B	
180-21834-3 MSD	DP13N-04I	Total/NA	Water	8260B	
LCS 480-122475/6	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122475/7	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Total/NA	Water	3510C	
180-21834-3 MS	DP13N-04I	Total/NA	Water	3510C	
180-21834-3 MSD	DP13N-04I	Total/NA	Water	3510C	
180-21834-4	DP12S-08S	Total/NA	Water	3510C	
180-21834-5	DP13M-05S	Total/NA	Water	3510C	
180-21834-6	DP13S-02S	Total/NA	Water	3510C	
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122296/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3 MS	DP13N-04I	Total/NA	Water	8270C LL	122296
180-21834-3 MSD	DP13N-04I	Total/NA	Water	8270C LL	122296
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122296
MB 480-122296/1-A	Method Blank	Total/NA	Water	8270C LL	122296

Analysis Batch: 122870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Total/NA	Water	8270C LL	122296
180-21834-4	DP12S-08S	Total/NA	Water	8270C LL	122296
180-21834-5	DP13M-05S	Total/NA	Water	8270C LL	122296
180-21834-6	DP13S-02S	Total/NA	Water	8270C LL	122296

Metals

Prep Batch: 122276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Total/NA	Water	3020A	
180-21834-3 MS	DP13N-04I	Total/NA	Water	3020A	
180-21834-3 MSD	DP13N-04I	Total/NA	Water	3020A	

Metals (Continued)

Prep Batch: 122276 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-4	DP12S-08S	Total/NA	Water	3020A	
180-21834-5	DP13M-05S	Total/NA	Water	3020A	
180-21834-6	DP13S-02S	Total/NA	Water	3020A	
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122276/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Dissolved	Water	3020A	
180-21834-3 MS	DP13N-04I	Dissolved	Water	3020A	
180-21834-3 MSD	DP13N-04I	Dissolved	Water	3020A	
180-21834-4	DP12S-08S	Dissolved	Water	3020A	
180-21834-5	DP13M-05S	Dissolved	Water	3020A	
180-21834-6	DP13S-02S	Dissolved	Water	3020A	
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Dissolved	Water	6020	122277
180-21834-3 MS	DP13N-04I	Dissolved	Water	6020	122277
180-21834-3 MSD	DP13N-04I	Dissolved	Water	6020	122277
180-21834-4	DP12S-08S	Dissolved	Water	6020	122277
180-21834-5	DP13M-05S	Dissolved	Water	6020	122277
180-21834-6	DP13S-02S	Dissolved	Water	6020	122277
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	6020	122277
MB 480-121735/7-B	Method Blank	Dissolved	Water	6020	122277

Analysis Batch: 122516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-4	DP12S-08S	Total/NA	Water	6020	122276
180-21834-5	DP13M-05S	Total/NA	Water	6020	122276
180-21834-6	DP13S-02S	Total/NA	Water	6020	122276
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	6020	122276
MB 480-122276/1-A	Method Blank	Total/NA	Water	6020	122276

Analysis Batch: 122597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-3	DP13N-04I	Total/NA	Water	6020	122276
180-21834-3	DP13N-04I	Total/NA	Water	6020	122276
180-21834-3 MS	DP13N-04I	Total/NA	Water	6020	122276
180-21834-3 MS	DP13N-04I	Total/NA	Water	6020	122276
180-21834-3 MSD	DP13N-04I	Total/NA	Water	6020	122276
180-21834-3 MSD	DP13N-04I	Total/NA	Water	6020	122276
180-21834-4	DP12S-08S	Total/NA	Water	6020	122276

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 6/3/13	Chain of Custody Number: 2[illegible]
Address: 200 Third Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 412-963-7058	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valeskeg; Lab Contact: V. Bortot		
Project Name and Location (State): South Cavalcade Ti Zone Delineation	Carrier/Waybill Number: FedEx		
Contract/Purchase Order/Quote No.: KBC-13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270C LL (SVOCs)	6020 select metals (diss.)	6020 select metals (total)	Special Instructions/ Conditions of Receipt
DP13N-04I (MS/MSD)	6/3/13	0945		X			6		6	9			9	6	3	3	Diss. Metals are field
DP13S-08S	6/1/13	1403		X			2		2	3			3	2	1	1	filtered
DP13N-05S	6/1/13	1211		X			2		2	3			3	2	1	1	NTU dropped while sampling
DP13S-02S	6/1/13	1530		X			2		2	3			3	2	1	1	DP13N-04I.
TB-060313	6/3/13	–		X						1			1				TB-060313 made w/
																	volatile free H_2O.
	RS	6/3/13														RS	6/3/13

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD 5 day

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/3/13	2100	1. Received By: [signature] TA BUFFALO	6/4/13	0900
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: #2 3@ 1.4, 2.1, 2.4

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gilchrie	~~5/31/13~~ RS 6/3/13	20374
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd Ave.	412-128-9411	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Halasky	U. Bartot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Central Area TI Zone Delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE-1366S			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: S260B (BTEX)	S270C LL	Gross alpha nuclides (Lab)	Gross alpha nuclides (Lab)	Special Instructions/ Conditions of Receipt
DP135-015	~~6/1/13~~ ~~5/31/13~~ 6/3/13	1512		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
TB-060313	6/3/13	—		X			+			1			1				TB-060313 made w/ lab grade Volatile Free water

RS 6/3/13

RS 6/3/13

Page 39 of 42

Possible Hazard Identification	Sample Disposal	Turn Around Time Required	QC Requirements (Specify)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)	☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____	

	Relinquished By	Date	Time	Received By	Date	Time
1.		6/3/13	2100		6/4/13	0900
2.						
3.						

1. Received By: TA BUFFALO

Comments

#2 30 14, 21, 24

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/10/2013

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-1

Login Number: 21834

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Bortot, Veronica

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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-1

Login Number: 21834
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 09:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.1, 2.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-1

Login Number: 21834
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 09:41 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.1, 2.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21834-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 12:39:14 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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: 180-21834-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21834-2

Comments
No additional comments.

Receipt
The samples were received on 6/4/2013 5:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.4º C, 2.1º C and 2.4º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following sample was diluted due to the abundance of non-target analytes: DP13S-01S (180-21834-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The continuing calibration verification (CCV) for Di-n-butyl phthalate associated with batch 122802 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13N-04I (180-21834-3 MS).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21834-1	DP13S-01S	Water	06/01/13 15:15	06/04/13 17:51

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Client Sample ID: DP13S-01S
Date Collected: 06/01/13 15:15
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122164	06/05/13 14:29	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1026.2 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		5			122870	06/07/13 19:03	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 21:47	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122597	06/06/13 13:57	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Client Sample ID: DP13S-01S
Date Collected: 06/01/13 15:15
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 14:29	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 14:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 14:29	1
Acetone	**18**		10		ug/L			06/05/13 14:29	1
Benzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 14:29	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 14:29	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 14:29	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 14:29	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:29	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 14:29	1
Methyl tert-butyl ether	**8.2**		1.0		ug/L			06/05/13 14:29	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 14:29	1
Styrene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Toluene	1.0	U	1.0		ug/L			06/05/13 14:29	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 14:29	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 14:29	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 14:29	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 14:29	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 14:29	1

Client Sample ID: DP13S-01S
Date Collected: 06/01/13 15:15
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/05/13 14:29*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 14:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 14:29*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
bis (2-chloroisopropyl) ether	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4,5-Trichlorophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4,6-Trichlorophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4-Dichlorophenol	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4-Dimethylphenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4-Dinitrophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,4-Dinitrotoluene	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2,6-Dinitrotoluene	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Chloronaphthalene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Chlorophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Methylnaphthalene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Methylphenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Nitroaniline	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
2-Nitrophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
3,3'-Dichlorobenzidine	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
3-Nitroaniline	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4,6-Dinitro-2-methylphenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Bromophenyl phenyl ether	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Chloro-3-methylphenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Chloroaniline	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Chlorophenyl phenyl ether	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Methylphenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Nitroaniline	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
4-Nitrophenol	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Acenaphthene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Acenaphthylene	1.5	U	1.5		ug/L		06/05/13 14:10	06/07/13 19:03	5
Acetophenone	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Anthracene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Atrazine	9.7	U	9.7		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzaldehyde	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzo(a)pyrene	0.88	U	0.88		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzo(g,h,i)perylene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		06/05/13 14:10	06/07/13 19:03	5
Bis(2-chloroethoxy)methane	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Bis(2-chloroethyl)ether	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Bis(2-ethylhexyl) phthalate	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Butyl benzyl phthalate	15	U	15		ug/L		06/05/13 14:10	06/07/13 19:03	5
Caprolactam	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Carbazole	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Chrysene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Dibenz(a,h)anthracene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21834-2

Client Sample ID: DP13S-01S
Date Collected: 06/01/13 15:15
Date Received: 06/04/13 17:51

Lab Sample ID: 180-21834-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Diethyl phthalate	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Dimethyl phthalate	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Di-n-butyl phthalate	9.7	U	9.7		ug/L		06/05/13 14:10	06/07/13 19:03	5
Di-n-octyl phthalate	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Fluoranthene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Fluorene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Hexachlorobenzene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Hexachlorobutadiene	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
Hexachlorocyclopentadiene	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
Hexachloroethane	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Indeno(1,2,3-cd)pyrene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Isophorone	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
Naphthalene	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
Nitrobenzene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5
N-Nitrosodi-n-propylamine	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
N-Nitrosodiphenylamine	24	U	24		ug/L		06/05/13 14:10	06/07/13 19:03	5
Pentachlorophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
Phenanthrene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 19:03	5
Phenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 19:03	5
Pyrene	2.4	U	2.4		ug/L		06/05/13 14:10	06/07/13 19:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*60*		*34 - 132*	*06/05/13 14:10*	*06/07/13 19:03*	*5*
2-Fluorobiphenyl	*58*		*37 - 120*	*06/05/13 14:10*	*06/07/13 19:03*	*5*
p-Terphenyl-d14	*75*		*58 - 147*	*06/05/13 14:10*	*06/07/13 19:03*	*5*
Phenol-d5	*23*		*11 - 120*	*06/05/13 14:10*	*06/07/13 19:03*	*5*
2-Fluorophenol	*30*		*18 - 120*	*06/05/13 14:10*	*06/07/13 19:03*	*5*
2,4,6-Tribromophenol	*90*		*39 - 146*	*06/05/13 14:10*	*06/07/13 19:03*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**		1.0		ug/L		06/05/13 13:50	06/06/13 13:57	1
Chromium	**3.3**		1.5		ug/L		06/05/13 13:50	06/06/13 13:57	1
Copper	**2.8**		1.0		ug/L		06/05/13 13:50	06/06/13 13:57	1
Lead	**4.0**		1.0		ug/L		06/05/13 13:50	06/06/13 13:57	1
Zinc	**19**		10		ug/L		06/05/13 13:50	06/06/13 13:57	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:47	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:47	1
Copper	**1.1**		1.0		ug/L		06/05/13 13:50	06/05/13 21:47	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:47	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:47	1

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

Lab Sample ID: MB 480-122164/8
Matrix: Water
Analysis Batch: 122164

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 12:17	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 12:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 12:17	1
Acetone	10	U	10		ug/L			06/05/13 12:17	1
Benzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 12:17	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 12:17	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 12:17	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Styrene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Toluene	1.0	U	1.0		ug/L			06/05/13 12:17	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 12:17	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 12:17	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 12:17	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 12:17	1

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

Lab Sample ID: MB 480-122164/8
Matrix: Water
Analysis Batch: 122164

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/05/13 12:17*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/05/13 12:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 12:17*	*1*

Lab Sample ID: LCS 480-122164/5
Matrix: Water
Analysis Batch: 122164

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.0		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	23.7		ug/L		95	58 - 121
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 127
Benzene	25.0	24.0		ug/L		96	71 - 124
Chlorobenzene	25.0	24.3		ug/L		97	72 - 120
cis-1,2-Dichloroethene	25.0	24.1		ug/L		97	74 - 124
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
Methyl tert-butyl ether	25.0	24.9		ug/L		99	64 - 127
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	73 - 127
Trichloroethene	25.0	25.2		ug/L		101	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*102*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acetophenone	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzaldehyde	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Caprolactam	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Carbazole	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Chrysene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenzofuran	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluoranthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluorene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachloroethane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Isophorone	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Nitrobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122802 — **Prep Batch: 122296**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenanthrene	0.20	U	0.20		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
Phenol-d5	*26*		*11 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorophenol	*33*		*18 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*06/05/13 14:10*	*06/07/13 15:53*	*1*

Lab Sample ID: LCS 480-122296/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 122802 — **Prep Batch: 122296**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.17		ug/L		90	22 - 167
2-Chlorophenol	8.00	5.29		ug/L		66	44 - 106
4-Chloro-3-methylphenol	8.00	6.80		ug/L		85	60 - 131
4-Nitrophenol	16.0	10.2		ug/L		64	10 - 105
Acenaphthene	8.00	6.35		ug/L		79	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.26		ug/L		91	69 - 136
Fluorene	8.00	6.57		ug/L		82	54 - 137
Hexachloroethane	8.00	5.18		ug/L		65	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.5		ug/L		78	10 - 131
Phenol	8.00	2.52		ug/L		32	17 - 61
Pyrene	8.00	7.65		ug/L		96	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*78*		*37 - 120*
p-Terphenyl-d14	*91*		*58 - 147*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*96*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122276/1-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/06/13 05:02	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 05:02	1

Lab Sample ID: LCS 480-122276/2-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.5		ug/L		103	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	19.8		ug/L		99	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Lab Sample ID: MB 480-121735/7-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:36	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:36	1

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.3		ug/L		106	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.1		ug/L		105	80 - 120
Lead	20.0	21.0		ug/L		105	80 - 120
Zinc	50.0	53.5		ug/L		107	80 - 120

GC/MS VOA

Analysis Batch: 122164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Total/NA	Water	8260B	
LCS 480-122164/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122164/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Total/NA	Water	3510C	
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122296/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122296
MB 480-122296/1-A	Method Blank	Total/NA	Water	8270C LL	122296

Analysis Batch: 122870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Total/NA	Water	8270C LL	122296

Metals

Prep Batch: 122276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Total/NA	Water	3020A	
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122276/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Dissolved	Water	3020A	
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Dissolved	Water	6020	122277
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	6020	122277
MB 480-121735/7-B	Method Blank	Dissolved	Water	6020	122277

Analysis Batch: 122516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	6020	122276
MB 480-122276/1-A	Method Blank	Total/NA	Water	6020	122276

Analysis Batch: 122597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21834-1	DP13S-01S	Total/NA	Water	6020	122276

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	6/7/13	210324
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.	412-428-6411	412-963-7058	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valestreg	V. Bortot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Canadada Tie Zone Delineation	FedEx		
Contract/Purchase Order/Quote No.			
KBC-13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C w (SVOCs)	6020 select metals (diss)	6020 select metals (total)	Special Instructions/ Conditions of Receipt
DP13N-04I (MS/MSD)	6/3/13	0945		X			6		6	9			9	6	3	3	Diss. Metals are field filtered
DP13S-08S	6/1/13	1403		X			2		2	3			3	2	1	1	
DP13N-05S	6/1/13	1211		X			2		2	3			3	2	1	1	NTU dropped while sampling
DP13S-02S	6/1/13	1530		X			2		2	3			3	2	1	1	DP13N-04I.
TB-060313	6/3/13	~		X						1			1				TB-060313 made w/ Volatile free H_2O.
	RS	6/3/13													RS	6/3/13	

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD 5 day

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/3/13	2100	1. Received By TF BUFFALO	6/4/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#2 3@ 1.4, 2.1, 2.4

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/10/2013

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gilchie	6/3/13 ~~5/31/13~~ RS 6/3/13	20374
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 3rd Ave.	412-928-9411	412-963-7058	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Halesky	U. Bartot	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Central Pa TI Zone Delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE-1366S			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C LL	6020 select metals (diss)	6020 select metals (tot)	Special Instructions/ Conditions of Receipt
DP13S-015	~~6/1/13~~ ~~5/31/13~~ 6/3/13	1512		X			2		2	3			3	2	1	1	Dissolved metals are field filtered
TB-060313	6/3/13 ~~6/3/13~~	—		X			+			1			1				TB-060313 made w/ lab grade Volatile Free water

RS 6/3/13 RS 6/3/13

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6/10/2013

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

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

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/3/13	2100	1. Received By TA BUFFALO	6/4/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#2 30 1.4, 2.1, 2.4

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-2

Login Number: 21834

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Bortot, Veronica

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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-2

Login Number: 21834
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 09:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.1, 2.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21834-2

Login Number: 21834
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 09:41 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.1, 2.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21845-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 12:43:40 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21845-1	DP13S-10S	Water	06/04/13 17:30	06/05/13 09:00
180-21845-2	DP13S-99A	Water	06/04/13 20:00	06/05/13 09:00
180-21845-3	TB-060413	Water	06/04/13 00:00	06/05/13 09:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: DP13S-10S

Lab Sample ID: 180-21845-1

Date Collected: 06/04/13 17:30

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/05/13 22:39	TRF	TAL BUF
	Instrument ID: HP5973G									
Total/NA	Prep	3510C			1039.4 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 20:53	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 23:07	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:09	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		5			122516	06/06/13 07:49	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-99A

Lab Sample ID: 180-21845-2

Date Collected: 06/04/13 20:00

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/05/13 23:02	TRF	TAL BUF
	Instrument ID: HP5973G									
Total/NA	Prep	3510C			1041.7 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 21:20	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 23:13	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:14	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		5			122516	06/06/13 07:54	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060413

Lab Sample ID: 180-21845-3

Date Collected: 06/04/13 00:00

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/05/13 23:25	TRF	TAL BUF
	Instrument ID: HP5973G									

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: DP13S-10S
Date Collected: 06/04/13 17:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 22:39	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 22:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 22:39	1
Acetone	10	U	10		ug/L			06/05/13 22:39	1
Benzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 22:39	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 22:39	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 22:39	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 22:39	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 22:39	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 22:39	1
Methyl tert-butyl ether	**2.6**		1.0		ug/L			06/05/13 22:39	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 22:39	1
Styrene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Toluene	1.0	U	1.0		ug/L			06/05/13 22:39	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 22:39	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 22:39	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 22:39	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 22:39	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 22:39	1

Client Sample ID: DP13S-10S
Date Collected: 06/04/13 17:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/05/13 22:39*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/05/13 22:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/05/13 22:39*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Methylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Methylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 20:53	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 20:53	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 20:53	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: DP13S-10S
Date Collected: 06/04/13 17:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 20:53	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
Naphthalene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 20:53	1
Pentachlorophenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 20:53	1
Phenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 20:53	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*56*		*34 - 132*	*06/05/13 14:10*	*06/07/13 20:53*	*1*
2-Fluorobiphenyl	*65*		*37 - 120*	*06/05/13 14:10*	*06/07/13 20:53*	*1*
p-Terphenyl-d14	*104*		*58 - 147*	*06/05/13 14:10*	*06/07/13 20:53*	*1*
Phenol-d5	*19*		*11 - 120*	*06/05/13 14:10*	*06/07/13 20:53*	*1*
2-Fluorophenol	*25*		*18 - 120*	*06/05/13 14:10*	*06/07/13 20:53*	*1*
2,4,6-Tribromophenol	*95*		*39 - 146*	*06/05/13 14:10*	*06/07/13 20:53*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.4**		1.0		ug/L		06/05/13 13:50	06/06/13 06:09	1
Chromium	**23**		7.5		ug/L		06/05/13 13:50	06/06/13 07:49	5
Copper	**15**		1.0		ug/L		06/05/13 13:50	06/06/13 06:09	1
Lead	**21**		1.0		ug/L		06/05/13 13:50	06/06/13 06:09	1
Zinc	**44**		10		ug/L		06/05/13 13:50	06/06/13 06:09	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:07	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:07	1
Copper	**1.3**		1.0		ug/L		06/05/13 13:50	06/05/13 23:07	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:07	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 23:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: DP13S-99A
Date Collected: 06/04/13 20:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 23:02	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 23:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 23:02	1
Acetone	10	U	10		ug/L			06/05/13 23:02	1
Benzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 23:02	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 23:02	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 23:02	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 23:02	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:02	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 23:02	1
Methyl tert-butyl ether	**2.6**		1.0		ug/L			06/05/13 23:02	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 23:02	1
Styrene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Toluene	1.0	U	1.0		ug/L			06/05/13 23:02	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:02	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 23:02	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 23:02	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 23:02	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 23:02	1

Client Sample ID: DP13S-99A
Date Collected: 06/04/13 20:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/05/13 23:02*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/05/13 23:02*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/05/13 23:02*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Methylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Methylphenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:20	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:20	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 21:20	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: DP13S-99A
Date Collected: 06/04/13 20:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 21:20	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
Naphthalene	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:20	1
Pentachlorophenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 21:20	1
Phenol	0.96	U	0.96		ug/L		06/05/13 14:10	06/07/13 21:20	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*61*		*34 - 132*	*06/05/13 14:10*	*06/07/13 21:20*	*1*
2-Fluorobiphenyl	*66*		*37 - 120*	*06/05/13 14:10*	*06/07/13 21:20*	*1*
p-Terphenyl-d14	*105*		*58 - 147*	*06/05/13 14:10*	*06/07/13 21:20*	*1*
Phenol-d5	*21*		*11 - 120*	*06/05/13 14:10*	*06/07/13 21:20*	*1*
2-Fluorophenol	*30*		*18 - 120*	*06/05/13 14:10*	*06/07/13 21:20*	*1*
2,4,6-Tribromophenol	*97*		*39 - 146*	*06/05/13 14:10*	*06/07/13 21:20*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.5**		1.0		ug/L		06/05/13 13:50	06/06/13 06:14	1
Chromium	**23**		7.5		ug/L		06/05/13 13:50	06/06/13 07:54	5
Copper	**16**		1.0		ug/L		06/05/13 13:50	06/06/13 06:14	1
Lead	**22**		1.0		ug/L		06/05/13 13:50	06/06/13 06:14	1
Zinc	**46**		10		ug/L		06/05/13 13:50	06/06/13 06:14	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:13	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:13	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:13	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:13	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 23:13	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: TB-060413
Date Collected: 06/04/13 00:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 23:25	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 23:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 23:25	1
Acetone	10	U	10		ug/L			06/05/13 23:25	1
Benzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 23:25	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 23:25	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 23:25	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 23:25	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:25	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 23:25	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 23:25	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Methylene Chloride	3.1		1.0		ug/L			06/05/13 23:25	1
Styrene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Toluene	1.0	U	1.0		ug/L			06/05/13 23:25	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:25	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 23:25	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 23:25	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 23:25	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 23:25	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-1

Client Sample ID: TB-060413
Date Collected: 06/04/13 00:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*06/05/13 23:25*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*06/05/13 23:25*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/05/13 23:25*	*1*

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

Lab Sample ID: LB 480-122043/1-A LB
Matrix: Water
Analysis Batch: 122378

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

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2,2-Tetrachloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2-Trichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1-Dichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
1,2,4-Trichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dibromo-3-Chloropropane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dibromoethane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichloropropane	10	U	10		ug/L			06/06/13 02:49	10
1,3-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,4-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
2-Hexanone	50	U	50		ug/L			06/06/13 02:49	10
2-Butanone (MEK)	100	U	100		ug/L			06/06/13 02:49	10
4-Methyl-2-pentanone (MIBK)	50	U	50		ug/L			06/06/13 02:49	10
Acetone	100	U	100		ug/L			06/06/13 02:49	10
Benzene	10	U	10		ug/L			06/06/13 02:49	10
Bromodichloromethane	10	U	10		ug/L			06/06/13 02:49	10
Bromoform	10	U	10		ug/L			06/06/13 02:49	10
Bromomethane	10	U	10		ug/L			06/06/13 02:49	10
Carbon disulfide	10	U	10		ug/L			06/06/13 02:49	10
Carbon tetrachloride	10	U	10		ug/L			06/06/13 02:49	10
Chlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
Dibromochloromethane	10	U	10		ug/L			06/06/13 02:49	10
Chloroethane	10	U	10		ug/L			06/06/13 02:49	10
Chloroform	10	U	10		ug/L			06/06/13 02:49	10
Chloromethane	10	U	10		ug/L			06/06/13 02:49	10
cis-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
cis-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 02:49	10
Cyclohexane	10	U	10		ug/L			06/06/13 02:49	10
Dichlorodifluoromethane	10	U	10		ug/L			06/06/13 02:49	10
Ethylbenzene	10	U	10		ug/L			06/06/13 02:49	10
Isopropylbenzene	10	U	10		ug/L			06/06/13 02:49	10
Methyl acetate	10	U	10		ug/L			06/06/13 02:49	10
Methyl tert-butyl ether	10	U	10		ug/L			06/06/13 02:49	10
Methylcyclohexane	10	U	10		ug/L			06/06/13 02:49	10
Methylene Chloride	10	U	10		ug/L			06/06/13 02:49	10
Styrene	10	U	10		ug/L			06/06/13 02:49	10
Tetrachloroethene	10	U	10		ug/L			06/06/13 02:49	10
Toluene	10	U	10		ug/L			06/06/13 02:49	10
trans-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
trans-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 02:49	10
Trichloroethene	10	U	10		ug/L			06/06/13 02:49	10
Trichlorofluoromethane	10	U	10		ug/L			06/06/13 02:49	10
Vinyl chloride	10	U	10		ug/L			06/06/13 02:49	10
Xylenes, Total	20	U	20		ug/L			06/06/13 02:49	10

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

Lab Sample ID: LB 480-122043/1-A LB
Matrix: Water
Analysis Batch: 122378

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

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/06/13 02:49*	*10*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/06/13 02:49*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/06/13 02:49*	*10*

Lab Sample ID: MB 480-122378/5
Matrix: Water
Analysis Batch: 122378

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 21:11	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 21:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 21:11	1
Acetone	10	U	10		ug/L			06/05/13 21:11	1
Benzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 21:11	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 21:11	1

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

Lab Sample ID: MB 480-122378/5
Matrix: Water
Analysis Batch: 122378

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Toluene	1.0	U	1.0		ug/L			06/05/13 21:11	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 21:11	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/05/13 21:11*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*06/05/13 21:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/05/13 21:11*	*1*

Lab Sample ID: LCS 480-122378/4
Matrix: Water
Analysis Batch: 122378

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	28.7		ug/L		115	71 - 129
1,1-Dichloroethene	25.0	21.4		ug/L		86	58 - 121
1,2-Dichlorobenzene	25.0	25.9		ug/L		104	80 - 124
1,2-Dichloroethane	25.0	25.4		ug/L		102	75 - 127
Benzene	25.0	26.6		ug/L		107	71 - 124
Chlorobenzene	25.0	26.5		ug/L		106	72 - 120
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	24.7		ug/L		99	64 - 127
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	27.5		ug/L		110	73 - 127
Trichloroethene	25.0	26.8		ug/L		107	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acetophenone	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzaldehyde	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Caprolactam	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Carbazole	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Chrysene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenzofuran	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122802 | **Prep Batch: 122296**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluorene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachloroethane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Isophorone	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Nitrobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenanthrene	0.20	U	0.20		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
Phenol-d5	*26*		*11 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorophenol	*33*		*18 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*06/05/13 14:10*	*06/07/13 15:53*	*1*

Lab Sample ID: LCS 480-122296/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122802 | **Prep Batch: 122296**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.17		ug/L		90	22 - 167
2-Chlorophenol	8.00	5.29		ug/L		66	44 - 106
4-Chloro-3-methylphenol	8.00	6.80		ug/L		85	60 - 131
4-Nitrophenol	16.0	10.2		ug/L		64	10 - 105
Acenaphthene	8.00	6.35		ug/L		79	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.26		ug/L		91	69 - 136
Fluorene	8.00	6.57		ug/L		82	54 - 137
Hexachloroethane	8.00	5.18		ug/L		65	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.5		ug/L		78	10 - 131
Phenol	8.00	2.52		ug/L		32	17 - 61
Pyrene	8.00	7.65		ug/L		96	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*78*		*37 - 120*
p-Terphenyl-d14	*91*		*58 - 147*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-122296/2-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122296

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*96*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122276/1-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/06/13 05:02	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 05:02	1

Lab Sample ID: LCS 480-122276/2-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.5		ug/L		103	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	19.8		ug/L		99	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Lab Sample ID: MB 480-121735/7-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:36	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:36	1

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.3		ug/L		106	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.1		ug/L		105	80 - 120
Lead	20.0	21.0		ug/L		105	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	50.0	53.5		ug/L		107	80 - 120

GC/MS VOA

Analysis Batch: 122378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Total/NA	Water	8260B	
180-21845-2	DP13S-99A	Total/NA	Water	8260B	
180-21845-3	TB-060413	Total/NA	Water	8260B	
LB 480-122043/1-A LB	Method Blank	Total/NA	Water	8260B	
LCS 480-122378/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122378/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Total/NA	Water	3510C	
180-21845-2	DP13S-99A	Total/NA	Water	3510C	
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122296/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122296
MB 480-122296/1-A	Method Blank	Total/NA	Water	8270C LL	122296

Analysis Batch: 122870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Total/NA	Water	8270C LL	122296
180-21845-2	DP13S-99A	Total/NA	Water	8270C LL	122296

Metals

Prep Batch: 122276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Total/NA	Water	3020A	
180-21845-2	DP13S-99A	Total/NA	Water	3020A	
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122276/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Dissolved	Water	3020A	
180-21845-2	DP13S-99A	Dissolved	Water	3020A	
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Dissolved	Water	6020	122277
180-21845-2	DP13S-99A	Dissolved	Water	6020	122277
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	6020	122277
MB 480-121735/7-B	Method Blank	Dissolved	Water	6020	122277

Metals (Continued)

Analysis Batch: 122516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-1	DP13S-10S	Total/NA	Water	6020	122276
180-21845-1	DP13S-10S	Total/NA	Water	6020	122276
180-21845-2	DP13S-99A	Total/NA	Water	6020	122276
180-21845-2	DP13S-99A	Total/NA	Water	6020	122276
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	6020	122276
MB 480-122276/1-A	Method Blank	Total/NA	Water	6020	122276

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt ______

Drinking Water? Yes ☐ No ☒

TAL-4124 (1007)

Client: Key / FTS	Project Manager: Angie Gatchie	Date: 6/4/13	Chain of Custody Number: 1373
Address: 200 Third Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number:	Page 1 of 1
City: Carnegie State: PA Zip Code: 15106	Site Contact: M. Urlesky Lab Contact: V. Bartolo		
Project Name and Location (State): South Cavalcade TI Zone Delineation / Houston, TX	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Matrix:	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C LL (SVOCs)	6020 total metals (diss.)	6020 total metals (tot.)								Special Instructions/ Conditions of Receipt
DP13S-10S	6/4/13	1730		X				2		2	3			3	2	1	1								Diss Metals are Field Filtered.
DP13S-99A	6/4/13	2000		X				2		2	3			3	2	1	1								
TB-060413	6/4/13	–		X							2			2											

RS 6/4/13

RS 6/4/13

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

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

Turn Around Time Required
☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other______

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/4/13	1900	1. Received By: [signature]	6/5/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 2.8, 2.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gotchie	6/4/13	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Fox Third Ave.	412-428-9411	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	V. Bartab	
Project Name and Location (State)	**Carrier/Waybill Number**		
KBE-13665	Fed Ex		
Contract/Purchase Order/Quote No.			
South Canalside TI Zone Delineation			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C (SVOC)	(Diss. Metals) Field filtered	(Diss. Metals) Lab filtered	Special Instructions/ Conditions of Receipt
DP135-08I	6/4/13	0930		X			2		2	3			3	2	1	1	Diss metals are field filtered. Turbidity rose while sampling DP135-08I.
DP135-01I	6/4/13	0915		X			2		2	3			3	2	1	1	
FB-03-060413	6/4/13	1125		X			2		2	3			3	2	1	1	
TB-060413	6/4/13	—		X						2			2				

RS 6/4/13

RS 6/4/13

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day TAT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/4/13	1900	1. Received By	6/5/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

7.8, 7.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/10/2013

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21845-1

Login Number: 21845

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21845-1

Login Number: 21845
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 02:00 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0, 2.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21845-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/10/2013 12:44:00 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21845-4	DP13S-08I	Water	06/04/13 07:30	06/05/13 09:00
180-21845-5	DP13S-01I	Water	06/04/13 09:15	06/05/13 09:00
180-21845-6	FB-03-060413	Water	06/04/13 11:25	06/05/13 09:00
180-21845-7	TB-060413	Water	06/04/13 00:00	06/05/13 09:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: DP13S-08I

Lab Sample ID: 180-21845-4

Date Collected: 06/04/13 07:30

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/05/13 23:47	TRF	TAL BUF
	Instrument ID: HP5973G									
Total/NA	Prep	3510C			1036.2 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 21:47	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 23:18	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:20	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		20			122597	06/06/13 14:40	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-01I

Lab Sample ID: 180-21845-5

Date Collected: 06/04/13 09:15

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	122378	06/06/13 00:10	TRF	TAL BUF
	Instrument ID: HP5973G									
Total/NA	Prep	3510C			1014.8 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			122870	06/07/13 22:14	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 23:24	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:25	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		5			122516	06/06/13 08:05	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: FB-03-060413

Lab Sample ID: 180-21845-6

Date Collected: 06/04/13 11:25

Matrix: Water

Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/06/13 00:33	TRF	TAL BUF
	Instrument ID: HP5973G									
Total/NA	Prep	3510C			1048.4 mL	1 mL	122296	06/05/13 14:10	ND	TAL BUF

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: FB-03-060413

Lab Sample ID: 180-21845-6

Date Collected: 06/04/13 11:25
Matrix: Water
Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C LL		1			122870	06/07/13 22:42	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122277	06/05/13 13:50	JM	TAL BUF
Dissolved	Analysis	6020		1			122514	06/05/13 23:29	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122276	06/05/13 13:50	JM	TAL BUF
Total/NA	Analysis	6020		1			122516	06/06/13 06:31	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060413

Lab Sample ID: 180-21845-7

Date Collected: 06/04/13 00:00
Matrix: Water
Date Received: 06/05/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122378	06/06/13 00:55	TRF	TAL BUF
	Instrument ID: HP5973G									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: DP13S-08I
Date Collected: 06/04/13 07:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 23:47	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 23:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 23:47	1
Acetone	**15**		10		ug/L			06/05/13 23:47	1
Benzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 23:47	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 23:47	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 23:47	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 23:47	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:47	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 23:47	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 23:47	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 23:47	1
Styrene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Toluene	1.0	U	1.0		ug/L			06/05/13 23:47	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 23:47	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 23:47	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 23:47	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 23:47	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 23:47	1

Client Sample ID: DP13S-08I
Date Collected: 06/04/13 07:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*06/05/13 23:47*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*06/05/13 23:47*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*06/05/13 23:47*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4-Dimethylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Methylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Methylphenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:47	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 21:47	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 21:47	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: DP13S-08I
Date Collected: 06/04/13 07:30
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Di-n-butyl phthalate	**4.0**		1.9		ug/L		06/05/13 14:10	06/07/13 21:47	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
Naphthalene	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 21:47	1
Pentachlorophenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 21:47	1
Phenol	0.97	U	0.97		ug/L		06/05/13 14:10	06/07/13 21:47	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*34 - 132*	*06/05/13 14:10*	*06/07/13 21:47*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*06/05/13 14:10*	*06/07/13 21:47*	*1*
p-Terphenyl-d14	*102*		*58 - 147*	*06/05/13 14:10*	*06/07/13 21:47*	*1*
Phenol-d5	*22*		*11 - 120*	*06/05/13 14:10*	*06/07/13 21:47*	*1*
2-Fluorophenol	*32*		*18 - 120*	*06/05/13 14:10*	*06/07/13 21:47*	*1*
2,4,6-Tribromophenol	*93*		*39 - 146*	*06/05/13 14:10*	*06/07/13 21:47*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		1.0		ug/L		06/05/13 13:50	06/06/13 06:20	1
Chromium	**520**		30		ug/L		06/05/13 13:50	06/06/13 14:40	20
Copper	**160**		1.0		ug/L		06/05/13 13:50	06/06/13 06:20	1
Lead	**210**		1.0		ug/L		06/05/13 13:50	06/06/13 06:20	1
Zinc	**550**		10		ug/L		06/05/13 13:50	06/06/13 06:20	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:18	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:18	1
Copper	**2.1**		1.0		ug/L		06/05/13 13:50	06/05/13 23:18	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:18	1
Zinc	**13**		10		ug/L		06/05/13 13:50	06/05/13 23:18	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: DP13S-01I
Date Collected: 06/04/13 09:15
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10		ug/L			06/06/13 00:10	10
1,1,2,2-Tetrachloroethane	10	U	10		ug/L			06/06/13 00:10	10
1,1,2-Trichloroethane	10	U	10		ug/L			06/06/13 00:10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10		ug/L			06/06/13 00:10	10
1,1-Dichloroethane	10	U	10		ug/L			06/06/13 00:10	10
1,1-Dichloroethene	10	U	10		ug/L			06/06/13 00:10	10
1,2,4-Trichlorobenzene	10	U	10		ug/L			06/06/13 00:10	10
1,2-Dibromo-3-Chloropropane	10	U	10		ug/L			06/06/13 00:10	10
1,2-Dibromoethane	10	U	10		ug/L			06/06/13 00:10	10
1,2-Dichlorobenzene	10	U	10		ug/L			06/06/13 00:10	10
1,2-Dichloroethane	10	U	10		ug/L			06/06/13 00:10	10
1,2-Dichloropropane	10	U	10		ug/L			06/06/13 00:10	10
1,3-Dichlorobenzene	10	U	10		ug/L			06/06/13 00:10	10
1,4-Dichlorobenzene	10	U	10		ug/L			06/06/13 00:10	10
2-Hexanone	50	U	50		ug/L			06/06/13 00:10	10
2-Butanone (MEK)	100	U	100		ug/L			06/06/13 00:10	10
4-Methyl-2-pentanone (MIBK)	50	U	50		ug/L			06/06/13 00:10	10
Acetone	100	U	100		ug/L			06/06/13 00:10	10
Benzene	10	U	10		ug/L			06/06/13 00:10	10
Bromodichloromethane	10	U	10		ug/L			06/06/13 00:10	10
Bromoform	10	U	10		ug/L			06/06/13 00:10	10
Bromomethane	10	U	10		ug/L			06/06/13 00:10	10
Carbon disulfide	10	U	10		ug/L			06/06/13 00:10	10
Carbon tetrachloride	10	U	10		ug/L			06/06/13 00:10	10
Chlorobenzene	10	U	10		ug/L			06/06/13 00:10	10
Dibromochloromethane	10	U	10		ug/L			06/06/13 00:10	10
Chloroethane	10	U	10		ug/L			06/06/13 00:10	10
Chloroform	10	U	10		ug/L			06/06/13 00:10	10
Chloromethane	10	U	10		ug/L			06/06/13 00:10	10
cis-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 00:10	10
cis-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 00:10	10
Cyclohexane	10	U	10		ug/L			06/06/13 00:10	10
Dichlorodifluoromethane	10	U	10		ug/L			06/06/13 00:10	10
Ethylbenzene	10	U	10		ug/L			06/06/13 00:10	10
Isopropylbenzene	10	U	10		ug/L			06/06/13 00:10	10
Methyl acetate	10	U	10		ug/L			06/06/13 00:10	10
Methyl tert-butyl ether	10	U	10		ug/L			06/06/13 00:10	10
Methylcyclohexane	10	U	10		ug/L			06/06/13 00:10	10
Methylene Chloride	10	U	10		ug/L			06/06/13 00:10	10
Styrene	10	U	10		ug/L			06/06/13 00:10	10
Tetrachloroethene	10	U	10		ug/L			06/06/13 00:10	10
Toluene	10	U	10		ug/L			06/06/13 00:10	10
trans-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 00:10	10
trans-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 00:10	10
Trichloroethene	10	U	10		ug/L			06/06/13 00:10	10
Trichlorofluoromethane	10	U	10		ug/L			06/06/13 00:10	10
Vinyl chloride	10	U	10		ug/L			06/06/13 00:10	10
Xylenes, Total	20	U	20		ug/L			06/06/13 00:10	10

Client Sample ID: DP13S-01I
Date Collected: 06/04/13 09:15
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/06/13 00:10*	*10*
Toluene-d8 (Surr)	*102*		*71 - 126*		*06/06/13 00:10*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/06/13 00:10*	*10*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4-Dichlorophenol	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4-Dimethylphenol	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Chlorophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Methylnaphthalene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Methylphenol	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Nitroaniline	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
2-Nitrophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
3-Nitroaniline	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Chloroaniline	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Methylphenol	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Nitroaniline	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
4-Nitrophenol	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Acenaphthene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 22:14	1
Acetophenone	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Anthracene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzaldehyde	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 22:14	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 22:14	1
Caprolactam	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Carbazole	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Chrysene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: DP13S-01I
Date Collected: 06/04/13 09:15
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Diethyl phthalate	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Dimethyl phthalate	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Di-n-butyl phthalate	**5.3**		2.0		ug/L		06/05/13 14:10	06/07/13 22:14	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Fluoranthene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Fluorene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Hexachlorobenzene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Hexachlorobutadiene	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
Hexachlorocyclopentadiene	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
Hexachloroethane	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Isophorone	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
Naphthalene	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
Nitrobenzene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		06/05/13 14:10	06/07/13 22:14	1
Pentachlorophenol	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
Phenanthrene	**0.30**		0.20		ug/L		06/05/13 14:10	06/07/13 22:14	1
Phenol	0.99	U	0.99		ug/L		06/05/13 14:10	06/07/13 22:14	1
Pyrene	0.49	U	0.49		ug/L		06/05/13 14:10	06/07/13 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*64*		*34 - 132*	*06/05/13 14:10*	*06/07/13 22:14*	*1*
2-Fluorobiphenyl	*72*		*37 - 120*	*06/05/13 14:10*	*06/07/13 22:14*	*1*
p-Terphenyl-d14	*101*		*58 - 147*	*06/05/13 14:10*	*06/07/13 22:14*	*1*
Phenol-d5	*24*		*11 - 120*	*06/05/13 14:10*	*06/07/13 22:14*	*1*
2-Fluorophenol	*32*		*18 - 120*	*06/05/13 14:10*	*06/07/13 22:14*	*1*
2,4,6-Tribromophenol	*99*		*39 - 146*	*06/05/13 14:10*	*06/07/13 22:14*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.9**		1.0		ug/L		06/05/13 13:50	06/06/13 06:25	1
Chromium	**26**		7.5		ug/L		06/05/13 13:50	06/06/13 08:05	5
Copper	**9.4**		1.0		ug/L		06/05/13 13:50	06/06/13 06:25	1
Lead	**7.8**		1.0		ug/L		06/05/13 13:50	06/06/13 06:25	1
Zinc	**37**		10		ug/L		06/05/13 13:50	06/06/13 06:25	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:24	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:24	1
Copper	**1.7**		1.0		ug/L		06/05/13 13:50	06/05/13 23:24	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:24	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 23:24	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: FB-03-060413
Date Collected: 06/04/13 11:25
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
2-Hexanone	5.0	U	5.0		ug/L			06/06/13 00:33	1
2-Butanone (MEK)	10	U	10		ug/L			06/06/13 00:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/06/13 00:33	1
Acetone	**10**		10		ug/L			06/06/13 00:33	1
Benzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Bromoform	1.0	U	1.0		ug/L			06/06/13 00:33	1
Bromomethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Carbon disulfide	1.0	U	1.0		ug/L			06/06/13 00:33	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/06/13 00:33	1
Chlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Chloroethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Chloroform	1.0	U	1.0		ug/L			06/06/13 00:33	1
Chloromethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:33	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Cyclohexane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Ethylbenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Methyl acetate	1.0	U	1.0		ug/L			06/06/13 00:33	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/06/13 00:33	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Methylene Chloride	1.0	U	1.0		ug/L			06/06/13 00:33	1
Styrene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Toluene	1.0	U	1.0		ug/L			06/06/13 00:33	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:33	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Trichloroethene	1.0	U	1.0		ug/L			06/06/13 00:33	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/06/13 00:33	1
Vinyl chloride	1.0	U	1.0		ug/L			06/06/13 00:33	1
Xylenes, Total	2.0	U	2.0		ug/L			06/06/13 00:33	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: FB-03-060413
Date Collected: 06/04/13 11:25
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/06/13 00:33*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/06/13 00:33*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/06/13 00:33*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4-Dinitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Methylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Methylphenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Acenaphthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Acenaphthylene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 22:42	1
Acetophenone	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Atrazine	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzaldehyde	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/05/13 14:10	06/07/13 22:42	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/05/13 14:10	06/07/13 22:42	1
Caprolactam	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Carbazole	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Chrysene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: FB-03-060413
Date Collected: 06/04/13 11:25
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-6
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/05/13 14:10	06/07/13 22:42	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Fluoranthene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Fluorene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
Hexachloroethane	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Isophorone	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
Naphthalene	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
Nitrobenzene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/05/13 14:10	06/07/13 22:42	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
Phenanthrene	0.19	U	0.19		ug/L		06/05/13 14:10	06/07/13 22:42	1
Phenol	0.95	U	0.95		ug/L		06/05/13 14:10	06/07/13 22:42	1
Pyrene	0.48	U	0.48		ug/L		06/05/13 14:10	06/07/13 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*34 - 132*	*06/05/13 14:10*	*06/07/13 22:42*	*1*
2-Fluorobiphenyl	*65*		*37 - 120*	*06/05/13 14:10*	*06/07/13 22:42*	*1*
p-Terphenyl-d14	*112*		*58 - 147*	*06/05/13 14:10*	*06/07/13 22:42*	*1*
Phenol-d5	*20*		*11 - 120*	*06/05/13 14:10*	*06/07/13 22:42*	*1*
2-Fluorophenol	*28*		*18 - 120*	*06/05/13 14:10*	*06/07/13 22:42*	*1*
2,4,6-Tribromophenol	*69*		*39 - 146*	*06/05/13 14:10*	*06/07/13 22:42*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 06:31	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/06/13 06:31	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 06:31	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 06:31	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 06:31	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:29	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 23:29	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:29	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 23:29	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 23:29	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: TB-060413
Date Collected: 06/04/13 00:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/06/13 00:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/06/13 00:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/06/13 00:55	1
Acetone	10	U	10		ug/L			06/06/13 00:55	1
Benzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Bromoform	1.0	U	1.0		ug/L			06/06/13 00:55	1
Bromomethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/06/13 00:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/06/13 00:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Chloroethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Chloroform	1.0	U	1.0		ug/L			06/06/13 00:55	1
Chloromethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/06/13 00:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/06/13 00:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Methylene Chloride	**1.2**		1.0		ug/L			06/06/13 00:55	1
Styrene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Toluene	1.0	U	1.0		ug/L			06/06/13 00:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/06/13 00:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/06/13 00:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/06/13 00:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/06/13 00:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/06/13 00:55	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21845-2

Client Sample ID: TB-060413
Date Collected: 06/04/13 00:00
Date Received: 06/05/13 09:00

Lab Sample ID: 180-21845-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		06/06/13 00:55	1
Toluene-d8 (Surr)	100		71 - 126		06/06/13 00:55	1
4-Bromofluorobenzene (Surr)	99		73 - 120		06/06/13 00:55	1

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

Lab Sample ID: LB 480-122043/1-A LB
Matrix: Water
Analysis Batch: 122378

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

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2,2-Tetrachloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2-Trichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1-Dichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,1-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
1,2,4-Trichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dibromo-3-Chloropropane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dibromoethane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichloroethane	10	U	10		ug/L			06/06/13 02:49	10
1,2-Dichloropropane	10	U	10		ug/L			06/06/13 02:49	10
1,3-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
1,4-Dichlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
2-Hexanone	50	U	50		ug/L			06/06/13 02:49	10
2-Butanone (MEK)	100	U	100		ug/L			06/06/13 02:49	10
4-Methyl-2-pentanone (MIBK)	50	U	50		ug/L			06/06/13 02:49	10
Acetone	100	U	100		ug/L			06/06/13 02:49	10
Benzene	10	U	10		ug/L			06/06/13 02:49	10
Bromodichloromethane	10	U	10		ug/L			06/06/13 02:49	10
Bromoform	10	U	10		ug/L			06/06/13 02:49	10
Bromomethane	10	U	10		ug/L			06/06/13 02:49	10
Carbon disulfide	10	U	10		ug/L			06/06/13 02:49	10
Carbon tetrachloride	10	U	10		ug/L			06/06/13 02:49	10
Chlorobenzene	10	U	10		ug/L			06/06/13 02:49	10
Dibromochloromethane	10	U	10		ug/L			06/06/13 02:49	10
Chloroethane	10	U	10		ug/L			06/06/13 02:49	10
Chloroform	10	U	10		ug/L			06/06/13 02:49	10
Chloromethane	10	U	10		ug/L			06/06/13 02:49	10
cis-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
cis-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 02:49	10
Cyclohexane	10	U	10		ug/L			06/06/13 02:49	10
Dichlorodifluoromethane	10	U	10		ug/L			06/06/13 02:49	10
Ethylbenzene	10	U	10		ug/L			06/06/13 02:49	10
Isopropylbenzene	10	U	10		ug/L			06/06/13 02:49	10
Methyl acetate	10	U	10		ug/L			06/06/13 02:49	10
Methyl tert-butyl ether	10	U	10		ug/L			06/06/13 02:49	10
Methylcyclohexane	10	U	10		ug/L			06/06/13 02:49	10
Methylene Chloride	10	U	10		ug/L			06/06/13 02:49	10
Styrene	10	U	10		ug/L			06/06/13 02:49	10
Tetrachloroethene	10	U	10		ug/L			06/06/13 02:49	10
Toluene	10	U	10		ug/L			06/06/13 02:49	10
trans-1,2-Dichloroethene	10	U	10		ug/L			06/06/13 02:49	10
trans-1,3-Dichloropropene	10	U	10		ug/L			06/06/13 02:49	10
Trichloroethene	10	U	10		ug/L			06/06/13 02:49	10
Trichlorofluoromethane	10	U	10		ug/L			06/06/13 02:49	10
Vinyl chloride	10	U	10		ug/L			06/06/13 02:49	10
Xylenes, Total	20	U	20		ug/L			06/06/13 02:49	10

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

Lab Sample ID: LB 480-122043/1-A LB
Matrix: Water
Analysis Batch: 122378

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

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/06/13 02:49*	*10*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/06/13 02:49*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/06/13 02:49*	*10*

Lab Sample ID: MB 480-122378/5
Matrix: Water
Analysis Batch: 122378

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
2-Hexanone	5.0	U	5.0		ug/L			06/05/13 21:11	1
2-Butanone (MEK)	10	U	10		ug/L			06/05/13 21:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/05/13 21:11	1
Acetone	10	U	10		ug/L			06/05/13 21:11	1
Benzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromoform	1.0	U	1.0		ug/L			06/05/13 21:11	1
Bromomethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Carbon disulfide	1.0	U	1.0		ug/L			06/05/13 21:11	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chlorobenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloroethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloroform	1.0	U	1.0		ug/L			06/05/13 21:11	1
Chloromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Cyclohexane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Ethylbenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methyl acetate	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Methylene Chloride	1.0	U	1.0		ug/L			06/05/13 21:11	1

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

Lab Sample ID: MB 480-122378/5
Matrix: Water
Analysis Batch: 122378

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Toluene	1.0	U	1.0		ug/L			06/05/13 21:11	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Trichloroethene	1.0	U	1.0		ug/L			06/05/13 21:11	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/05/13 21:11	1
Vinyl chloride	1.0	U	1.0		ug/L			06/05/13 21:11	1
Xylenes, Total	2.0	U	2.0		ug/L			06/05/13 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*06/05/13 21:11*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*06/05/13 21:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/05/13 21:11*	*1*

Lab Sample ID: LCS 480-122378/4
Matrix: Water
Analysis Batch: 122378

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	28.7		ug/L		115	71 - 129
1,1-Dichloroethene	25.0	21.4		ug/L		86	58 - 121
1,2-Dichlorobenzene	25.0	25.9		ug/L		104	80 - 124
1,2-Dichloroethane	25.0	25.4		ug/L		102	75 - 127
Benzene	25.0	26.6		ug/L		107	71 - 124
Chlorobenzene	25.0	26.5		ug/L		106	72 - 120
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	24.7		ug/L		99	64 - 127
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	27.5		ug/L		110	73 - 127
Trichloroethene	25.0	26.8		ug/L		107	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Methylphenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acenaphthylene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Acetophenone	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Atrazine	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzaldehyde	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Caprolactam	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Carbazole	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Chrysene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dibenzofuran	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122296/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122802 | **Prep Batch: 122296**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Fluorene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Hexachloroethane	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Isophorone	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
Naphthalene	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Nitrobenzene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenanthrene	0.20	U	0.20		ug/L		06/05/13 14:10	06/07/13 15:53	1
Phenol	1.0	U	1.0		ug/L		06/05/13 14:10	06/07/13 15:53	1
Pyrene	0.50	U	0.50		ug/L		06/05/13 14:10	06/07/13 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorobiphenyl	*69*		*37 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
p-Terphenyl-d14	*90*		*58 - 147*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
Phenol-d5	*26*		*11 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2-Fluorophenol	*33*		*18 - 120*	*06/05/13 14:10*	*06/07/13 15:53*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*06/05/13 14:10*	*06/07/13 15:53*	*1*

Lab Sample ID: LCS 480-122296/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122802 | **Prep Batch: 122296**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.17		ug/L		90	22 - 167
2-Chlorophenol	8.00	5.29		ug/L		66	44 - 106
4-Chloro-3-methylphenol	8.00	6.80		ug/L		85	60 - 131
4-Nitrophenol	16.0	10.2		ug/L		64	10 - 105
Acenaphthene	8.00	6.35		ug/L		79	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	7.26		ug/L		91	69 - 136
Fluorene	8.00	6.57		ug/L		82	54 - 137
Hexachloroethane	8.00	5.18		ug/L		65	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.88		ug/L		86	50 - 123
Pentachlorophenol	16.0	12.5		ug/L		78	10 - 131
Phenol	8.00	2.52		ug/L		32	17 - 61
Pyrene	8.00	7.65		ug/L		96	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*78*		*37 - 120*
p-Terphenyl-d14	*91*		*58 - 147*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-122296/2-A
Matrix: Water
Analysis Batch: 122802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122296

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*32*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*96*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122276/1-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/06/13 05:02	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/06/13 05:02	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/06/13 05:02	1

Lab Sample ID: LCS 480-122276/2-A
Matrix: Water
Analysis Batch: 122516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.5		ug/L		103	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	19.8		ug/L		99	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Lab Sample ID: MB 480-121735/7-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Chromium	1.5	U	1.5		ug/L		06/05/13 13:50	06/05/13 21:36	1
Copper	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Lead	1.0	U	1.0		ug/L		06/05/13 13:50	06/05/13 21:36	1
Zinc	10	U	10		ug/L		06/05/13 13:50	06/05/13 21:36	1

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.3		ug/L		106	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	21.1		ug/L		105	80 - 120
Lead	20.0	21.0		ug/L		105	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-121735/8-B
Matrix: Water
Analysis Batch: 122514

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	50.0	53.5		ug/L		107	80 - 120

GC/MS VOA

Analysis Batch: 122378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	8260B	
180-21845-5	DP13S-01I	Total/NA	Water	8260B	
180-21845-6	FB-03-060413	Total/NA	Water	8260B	
180-21845-7	TB-060413	Total/NA	Water	8260B	
LB 480-122043/1-A LB	Method Blank	Total/NA	Water	8260B	
LCS 480-122378/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-122378/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	3510C	
180-21845-5	DP13S-01I	Total/NA	Water	3510C	
180-21845-6	FB-03-060413	Total/NA	Water	3510C	
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122296/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 122802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122296/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122296
MB 480-122296/1-A	Method Blank	Total/NA	Water	8270C LL	122296

Analysis Batch: 122870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	8270C LL	122296
180-21845-5	DP13S-01I	Total/NA	Water	8270C LL	122296
180-21845-6	FB-03-060413	Total/NA	Water	8270C LL	122296

Metals

Prep Batch: 122276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	3020A	
180-21845-5	DP13S-01I	Total/NA	Water	3020A	
180-21845-6	FB-03-060413	Total/NA	Water	3020A	
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122276/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Dissolved	Water	3020A	
180-21845-5	DP13S-01I	Dissolved	Water	3020A	
180-21845-6	FB-03-060413	Dissolved	Water	3020A	
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-121735/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Dissolved	Water	6020	122277

Metals (Continued)

Analysis Batch: 122514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-5	DP13S-01I	Dissolved	Water	6020	122277
180-21845-6	FB-03-060413	Dissolved	Water	6020	122277
LCS 480-121735/8-B	Lab Control Sample	Dissolved	Water	6020	122277
MB 480-121735/7-B	Method Blank	Dissolved	Water	6020	122277

Analysis Batch: 122516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	6020	122276
180-21845-5	DP13S-01I	Total/NA	Water	6020	122276
180-21845-5	DP13S-01I	Total/NA	Water	6020	122276
180-21845-6	FB-03-060413	Total/NA	Water	6020	122276
LCS 480-122276/2-A	Lab Control Sample	Total/NA	Water	6020	122276
MB 480-122276/1-A	Method Blank	Total/NA	Water	6020	122276

Analysis Batch: 122597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21845-4	DP13S-08I	Total/NA	Water	6020	122276

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key / FTS	Project Manager: Angie Gatchie	Date: 6/4/13	Chain of Custody Number: [illegible]373
Address: 200 Third Ave.	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number:	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: U. Bartolo		
Project Name and Location (State): South Cavalcade Tl Zone Delineation / Houston, TX	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260B (BTEX)	8270C LL (SVOCs)	6020 select metals (diss)	6020 select metals (total)	Special Instructions/ Conditions of Receipt
DP13S-10S	6/4/13	1730		X			2		2	3			3	2	1	1	Diss Metals are field filtered.
DP13S-99A	6/4/13	2000		X			2		2	3			3	2	1	1	
TB-060413	6/4/13	-		X						2			2				

RS 6/4/13

RS 6/4/13

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

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

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 6/4/13	Time: 1900	1. Received By: [signature]	Date: 6/5/13	Time: 0900
2. Relinquished By:	Date:	Time:	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: 2.8, 2.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gotchie	6/4/13	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Ten Third Ave.	412-428-9411	412-963-7058	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Carnegie / PA / 15106	M. Valesky	V. Bartab	
Project Name and Location (State)	**Carrier/Waybill Number**		
KBE-13665	Fed Ex		
Contract/Purchase Order/Quote No.			
South Canonsburg TI Zone Delineation			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260B (BTEX)	8270C (SVOC)	(Diss. Fe, Mn, Na, Ca, Mg, K)	(Diss. Alkalinity, Chloride, Sulfate)	Special Instructions/ Conditions of Receipt
DP135-08I	6/4/13	0930		X			2		2	3			3	2	1	1	Diss metals are field filtered. Turbidity rose while sampling DP135-08I.
DP135-01I	6/4/13	0915		X			2		2	3			3	2	1	1	
FB-03-060413	6/4/13	1125		X			2		2	3			3	2	1	1	
TB-060413	6/4/13	—		X						2			2				

RS 6/4/13

RS 6/4/13

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day TAT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/4/13	1900	1. Received By	6/5/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

7.8, 7.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21845-2

Login Number: 21845

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21845-2

Login Number: 21845
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/05/13 02:00 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0, 2.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21921-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/12/2013 5:26:27 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21921-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21921-1

Comments
No additional comments.

Receipt
The samples were received on 6/6/2013 3:03 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 123046 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 123046 was outside control limits.

Method(s) 8260B: Due to the high concentration of Ethylbenzene, the matrix spike / matrix spike duplicate (MS/MSD) for batch 123046 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: DP13S-C2I (180-21921-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13N-OSI (180-21921-1), DP13S-C2I (180-21921-3), DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The laboratory control sample (LCS) for batch 123101 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.These results have been reported and qualified.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). As such, spike recoveries were diluted out.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13N-OSI (180-21921-1), DP13S-C2I (180-21921-3), DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). As such, spike recoveries were diluted out.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The Serial Dilution (180-21921-3 SD) associated with batch 480-122760, exhibited results outside the quality control limits for dissolved zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): (180-21921-3 PDS), (180-21921-3 SD), DP13S-C2I (180-21921-3), DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD).

No other analytical or quality issues were noted.

Organic Prep

Job ID: 180-21921-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

Method(s) 3510C: The following samples formed emulsions during the extraction procedure: DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). The emulsions were broken up using the centrifuge.

No other analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits
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.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
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.
F	RPD of the MS and MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21921-1	DP13N-OSI	Water	06/05/13 08:20	06/06/13 15:03
180-21921-2	EB-060513	Water	06/05/13 09:35	06/06/13 15:03
180-21921-3	DP13S-C2I	Water	06/05/13 12:10	06/06/13 15:03
180-21921-4	TB-060513	Water	06/05/13 00:00	06/06/13 15:03

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: DP13N-OSI

Lab Sample ID: 180-21921-1

Date Collected: 06/05/13 08:20

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123046	06/10/13 15:33	RL	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1049.6 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL		100			123101	06/11/13 02:45	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C	DL		1049.6 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL	DL	1000			123293	06/11/13 16:57	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		1			122993	06/07/13 21:02	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	122760	06/07/13 11:20	JM	TAL BUF
Dissolved	Analysis	6020		1			123003	06/08/13 03:17	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: EB-060513

Lab Sample ID: 180-21921-2

Date Collected: 06/05/13 09:35

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123046	06/10/13 15:55	RL	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1048 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			123101	06/11/13 03:12	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		1			122993	06/07/13 21:08	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	122760	06/07/13 11:20	JM	TAL BUF
Dissolved	Analysis	6020		1			123003	06/08/13 03:23	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-C2I

Lab Sample ID: 180-21921-3

Date Collected: 06/05/13 12:10

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123046	06/10/13 16:16	RL	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Analysis	8260B	DL	4	5 mL	5 mL	123256	06/11/13 11:52	NQN	TAL BUF
	Instrument ID: HP5975D									
Total/NA	Prep	3510C			911.4 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL		100			123101	06/11/13 03:40	RMM	TAL BUF
	Instrument ID: HP5973Y									

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: DP13S-C2I

Lab Sample ID: 180-21921-3

Date Collected: 06/05/13 12:10

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C	DL		911.4 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL	DL	1000			123293	06/11/13 17:24	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		1			122993	06/07/13 21:14	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	122760	06/07/13 11:20	JM	TAL BUF
Dissolved	Analysis	6020		1			123003	06/08/13 03:28	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		5			123131	06/08/13 23:45	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060513

Lab Sample ID: 180-21921-4

Date Collected: 06/05/13 00:00

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123046	06/10/13 17:21	RL	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RL = Renee Larson

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: DP13N-OSI
Date Collected: 06/05/13 08:20
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:33	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:33	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 15:33	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 15:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 15:33	1
Acetone	10	U	10		ug/L			06/10/13 15:33	1
Benzene	**1.0**		1.0		ug/L			06/10/13 15:33	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 15:33	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 15:33	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 15:33	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 15:33	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:33	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Ethylbenzene	**23**		1.0		ug/L			06/10/13 15:33	1
Isopropylbenzene	**3.2**		1.0		ug/L			06/10/13 15:33	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 15:33	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 15:33	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 15:33	1
Styrene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Toluene	**1.2**		1.0		ug/L			06/10/13 15:33	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:33	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 15:33	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 15:33	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 15:33	1
Xylenes, Total	**17**		2.0		ug/L			06/10/13 15:33	1

Client Sample ID: DP13N-OSI
Date Collected: 06/05/13 08:20
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/10/13 15:33*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/10/13 15:33*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/10/13 15:33*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
bis (2-chloroisopropyl) ether	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4,5-Trichlorophenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4,6-Trichlorophenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4-Dichlorophenol	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4-Dimethylphenol	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4-Dinitrophenol	480	U *	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,4-Dinitrotoluene	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2,6-Dinitrotoluene	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Chloronaphthalene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Chlorophenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Methylnaphthalene	**200**		48		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Methylphenol	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Nitroaniline	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
2-Nitrophenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
3,3'-Dichlorobenzidine	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
3-Nitroaniline	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4,6-Dinitro-2-methylphenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Bromophenyl phenyl ether	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Chloro-3-methylphenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Chloroaniline	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Chlorophenyl phenyl ether	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Methylphenol	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Nitroaniline	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
4-Nitrophenol	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Acenaphthene	**260**		48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Acenaphthylene	29	U	29		ug/L		06/07/13 13:45	06/11/13 02:45	100
Acetophenone	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Anthracene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Atrazine	190	U	190		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzaldehyde	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzo(a)anthracene	29	U	29		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzo(a)pyrene	17	U	17		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzo(b)fluoranthene	29	U	29		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzo(g,h,i)perylene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Benzo(k)fluoranthene	29	U	29		ug/L		06/07/13 13:45	06/11/13 02:45	100
Bis(2-chloroethoxy)methane	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Bis(2-chloroethyl)ether	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Bis(2-ethylhexyl) phthalate	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Butyl benzyl phthalate	290	U	290		ug/L		06/07/13 13:45	06/11/13 02:45	100
Caprolactam	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Carbazole	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Chrysene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Dibenz(a,h)anthracene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: DP13N-OSI
Date Collected: 06/05/13 08:20
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Diethyl phthalate	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Dimethyl phthalate	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Di-n-butyl phthalate	190	U	190		ug/L		06/07/13 13:45	06/11/13 02:45	100
Di-n-octyl phthalate	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Fluoranthene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Fluorene	**91**		48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Hexachlorobenzene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Hexachlorobutadiene	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
Hexachlorocyclopentadiene	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
Hexachloroethane	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Indeno(1,2,3-cd)pyrene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Isophorone	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
Nitrobenzene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100
N-Nitrosodi-n-propylamine	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
N-Nitrosodiphenylamine	480	U	480		ug/L		06/07/13 13:45	06/11/13 02:45	100
Pentachlorophenol	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
Phenanthrene	**190**		19		ug/L		06/07/13 13:45	06/11/13 02:45	100
Phenol	95	U	95		ug/L		06/07/13 13:45	06/11/13 02:45	100
Pyrene	48	U	48		ug/L		06/07/13 13:45	06/11/13 02:45	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*34 - 132*	*06/07/13 13:45*	*06/11/13 02:45*	*100*
2-Fluorobiphenyl	*81*		*37 - 120*	*06/07/13 13:45*	*06/11/13 02:45*	*100*
p-Terphenyl-d14	*116*		*58 - 147*	*06/07/13 13:45*	*06/11/13 02:45*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*06/07/13 13:45*	*06/11/13 02:45*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/07/13 13:45*	*06/11/13 02:45*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/07/13 13:45*	*06/11/13 02:45*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**4600**		950		ug/L		06/07/13 13:45	06/11/13 16:57	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/07/13 13:45*	*06/11/13 16:57*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0		ug/L		06/07/13 11:20	06/07/13 21:02	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/07/13 21:02	1
Copper	**1.1**		1.0		ug/L		06/07/13 11:20	06/07/13 21:02	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 21:02	1
Zinc	**13**		10		ug/L		06/07/13 11:20	06/07/13 21:02	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: DP13N-OSI

Lab Sample ID: 180-21921-1

Date Collected: 06/05/13 08:20

Matrix: Water

Date Received: 06/06/13 15:03

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.1**		1.0		ug/L		06/07/13 11:20	06/08/13 03:17	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 03:17	1
Copper	**1.1**		1.0		ug/L		06/07/13 11:20	06/08/13 03:17	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:17	1
Zinc	**12**		10		ug/L		06/07/13 11:20	06/08/13 03:17	1

Client Sample ID: EB-060513

Lab Sample ID: 180-21921-2

Date Collected: 06/05/13 09:35

Matrix: Water

Date Received: 06/06/13 15:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 15:55	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 15:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 15:55	1
Acetone	10	U	10		ug/L			06/10/13 15:55	1
Benzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 15:55	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 15:55	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 15:55	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 15:55	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:55	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 15:55	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 15:55	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 15:55	1

Client Sample ID: EB-060513
Date Collected: 06/05/13 09:35
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 15:55	1
Styrene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Toluene	1.0	U	1.0		ug/L			06/10/13 15:55	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 15:55	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 15:55	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 15:55	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 15:55	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/10/13 15:55*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*06/10/13 15:55*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/10/13 15:55*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Methylphenol	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Methylphenol	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Acenaphthene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Acenaphthylene	0.29	U	0.29		ug/L		06/07/13 13:45	06/11/13 03:12	1
Acetophenone	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Anthracene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Atrazine	1.9	U	1.9		ug/L		06/07/13 13:45	06/11/13 03:12	1
Benzaldehyde	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/07/13 13:45	06/11/13 03:12	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: EB-060513
Date Collected: 06/05/13 09:35
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/07/13 13:45	06/11/13 03:12	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/07/13 13:45	06/11/13 03:12	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/07/13 13:45	06/11/13 03:12	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/07/13 13:45	06/11/13 03:12	1
Caprolactam	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Carbazole	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Chrysene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Dibenzofuran	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/07/13 13:45	06/11/13 03:12	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Fluoranthene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Fluorene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
Hexachloroethane	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Isophorone	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
Naphthalene	**3.3**		0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
Nitrobenzene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/07/13 13:45	06/11/13 03:12	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
Phenanthrene	0.19	U	0.19		ug/L		06/07/13 13:45	06/11/13 03:12	1
Phenol	0.95	U	0.95		ug/L		06/07/13 13:45	06/11/13 03:12	1
Pyrene	0.48	U	0.48		ug/L		06/07/13 13:45	06/11/13 03:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*34 - 132*	*06/07/13 13:45*	*06/11/13 03:12*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*06/07/13 13:45*	*06/11/13 03:12*	*1*
p-Terphenyl-d14	*106*		*58 - 147*	*06/07/13 13:45*	*06/11/13 03:12*	*1*
Phenol-d5	*23*		*11 - 120*	*06/07/13 13:45*	*06/11/13 03:12*	*1*
2-Fluorophenol	*30*		*18 - 120*	*06/07/13 13:45*	*06/11/13 03:12*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*06/07/13 13:45*	*06/11/13 03:12*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 21:08	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/07/13 21:08	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 21:08	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 21:08	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/07/13 21:08	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: EB-060513

Lab Sample ID: 180-21921-2

Date Collected: 06/05/13 09:35

Matrix: Water

Date Received: 06/06/13 15:03

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:23	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 03:23	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:23	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:23	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/08/13 03:23	1

Client Sample ID: DP13S-C2I

Lab Sample ID: 180-21921-3

Date Collected: 06/05/13 12:10

Matrix: Water

Date Received: 06/06/13 15:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 16:16	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 16:16	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 16:16	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 16:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 16:16	1
Acetone	10	U	10		ug/L			06/10/13 16:16	1
Benzene	**12**		1.0		ug/L			06/10/13 16:16	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 16:16	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 16:16	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 16:16	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 16:16	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 16:16	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Isopropylbenzene	**14**		1.0		ug/L			06/10/13 16:16	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 16:16	1
Methyl tert-butyl ether	**1.5**		1.0		ug/L			06/10/13 16:16	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 16:16	1

Client Sample ID: DP13S-C2I
Date Collected: 06/05/13 12:10
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Toluene	**39**		1.0		ug/L			06/10/13 16:16	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 16:16	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 16:16	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 16:16	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 16:16	1
Xylenes, Total	**270**		2.0		ug/L			06/10/13 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*06/10/13 16:16*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/10/13 16:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/10/13 16:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**170**		4.0		ug/L			06/11/13 11:52	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/11/13 11:52*	*4*
Toluene-d8 (Surr)	*95*		*71 - 126*		*06/11/13 11:52*	*4*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/11/13 11:52*	*4*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
bis (2-chloroisopropyl) ether	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4,5-Trichlorophenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4,6-Trichlorophenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4-Dichlorophenol	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4-Dimethylphenol	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4-Dinitrophenol	550	U *	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,4-Dinitrotoluene	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2,6-Dinitrotoluene	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Chloronaphthalene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Chlorophenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Methylnaphthalene	**720**		55		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Methylphenol	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Nitroaniline	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
2-Nitrophenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
3,3'-Dichlorobenzidine	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
3-Nitroaniline	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4,6-Dinitro-2-methylphenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Bromophenyl phenyl ether	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Chloro-3-methylphenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Chloroaniline	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Chlorophenyl phenyl ether	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Methylphenol	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
4-Nitroaniline	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100

Client Sample ID: DP13S-C2I
Date Collected: 06/05/13 12:10
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Acenaphthene	**360**		55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Acenaphthylene	33	U	33		ug/L		06/07/13 13:45	06/11/13 03:40	100
Acetophenone	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Anthracene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Atrazine	220	U	220		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzaldehyde	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzo(a)anthracene	33	U	33		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzo(a)pyrene	20	U	20		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzo(b)fluoranthene	33	U	33		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzo(g,h,i)perylene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Benzo(k)fluoranthene	33	U	33		ug/L		06/07/13 13:45	06/11/13 03:40	100
Bis(2-chloroethoxy)methane	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Bis(2-chloroethyl)ether	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Bis(2-ethylhexyl) phthalate	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Butyl benzyl phthalate	330	U	330		ug/L		06/07/13 13:45	06/11/13 03:40	100
Caprolactam	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Carbazole	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Chrysene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Dibenz(a,h)anthracene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Dibenzofuran	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Diethyl phthalate	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Dimethyl phthalate	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Di-n-butyl phthalate	220	U	220		ug/L		06/07/13 13:45	06/11/13 03:40	100
Di-n-octyl phthalate	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Fluoranthene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Fluorene	**140**		55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Hexachlorobenzene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Hexachlorobutadiene	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
Hexachlorocyclopentadiene	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
Hexachloroethane	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Indeno(1,2,3-cd)pyrene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Isophorone	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
Nitrobenzene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100
N-Nitrosodi-n-propylamine	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
N-Nitrosodiphenylamine	550	U	550		ug/L		06/07/13 13:45	06/11/13 03:40	100
Pentachlorophenol	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
Phenanthrene	**210**		22		ug/L		06/07/13 13:45	06/11/13 03:40	100
Phenol	110	U	110		ug/L		06/07/13 13:45	06/11/13 03:40	100
Pyrene	55	U	55		ug/L		06/07/13 13:45	06/11/13 03:40	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/07/13 13:45*	*06/11/13 03:40*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/07/13 13:45*	*06/11/13 03:40*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/07/13 13:45*	*06/11/13 03:40*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*06/07/13 13:45*	*06/11/13 03:40*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/07/13 13:45*	*06/11/13 03:40*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/07/13 13:45*	*06/11/13 03:40*	*100*

Client Sample ID: DP13S-C2I

Lab Sample ID: 180-21921-3

Date Collected: 06/05/13 12:10

Matrix: Water

Date Received: 06/06/13 15:03

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	12000		1100		ug/L		06/07/13 13:45	06/11/13 17:24	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/07/13 13:45*	*06/11/13 17:24*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	21		1.0		ug/L		06/07/13 11:20	06/07/13 21:14	1
Chromium	210		7.5		ug/L		06/07/13 11:20	06/08/13 23:45	5
Copper	72		1.0		ug/L		06/07/13 11:20	06/07/13 21:14	1
Lead	51		1.0		ug/L		06/07/13 11:20	06/07/13 21:14	1
Zinc	350		10		ug/L		06/07/13 11:20	06/07/13 21:14	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		1.0		ug/L		06/07/13 11:20	06/08/13 03:28	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 03:28	1
Copper	1.1		1.0		ug/L		06/07/13 11:20	06/08/13 03:28	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:28	1
Zinc	28		10		ug/L		06/07/13 11:20	06/08/13 03:28	1

Client Sample ID: TB-060513

Lab Sample ID: 180-21921-4

Date Collected: 06/05/13 00:00

Matrix: Water

Date Received: 06/06/13 15:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 17:21	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 17:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 17:21	1
Acetone	10	U	10		ug/L			06/10/13 17:21	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-1

Client Sample ID: TB-060513
Date Collected: 06/05/13 00:00
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 17:21	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 17:21	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 17:21	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 17:21	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 17:21	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 17:21	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 17:21	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Methylene Chloride	**4.0**		1.0		ug/L			06/10/13 17:21	1
Styrene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Toluene	1.0	U	1.0		ug/L			06/10/13 17:21	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 17:21	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 17:21	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 17:21	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 17:21	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*06/10/13 17:21*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*06/10/13 17:21*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/10/13 17:21*	*1*

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

Lab Sample ID: MB 480-123046/6
Matrix: Water
Analysis Batch: 123046

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 10:57	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 10:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 10:57	1
Acetone	10	U	10		ug/L			06/10/13 10:57	1
Benzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 10:57	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Styrene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Toluene	1.0	U	1.0		ug/L			06/10/13 10:57	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 10:57	1

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

Lab Sample ID: MB 480-123046/6
Matrix: Water
Analysis Batch: 123046

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		06/10/13 10:57	1
Toluene-d8 (Surr)	98		71 - 126		06/10/13 10:57	1
4-Bromofluorobenzene (Surr)	97		73 - 120		06/10/13 10:57	1

Lab Sample ID: LCS 480-123046/5
Matrix: Water
Analysis Batch: 123046

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.5		ug/L		106	71 - 129
1,1-Dichloroethene	25.0	25.6		ug/L		102	58 - 121
1,2-Dichlorobenzene	25.0	27.2		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 127
Benzene	25.0	26.0		ug/L		104	71 - 124
Chlorobenzene	25.0	26.6		ug/L		107	72 - 120
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	74 - 124
Ethylbenzene	25.0	26.9		ug/L		108	77 - 123
Methyl tert-butyl ether	25.0	25.6		ug/L		103	64 - 127
Tetrachloroethene	25.0	26.9		ug/L		108	74 - 122
Toluene	25.0	26.5		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	73 - 127
Trichloroethene	25.0	26.5		ug/L		106	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
Toluene-d8 (Surr)	101		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 123046

Client Sample ID: DP13S-C2I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.0	U	25.0	30.2		ug/L		121	71 - 129
1,1-Dichloroethene	1.0	U	25.0	32.4	F	ug/L		130	58 - 121
1,2-Dichlorobenzene	1.0	U	25.0	29.8		ug/L		119	80 - 124
1,2-Dichloroethane	1.0	U	25.0	30.0		ug/L		120	75 - 127
Benzene	12		25.0	42.7		ug/L		121	71 - 124
Chlorobenzene	1.0	U	25.0	30.3	F	ug/L		121	72 - 120
cis-1,2-Dichloroethene	1.0	U	25.0	31.5	F	ug/L		126	74 - 124
Ethylbenzene	170		25.0	197	E 4	ug/L		115	77 - 123
Methyl tert-butyl ether	1.5		25.0	28.3		ug/L		108	64 - 127
Tetrachloroethene	1.0	U	25.0	31.4	F	ug/L		126	74 - 122
Toluene	39		25.0	68.2		ug/L		116	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	32.3	F	ug/L		129	73 - 127
Trichloroethene	1.0	U	25.0	31.2	F	ug/L		125	74 - 123

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

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 123046

Client Sample ID: DP13S-C2I
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*100*		*71 - 126*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*

Lab Sample ID: 180-21921-3 MSD
Matrix: Water
Analysis Batch: 123046

Client Sample ID: DP13S-C2I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	1.0	U	25.0	31.2		ug/L		125	71 - 129	3	20
1,1-Dichloroethene	1.0	U	25.0	32.8	F	ug/L		131	58 - 121	1	16
1,2-Dichlorobenzene	1.0	U	25.0	30.0		ug/L		120	80 - 124	1	20
1,2-Dichloroethane	1.0	U	25.0	29.8		ug/L		119	75 - 127	1	20
Benzene	12		25.0	43.0		ug/L		122	71 - 124	1	13
Chlorobenzene	1.0	U	25.0	30.9	F	ug/L		124	72 - 120	2	25
cis-1,2-Dichloroethene	1.0	U	25.0	31.6	F	ug/L		126	74 - 124	0	15
Ethylbenzene	170		25.0	199	E 4	ug/L		124	77 - 123	1	15
Methyl tert-butyl ether	1.5		25.0	29.2		ug/L		111	64 - 127	3	37
Tetrachloroethene	1.0	U	25.0	31.9	F	ug/L		128	74 - 122	2	20
Toluene	39		25.0	69.9	F	ug/L		123	80 - 122	3	15
trans-1,2-Dichloroethene	1.0	U	25.0	32.4	F	ug/L		130	73 - 127	0	20
Trichloroethene	1.0	U	25.0	31.7	F	ug/L		127	74 - 123	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
Toluene-d8 (Surr)	*99*		*71 - 126*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*

Lab Sample ID: MB 480-123256/6
Matrix: Water
Analysis Batch: 123256

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
2-Hexanone	5.0	U	5.0		ug/L			06/11/13 11:13	1

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

Lab Sample ID: MB 480-123256/6
Matrix: Water
Analysis Batch: 123256

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10		ug/L			06/11/13 11:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/11/13 11:13	1
Acetone	10	U	10		ug/L			06/11/13 11:13	1
Benzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Bromoform	1.0	U	1.0		ug/L			06/11/13 11:13	1
Bromomethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Carbon disulfide	1.0	U	1.0		ug/L			06/11/13 11:13	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/11/13 11:13	1
Chlorobenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Chloroethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Chloroform	1.0	U	1.0		ug/L			06/11/13 11:13	1
Chloromethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/11/13 11:13	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Cyclohexane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Ethylbenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Methyl acetate	1.0	U	1.0		ug/L			06/11/13 11:13	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/11/13 11:13	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Methylene Chloride	1.0	U	1.0		ug/L			06/11/13 11:13	1
Styrene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Toluene	1.0	U	1.0		ug/L			06/11/13 11:13	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/11/13 11:13	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Trichloroethene	1.0	U	1.0		ug/L			06/11/13 11:13	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/11/13 11:13	1
Vinyl chloride	1.0	U	1.0		ug/L			06/11/13 11:13	1
Xylenes, Total	2.0	U	2.0		ug/L			06/11/13 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*06/11/13 11:13*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*06/11/13 11:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/11/13 11:13*	*1*

Lab Sample ID: LCS 480-123256/5
Matrix: Water
Analysis Batch: 123256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	21.3		ug/L		85	71 - 129
1,1-Dichloroethene	25.0	18.7		ug/L		75	58 - 121
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	21.6		ug/L		86	75 - 127

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

Lab Sample ID: LCS 480-123256/5
Matrix: Water
Analysis Batch: 123256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.4		ug/L		90	71 - 124
Chlorobenzene	25.0	22.7		ug/L		91	72 - 120
cis-1,2-Dichloroethene	25.0	21.4		ug/L		86	74 - 124
Ethylbenzene	25.0	22.8		ug/L		91	77 - 123
Methyl tert-butyl ether	25.0	21.1		ug/L		85	64 - 127
Tetrachloroethene	25.0	23.2		ug/L		93	74 - 122
Toluene	25.0	22.6		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	73 - 127
Trichloroethene	25.0	21.9		ug/L		88	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*
Toluene-d8 (Surr)	*96*		*71 - 126*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122808/1-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Methylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Methylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Acenaphthene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122808/1-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Acetophenone	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Anthracene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Atrazine	2.0	U	2.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzaldehyde	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Caprolactam	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Carbazole	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Chrysene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dibenzofuran	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Fluoranthene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Fluorene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachloroethane	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Isophorone	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Naphthalene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Nitrobenzene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Phenanthrene	0.20	U	0.20		ug/L		06/07/13 13:45	06/11/13 00:55	1
Phenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Pyrene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*34 - 132*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
p-Terphenyl-d14	*114*		*58 - 147*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
Phenol-d5	*26*		*11 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2-Fluorophenol	*36*		*18 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*06/07/13 13:45*	*06/11/13 00:55*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-122808/2-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.77		ug/L		97	22 - 167
2-Chlorophenol	8.00	5.50		ug/L		69	44 - 106
4-Chloro-3-methylphenol	8.00	6.81		ug/L		85	60 - 131
4-Nitrophenol	16.0	6.78		ug/L		42	10 - 105
Acenaphthene	8.00	6.94		ug/L		87	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.86		ug/L		111	69 - 136
Fluorene	8.00	7.07		ug/L		88	54 - 137
Hexachloroethane	8.00	5.29		ug/L		66	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.46		ug/L		81	50 - 123
Pentachlorophenol	16.0	12.2		ug/L		76	10 - 131
Phenol	8.00	2.54		ug/L		32	17 - 61
Pyrene	8.00	9.77		ug/L		122	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*87*		*37 - 120*
p-Terphenyl-d14	*123*		*58 - 147*
Phenol-d5	*29*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*101*		*39 - 146*

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 123101

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	550	U	7.73	480	U F	ug/L		65	70 - 130
2-Chlorophenol	550	U	7.73	480	U F	ug/L		0	70 - 130
4-Chloro-3-methylphenol	550	U	7.73	480	U F	ug/L		0	70 - 130
4-Nitrophenol	550	U	15.5	480	U	ug/L		NC	70 - 130
Acenaphthene	360		7.73	431	4	ug/L		870	35 - 143
Bis(2-ethylhexyl) phthalate	550	U	7.73	480	U	ug/L		NC	69 - 136
Fluorene	140		7.73	186	4	ug/L		537	54 - 137
Hexachloroethane	550	U	7.73	480	U	ug/L		NC	70 - 130
N-Nitrosodi-n-propylamine	550	U	7.73	480	U F	ug/L		0	70 - 130
Pentachlorophenol	110	U	15.5	97	U	ug/L		NC	18 - 131
Phenol	110	U	7.73	97	U	ug/L		NC	7 - 120
Pyrene	55	U	7.73	91.6	F	ug/L		991	85 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*0*	*X*	*34 - 132*
2-Fluorobiphenyl	*71*		*37 - 120*
p-Terphenyl-d14	*91*		*58 - 147*
Phenol-d5	*0*	*X*	*11 - 120*
2-Fluorophenol	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol	*67*		*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 180-21921-3 MSD
Matrix: Water
Analysis Batch: 123101

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	550	U	7.78	490	U F	ug/L		82	70 - 130	24	20
2-Chlorophenol	550	U	7.78	490	U F	ug/L		0	70 - 130	NC	20
4-Chloro-3-methylphenol	550	U	7.78	490	U F	ug/L		0	70 - 130	NC	20
4-Nitrophenol	550	U	15.6	490	U	ug/L		NC	70 - 130	NC	20
Acenaphthene	360		7.78	375	4	ug/L		143	35 - 143	14	24
Bis(2-ethylhexyl) phthalate	550	U	7.78	490	U	ug/L		NC	69 - 136	NC	15
Fluorene	140		7.78	159	4 F	ug/L		180	54 - 137	16	15
Hexachloroethane	550	U	7.78	490	U F	ug/L		NC	70 - 130	34	20
N-Nitrosodi-n-propylamine	550	U	7.78	490	U F	ug/L		0	70 - 130	NC	20
Pentachlorophenol	110	U	15.6	97	U	ug/L		NC	18 - 131	NC	37
Phenol	110	U	7.78	97	U	ug/L		NC	7 - 120	NC	34
Pyrene	55	U	7.78	76.3	F	ug/L		788	85 - 139	18	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*50*		*34 - 132*
2-Fluorobiphenyl	*53*		*37 - 120*
p-Terphenyl-d14	*65*		*58 - 147*
Phenol-d5	*0*	*X*	*11 - 120*
2-Fluorophenol	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol	*61*		*39 - 146*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 123293

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122808

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*0*	*X*	*34 - 132*
2-Fluorobiphenyl - DL	*0*	*X*	*37 - 120*
p-Terphenyl-d14 - DL	*0*	*X*	*58 - 147*
Phenol-d5 - DL	*0*	*X*	*11 - 120*
2-Fluorophenol - DL	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol - DL	*0*	*X*	*39 - 146*

Lab Sample ID: 180-21921-3 MSD
Matrix: Water
Analysis Batch: 123293

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122808

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*0*	*X*	*34 - 132*
2-Fluorobiphenyl - DL	*0*	*X*	*37 - 120*
p-Terphenyl-d14 - DL	*0*	*X*	*58 - 147*
Phenol-d5 - DL	*0*	*X*	*11 - 120*
2-Fluorophenol - DL	*0*	*X*	*18 - 120*
2,4,6-Tribromophenol - DL	*0*	*X*	*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122757/1-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/07/13 19:42	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/07/13 19:42	1

Lab Sample ID: LCS 480-122757/2-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.7		ug/L		104	80 - 120
Chromium	20.0	21.0		ug/L		105	80 - 120
Copper	20.0	21.1		ug/L		106	80 - 120
Lead	20.0	20.4		ug/L		102	80 - 120
Zinc	50.0	53.4		ug/L		107	80 - 120

Lab Sample ID: LCSD 480-122757/3-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	20.0	20.9		ug/L		105	80 - 120	1	20
Chromium	20.0	21.0		ug/L		105	80 - 120	0	20
Copper	20.0	21.4		ug/L		107	80 - 120	1	20
Lead	20.0	20.6		ug/L		103	80 - 120	1	20
Zinc	50.0	54.2		ug/L		108	80 - 120	1	20

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 122993

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	21		20.0	36.8		ug/L		79	75 - 125
Copper	72		20.0	87.2		ug/L		78	75 - 125
Lead	51		20.0	69.1		ug/L		89	75 - 125
Zinc	350		50.0	397	4	ug/L		95	75 - 125

Lab Sample ID: 180-21921-3 MS
Matrix: Water
Analysis Batch: 123131

Client Sample ID: DP13S-C2I
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	210		20.0	238	4	ug/L		141	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21921-3 MSD | **Client Sample ID: DP13S-C2I**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 122993 | **Prep Batch: 122757**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	21		20.0	36.0		ug/L		75	75 - 125	2	20
Copper	72		20.0	89.1		ug/L		88	75 - 125	2	20
Lead	51		20.0	69.4		ug/L		91	75 - 125	0	20
Zinc	350		50.0	400	4	ug/L		101	75 - 125	1	20

Lab Sample ID: 180-21921-3 MSD | **Client Sample ID: DP13S-C2I**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 123131 | **Prep Batch: 122757**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	210		20.0	215	4	ug/L		27	75 - 125	10	20

Lab Sample ID: MB 480-122587/7-B | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Dissolved**
Analysis Batch: 123003 | **Prep Batch: 122760**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 03:06	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/08/13 03:06	1

Lab Sample ID: LCS 480-122587/8-B | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Dissolved**
Analysis Batch: 123003 | **Prep Batch: 122760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.9		ug/L		104	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.8		ug/L		104	80 - 120
Lead	20.0	20.2		ug/L		101	80 - 120
Zinc	50.0	51.8		ug/L		104	80 - 120

Lab Sample ID: 180-21921-3 MS | **Client Sample ID: DP13S-C2I**
Matrix: Water | **Prep Type: Dissolved**
Analysis Batch: 123003 | **Prep Batch: 122760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	22		20.0	42.6		ug/L		102	75 - 125
Chromium	1.5	U	20.0	18.4		ug/L		92	75 - 125
Copper	1.1		20.0	20.1		ug/L		95	75 - 125
Lead	1.0	U	20.0	19.7		ug/L		98	75 - 125
Zinc	28		50.0	76.0		ug/L		96	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-21921-3 MSD
Matrix: Water
Analysis Batch: 123003

Client Sample ID: DP13S-C2I
Prep Type: Dissolved
Prep Batch: 122760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	22		20.0	43.7		ug/L		107	75 - 125	2	20
Chromium	1.5	U	20.0	18.5		ug/L		92	75 - 125	1	20
Copper	1.1		20.0	20.3		ug/L		96	75 - 125	1	20
Lead	1.0	U	20.0	19.9		ug/L		99	75 - 125	1	20
Zinc	28		50.0	77.0		ug/L		98	75 - 125	1	20

GC/MS VOA

Analysis Batch: 123046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Total/NA	Water	8260B	
180-21921-2	EB-060513	Total/NA	Water	8260B	
180-21921-3	DP13S-C2I	Total/NA	Water	8260B	
180-21921-3 MS	DP13S-C2I	Total/NA	Water	8260B	
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	8260B	
180-21921-4	TB-060513	Total/NA	Water	8260B	
LCS 480-123046/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123046/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 123256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-3 - DL	DP13S-C2I	Total/NA	Water	8260B	
LCS 480-123256/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123256/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Total/NA	Water	3510C	
180-21921-1 - DL	DP13N-OSI	Total/NA	Water	3510C	
180-21921-2	EB-060513	Total/NA	Water	3510C	
180-21921-3	DP13S-C2I	Total/NA	Water	3510C	
180-21921-3 - DL	DP13S-C2I	Total/NA	Water	3510C	
180-21921-3 MS	DP13S-C2I	Total/NA	Water	3510C	
180-21921-3 MS - DL	DP13S-C2I	Total/NA	Water	3510C	
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	3510C	
180-21921-3 MSD - DL	DP13S-C2I	Total/NA	Water	3510C	
LCS 480-122808/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122808/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Total/NA	Water	8270C LL	122808
180-21921-2	EB-060513	Total/NA	Water	8270C LL	122808
180-21921-3	DP13S-C2I	Total/NA	Water	8270C LL	122808
180-21921-3 MS	DP13S-C2I	Total/NA	Water	8270C LL	122808
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	8270C LL	122808
LCS 480-122808/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122808
MB 480-122808/1-A	Method Blank	Total/NA	Water	8270C LL	122808

Analysis Batch: 123293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1 - DL	DP13N-OSI	Total/NA	Water	8270C LL	122808
180-21921-3 - DL	DP13S-C2I	Total/NA	Water	8270C LL	122808
180-21921-3 MS - DL	DP13S-C2I	Total/NA	Water	8270C LL	122808
180-21921-3 MSD - DL	DP13S-C2I	Total/NA	Water	8270C LL	122808

Metals

Prep Batch: 122757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Total/NA	Water	3020A	
180-21921-2	EB-060513	Total/NA	Water	3020A	
180-21921-3	DP13S-C2I	Total/NA	Water	3020A	
180-21921-3 MS	DP13S-C2I	Total/NA	Water	3020A	
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	3020A	
LCS 480-122757/2-A	Lab Control Sample	Total/NA	Water	3020A	
LCSD 480-122757/3-A	Lab Control Sample Dup	Total/NA	Water	3020A	
MB 480-122757/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Dissolved	Water	3020A	
180-21921-2	EB-060513	Dissolved	Water	3020A	
180-21921-3	DP13S-C2I	Dissolved	Water	3020A	
180-21921-3 MS	DP13S-C2I	Dissolved	Water	3020A	
180-21921-3 MSD	DP13S-C2I	Dissolved	Water	3020A	
LCS 480-122587/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-122587/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Total/NA	Water	6020	122757
180-21921-2	EB-060513	Total/NA	Water	6020	122757
180-21921-3	DP13S-C2I	Total/NA	Water	6020	122757
180-21921-3 MS	DP13S-C2I	Total/NA	Water	6020	122757
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	6020	122757
LCS 480-122757/2-A	Lab Control Sample	Total/NA	Water	6020	122757
LCSD 480-122757/3-A	Lab Control Sample Dup	Total/NA	Water	6020	122757
MB 480-122757/1-A	Method Blank	Total/NA	Water	6020	122757

Analysis Batch: 123003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-1	DP13N-OSI	Dissolved	Water	6020	122760
180-21921-2	EB-060513	Dissolved	Water	6020	122760
180-21921-3	DP13S-C2I	Dissolved	Water	6020	122760
180-21921-3 MS	DP13S-C2I	Dissolved	Water	6020	122760
180-21921-3 MSD	DP13S-C2I	Dissolved	Water	6020	122760
LCS 480-122587/8-B	Lab Control Sample	Dissolved	Water	6020	122760
MB 480-122587/7-B	Method Blank	Dissolved	Water	6020	122760

Analysis Batch: 123131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-3	DP13S-C2I	Total/NA	Water	6020	122757
180-21921-3 MS	DP13S-C2I	Total/NA	Water	6020	122757
180-21921-3 MSD	DP13S-C2I	Total/NA	Water	6020	122757

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 6/5/13	Chain of Custody Number: 220375
Address: 200 Third Ave	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: J. Bartob		
Project Name and Location (State): South Cavalcade T1 Zone Delineation / Houston, TX	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270 CLL (SVOCs)	6020 selected metals (diss.)	6020 selected metals (total)	Special Instructions/ Conditions of Receipt
DP13N-05I	6/5/13	0820		X			2		2	3			3	2	1	1	Diss. Metals are
EB-060513	6/5/13	0935		X			2		2	3			3	2	1	1	field filtered
DP13S-02I (MS/MSD)	6/5/13	1210		X			6		6	9			9	6	3	3	
TB-060513	6/5/13	—		X						2			2				

RS 6/5/13

180-21921 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/5/13	1900	1. Received By: [signature] TA Buff	6-6-13	0900
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: 3.1, 3.4, 2.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
KEy Environmental / FTS	Angie Gatchie	6/5/13	220376
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
Carnegie	PA	15106	M. Valesky	V. Barfod
Project Name and Location (State)	**Carrier/Waybill Number**
South Cavalcade Tiger Delineation / Houston/Tx	Fed Ex
Contract/Purchase Order/Quote No.	
KBE-13665	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260B (BTEX)	6020A (Diss Metals)	6020 (Total Metals)	6020 (Total Metals Lab. Filtered)	Special Instructions/ Conditions of Receipt
DP13S-09I	6/5/13	1722		X			2		2	3			3	2	-	1	Diss. Metals are field filtered.
TB-060513	6/5/13	-		X						2			2				

RS 6/5/13

RS 6/5/13

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/5/13	1900	1. Received By TA DUFF	6.6.13	0900
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

3.1 3.4, 2.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21921-1

Login Number: 21921

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

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?	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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21921-1

Login Number: 21921
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/07/13 08:56 AM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21921-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/12/2013 5:22:21 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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: 180-21921-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21921-2

Comments
No additional comments.

Receipt
The samples were received on 6/6/2013 3:03 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA
Method(s) 8260B: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: DP13S-09I (180-21921-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): DP13S-09I (180-21921-5).

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13S-09I (180-21921-5), DP13S-C2I (180-21921-3), DP13S-C2I (180-21921-3 MS), DP13S-C2I (180-21921-3 MSD). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The laboratory control sample (LCS) for batch 123101 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The Serial Dilution (180-21921-3 SD) associated with batch 480-122760, exhibited results outside the quality control limits for dissolved zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6020: The Serial Dilution (180-21921-3 SD) associated with batch 480-122757, exhibited results outside the quality control limits for total zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13S-09I (180-21921-5).

Method(s) 6020: The following sample(s) was diluted to bring the concentration of target analyte total zinc within the linear range of the instrument: DP13S-09I (180-21921-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21921-5	DP13S-09I	Water	06/05/13 17:22	06/06/13 15:03
180-21921-6	TB-060513	Water	06/05/13 00:00	06/06/13 15:03

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: DP13S-09I

Lab Sample ID: 180-21921-5

Date Collected: 06/05/13 17:22

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	123046	06/10/13 17:42	RL	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			905.7 mL	1 mL	122808	06/07/13 13:45	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			123293	06/11/13 17:52	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		1			122993	06/07/13 21:56	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	122760	06/07/13 11:20	JM	TAL BUF
Dissolved	Analysis	6020		1			123003	06/08/13 04:07	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122757	06/07/13 11:20	JM	TAL BUF
Total/NA	Analysis	6020		5			123131	06/08/13 23:23	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060513

Lab Sample ID: 180-21921-6

Date Collected: 06/05/13 00:00

Matrix: Water

Date Received: 06/06/13 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123046	06/10/13 18:04	RL	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

RL = Renee Larson

RMM = Ryan McKernan

Client Sample ID: DP13S-09I
Date Collected: 06/05/13 17:22
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,1,2-Trichloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,1-Dichloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,1-Dichloroethene	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2,4-Trichlorobenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2-Dibromoethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2-Dichlorobenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2-Dichloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,2-Dichloropropane	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,3-Dichlorobenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
1,4-Dichlorobenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
2-Hexanone	25	U	25		ug/L			06/10/13 17:42	5
2-Butanone (MEK)	50	U	50		ug/L			06/10/13 17:42	5
4-Methyl-2-pentanone (MIBK)	25	U	25		ug/L			06/10/13 17:42	5
Acetone	50	U	50		ug/L			06/10/13 17:42	5
Benzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Bromodichloromethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Bromoform	5.0	U	5.0		ug/L			06/10/13 17:42	5
Bromomethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Carbon disulfide	5.0	U	5.0		ug/L			06/10/13 17:42	5
Carbon tetrachloride	5.0	U	5.0		ug/L			06/10/13 17:42	5
Chlorobenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Dibromochloromethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Chloroethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Chloroform	5.0	U	5.0		ug/L			06/10/13 17:42	5
Chloromethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
cis-1,2-Dichloroethene	5.0	U	5.0		ug/L			06/10/13 17:42	5
cis-1,3-Dichloropropene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Cyclohexane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Dichlorodifluoromethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Ethylbenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Isopropylbenzene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Methyl acetate	5.0	U	5.0		ug/L			06/10/13 17:42	5
Methyl tert-butyl ether	5.0	U	5.0		ug/L			06/10/13 17:42	5
Methylcyclohexane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Methylene Chloride	5.0	U	5.0		ug/L			06/10/13 17:42	5
Styrene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Tetrachloroethene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Toluene	5.0	U	5.0		ug/L			06/10/13 17:42	5
trans-1,2-Dichloroethene	5.0	U	5.0		ug/L			06/10/13 17:42	5
trans-1,3-Dichloropropene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Trichloroethene	5.0	U	5.0		ug/L			06/10/13 17:42	5
Trichlorofluoromethane	5.0	U	5.0		ug/L			06/10/13 17:42	5
Vinyl chloride	5.0	U	5.0		ug/L			06/10/13 17:42	5
Xylenes, Total	10	U	10		ug/L			06/10/13 17:42	5

Client Sample ID: DP13S-09I
Date Collected: 06/05/13 17:22
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*06/10/13 17:42*	*5*
Toluene-d8 (Surr)	*101*		*71 - 126*		*06/10/13 17:42*	*5*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/10/13 17:42*	*5*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
bis (2-chloroisopropyl) ether	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4,5-Trichlorophenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4,6-Trichlorophenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4-Dichlorophenol	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4-Dimethylphenol	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4-Dinitrophenol	5.5	U *	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,4-Dinitrotoluene	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2,6-Dinitrotoluene	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Chloronaphthalene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Chlorophenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Methylnaphthalene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Methylphenol	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Nitroaniline	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
2-Nitrophenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
3,3'-Dichlorobenzidine	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
3-Nitroaniline	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4,6-Dinitro-2-methylphenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Bromophenyl phenyl ether	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Chloro-3-methylphenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Chloroaniline	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Chlorophenyl phenyl ether	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Methylphenol	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Nitroaniline	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
4-Nitrophenol	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Acenaphthene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Acenaphthylene	0.33	U	0.33		ug/L		06/07/13 13:45	06/11/13 17:52	1
Acetophenone	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Anthracene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Atrazine	2.2	U	2.2		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzaldehyde	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzo(a)anthracene	0.33	U	0.33		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzo(a)pyrene	0.20	U	0.20		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzo(b)fluoranthene	0.33	U	0.33		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzo(g,h,i)perylene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Benzo(k)fluoranthene	0.33	U	0.33		ug/L		06/07/13 13:45	06/11/13 17:52	1
Bis(2-chloroethoxy)methane	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Bis(2-chloroethyl)ether	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Bis(2-ethylhexyl) phthalate	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Butyl benzyl phthalate	3.3	U	3.3		ug/L		06/07/13 13:45	06/11/13 17:52	1
Caprolactam	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Carbazole	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Chrysene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Dibenz(a,h)anthracene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Client Sample ID: DP13S-09I
Date Collected: 06/05/13 17:22
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-5
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Diethyl phthalate	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Dimethyl phthalate	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Di-n-butyl phthalate	2.2	U	2.2		ug/L		06/07/13 13:45	06/11/13 17:52	1
Di-n-octyl phthalate	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Fluoranthene	**0.67**		0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Fluorene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Hexachlorobenzene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Hexachlorobutadiene	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
Hexachlorocyclopentadiene	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
Hexachloroethane	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Indeno(1,2,3-cd)pyrene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Isophorone	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
Naphthalene	**2.7**		1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
Nitrobenzene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1
N-Nitrosodi-n-propylamine	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
N-Nitrosodiphenylamine	5.5	U	5.5		ug/L		06/07/13 13:45	06/11/13 17:52	1
Pentachlorophenol	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
Phenanthrene	**0.91**		0.22		ug/L		06/07/13 13:45	06/11/13 17:52	1
Phenol	1.1	U	1.1		ug/L		06/07/13 13:45	06/11/13 17:52	1
Pyrene	0.55	U	0.55		ug/L		06/07/13 13:45	06/11/13 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*51*		*34 - 132*	*06/07/13 13:45*	*06/11/13 17:52*	*1*
2-Fluorobiphenyl	*59*		*37 - 120*	*06/07/13 13:45*	*06/11/13 17:52*	*1*
p-Terphenyl-d14	*39*	*X*	*58 - 147*	*06/07/13 13:45*	*06/11/13 17:52*	*1*
Phenol-d5	*23*		*11 - 120*	*06/07/13 13:45*	*06/11/13 17:52*	*1*
2-Fluorophenol	*27*		*18 - 120*	*06/07/13 13:45*	*06/11/13 17:52*	*1*
2,4,6-Tribromophenol	*84*		*39 - 146*	*06/07/13 13:45*	*06/11/13 17:52*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		1.0		ug/L		06/07/13 11:20	06/07/13 21:56	1
Chromium	**620**		7.5		ug/L		06/07/13 11:20	06/08/13 23:23	5
Copper	**220**		1.0		ug/L		06/07/13 11:20	06/07/13 21:56	1
Lead	**100**		1.0		ug/L		06/07/13 11:20	06/07/13 21:56	1
Zinc	**1700**		50		ug/L		06/07/13 11:20	06/08/13 23:23	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.1**		1.0		ug/L		06/07/13 11:20	06/08/13 04:07	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 04:07	1
Copper	**5.1**		1.0		ug/L		06/07/13 11:20	06/08/13 04:07	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 04:07	1
Zinc	**59**		10		ug/L		06/07/13 11:20	06/08/13 04:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Client Sample ID: TB-060513
Date Collected: 06/05/13 00:00
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 18:04	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 18:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 18:04	1
Acetone	10	U	10		ug/L			06/10/13 18:04	1
Benzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 18:04	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 18:04	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 18:04	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 18:04	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 18:04	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 18:04	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 18:04	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Methylene Chloride	1.2		1.0		ug/L			06/10/13 18:04	1
Styrene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Toluene	1.0	U	1.0		ug/L			06/10/13 18:04	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 18:04	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 18:04	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 18:04	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 18:04	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 18:04	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21921-2

Client Sample ID: TB-060513
Date Collected: 06/05/13 00:00
Date Received: 06/06/13 15:03

Lab Sample ID: 180-21921-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/10/13 18:04*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*06/10/13 18:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/10/13 18:04*	*1*

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

Lab Sample ID: MB 480-123046/6
Matrix: Water
Analysis Batch: 123046

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 10:57	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 10:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 10:57	1
Acetone	10	U	10		ug/L			06/10/13 10:57	1
Benzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 10:57	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 10:57	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 10:57	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Styrene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Toluene	1.0	U	1.0		ug/L			06/10/13 10:57	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 10:57	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 10:57	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 10:57	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 10:57	1

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

Lab Sample ID: MB 480-123046/6
Matrix: Water
Analysis Batch: 123046

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*06/10/13 10:57*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/10/13 10:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/10/13 10:57*	*1*

Lab Sample ID: LCS 480-123046/5
Matrix: Water
Analysis Batch: 123046

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.5		ug/L		106	71 - 129
1,1-Dichloroethene	25.0	25.6		ug/L		102	58 - 121
1,2-Dichlorobenzene	25.0	27.2		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 127
Benzene	25.0	26.0		ug/L		104	71 - 124
Chlorobenzene	25.0	26.6		ug/L		107	72 - 120
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	74 - 124
Ethylbenzene	25.0	26.9		ug/L		108	77 - 123
Methyl tert-butyl ether	25.0	25.6		ug/L		103	64 - 127
Tetrachloroethene	25.0	26.9		ug/L		108	74 - 122
Toluene	25.0	26.5		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	73 - 127
Trichloroethene	25.0	26.5		ug/L		106	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-122808/1-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122808/1-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Methylphenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Acenaphthene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Acenaphthylene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Acetophenone	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Anthracene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Atrazine	2.0	U	2.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzaldehyde	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Caprolactam	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Carbazole	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Chrysene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dibenzofuran	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Fluoranthene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Fluorene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Hexachloroethane	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Isophorone	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
Naphthalene	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Nitrobenzene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-122808/1-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Phenanthrene	0.20	U	0.20		ug/L		06/07/13 13:45	06/11/13 00:55	1
Phenol	1.0	U	1.0		ug/L		06/07/13 13:45	06/11/13 00:55	1
Pyrene	0.50	U	0.50		ug/L		06/07/13 13:45	06/11/13 00:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*34 - 132*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
p-Terphenyl-d14	*114*		*58 - 147*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
Phenol-d5	*26*		*11 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2-Fluorophenol	*36*		*18 - 120*	*06/07/13 13:45*	*06/11/13 00:55*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*06/07/13 13:45*	*06/11/13 00:55*	*1*

Lab Sample ID: LCS 480-122808/2-A
Matrix: Water
Analysis Batch: 123101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	7.77		ug/L		97	22 - 167
2-Chlorophenol	8.00	5.50		ug/L		69	44 - 106
4-Chloro-3-methylphenol	8.00	6.81		ug/L		85	60 - 131
4-Nitrophenol	16.0	6.78		ug/L		42	10 - 105
Acenaphthene	8.00	6.94		ug/L		87	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.86		ug/L		111	69 - 136
Fluorene	8.00	7.07		ug/L		88	54 - 137
Hexachloroethane	8.00	5.29		ug/L		66	32 - 104
N-Nitrosodi-n-propylamine	8.00	6.46		ug/L		81	50 - 123
Pentachlorophenol	16.0	12.2		ug/L		76	10 - 131
Phenol	8.00	2.54		ug/L		32	17 - 61
Pyrene	8.00	9.77		ug/L		122	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*34 - 132*
2-Fluorobiphenyl	*87*		*37 - 120*
p-Terphenyl-d14	*123*		*58 - 147*
Phenol-d5	*29*		*11 - 120*
2-Fluorophenol	*42*		*18 - 120*
2,4,6-Tribromophenol	*101*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122757/1-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/07/13 19:42	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/07/13 19:42	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/07/13 19:42	1

Lab Sample ID: LCS 480-122757/2-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.7		ug/L		104	80 - 120
Chromium	20.0	21.0		ug/L		105	80 - 120
Copper	20.0	21.1		ug/L		106	80 - 120
Lead	20.0	20.4		ug/L		102	80 - 120
Zinc	50.0	53.4		ug/L		107	80 - 120

Lab Sample ID: LCSD 480-122757/3-A
Matrix: Water
Analysis Batch: 122993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122757

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	20.0	20.9		ug/L		105	80 - 120	1	20
Chromium	20.0	21.0		ug/L		105	80 - 120	0	20
Copper	20.0	21.4		ug/L		107	80 - 120	1	20
Lead	20.0	20.6		ug/L		103	80 - 120	1	20
Zinc	50.0	54.2		ug/L		108	80 - 120	1	20

Lab Sample ID: MB 480-122587/7-B
Matrix: Water
Analysis Batch: 123003

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Chromium	1.5	U	1.5		ug/L		06/07/13 11:20	06/08/13 03:06	1
Copper	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Lead	1.0	U	1.0		ug/L		06/07/13 11:20	06/08/13 03:06	1
Zinc	10	U	10		ug/L		06/07/13 11:20	06/08/13 03:06	1

Lab Sample ID: LCS 480-122587/8-B
Matrix: Water
Analysis Batch: 123003

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.9		ug/L		104	80 - 120
Chromium	20.0	20.2		ug/L		101	80 - 120
Copper	20.0	20.8		ug/L		104	80 - 120
Lead	20.0	20.2		ug/L		101	80 - 120
Zinc	50.0	51.8		ug/L		104	80 - 120

GC/MS VOA

Analysis Batch: 123046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	8260B	
180-21921-6	TB-060513	Total/NA	Water	8260B	
LCS 480-123046/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123046/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 122808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	3510C	
LCS 480-122808/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-122808/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-122808/2-A	Lab Control Sample	Total/NA	Water	8270C LL	122808
MB 480-122808/1-A	Method Blank	Total/NA	Water	8270C LL	122808

Analysis Batch: 123293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	8270C LL	122808

Metals

Prep Batch: 122757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	3020A	
LCS 480-122757/2-A	Lab Control Sample	Total/NA	Water	3020A	
LCSD 480-122757/3-A	Lab Control Sample Dup	Total/NA	Water	3020A	
MB 480-122757/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 122760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Dissolved	Water	3020A	
LCS 480-122587/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-122587/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 122993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	6020	122757
LCS 480-122757/2-A	Lab Control Sample	Total/NA	Water	6020	122757
LCSD 480-122757/3-A	Lab Control Sample Dup	Total/NA	Water	6020	122757
MB 480-122757/1-A	Method Blank	Total/NA	Water	6020	122757

Analysis Batch: 123003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Dissolved	Water	6020	122760
LCS 480-122587/8-B	Lab Control Sample	Dissolved	Water	6020	122760
MB 480-122587/7-B	Method Blank	Dissolved	Water	6020	122760

Metals (Continued)

Analysis Batch: 123131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21921-5	DP13S-09I	Total/NA	Water	6020	122757

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 6/5/13	Chain of Custody Number: 220375
Address: 200 Third Ave	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: J. Bartob		
Project Name and Location (State): South Cavalcade TI Zone Delineation / Houston, TX	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270 CLL (SVOCs)	6020 selected metals (diss.)	6020 selected metals (total)	Special Instructions/ Conditions of Receipt
DP13N-05I	6/5/13	0820		X			2		2	3			3	2	1	1	Diss. Metals are
EB-060513	6/5/13	0935		X			2		2	3			3	2	1	1	field filtered
DP13S-02I (MS/MSD)	6/5/13	1210		X			6		6	9			9	6	3	3	
TB-060513	6/5/13	—		X						2			2				

RS 6/5/13

180-21921 Chain of Custody

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

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

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/5/13	1900	1. Received By: [signature] TA Buff	6-6-13	0900
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: 3.1, 3.4, 2.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 6/5/13	Chain of Custody Number: 220376
Address: 200 Third Ave	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky	Lab Contact: V. Bortot	
Project Name and Location (State): South Cavalcade T1 Zone Delineation / Houston / Tx	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270C LL (SVOCs)	6020 selected diss metals	6020 selected tot. metals	Special Instructions/ Conditions of Receipt
DP13S-09I	6/5/13	1722		X			2		2	3			3	2	1	1	Diss. Metals are field filtered.
TB-060513	6/5/13	–		X						2			2				

RS 6/5/13

RS 6/5/13

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/5/13	1900	1. Received By: [signature] TA BUFF	6.6.13	0900
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: 3.1, 3.4, 2.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21921-2

Login Number: 21921

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

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?	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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21921-2

Login Number: 21921
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/07/13 08:56 AM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21993-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/12/2013 5:37:35 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21993-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21993-1

Comments
No additional comments.

Receipt
The samples were received on 6/7/2013 4:44 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.3º C and 1.9º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123140 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123140 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21993-1	OP13S-10I	Water	06/06/13 11:55	06/07/13 16:44
180-21993-2	FB-03-060613	Water	06/06/13 12:55	06/07/13 16:44

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: OP13S-10I

Lab Sample ID: 180-21993-1

Date Collected: 06/06/13 11:55

Matrix: Water

Date Received: 06/07/13 16:44

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122884	06/08/13 07:02	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1045.2 mL	1 mL	123140	06/10/13 14:34	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			123500	06/12/13 12:00	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122839	06/08/13 09:40	SS	TAL BUF
Dissolved	Analysis	6020		1			123339	06/11/13 02:29	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122957	06/08/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			123340	06/11/13 04:23	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: FB-03-060613

Lab Sample ID: 180-21993-2

Date Collected: 06/06/13 12:55

Matrix: Water

Date Received: 06/07/13 16:44

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	122884	06/08/13 07:27	NQN	TAL BUF
	Instrument ID: HP5975T									
Total/NA	Prep	3510C			1038.3 mL	1 mL	123140	06/10/13 14:34	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			123500	06/12/13 12:28	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122839	06/08/13 09:40	SS	TAL BUF
Dissolved	Analysis	6020		1			123339	06/11/13 02:35	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122957	06/08/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			123340	06/11/13 04:29	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: OP13S-10I
Date Collected: 06/06/13 11:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
2-Hexanone	5.0	U	5.0		ug/L			06/08/13 07:02	1
2-Butanone (MEK)	10	U	10		ug/L			06/08/13 07:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/08/13 07:02	1
Acetone	10	U	10		ug/L			06/08/13 07:02	1
Benzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Bromoform	1.0	U	1.0		ug/L			06/08/13 07:02	1
Bromomethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Carbon disulfide	1.0	U	1.0		ug/L			06/08/13 07:02	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/08/13 07:02	1
Chlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Chloroethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Chloroform	1.0	U	1.0		ug/L			06/08/13 07:02	1
Chloromethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:02	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Cyclohexane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Ethylbenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Methyl acetate	1.0	U	1.0		ug/L			06/08/13 07:02	1
Methyl tert-butyl ether	**2.8**		1.0		ug/L			06/08/13 07:02	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Methylene Chloride	1.0	U	1.0		ug/L			06/08/13 07:02	1
Styrene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Toluene	1.0	U	1.0		ug/L			06/08/13 07:02	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:02	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Trichloroethene	1.0	U	1.0		ug/L			06/08/13 07:02	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/08/13 07:02	1
Vinyl chloride	1.0	U	1.0		ug/L			06/08/13 07:02	1
Xylenes, Total	2.0	U	2.0		ug/L			06/08/13 07:02	1

Client Sample ID: OP13S-10I
Date Collected: 06/06/13 11:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*		*06/08/13 07:02*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/08/13 07:02*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/08/13 07:02*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Methylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Methylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Acenaphthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Acenaphthylene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:00	1
Acetophenone	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Atrazine	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzaldehyde	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:00	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/10/13 14:34	06/12/13 12:00	1
Caprolactam	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Carbazole	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Chrysene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: OP13S-10I
Date Collected: 06/06/13 11:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 12:00	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Fluoranthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Fluorene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
Hexachloroethane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Isophorone	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
Naphthalene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
Nitrobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:00	1
Pentachlorophenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
Phenanthrene	**0.24**		0.19		ug/L		06/10/13 14:34	06/12/13 12:00	1
Phenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:00	1
Pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*34 - 132*	*06/10/13 14:34*	*06/12/13 12:00*	*1*
2-Fluorobiphenyl	*60*		*37 - 120*	*06/10/13 14:34*	*06/12/13 12:00*	*1*
p-Terphenyl-d14	*71*		*58 - 147*	*06/10/13 14:34*	*06/12/13 12:00*	*1*
Phenol-d5	*23*		*11 - 120*	*06/10/13 14:34*	*06/12/13 12:00*	*1*
2-Fluorophenol	*30*		*18 - 120*	*06/10/13 14:34*	*06/12/13 12:00*	*1*
2,4,6-Tribromophenol	*87*		*39 - 146*	*06/10/13 14:34*	*06/12/13 12:00*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.4**		1.0		ug/L		06/08/13 09:40	06/11/13 04:23	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 04:23	1
Copper	**1.5**		1.0		ug/L		06/08/13 09:40	06/11/13 04:23	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:23	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 04:23	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.1**		1.0		ug/L		06/08/13 09:40	06/11/13 02:29	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 02:29	1
Copper	**1.2**		1.0		ug/L		06/08/13 09:40	06/11/13 02:29	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:29	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 02:29	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: FB-03-060613
Date Collected: 06/06/13 12:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
2-Hexanone	5.0	U	5.0		ug/L			06/08/13 07:27	1
2-Butanone (MEK)	10	U	10		ug/L			06/08/13 07:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/08/13 07:27	1
Acetone	10	U	10		ug/L			06/08/13 07:27	1
Benzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Bromoform	1.0	U	1.0		ug/L			06/08/13 07:27	1
Bromomethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Carbon disulfide	1.0	U	1.0		ug/L			06/08/13 07:27	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/08/13 07:27	1
Chlorobenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Chloroethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Chloroform	1.0	U	1.0		ug/L			06/08/13 07:27	1
Chloromethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:27	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Cyclohexane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Ethylbenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Methyl acetate	1.0	U	1.0		ug/L			06/08/13 07:27	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/08/13 07:27	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Methylene Chloride	1.0	U	1.0		ug/L			06/08/13 07:27	1
Styrene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Toluene	1.0	U	1.0		ug/L			06/08/13 07:27	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 07:27	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Trichloroethene	1.0	U	1.0		ug/L			06/08/13 07:27	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/08/13 07:27	1
Vinyl chloride	1.0	U	1.0		ug/L			06/08/13 07:27	1
Xylenes, Total	2.0	U	2.0		ug/L			06/08/13 07:27	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: FB-03-060613
Date Collected: 06/06/13 12:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/08/13 07:27*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/08/13 07:27*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/08/13 07:27*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4-Dimethylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Methylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Methylphenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Acenaphthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Acenaphthylene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:28	1
Acetophenone	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Atrazine	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzaldehyde	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 12:28	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/10/13 14:34	06/12/13 12:28	1
Caprolactam	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Carbazole	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Chrysene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21993-1

Client Sample ID: FB-03-060613
Date Collected: 06/06/13 12:55
Date Received: 06/07/13 16:44

Lab Sample ID: 180-21993-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 12:28	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Fluoranthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Fluorene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Hexachlorobutadiene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
Hexachlorocyclopentadiene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
Hexachloroethane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Isophorone	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
Naphthalene	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
Nitrobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 12:28	1
Pentachlorophenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
Phenanthrene	0.19	U	0.19		ug/L		06/10/13 14:34	06/12/13 12:28	1
Phenol	0.96	U	0.96		ug/L		06/10/13 14:34	06/12/13 12:28	1
Pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*34 - 132*	*06/10/13 14:34*	*06/12/13 12:28*	*1*
2-Fluorobiphenyl	*66*		*37 - 120*	*06/10/13 14:34*	*06/12/13 12:28*	*1*
p-Terphenyl-d14	*93*		*58 - 147*	*06/10/13 14:34*	*06/12/13 12:28*	*1*
Phenol-d5	*22*		*11 - 120*	*06/10/13 14:34*	*06/12/13 12:28*	*1*
2-Fluorophenol	*28*		*18 - 120*	*06/10/13 14:34*	*06/12/13 12:28*	*1*
2,4,6-Tribromophenol	*64*		*39 - 146*	*06/10/13 14:34*	*06/12/13 12:28*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:29	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 04:29	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:29	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:29	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 04:29	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:35	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 02:35	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:35	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:35	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 02:35	1

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

Lab Sample ID: MB 480-122884/7
Matrix: Water
Analysis Batch: 122884

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
2-Hexanone	5.0	U	5.0		ug/L			06/08/13 00:06	1
2-Butanone (MEK)	10	U	10		ug/L			06/08/13 00:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/08/13 00:06	1
Acetone	10	U	10		ug/L			06/08/13 00:06	1
Benzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Bromoform	1.0	U	1.0		ug/L			06/08/13 00:06	1
Bromomethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Carbon disulfide	1.0	U	1.0		ug/L			06/08/13 00:06	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/08/13 00:06	1
Chlorobenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Chloroethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Chloroform	1.0	U	1.0		ug/L			06/08/13 00:06	1
Chloromethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 00:06	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Cyclohexane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Ethylbenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Methyl acetate	1.0	U	1.0		ug/L			06/08/13 00:06	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/08/13 00:06	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Methylene Chloride	1.0	U	1.0		ug/L			06/08/13 00:06	1
Styrene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Toluene	1.0	U	1.0		ug/L			06/08/13 00:06	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/08/13 00:06	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Trichloroethene	1.0	U	1.0		ug/L			06/08/13 00:06	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/08/13 00:06	1
Vinyl chloride	1.0	U	1.0		ug/L			06/08/13 00:06	1
Xylenes, Total	2.0	U	2.0		ug/L			06/08/13 00:06	1

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

Lab Sample ID: MB 480-122884/7
Matrix: Water
Analysis Batch: 122884

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		06/08/13 00:06	1
Toluene-d8 (Surr)	97		71 - 126		06/08/13 00:06	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/08/13 00:06	1

Lab Sample ID: LCS 480-122884/4
Matrix: Water
Analysis Batch: 122884

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			25.0	26.2		ug/L		105	71 - 129		
1,1-Dichloroethene			25.0	27.3		ug/L		109	58 - 121		
1,2-Dichlorobenzene			25.0	25.9		ug/L		103	80 - 124		
1,2-Dichloroethane			25.0	25.5		ug/L		102	75 - 127		
Benzene			25.0	26.0		ug/L		104	71 - 124		
Chlorobenzene			25.0	25.5		ug/L		102	72 - 120		
cis-1,2-Dichloroethene			25.0	25.9		ug/L		104	74 - 124		
Ethylbenzene			25.0	25.4		ug/L		102	77 - 123		
Methyl tert-butyl ether			25.0	25.3		ug/L		101	64 - 127		
Tetrachloroethene			25.0	28.9		ug/L		116	74 - 122		
Toluene			25.0	25.8		ug/L		103	80 - 122		
trans-1,2-Dichloroethene			25.0	26.4		ug/L		106	73 - 127		
Trichloroethene			25.0	27.8		ug/L		111	74 - 123		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
Toluene-d8 (Surr)	100		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Lab Sample ID: LCSD 480-122884/5
Matrix: Water
Analysis Batch: 122884

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
1,1-Dichloroethane			25.0	25.6		ug/L		102	71 - 129	3	20
1,1-Dichloroethene			25.0	26.1		ug/L		105	58 - 121	4	16
1,2-Dichlorobenzene			25.0	25.1		ug/L		100	80 - 124	3	20
1,2-Dichloroethane			25.0	24.8		ug/L		99	75 - 127	3	20
Benzene			25.0	25.2		ug/L		101	71 - 124	3	13
Chlorobenzene			25.0	25.7		ug/L		103	72 - 120	1	25
cis-1,2-Dichloroethene			25.0	24.8		ug/L		99	74 - 124	5	15
Ethylbenzene			25.0	25.3		ug/L		101	77 - 123	1	15
Methyl tert-butyl ether			25.0	25.2		ug/L		101	64 - 127	0	37
Tetrachloroethene			25.0	27.8		ug/L		111	74 - 122	4	20
Toluene			25.0	25.3		ug/L		101	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	26.0		ug/L		104	73 - 127	2	20
Trichloroethene			25.0	26.4		ug/L		106	74 - 123	5	16

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

Lab Sample ID: LCSD 480-122884/5
Matrix: Water
Analysis Batch: 122884

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*
Toluene-d8 (Surr)	*100*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-123140/1-A
Matrix: Water
Analysis Batch: 123293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Methylphenol	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Methylphenol	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Acenaphthene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Acenaphthylene	0.30	U	0.30		ug/L		06/10/13 14:34	06/11/13 18:19	1
Acetophenone	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Anthracene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Atrazine	2.0	U	2.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzaldehyde	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/10/13 14:34	06/11/13 18:19	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123140/1-A
Matrix: Water
Analysis Batch: 123293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Caprolactam	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Carbazole	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Chrysene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Dibenzofuran	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Fluoranthene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Fluorene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Hexachloroethane	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Isophorone	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
Naphthalene	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Nitrobenzene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Phenanthrene	0.20	U	0.20		ug/L		06/10/13 14:34	06/11/13 18:19	1
Phenol	1.0	U	1.0		ug/L		06/10/13 14:34	06/11/13 18:19	1
Pyrene	0.50	U	0.50		ug/L		06/10/13 14:34	06/11/13 18:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*34 - 132*	*06/10/13 14:34*	*06/11/13 18:19*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*06/10/13 14:34*	*06/11/13 18:19*	*1*
p-Terphenyl-d14	*95*		*58 - 147*	*06/10/13 14:34*	*06/11/13 18:19*	*1*
Phenol-d5	*25*		*11 - 120*	*06/10/13 14:34*	*06/11/13 18:19*	*1*
2-Fluorophenol	*36*		*18 - 120*	*06/10/13 14:34*	*06/11/13 18:19*	*1*
2,4,6-Tribromophenol	*80*		*39 - 146*	*06/10/13 14:34*	*06/11/13 18:19*	*1*

Lab Sample ID: LCS 480-123140/2-A
Matrix: Water
Analysis Batch: 123293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	6.96		ug/L		87	22 - 167
2-Chlorophenol	8.00	5.0	U	ug/L		62	44 - 106
4-Chloro-3-methylphenol	8.00	6.69		ug/L		84	60 - 131
4-Nitrophenol	16.0	6.56		ug/L		41	10 - 105
Acenaphthene	8.00	5.67		ug/L		71	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	8.40		ug/L		105	69 - 136

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 480-123140/2-A
Matrix: Water
Analysis Batch: 123293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluorene			8.00	6.29		ug/L		79	54 - 137		
Hexachloroethane			8.00	5.0	U	ug/L		51	32 - 104		
N-Nitrosodi-n-propylamine			8.00	5.44		ug/L		68	50 - 123		
Pentachlorophenol			16.0	11.4		ug/L		71	10 - 131		
Phenol			8.00	2.49		ug/L		31	17 - 61		
Pyrene			8.00	7.78		ug/L		97	58 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*34 - 132*
2-Fluorobiphenyl	*73*		*37 - 120*
p-Terphenyl-d14	*100*		*58 - 147*
Phenol-d5	*29*		*11 - 120*
2-Fluorophenol	*39*		*18 - 120*
2,4,6-Tribromophenol	*94*		*39 - 146*

Lab Sample ID: LCSD 480-123140/3-A
Matrix: Water
Analysis Batch: 123500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 123140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene			8.00	7.16		ug/L		89	22 - 167	3	20
2-Chlorophenol			8.00	5.0	U	ug/L		62	44 - 106	1	20
4-Chloro-3-methylphenol			8.00	6.49		ug/L		81	60 - 131	3	20
4-Nitrophenol			16.0	5.87		ug/L		37	10 - 105	11	20
Acenaphthene			8.00	5.84		ug/L		73	35 - 143	3	24
Bis(2-ethylhexyl) phthalate			8.00	8.61		ug/L		108	69 - 136	3	15
Fluorene			8.00	6.24		ug/L		78	54 - 137	1	15
Hexachloroethane			8.00	5.0	U	ug/L		53	32 - 104	5	20
N-Nitrosodi-n-propylamine			8.00	5.58		ug/L		70	50 - 123	3	20
Pentachlorophenol			16.0	11.1		ug/L		69	10 - 131	3	37
Phenol			8.00	2.48		ug/L		31	17 - 61	0	34
Pyrene			8.00	8.07		ug/L		101	58 - 143	4	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*34 - 132*
2-Fluorobiphenyl	*73*		*37 - 120*
p-Terphenyl-d14	*104*		*58 - 147*
Phenol-d5	*28*		*11 - 120*
2-Fluorophenol	*39*		*18 - 120*
2,4,6-Tribromophenol	*94*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122957/1-A
Matrix: Water
Analysis Batch: 123340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 03:05	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 03:05	1

Lab Sample ID: LCS 480-122957/2-A
Matrix: Water
Analysis Batch: 123340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.6		ug/L		103	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	20.9		ug/L		104	80 - 120
Lead	20.0	20.1		ug/L		101	80 - 120
Zinc	50.0	54.3		ug/L		109	80 - 120

Lab Sample ID: MB 480-122587/11-B
Matrix: Water
Analysis Batch: 123339

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122839

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/10/13 23:49	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/10/13 23:49	1

Lab Sample ID: LCS 480-122587/12-B
Matrix: Water
Analysis Batch: 123339

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.5		ug/L		108	80 - 120
Chromium	20.0	21.0		ug/L		105	80 - 120
Copper	20.0	21.4		ug/L		107	80 - 120
Lead	20.0	20.7		ug/L		103	80 - 120
Zinc	50.0	54.1		ug/L		108	80 - 120

GC/MS VOA

Analysis Batch: 122884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Total/NA	Water	8260B	
180-21993-2	FB-03-060613	Total/NA	Water	8260B	
LCS 480-122884/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 480-122884/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 480-122884/7	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 123140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Total/NA	Water	3510C	
180-21993-2	FB-03-060613	Total/NA	Water	3510C	
LCS 480-123140/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-123140/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-123140/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-123140/2-A	Lab Control Sample	Total/NA	Water	8270C LL	123140
MB 480-123140/1-A	Method Blank	Total/NA	Water	8270C LL	123140

Analysis Batch: 123500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Total/NA	Water	8270C LL	123140
180-21993-2	FB-03-060613	Total/NA	Water	8270C LL	123140
LCSD 480-123140/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	123140

Metals

Prep Batch: 122839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Dissolved	Water	3020A	
180-21993-2	FB-03-060613	Dissolved	Water	3020A	
LCS 480-122587/12-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-122587/11-B	Method Blank	Dissolved	Water	3020A	

Prep Batch: 122957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Total/NA	Water	3020A	
180-21993-2	FB-03-060613	Total/NA	Water	3020A	
LCS 480-122957/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122957/1-A	Method Blank	Total/NA	Water	3020A	

Analysis Batch: 123339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Dissolved	Water	6020	122839
180-21993-2	FB-03-060613	Dissolved	Water	6020	122839
LCS 480-122587/12-B	Lab Control Sample	Dissolved	Water	6020	122839
MB 480-122587/11-B	Method Blank	Dissolved	Water	6020	122839

Metals (Continued)

Analysis Batch: 123340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21993-1	OP13S-10I	Total/NA	Water	6020	122957
180-21993-2	FB-03-060613	Total/NA	Water	6020	122957
LCS 480-122957/2-A	Lab Control Sample	Total/NA	Water	6020	122957
MB 480-122957/1-A	Method Blank	Total/NA	Water	6020	122957

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Catchie	6/6/13	220323
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
Carnegie	PA	15106	M. Valestry	U. Bortot
Project Name and Location (State)	**Carrier/Waybill Number**	
South Cavalcade T1 Zone Delineation	Fed Ex	
Contract/Purchase Order/Quote No.		
KBE13665		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): SVOCs (8270C)	8270C LL (SVOCs)	LMD selected metals (6010)	LMD selected metals (7470)	Special Instructions/ Conditions of Receipt
OP135-10I	6/6/13	1155		X			2		2	3			3	2	1	1	Diss. Metals are Field Filtered
FB-03-060613	6/6/13	1255		X			2		2	3			3	2	1	1	

RS 6/6/13

RS 6/6/13

180-21993 Login
PM: Bortot, Veronica
Company: Field & Technical Services LLC

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day TAT BY CLIENT REQUEST 6/7/13 kpm

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/6/13	1800	1. Received By	6/7/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

1.3, 1.9°C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21993-1

Login Number: 21993

List Number: 1

Creator: Bort, Kathryn L

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21993-1

Login Number: 21993
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/07/13 05:23 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-21994-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/12/2013 5:36:21 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-21994-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-21994-1

Comments
No additional comments.

Receipt
The samples were received on 6/7/2013 4:56 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.3º C and 1.9º C.

GC/MS VOA
Method(s) 8260B: The Matrix Spike Blank recovery was below/above TestAmerica's statistically developed internal laboratory QC limits, for Methyl acetate and 1,2-Dibromo-3-Chloropropane. These analytes was not a requested spiking compound; therefore the recovery is being reported for advisory purposes only. All other quality control indicators, including the continuing calibration verification, were within method prescribed limits for these analytes.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: P-02R (180-21994-1). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123140 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123140 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21994-1	P-02R	Water	06/06/13 14:28	06/07/13 16:56
180-21994-2	EB-04-060613	Water	06/06/13 15:00	06/07/13 16:56
180-21994-3	TB-060613	Water	06/06/13 00:00	06/07/13 16:56

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: P-02R

Lab Sample ID: 180-21994-1

Date Collected: 06/06/13 14:28

Matrix: Water

Date Received: 06/07/13 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123063	06/10/13 12:57	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C	DL		1034.7 mL	1 mL	123140	06/10/13 14:34	ND	TAL BUF
Total/NA	Analysis	8270C LL	DL	100			123500	06/12/13 13:50	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3510C			1034.7 mL	1 mL	123140	06/10/13 14:34	ND	TAL BUF
Total/NA	Analysis	8270C LL		50			123500	06/12/13 12:55	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122839	06/08/13 09:40	SS	TAL BUF
Dissolved	Analysis	6020		1			123339	06/11/13 02:40	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122957	06/08/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			123340	06/11/13 04:35	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: EB-04-060613

Lab Sample ID: 180-21994-2

Date Collected: 06/06/13 15:00

Matrix: Water

Date Received: 06/07/13 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123063	06/10/13 13:21	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1049.3 mL	1 mL	123140	06/10/13 14:34	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			123500	06/12/13 13:23	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	122839	06/08/13 09:40	SS	TAL BUF
Dissolved	Analysis	6020		1			123339	06/11/13 02:46	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	122957	06/08/13 09:40	JM	TAL BUF
Total/NA	Analysis	6020		1			123340	06/11/13 04:41	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060613

Lab Sample ID: 180-21994-3

Date Collected: 06/06/13 00:00

Matrix: Water

Date Received: 06/07/13 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123063	06/10/13 13:45	RL	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

RL = Renee Larson

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: P-02R
Date Collected: 06/06/13 14:28
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,2-Dibromo-3-Chloropropane	1.0	U *	1.0		ug/L			06/10/13 12:57	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 12:57	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 12:57	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 12:57	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 12:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 12:57	1
Acetone	10	U	10		ug/L			06/10/13 12:57	1
Benzene	**7.8**		1.0		ug/L			06/10/13 12:57	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 12:57	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 12:57	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 12:57	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 12:57	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 12:57	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Ethylbenzene	**37**		1.0		ug/L			06/10/13 12:57	1
Isopropylbenzene	**5.3**		1.0		ug/L			06/10/13 12:57	1
Methyl acetate	1.0	U *	1.0		ug/L			06/10/13 12:57	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 12:57	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 12:57	1
Styrene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Toluene	**4.0**		1.0		ug/L			06/10/13 12:57	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 12:57	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 12:57	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 12:57	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 12:57	1
Xylenes, Total	**26**		2.0		ug/L			06/10/13 12:57	1

Client Sample ID: P-02R
Date Collected: 06/06/13 14:28
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*66 - 137*		*06/10/13 12:57*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/10/13 12:57*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/10/13 12:57*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
bis (2-chloroisopropyl) ether	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4,5-Trichlorophenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4,6-Trichlorophenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4-Dichlorophenol	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4-Dimethylphenol	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4-Dinitrophenol	240	U *	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,4-Dinitrotoluene	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2,6-Dinitrotoluene	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Chloronaphthalene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Chlorophenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Methylnaphthalene	**37**		24		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Methylphenol	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Nitroaniline	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
2-Nitrophenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
3,3'-Dichlorobenzidine	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
3-Nitroaniline	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4,6-Dinitro-2-methylphenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Bromophenyl phenyl ether	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Chloro-3-methylphenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Chloroaniline	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Chlorophenyl phenyl ether	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Methylphenol	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Nitroaniline	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
4-Nitrophenol	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Acenaphthene	**220**		24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Acenaphthylene	14	U	14		ug/L		06/10/13 14:34	06/12/13 12:55	50
Acetophenone	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Anthracene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Atrazine	97	U	97		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzaldehyde	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzo(a)anthracene	14	U	14		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzo(a)pyrene	8.7	U	8.7		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzo(b)fluoranthene	14	U	14		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzo(g,h,i)perylene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Benzo(k)fluoranthene	14	U	14		ug/L		06/10/13 14:34	06/12/13 12:55	50
Bis(2-chloroethoxy)methane	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Bis(2-chloroethyl)ether	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Bis(2-ethylhexyl) phthalate	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Butyl benzyl phthalate	140	U	140		ug/L		06/10/13 14:34	06/12/13 12:55	50
Caprolactam	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Carbazole	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Chrysene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Dibenz(a,h)anthracene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: P-02R
Date Collected: 06/06/13 14:28
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Diethyl phthalate	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Dimethyl phthalate	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Di-n-butyl phthalate	97	U	97		ug/L		06/10/13 14:34	06/12/13 12:55	50
Di-n-octyl phthalate	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Fluoranthene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Fluorene	**60**		24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Hexachlorobenzene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Hexachlorobutadiene	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
Hexachlorocyclopentadiene	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
Hexachloroethane	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Indeno(1,2,3-cd)pyrene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Isophorone	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
Nitrobenzene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50
N-Nitrosodi-n-propylamine	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
N-Nitrosodiphenylamine	240	U	240		ug/L		06/10/13 14:34	06/12/13 12:55	50
Pentachlorophenol	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
Phenanthrene	**41**		9.7		ug/L		06/10/13 14:34	06/12/13 12:55	50
Phenol	48	U	48		ug/L		06/10/13 14:34	06/12/13 12:55	50
Pyrene	24	U	24		ug/L		06/10/13 14:34	06/12/13 12:55	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/10/13 14:34*	*06/12/13 12:55*	*50*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/10/13 14:34*	*06/12/13 12:55*	*50*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/10/13 14:34*	*06/12/13 12:55*	*50*
Phenol-d5	*0*	*X*	*11 - 120*	*06/10/13 14:34*	*06/12/13 12:55*	*50*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/10/13 14:34*	*06/12/13 12:55*	*50*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/10/13 14:34*	*06/12/13 12:55*	*50*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**1300**		97		ug/L		06/10/13 14:34	06/12/13 13:50	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/10/13 14:34*	*06/12/13 13:50*	*100*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/10/13 14:34*	*06/12/13 13:50*	*100*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/10/13 14:34*	*06/12/13 13:50*	*100*
Phenol-d5	*0*	*X*	*11 - 120*	*06/10/13 14:34*	*06/12/13 13:50*	*100*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/10/13 14:34*	*06/12/13 13:50*	*100*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/10/13 14:34*	*06/12/13 13:50*	*100*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**51**		1.0		ug/L		06/08/13 09:40	06/11/13 04:35	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 04:35	1
Copper	**1.8**		1.0		ug/L		06/08/13 09:40	06/11/13 04:35	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:35	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 04:35	1

Client Sample ID: P-02R

Lab Sample ID: 180-21994-1

Date Collected: 06/06/13 14:28

Matrix: Water

Date Received: 06/07/13 16:56

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**47**		1.0		ug/L		06/08/13 09:40	06/11/13 02:40	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 02:40	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:40	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:40	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 02:40	1

Client Sample ID: EB-04-060613

Lab Sample ID: 180-21994-2

Date Collected: 06/06/13 15:00

Matrix: Water

Date Received: 06/07/13 16:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,2-Dibromo-3-Chloropropane	1.0	U *	1.0		ug/L			06/10/13 13:21	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 13:21	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 13:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 13:21	1
Acetone	**13**		10		ug/L			06/10/13 13:21	1
Benzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 13:21	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 13:21	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 13:21	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 13:21	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:21	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Methyl acetate	1.0	U *	1.0		ug/L			06/10/13 13:21	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 13:21	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 13:21	1

Client Sample ID: EB-04-060613
Date Collected: 06/06/13 15:00
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 13:21	1
Styrene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Toluene	1.0	U	1.0		ug/L			06/10/13 13:21	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:21	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 13:21	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 13:21	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 13:21	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*06/10/13 13:21*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/10/13 13:21*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/10/13 13:21*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Methylphenol	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Methylphenol	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Acenaphthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Acenaphthylene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 13:23	1
Acetophenone	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Atrazine	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 13:23	1
Benzaldehyde	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 13:23	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: EB-04-060613
Date Collected: 06/06/13 15:00
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/10/13 14:34	06/12/13 13:23	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 13:23	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/10/13 14:34	06/12/13 13:23	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/10/13 14:34	06/12/13 13:23	1
Caprolactam	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Carbazole	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Chrysene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Dibenzofuran	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/10/13 14:34	06/12/13 13:23	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Fluoranthene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Fluorene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
Hexachloroethane	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Indeno(1,2,3-cd)pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Isophorone	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
Naphthalene	**1.9**		0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
Nitrobenzene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/10/13 14:34	06/12/13 13:23	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
Phenanthrene	0.19	U	0.19		ug/L		06/10/13 14:34	06/12/13 13:23	1
Phenol	0.95	U	0.95		ug/L		06/10/13 14:34	06/12/13 13:23	1
Pyrene	0.48	U	0.48		ug/L		06/10/13 14:34	06/12/13 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*63*		*34 - 132*	*06/10/13 14:34*	*06/12/13 13:23*	*1*
2-Fluorobiphenyl	*65*		*37 - 120*	*06/10/13 14:34*	*06/12/13 13:23*	*1*
p-Terphenyl-d14	*91*		*58 - 147*	*06/10/13 14:34*	*06/12/13 13:23*	*1*
Phenol-d5	*23*		*11 - 120*	*06/10/13 14:34*	*06/12/13 13:23*	*1*
2-Fluorophenol	*33*		*18 - 120*	*06/10/13 14:34*	*06/12/13 13:23*	*1*
2,4,6-Tribromophenol	*74*		*39 - 146*	*06/10/13 14:34*	*06/12/13 13:23*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:41	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 04:41	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:41	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 04:41	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 04:41	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: EB-04-060613

Lab Sample ID: 180-21994-2

Date Collected: 06/06/13 15:00

Matrix: Water

Date Received: 06/07/13 16:56

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:46	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 02:46	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:46	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 02:46	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 02:46	1

Client Sample ID: TB-060613

Lab Sample ID: 180-21994-3

Date Collected: 06/06/13 00:00

Matrix: Water

Date Received: 06/07/13 16:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,2-Dibromo-3-Chloropropane	1.0	U *	1.0		ug/L			06/10/13 13:45	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 13:45	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 13:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 13:45	1
Acetone	10	U	10		ug/L			06/10/13 13:45	1
Benzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 13:45	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 13:45	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 13:45	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 13:45	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:45	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Methyl acetate	1.0	U *	1.0		ug/L			06/10/13 13:45	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 13:45	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 13:45	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-21994-1

Client Sample ID: TB-060613
Date Collected: 06/06/13 00:00
Date Received: 06/07/13 16:56

Lab Sample ID: 180-21994-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.1		1.0		ug/L			06/10/13 13:45	1
Styrene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Toluene	1.0	U	1.0		ug/L			06/10/13 13:45	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 13:45	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 13:45	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 13:45	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 13:45	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*06/10/13 13:45*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/10/13 13:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/10/13 13:45*	*1*

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

Lab Sample ID: MB 480-123063/6
Matrix: Water
Analysis Batch: 123063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
2-Hexanone	5.0	U	5.0		ug/L			06/10/13 11:56	1
2-Butanone (MEK)	10	U	10		ug/L			06/10/13 11:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/10/13 11:56	1
Acetone	10	U	10		ug/L			06/10/13 11:56	1
Benzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Bromoform	1.0	U	1.0		ug/L			06/10/13 11:56	1
Bromomethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Carbon disulfide	1.0	U	1.0		ug/L			06/10/13 11:56	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/10/13 11:56	1
Chlorobenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Chloroethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Chloroform	1.0	U	1.0		ug/L			06/10/13 11:56	1
Chloromethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 11:56	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Cyclohexane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Ethylbenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Methyl acetate	1.0	U	1.0		ug/L			06/10/13 11:56	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/10/13 11:56	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Methylene Chloride	1.0	U	1.0		ug/L			06/10/13 11:56	1
Styrene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Toluene	1.0	U	1.0		ug/L			06/10/13 11:56	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/10/13 11:56	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Trichloroethene	1.0	U	1.0		ug/L			06/10/13 11:56	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/10/13 11:56	1
Vinyl chloride	1.0	U	1.0		ug/L			06/10/13 11:56	1
Xylenes, Total	2.0	U	2.0		ug/L			06/10/13 11:56	1

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

Lab Sample ID: MB 480-123063/6
Matrix: Water
Analysis Batch: 123063

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		66 - 137		06/10/13 11:56	1
Toluene-d8 (Surr)	96		71 - 126		06/10/13 11:56	1
4-Bromofluorobenzene (Surr)	96		73 - 120		06/10/13 11:56	1

Lab Sample ID: LCS 480-123063/5
Matrix: Water
Analysis Batch: 123063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	22.3		ug/L		89	71 - 129
1,1-Dichloroethene	25.0	20.7		ug/L		83	58 - 121
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 127
Benzene	25.0	22.3		ug/L		89	71 - 124
Chlorobenzene	25.0	22.6		ug/L		90	72 - 120
cis-1,2-Dichloroethene	25.0	22.1		ug/L		88	74 - 124
Ethylbenzene	25.0	23.5		ug/L		94	77 - 123
Methyl tert-butyl ether	25.0	24.5		ug/L		98	64 - 127
Tetrachloroethene	25.0	21.8		ug/L		87	74 - 122
Toluene	25.0	22.3		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	21.4		ug/L		86	73 - 127
Trichloroethene	25.0	23.4		ug/L		94	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: LCSD 480-123140/3-A
Matrix: Water
Analysis Batch: 123500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 123140

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	7.16		ug/L		89	22 - 167	3	20
2-Chlorophenol	8.00	5.0	U	ug/L		62	44 - 106	1	20
4-Chloro-3-methylphenol	8.00	6.49		ug/L		81	60 - 131	3	20
4-Nitrophenol	16.0	5.87		ug/L		37	10 - 105	11	20
Acenaphthene	8.00	5.84		ug/L		73	35 - 143	3	24
Bis(2-ethylhexyl) phthalate	8.00	8.61		ug/L		108	69 - 136	3	15
Fluorene	8.00	6.24		ug/L		78	54 - 137	1	15
Hexachloroethane	8.00	5.0	U	ug/L		53	32 - 104	5	20
N-Nitrosodi-n-propylamine	8.00	5.58		ug/L		70	50 - 123	3	20
Pentachlorophenol	16.0	11.1		ug/L		69	10 - 131	3	37
Phenol	8.00	2.48		ug/L		31	17 - 61	0	34
Pyrene	8.00	8.07		ug/L		101	58 - 143	4	19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-123140/3-A
Matrix: Water
Analysis Batch: 123500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 123140

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*34 - 132*
2-Fluorobiphenyl	*73*		*37 - 120*
p-Terphenyl-d14	*104*		*58 - 147*
Phenol-d5	*28*		*11 - 120*
2-Fluorophenol	*39*		*18 - 120*
2,4,6-Tribromophenol	*94*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-122957/1-A
Matrix: Water
Analysis Batch: 123340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/11/13 03:05	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/11/13 03:05	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/11/13 03:05	1

Lab Sample ID: LCS 480-122957/2-A
Matrix: Water
Analysis Batch: 123340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.6		ug/L		103	80 - 120
Chromium	20.0	20.8		ug/L		104	80 - 120
Copper	20.0	20.9		ug/L		104	80 - 120
Lead	20.0	20.1		ug/L		101	80 - 120
Zinc	50.0	54.3		ug/L		109	80 - 120

Lab Sample ID: MB 480-122587/11-B
Matrix: Water
Analysis Batch: 123339

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 122839

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Chromium	1.5	U	1.5		ug/L		06/08/13 09:40	06/10/13 23:49	1
Copper	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Lead	1.0	U	1.0		ug/L		06/08/13 09:40	06/10/13 23:49	1
Zinc	10	U	10		ug/L		06/08/13 09:40	06/10/13 23:49	1

Lab Sample ID: LCS 480-122587/12-B
Matrix: Water
Analysis Batch: 123339

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.5		ug/L		108	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-122587/12-B
Matrix: Water
Analysis Batch: 123339

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 122839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	21.0		ug/L		105	80 - 120
Copper	20.0	21.4		ug/L		107	80 - 120
Lead	20.0	20.7		ug/L		103	80 - 120
Zinc	50.0	54.1		ug/L		108	80 - 120

GC/MS VOA

Analysis Batch: 123063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1	P-02R	Total/NA	Water	8260B	
180-21994-2	EB-04-060613	Total/NA	Water	8260B	
180-21994-3	TB-060613	Total/NA	Water	8260B	
LCS 480-123063/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123063/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 123140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1 - DL	P-02R	Total/NA	Water	3510C	
180-21994-1	P-02R	Total/NA	Water	3510C	
180-21994-2	EB-04-060613	Total/NA	Water	3510C	
LCSD 480-123140/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 123500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1 - DL	P-02R	Total/NA	Water	8270C LL	123140
180-21994-1	P-02R	Total/NA	Water	8270C LL	123140
180-21994-2	EB-04-060613	Total/NA	Water	8270C LL	123140
LCSD 480-123140/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	123140

Metals

Prep Batch: 122839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1	P-02R	Dissolved	Water	3020A	
180-21994-2	EB-04-060613	Dissolved	Water	3020A	
LCS 480-122587/12-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-122587/11-B	Method Blank	Dissolved	Water	3020A	

Prep Batch: 122957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1	P-02R	Total/NA	Water	3020A	
180-21994-2	EB-04-060613	Total/NA	Water	3020A	
LCS 480-122957/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-122957/1-A	Method Blank	Total/NA	Water	3020A	

Analysis Batch: 123339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1	P-02R	Dissolved	Water	6020	122839
180-21994-2	EB-04-060613	Dissolved	Water	6020	122839
LCS 480-122587/12-B	Lab Control Sample	Dissolved	Water	6020	122839
MB 480-122587/11-B	Method Blank	Dissolved	Water	6020	122839

Analysis Batch: 123340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21994-1	P-02R	Total/NA	Water	6020	122957
180-21994-2	EB-04-060613	Total/NA	Water	6020	122957
LCS 480-122957/2-A	Lab Control Sample	Total/NA	Water	6020	122957

Metals (Continued)

Analysis Batch: 123340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-122957/1-A	Method Blank	Total/NA	Water	6020	122957

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	6/6/13	220378
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
Carnegie	PA	15106	M. Wolesky	V. Bortot
Project Name and Location (State)	**Carrier/Waybill Number**	**Analysis (Attach list if more space is needed)**
S. Cavalcade TI Zone Delineation / Houston, Tx	Fed Ex	
Contract/Purchase Order/Quote No.		
HBE-13665		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260B (BTEX)	8270C LL (SVOCs)	6020 dissolved metals (diss.)	6020 dissolved metals (field)	Special Instructions/ Conditions of Receipt
P-02R	6/6/13	1428		X			2		2	3			3	2	1	1	Dissolved metals are Field Filtered.
EB-04-060613	6/6/13	1506		X			2		2	3			3	2	1	1	
TB-060613	6/6/13	-		X						1			1				

RS 6/6/13

RS 6/6/13

180-21994 Login
PM: Bortot, Veronica
Company: Field & Technical Services LLC

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day

QC Requirements (Specify)

	Date	Time
1. Relinquished By		
2. Relinquished By		
3. Relinquished By		

	Date	Time
1. Received By	6/7/13	0900
2. Received By		
3. Received By		

Comments: 1.3, 1.9 °C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21994-1

Login Number: 21994

List Number: 1

Creator: Bort, Kathryn L

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-21994-1

Login Number: 21994
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/07/13 05:25 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-22042-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/13/2013 5:06:07 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Job ID: 180-22042-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-22042-1

Comments
No additional comments.

Receipt
The samples were received on 6/10/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following sample contained one acid and/or one base surrogate outside acceptance limits: FB-04-060713 (180-22042-2). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123724 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch 123562 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 123562recovered outside control limits for the following analyte: Indeno[1,2,3-cd]pyrene. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22042-1	DP13N-09S	Water	06/07/13 12:45	06/10/13 09:15
180-22042-2	FB-04-060713	Water	06/07/13 13:45	06/10/13 09:15

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: DP13N-09S

Lab Sample ID: 180-22042-1

Date Collected: 06/07/13 12:45

Matrix: Water

Date Received: 06/10/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123461	06/12/13 10:50	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1050.2 mL	1 mL	123562	06/12/13 14:13	JL	TAL BUF
Total/NA	Analysis	8270C LL		1			123724	06/13/13 12:43	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	123444	06/12/13 07:45	JM	TAL BUF
Dissolved	Analysis	6020		1			123747	06/12/13 15:38	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123443	06/12/13 07:45	JM	TAL BUF
Total/NA	Analysis	6020		1			123748	06/12/13 19:15	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: FB-04-060713

Lab Sample ID: 180-22042-2

Date Collected: 06/07/13 13:45

Matrix: Water

Date Received: 06/10/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123461	06/12/13 11:12	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1051.9 mL	1 mL	123562	06/12/13 14:13	JL	TAL BUF
Total/NA	Analysis	8270C LL		1			123724	06/13/13 13:10	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	123444	06/12/13 07:45	JM	TAL BUF
Dissolved	Analysis	6020		1			123747	06/12/13 15:44	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123443	06/12/13 07:45	JM	TAL BUF
Total/NA	Analysis	6020		1			123748	06/12/13 19:22	MM	TAL BUF
	Instrument ID: ELAN									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JL = Joseph Larson

JM = Jaclyn Mantell

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: DP13N-09S
Date Collected: 06/07/13 12:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 10:50	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 10:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 10:50	1
Acetone	10	U	10		ug/L			06/12/13 10:50	1
Benzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 10:50	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 10:50	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 10:50	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 10:50	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:50	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Ethylbenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 10:50	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 10:50	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Methylene Chloride	1.0	U	1.0		ug/L			06/12/13 10:50	1
Styrene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Toluene	1.0	U	1.0		ug/L			06/12/13 10:50	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:50	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 10:50	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 10:50	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 10:50	1
Xylenes, Total	2.0	U	2.0		ug/L			06/12/13 10:50	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: DP13N-09S
Date Collected: 06/07/13 12:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*06/12/13 10:50*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*06/12/13 10:50*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/12/13 10:50*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Methylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Methylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Acenaphthene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Acenaphthylene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 12:43	1
Acetophenone	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Anthracene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Atrazine	1.9	U	1.9		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzaldehyde	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 12:43	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Bis(2-ethylhexyl) phthalate	4.8	U *	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/12/13 14:13	06/13/13 12:43	1
Caprolactam	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Carbazole	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Chrysene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: DP13N-09S
Date Collected: 06/07/13 12:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/12/13 14:13	06/13/13 12:43	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Fluoranthene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Fluorene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
Hexachloroethane	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Indeno(1,2,3-cd)pyrene	0.48	U *	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Isophorone	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
Naphthalene	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
Nitrobenzene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 12:43	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
Phenanthrene	0.19	U	0.19		ug/L		06/12/13 14:13	06/13/13 12:43	1
Phenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 12:43	1
Pyrene	0.48	U *	0.48		ug/L		06/12/13 14:13	06/13/13 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*34 - 132*	*06/12/13 14:13*	*06/13/13 12:43*	*1*
2-Fluorobiphenyl	*71*		*37 - 120*	*06/12/13 14:13*	*06/13/13 12:43*	*1*
p-Terphenyl-d14	*127*		*58 - 147*	*06/12/13 14:13*	*06/13/13 12:43*	*1*
Phenol-d5	*25*		*11 - 120*	*06/12/13 14:13*	*06/13/13 12:43*	*1*
2-Fluorophenol	*36*		*18 - 120*	*06/12/13 14:13*	*06/13/13 12:43*	*1*
2,4,6-Tribromophenol	*96*		*39 - 146*	*06/12/13 14:13*	*06/13/13 12:43*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:15	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 19:15	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:15	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:15	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 19:15	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:38	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 15:38	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:38	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:38	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 15:38	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: FB-04-060713
Date Collected: 06/07/13 13:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 11:12	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 11:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 11:12	1
Acetone	10	U	10		ug/L			06/12/13 11:12	1
Benzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 11:12	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 11:12	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 11:12	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 11:12	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:12	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Ethylbenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 11:12	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 11:12	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Methylene Chloride	1.0	U	1.0		ug/L			06/12/13 11:12	1
Styrene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Toluene	1.0	U	1.0		ug/L			06/12/13 11:12	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:12	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 11:12	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 11:12	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 11:12	1
Xylenes, Total	2.0	U	2.0		ug/L			06/12/13 11:12	1

Client Sample ID: FB-04-060713
Date Collected: 06/07/13 13:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/12/13 11:12*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*06/12/13 11:12*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/12/13 11:12*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
bis (2-chloroisopropyl) ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4,5-Trichlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4,6-Trichlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4-Dichlorophenol	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4-Dimethylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4-Dinitrophenol	4.8	U *	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,4-Dinitrotoluene	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2,6-Dinitrotoluene	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Chloronaphthalene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Chlorophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Methylnaphthalene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Methylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
2-Nitrophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
3,3'-Dichlorobenzidine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
3-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Bromophenyl phenyl ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Chloro-3-methylphenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Chloroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Chlorophenyl phenyl ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Methylphenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Nitroaniline	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
4-Nitrophenol	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Acenaphthene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Acenaphthylene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 13:10	1
Acetophenone	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Anthracene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Atrazine	1.9	U	1.9		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzaldehyde	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzo(a)pyrene	0.17	U	0.17		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzo(g,h,i)perylene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/12/13 14:13	06/13/13 13:10	1
Bis(2-chloroethoxy)methane	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Bis(2-chloroethyl)ether	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Bis(2-ethylhexyl) phthalate	4.8	U *	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/12/13 14:13	06/13/13 13:10	1
Caprolactam	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Carbazole	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Chrysene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Dibenz(a,h)anthracene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-1

Client Sample ID: FB-04-060713
Date Collected: 06/07/13 13:45
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Diethyl phthalate	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Dimethyl phthalate	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Di-n-butyl phthalate	1.9	U	1.9		ug/L		06/12/13 14:13	06/13/13 13:10	1
Di-n-octyl phthalate	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Fluoranthene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Fluorene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Hexachlorobenzene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Hexachlorobutadiene	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
Hexachlorocyclopentadiene	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
Hexachloroethane	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Indeno(1,2,3-cd)pyrene	0.48	U *	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Isophorone	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
Naphthalene	**3.2**		0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
Nitrobenzene	0.48	U	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1
N-Nitrosodi-n-propylamine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
N-Nitrosodiphenylamine	4.8	U	4.8		ug/L		06/12/13 14:13	06/13/13 13:10	1
Pentachlorophenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
Phenanthrene	0.19	U	0.19		ug/L		06/12/13 14:13	06/13/13 13:10	1
Phenol	0.95	U	0.95		ug/L		06/12/13 14:13	06/13/13 13:10	1
Pyrene	0.48	U *	0.48		ug/L		06/12/13 14:13	06/13/13 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*34 - 132*	*06/12/13 14:13*	*06/13/13 13:10*	*1*
2-Fluorobiphenyl	*98*		*37 - 120*	*06/12/13 14:13*	*06/13/13 13:10*	*1*
p-Terphenyl-d14	*152*	*X*	*58 - 147*	*06/12/13 14:13*	*06/13/13 13:10*	*1*
Phenol-d5	*32*		*11 - 120*	*06/12/13 14:13*	*06/13/13 13:10*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/12/13 14:13*	*06/13/13 13:10*	*1*
2,4,6-Tribromophenol	*107*		*39 - 146*	*06/12/13 14:13*	*06/13/13 13:10*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:22	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 19:22	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:22	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 19:22	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 19:22	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:44	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 15:44	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:44	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:44	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 15:44	1

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

Lab Sample ID: MB 480-123461/5
Matrix: Water
Analysis Batch: 123461

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 10:14	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 10:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 10:14	1
Acetone	10	U	10		ug/L			06/12/13 10:14	1
Benzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 10:14	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Ethylbenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methylene Chloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Styrene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Toluene	1.0	U	1.0		ug/L			06/12/13 10:14	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Xylenes, Total	2.0	U	2.0		ug/L			06/12/13 10:14	1

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

Lab Sample ID: MB 480-123461/5
Matrix: Water
Analysis Batch: 123461

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/12/13 10:14*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/12/13 10:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/12/13 10:14*	*1*

Lab Sample ID: LCS 480-123461/4
Matrix: Water
Analysis Batch: 123461

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.9		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	19.9		ug/L		80	58 - 121
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 124
1,2-Dichloroethane	25.0	26.8		ug/L		107	75 - 127
Benzene	25.0	26.3		ug/L		105	71 - 124
Chlorobenzene	25.0	26.7		ug/L		107	72 - 120
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	23.8		ug/L		95	64 - 127
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	26.6		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
Trichloroethene	25.0	25.6		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-123562/1-A
Matrix: Water
Analysis Batch: 123724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123562/1-A
Matrix: Water
Analysis Batch: 123724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Methylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acenaphthene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acenaphthylene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acetophenone	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Anthracene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Atrazine	2.0	U	2.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzaldehyde	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Caprolactam	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Carbazole	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Chrysene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dibenzofuran	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Fluoranthene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Fluorene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachloroethane	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Isophorone	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Naphthalene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Nitrobenzene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123562/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Phenanthrene	0.20	U	0.20		ug/L		06/12/13 14:13	06/13/13 11:21	1
Phenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Pyrene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*34 - 132*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
p-Terphenyl-d14	*144*		*58 - 147*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
Phenol-d5	*30*		*11 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2-Fluorophenol	*43*		*18 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2,4,6-Tribromophenol	*94*		*39 - 146*	*06/12/13 14:13*	*06/13/13 11:21*	*1*

Lab Sample ID: LCS 480-123562/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	8.72		ug/L		109	22 - 167
2-Chlorophenol	8.00	6.60		ug/L		83	44 - 106
4-Chloro-3-methylphenol	8.00	7.48		ug/L		93	60 - 131
4-Nitrophenol	16.0	6.62		ug/L		41	10 - 105
Acenaphthene	8.00	7.52		ug/L		94	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	10.9		ug/L		136	69 - 136
Fluorene	8.00	7.71		ug/L		96	54 - 137
Hexachloroethane	8.00	5.60		ug/L		70	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.38		ug/L		92	50 - 123
Pentachlorophenol	16.0	12.8		ug/L		80	10 - 131
Phenol	8.00	2.88		ug/L		36	17 - 61
Pyrene	8.00	11.4		ug/L		142	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*84*		*34 - 132*
2-Fluorobiphenyl	*94*		*37 - 120*
p-Terphenyl-d14	*136*		*58 - 147*
Phenol-d5	*35*		*11 - 120*
2-Fluorophenol	*51*		*18 - 120*
2,4,6-Tribromophenol	*106*		*39 - 146*

Lab Sample ID: LCSD 480-123562/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	8.39		ug/L		105	22 - 167	4	20
2-Chlorophenol	8.00	6.89		ug/L		86	44 - 106	4	20
4-Chloro-3-methylphenol	8.00	7.75		ug/L		97	60 - 131	4	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-123562/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol	16.0	6.15		ug/L		38	10 - 105	7	20
Acenaphthene	8.00	7.69		ug/L		96	35 - 143	2	24
Bis(2-ethylhexyl) phthalate	8.00	11.0	*	ug/L		138	69 - 136	1	15
Fluorene	8.00	7.87		ug/L		98	54 - 137	2	15
Hexachloroethane	8.00	5.91		ug/L		74	32 - 104	5	20
N-Nitrosodi-n-propylamine	8.00	8.01		ug/L		100	50 - 123	8	20
Pentachlorophenol	16.0	12.4		ug/L		77	10 - 131	3	37
Phenol	8.00	3.17		ug/L		40	17 - 61	9	34
Pyrene	8.00	11.6	*	ug/L		145	58 - 143	2	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*95*		*34 - 132*
2-Fluorobiphenyl	*98*		*37 - 120*
p-Terphenyl-d14	*146*		*58 - 147*
Phenol-d5	*38*		*11 - 120*
2-Fluorophenol	*54*		*18 - 120*
2,4,6-Tribromophenol	*111*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-123443/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123748 — **Prep Batch: 123443**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 16:08	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 16:08	1

Lab Sample ID: LCS 480-123443/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123748 — **Prep Batch: 123443**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	22.1		ug/L		110	80 - 120
Chromium	20.0	21.9		ug/L		110	80 - 120
Copper	20.0	21.9		ug/L		110	80 - 120
Lead	20.0	20.3		ug/L		101	80 - 120
Zinc	50.0	56.1		ug/L		112	80 - 120

Lab Sample ID: MB 480-123156/7-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 123747 — **Prep Batch: 123444**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-123156/7-B
Matrix: Water
Analysis Batch: 123747

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 123444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 13:49	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 13:49	1

Lab Sample ID: LCS 480-123156/8-B
Matrix: Water
Analysis Batch: 123747

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 123444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.2		ug/L		106	80 - 120
Chromium	20.0	21.1		ug/L		106	80 - 120
Copper	20.0	21.3		ug/L		107	80 - 120
Lead	20.0	20.5		ug/L		102	80 - 120
Zinc	50.0	54.6		ug/L		109	80 - 120

GC/MS VOA

Analysis Batch: 123461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Total/NA	Water	8260B	
180-22042-2	FB-04-060713	Total/NA	Water	8260B	
LCS 480-123461/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123461/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 123562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Total/NA	Water	3510C	
180-22042-2	FB-04-060713	Total/NA	Water	3510C	
LCS 480-123562/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-123562/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-123562/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Total/NA	Water	8270C LL	123562
180-22042-2	FB-04-060713	Total/NA	Water	8270C LL	123562
LCS 480-123562/2-A	Lab Control Sample	Total/NA	Water	8270C LL	123562
LCSD 480-123562/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	123562
MB 480-123562/1-A	Method Blank	Total/NA	Water	8270C LL	123562

Metals

Prep Batch: 123443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Total/NA	Water	3020A	
180-22042-2	FB-04-060713	Total/NA	Water	3020A	
LCS 480-123443/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-123443/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 123444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Dissolved	Water	3020A	
180-22042-2	FB-04-060713	Dissolved	Water	3020A	
LCS 480-123156/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-123156/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 123747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Dissolved	Water	6020	123444
180-22042-2	FB-04-060713	Dissolved	Water	6020	123444
LCS 480-123156/8-B	Lab Control Sample	Dissolved	Water	6020	123444
MB 480-123156/7-B	Method Blank	Dissolved	Water	6020	123444

Analysis Batch: 123748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-1	DP13N-09S	Total/NA	Water	6020	123443
180-22042-2	FB-04-060713	Total/NA	Water	6020	123443

Metals (Continued)

Analysis Batch: 123748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-123443/2-A	Lab Control Sample	Total/NA	Water	6020	123443
MB 480-123443/1-A	Method Blank	Total/NA	Water	6020	123443

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Test THE LEADER...

180-22042 Chain of Custody

TAL-4124 (1007)

Client: Key Environmental / FTS	Project Manager: Angie Gatchie	Date: 6/7/13	Chain of Custody Number: 220321
Address: 200 Third Ave.	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page 1 of 1
City: Carnegie; State: PA; Zip Code: 15106	Site Contact: M. Valesky; Lab Contact: V. Bartot		
Project Name and Location (State): S. Cavalcade TI Zone Delineation	Carrier/Waybill Number: Fed Ex		
Contract/Purchase Order/Quote No.: KBE-13665			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260B (BTEX)	8270C (SVOCs)	6020 selected metals (diss)	6020 selected metals (total)	Special Instructions/ Conditions of Receipt
DP13N-095	6/7/13	1245		X			2		2	3			3	2	1	1	Diss. Metals are
FB-04-060713	6/7/13	1345		X			2		2	3			3	2	1	1	Field Filtered.

RS 6/7/13

RS 6/7/13

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day TAT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/7/13		1. Received By: [signature]	6/10/13	915
2. Relinquished By: [signature]			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: 3.3°C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	6/7/13	220322
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
Carnegie	PA	15106	M. Valentine	V. Burton
Project Name and Location (State)	**Carrier/Waybill Number**	
S. Cavalcade TI Zone Delineation / Houston, TX	Fed Ex	
Contract/Purchase Order/Quote No.		
KBE-13665		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260B (Brtex)	6020C Lab Filtered	6020C Lab Filtered (Dissolved)	6010B Lab Filtered (Dissolved)	Special Instructions/ Conditions of Receipt
DP13N-07I	6/7/13	1010		X			2		2	3			3	2	1	1	Diss. Metals are Field Filtered
TB-060713	6/7/13	—		X						1			1				

RS 6/7/13 RS 6/7/13

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

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

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		6/7/13			6/10/13	9:05
2.						
3.						

Comments

3.3°C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/13/2013

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22042-1

Login Number: 22042

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

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?	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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22042-1

Login Number: 22042
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/11/13 06:16 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-22042-2
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/13/2013 5:03:27 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

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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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Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Job ID: 180-22042-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-22042-2

Comments
No additional comments.

Receipt
The samples were received on 6/10/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The following sample was diluted due to abundance of target analytes: DP13N-07I (180-22042-3). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 123724 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. 2,4-Dinitrophenol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch 123562 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 123562recovered outside control limits for the following analyte: Indeno[1,2,3-cd]pyrene. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Dissolved metals results for the following sample(s) are slightly greater than the corresponding total metals results for arsenic: DP13N-07I (180-22042-3).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22042-3	DP13N-07I	Water	06/07/13 10:10	06/10/13 09:15
180-22042-4	TB-060713	Water	06/07/13 00:00	06/10/13 09:15

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Client Sample ID: DP13N-07I

Lab Sample ID: 180-22042-3

Date Collected: 06/07/13 10:10

Matrix: Water

Date Received: 06/10/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123461	06/12/13 11:34	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1043.6 mL	1 mL	123562	06/12/13 14:13	JL	TAL BUF
Total/NA	Analysis	8270C LL		1000			123724	06/13/13 14:13	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	123444	06/12/13 07:45	JM	TAL BUF
Dissolved	Analysis	6020		1			123747	06/12/13 15:49	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123443	06/12/13 07:45	JM	TAL BUF
Total/NA	Analysis	6020		1			123748	06/12/13 19:28	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TB-060713

Lab Sample ID: 180-22042-4

Date Collected: 06/07/13 00:00

Matrix: Water

Date Received: 06/10/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123461	06/12/13 11:56	TRF	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JL = Joseph Larson

JM = Jaclyn Mantell

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Client Sample ID: DP13N-07I
Date Collected: 06/07/13 10:10
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:34	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:34	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 11:34	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 11:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 11:34	1
Acetone	10	U	10		ug/L			06/12/13 11:34	1
Benzene	**1.8**		1.0		ug/L			06/12/13 11:34	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 11:34	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 11:34	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 11:34	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 11:34	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:34	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Ethylbenzene	**24**		1.0		ug/L			06/12/13 11:34	1
Isopropylbenzene	**6.3**		1.0		ug/L			06/12/13 11:34	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 11:34	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 11:34	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Methylene Chloride	1.0	U	1.0		ug/L			06/12/13 11:34	1
Styrene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Toluene	**1.0**		1.0		ug/L			06/12/13 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:34	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 11:34	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 11:34	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 11:34	1
Xylenes, Total	**23**		2.0		ug/L			06/12/13 11:34	1

Client Sample ID: DP13N-07I
Date Collected: 06/07/13 10:10
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/12/13 11:34*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*06/12/13 11:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/12/13 11:34*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
bis (2-chloroisopropyl) ether	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4,5-Trichlorophenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4,6-Trichlorophenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4-Dichlorophenol	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4-Dimethylphenol	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4-Dinitrophenol	4800	U *	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,4-Dinitrotoluene	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2,6-Dinitrotoluene	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Chloronaphthalene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Chlorophenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Methylnaphthalene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Methylphenol	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Nitroaniline	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
2-Nitrophenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
3,3'-Dichlorobenzidine	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
3-Nitroaniline	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4,6-Dinitro-2-methylphenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Bromophenyl phenyl ether	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Chloro-3-methylphenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Chloroaniline	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Chlorophenyl phenyl ether	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Methylphenol	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Nitroaniline	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
4-Nitrophenol	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Acenaphthene	**670**		480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Acenaphthylene	290	U	290		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Acetophenone	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Anthracene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Atrazine	1900	U	1900		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzaldehyde	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzo(a)anthracene	290	U	290		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzo(a)pyrene	170	U	170		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzo(b)fluoranthene	290	U	290		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzo(g,h,i)perylene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Benzo(k)fluoranthene	290	U	290		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Bis(2-chloroethoxy)methane	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Bis(2-chloroethyl)ether	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Bis(2-ethylhexyl) phthalate	4800	U *	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Butyl benzyl phthalate	2900	U	2900		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Caprolactam	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Carbazole	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Chrysene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Dibenz(a,h)anthracene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000

Client Sample ID: DP13N-07I
Date Collected: 06/07/13 10:10
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Diethyl phthalate	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Dimethyl phthalate	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Di-n-butyl phthalate	1900	U	1900		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Di-n-octyl phthalate	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Fluoranthene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Fluorene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Hexachlorobenzene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Hexachlorobutadiene	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Hexachlorocyclopentadiene	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Hexachloroethane	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Indeno(1,2,3-cd)pyrene	480	U *	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Isophorone	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Naphthalene	**7500**		960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Nitrobenzene	480	U	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000
N-Nitrosodi-n-propylamine	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
N-Nitrosodiphenylamine	4800	U	4800		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Pentachlorophenol	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Phenanthrene	**420**		190		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Phenol	960	U	960		ug/L		06/12/13 14:13	06/13/13 14:13	1000
Pyrene	480	U *	480		ug/L		06/12/13 14:13	06/13/13 14:13	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*
Phenol-d5	*0*	*X*	*11 - 120*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/12/13 14:13*	*06/13/13 14:13*	*1000*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**39**		1.0		ug/L		06/12/13 07:45	06/12/13 19:28	1
Chromium	**16**		1.5		ug/L		06/12/13 07:45	06/12/13 19:28	1
Copper	**7.5**		1.0		ug/L		06/12/13 07:45	06/12/13 19:28	1
Lead	**7.9**		1.0		ug/L		06/12/13 07:45	06/12/13 19:28	1
Zinc	**37**		10		ug/L		06/12/13 07:45	06/12/13 19:28	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**45**		1.0		ug/L		06/12/13 07:45	06/12/13 15:49	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 15:49	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:49	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 15:49	1
Zinc	**18**		10		ug/L		06/12/13 07:45	06/12/13 15:49	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Client Sample ID: TB-060713
Date Collected: 06/07/13 00:00
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 11:56	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 11:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 11:56	1
Acetone	10	U	10		ug/L			06/12/13 11:56	1
Benzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 11:56	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 11:56	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 11:56	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 11:56	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:56	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Ethylbenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 11:56	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 11:56	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Methylene Chloride	**3.8**		1.0		ug/L			06/12/13 11:56	1
Styrene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Toluene	1.0	U	1.0		ug/L			06/12/13 11:56	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 11:56	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 11:56	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 11:56	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 11:56	1
Xylenes, Total	2.0	U	2.0		ug/L			06/12/13 11:56	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22042-2

Client Sample ID: TB-060713
Date Collected: 06/07/13 00:00
Date Received: 06/10/13 09:15

Lab Sample ID: 180-22042-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		06/12/13 11:56	1
Toluene-d8 (Surr)	99		71 - 126		06/12/13 11:56	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/12/13 11:56	1

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

Lab Sample ID: MB 480-123461/5
Matrix: Water
Analysis Batch: 123461

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
2-Hexanone	5.0	U	5.0		ug/L			06/12/13 10:14	1
2-Butanone (MEK)	10	U	10		ug/L			06/12/13 10:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/12/13 10:14	1
Acetone	10	U	10		ug/L			06/12/13 10:14	1
Benzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromoform	1.0	U	1.0		ug/L			06/12/13 10:14	1
Bromomethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Carbon disulfide	1.0	U	1.0		ug/L			06/12/13 10:14	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chlorobenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloroethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloroform	1.0	U	1.0		ug/L			06/12/13 10:14	1
Chloromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Cyclohexane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Ethylbenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methyl acetate	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Methylene Chloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Styrene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Toluene	1.0	U	1.0		ug/L			06/12/13 10:14	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Trichloroethene	1.0	U	1.0		ug/L			06/12/13 10:14	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/12/13 10:14	1
Vinyl chloride	1.0	U	1.0		ug/L			06/12/13 10:14	1
Xylenes, Total	2.0	U	2.0		ug/L			06/12/13 10:14	1

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

Lab Sample ID: MB 480-123461/5
Matrix: Water
Analysis Batch: 123461

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/12/13 10:14*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*06/12/13 10:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/12/13 10:14*	*1*

Lab Sample ID: LCS 480-123461/4
Matrix: Water
Analysis Batch: 123461

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.9		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	19.9		ug/L		80	58 - 121
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 124
1,2-Dichloroethane	25.0	26.8		ug/L		107	75 - 127
Benzene	25.0	26.3		ug/L		105	71 - 124
Chlorobenzene	25.0	26.7		ug/L		107	72 - 120
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	23.8		ug/L		95	64 - 127
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	26.6		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
Trichloroethene	25.0	25.6		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*
Toluene-d8 (Surr)	*101*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-123562/1-A
Matrix: Water
Analysis Batch: 123724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123562/1-A
Matrix: Water
Analysis Batch: 123724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Methylphenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acenaphthene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acenaphthylene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Acetophenone	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Anthracene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Atrazine	2.0	U	2.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzaldehyde	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Caprolactam	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Carbazole	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Chrysene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dibenzofuran	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Fluoranthene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Fluorene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Hexachloroethane	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Isophorone	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
Naphthalene	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Nitrobenzene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123562/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Phenanthrene	0.20	U	0.20		ug/L		06/12/13 14:13	06/13/13 11:21	1
Phenol	1.0	U	1.0		ug/L		06/12/13 14:13	06/13/13 11:21	1
Pyrene	0.50	U	0.50		ug/L		06/12/13 14:13	06/13/13 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*34 - 132*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
p-Terphenyl-d14	*144*		*58 - 147*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
Phenol-d5	*30*		*11 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2-Fluorophenol	*43*		*18 - 120*	*06/12/13 14:13*	*06/13/13 11:21*	*1*
2,4,6-Tribromophenol	*94*		*39 - 146*	*06/12/13 14:13*	*06/13/13 11:21*	*1*

Lab Sample ID: LCS 480-123562/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	8.72		ug/L		109	22 - 167
2-Chlorophenol	8.00	6.60		ug/L		83	44 - 106
4-Chloro-3-methylphenol	8.00	7.48		ug/L		93	60 - 131
4-Nitrophenol	16.0	6.62		ug/L		41	10 - 105
Acenaphthene	8.00	7.52		ug/L		94	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	10.9		ug/L		136	69 - 136
Fluorene	8.00	7.71		ug/L		96	54 - 137
Hexachloroethane	8.00	5.60		ug/L		70	32 - 104
N-Nitrosodi-n-propylamine	8.00	7.38		ug/L		92	50 - 123
Pentachlorophenol	16.0	12.8		ug/L		80	10 - 131
Phenol	8.00	2.88		ug/L		36	17 - 61
Pyrene	8.00	11.4		ug/L		142	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*84*		*34 - 132*
2-Fluorobiphenyl	*94*		*37 - 120*
p-Terphenyl-d14	*136*		*58 - 147*
Phenol-d5	*35*		*11 - 120*
2-Fluorophenol	*51*		*18 - 120*
2,4,6-Tribromophenol	*106*		*39 - 146*

Lab Sample ID: LCSD 480-123562/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	8.39		ug/L		105	22 - 167	4	20
2-Chlorophenol	8.00	6.89		ug/L		86	44 - 106	4	20
4-Chloro-3-methylphenol	8.00	7.75		ug/L		97	60 - 131	4	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-123562/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123724 — **Prep Batch: 123562**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	6.15		ug/L		38	10 - 105	7	20
Acenaphthene			8.00	7.69		ug/L		96	35 - 143	2	24
Bis(2-ethylhexyl) phthalate			8.00	11.0	*	ug/L		138	69 - 136	1	15
Fluorene			8.00	7.87		ug/L		98	54 - 137	2	15
Hexachloroethane			8.00	5.91		ug/L		74	32 - 104	5	20
N-Nitrosodi-n-propylamine			8.00	8.01		ug/L		100	50 - 123	8	20
Pentachlorophenol			16.0	12.4		ug/L		77	10 - 131	3	37
Phenol			8.00	3.17		ug/L		40	17 - 61	9	34
Pyrene			8.00	11.6	*	ug/L		145	58 - 143	2	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*95*		*34 - 132*
2-Fluorobiphenyl	*98*		*37 - 120*
p-Terphenyl-d14	*146*		*58 - 147*
Phenol-d5	*38*		*11 - 120*
2-Fluorophenol	*54*		*18 - 120*
2,4,6-Tribromophenol	*111*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-123443/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123748 — **Prep Batch: 123443**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 16:08	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 16:08	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 16:08	1

Lab Sample ID: LCS 480-123443/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123748 — **Prep Batch: 123443**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			20.0	22.1		ug/L		110	80 - 120
Chromium			20.0	21.9		ug/L		110	80 - 120
Copper			20.0	21.9		ug/L		110	80 - 120
Lead			20.0	20.3		ug/L		101	80 - 120
Zinc			50.0	56.1		ug/L		112	80 - 120

Lab Sample ID: MB 480-123156/7-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 123747 — **Prep Batch: 123444**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-123156/7-B
Matrix: Water
Analysis Batch: 123747

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 123444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		06/12/13 07:45	06/12/13 13:49	1
Copper	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1
Lead	1.0	U	1.0		ug/L		06/12/13 07:45	06/12/13 13:49	1
Zinc	10	U	10		ug/L		06/12/13 07:45	06/12/13 13:49	1

Lab Sample ID: LCS 480-123156/8-B
Matrix: Water
Analysis Batch: 123747

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 123444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	21.2		ug/L		106	80 - 120
Chromium	20.0	21.1		ug/L		106	80 - 120
Copper	20.0	21.3		ug/L		107	80 - 120
Lead	20.0	20.5		ug/L		102	80 - 120
Zinc	50.0	54.6		ug/L		109	80 - 120

GC/MS VOA

Analysis Batch: 123461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Total/NA	Water	8260B	
180-22042-4	TB-060713	Total/NA	Water	8260B	
LCS 480-123461/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123461/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 123562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Total/NA	Water	3510C	
LCS 480-123562/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-123562/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-123562/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Total/NA	Water	8270C LL	123562
LCS 480-123562/2-A	Lab Control Sample	Total/NA	Water	8270C LL	123562
LCSD 480-123562/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	123562
MB 480-123562/1-A	Method Blank	Total/NA	Water	8270C LL	123562

Metals

Prep Batch: 123443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Total/NA	Water	3020A	
LCS 480-123443/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-123443/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 123444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Dissolved	Water	3020A	
LCS 480-123156/8-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-123156/7-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 123747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Dissolved	Water	6020	123444
LCS 480-123156/8-B	Lab Control Sample	Dissolved	Water	6020	123444
MB 480-123156/7-B	Method Blank	Dissolved	Water	6020	123444

Analysis Batch: 123748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22042-3	DP13N-07I	Total/NA	Water	6020	123443
LCS 480-123443/2-A	Lab Control Sample	Total/NA	Water	6020	123443
MB 480-123443/1-A	Method Blank	Total/NA	Water	6020	123443

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Test America
THE LEADER...

180-22042 Chain of Custody

6/13/2013

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	6/7/13	220321
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Carnegie / PA / 15106	M. Valesky	V. Bartot	
Project Name and Location (State)	**Carrier/Waybill Number**		
S. Cavalcade TI Zone Delineation	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE-13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aquaous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260B (8TCL)	8270C (SVOC)	Gross alpha/beta	Cr6 Soluble	Special Instructions/ Conditions of Receipt
DP13N-095	6/7/13	1245		X			2		2	3			3	2	1	1	Diss. Metals are
FB-04-060713	6/7/13	1345		X			2		2	3			3	2	1	1	Field Filtered.

RS 6/7/13

RS 6/7/13

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 day TAT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/7/13		1. Received By	6/10/13	915
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

3.3°C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Key Environmental / FTS	Angie Gatchie	6/7/13	220322
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
200 Third Ave.			
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
Carnegie	PA / 15106	M. Haberly	V. Bartek
Project Name and Location (State)	**Carrier/Waybill Number**		
S. Cavalcade TI Bore Delineation / Houston, TX	Fed Ex		
Contract/Purchase Order/Quote No.			
KBE-13665			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): BTEX (Brtex)	624 VOC List (Short)	624 VOC select metals (Diss)	6010 Metals only (Diss)	Special Instructions/ Conditions of Receipt
DP13N-07I	6/7/13	1010		X			2		2	3			3	2	1	1	Diss. Metals are field filtered
TB-060713	6/7/13	—		X						1			1				

RS 6/7/13

RS 6/7/13

Possible Hazard Identification	Sample Disposal	Turn Around Time Required	QC Requirements (Specify)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)	☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____	

	Relinquished By	Date	Time	Received By	Date	Time
1.		6/7/13		Meagan Holeyh	6/10/13	9:05
2.						
3.						

Comments

3.3°C #3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/13/2013

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22042-2

Login Number: 22042

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

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?	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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22042-2

Login Number: 22042
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/11/13 06:16 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-22077-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/18/2013 3:43:19 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

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

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Job ID: 180-22077-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-22077-1

Comments
No additional comments.

Receipt
The samples were received on 6/12/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.1º C and 3.7º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 124151 recovered outside control limits for the following analytes: 2,4-dimethylphenol. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch124151 recovered outside control limits for the following analyte: Bis[2-ethylhexyl] phthalate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C LL: The following sample contained one acid and/or one base surrogate outside acceptance limits: DP13N-09I (180-22077-2). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C LL: The following samples were diluted due to abundance of target analytes: DP13N-08I (180-22077-1), DP13N-08S (180-22077-3). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following samples were diluted due to the abundance of non-target analytes: DP13N-06I (180-22077-4), DP13N-09I (180-22077-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The method blank for preparation batch 124151 contained Naphthalene above the reporting limit (RL). The associated samples contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13N-08I (180-22077-1), DP13N-09I (180-22077-2).

No other analytical or quality issues were noted.

Organic Prep
Method(s) 3510C: The following samples formed emulsions during the extraction procedure: DP13N-08I (180-22077-1). The emulsions were broken up using centrifugation.

No other analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22077-1	DP13N-08I	Water	06/11/13 10:50	06/12/13 09:00
180-22077-2	DP13N-09I	Water	06/11/13 07:45	06/12/13 09:00
180-22077-3	DP13N-08S	Water	06/11/13 12:15	06/12/13 09:00
180-22077-4	DP13N-06I	Water	06/11/13 16:40	06/12/13 09:00
180-22077-5	TRIP BLANK	Water	06/11/13 00:00	06/12/13 09:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-08I

Lab Sample ID: 180-22077-1

Date Collected: 06/11/13 10:50

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123735	06/13/13 13:48	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			935.2 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		500			124527	06/18/13 12:08	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		1			124031	06/13/13 23:16	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123686	06/13/13 09:30	JM	TAL BUF
Dissolved	Analysis	6020		1			124032	06/14/13 01:48	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		2			124111	06/14/13 15:13	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-09I

Lab Sample ID: 180-22077-2

Date Collected: 06/11/13 07:45

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123735	06/13/13 14:12	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			961 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		5			124527	06/18/13 12:35	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		1			124031	06/13/13 23:22	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123686	06/13/13 09:30	JM	TAL BUF
Dissolved	Analysis	6020		1			124032	06/14/13 01:53	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		2			124111	06/14/13 15:19	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-08S

Lab Sample ID: 180-22077-3

Date Collected: 06/11/13 12:15

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123735	06/13/13 14:36	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1035 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-08S

Lab Sample ID: 180-22077-3

Date Collected: 06/11/13 12:15

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C LL		500			124527	06/18/13 13:03	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		1			124031	06/13/13 23:28	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123686	06/13/13 09:30	JM	TAL BUF
Dissolved	Analysis	6020		1			124032	06/14/13 01:58	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13N-06I

Lab Sample ID: 180-22077-4

Date Collected: 06/11/13 16:40

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123735	06/13/13 15:00	RL	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1003.2 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		5			124527	06/18/13 13:30	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123685	06/13/13 09:30	JM	TAL BUF
Total/NA	Analysis	6020		1			124031	06/13/13 23:34	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123686	06/13/13 09:30	JM	TAL BUF
Dissolved	Analysis	6020		1			124032	06/14/13 02:04	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-22077-5

Date Collected: 06/11/13 00:00

Matrix: Water

Date Received: 06/12/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123735	06/13/13 15:24	RL	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

ND = Nicole Dwyer

Batch Type: Analysis

MM = Michael Mosscrop

RL = Renee Larson

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-08I
Date Collected: 06/11/13 10:50
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 13:48	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 13:48	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 13:48	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 13:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 13:48	1
Acetone	**44**		10		ug/L			06/13/13 13:48	1
Benzene	**37**		1.0		ug/L			06/13/13 13:48	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 13:48	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 13:48	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 13:48	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 13:48	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 13:48	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Ethylbenzene	**36**		1.0		ug/L			06/13/13 13:48	1
Isopropylbenzene	**3.6**		1.0		ug/L			06/13/13 13:48	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 13:48	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 13:48	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 13:48	1
Styrene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Toluene	**3.4**		1.0		ug/L			06/13/13 13:48	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 13:48	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 13:48	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 13:48	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 13:48	1
Xylenes, Total	**86**		2.0		ug/L			06/13/13 13:48	1

Client Sample ID: DP13N-08I
Date Collected: 06/11/13 10:50
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*66 - 137*		*06/13/13 13:48*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*06/13/13 13:48*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/13/13 13:48*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
bis (2-chloroisopropyl) ether	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4,5-Trichlorophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4,6-Trichlorophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4-Dichlorophenol	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4-Dimethylphenol	530	U *	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4-Dinitrophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,4-Dinitrotoluene	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2,6-Dinitrotoluene	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Chloronaphthalene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Chlorophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Methylnaphthalene	**740**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Methylphenol	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Nitroaniline	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
2-Nitrophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
3,3'-Dichlorobenzidine	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
3-Nitroaniline	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4,6-Dinitro-2-methylphenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Bromophenyl phenyl ether	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Chloro-3-methylphenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Chloroaniline	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Chlorophenyl phenyl ether	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Methylphenol	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Nitroaniline	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
4-Nitrophenol	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Acenaphthene	**840**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Acenaphthylene	160	U	160		ug/L		06/15/13 07:39	06/18/13 12:08	500
Acetophenone	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Anthracene	**370**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Atrazine	1100	U	1100		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzaldehyde	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzo(a)anthracene	**200**		160		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzo(a)pyrene	96	U	96		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzo(b)fluoranthene	160	U	160		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzo(g,h,i)perylene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Benzo(k)fluoranthene	160	U	160		ug/L		06/15/13 07:39	06/18/13 12:08	500
Bis(2-chloroethoxy)methane	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Bis(2-chloroethyl)ether	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Bis(2-ethylhexyl) phthalate	2700	U *	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Butyl benzyl phthalate	1600	U	1600		ug/L		06/15/13 07:39	06/18/13 12:08	500
Caprolactam	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Carbazole	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Chrysene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Dibenz(a,h)anthracene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500

Client Sample ID: DP13N-08I
Date Collected: 06/11/13 10:50
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Diethyl phthalate	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Dimethyl phthalate	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Di-n-butyl phthalate	1100	U	1100		ug/L		06/15/13 07:39	06/18/13 12:08	500
Di-n-octyl phthalate	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Fluoranthene	**1100**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Fluorene	**570**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Hexachlorobenzene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Hexachlorobutadiene	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
Hexachlorocyclopentadiene	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
Hexachloroethane	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Indeno(1,2,3-cd)pyrene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Isophorone	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
Naphthalene	**8500**	**B**	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
Nitrobenzene	270	U	270		ug/L		06/15/13 07:39	06/18/13 12:08	500
N-Nitrosodi-n-propylamine	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
N-Nitrosodiphenylamine	2700	U	2700		ug/L		06/15/13 07:39	06/18/13 12:08	500
Pentachlorophenol	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
Phenanthrene	**2400**		110		ug/L		06/15/13 07:39	06/18/13 12:08	500
Phenol	530	U	530		ug/L		06/15/13 07:39	06/18/13 12:08	500
Pyrene	**840**		270		ug/L		06/15/13 07:39	06/18/13 12:08	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/15/13 07:39*	*06/18/13 12:08*	*500*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/15/13 07:39*	*06/18/13 12:08*	*500*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/15/13 07:39*	*06/18/13 12:08*	*500*
Phenol-d5	*0*	*X*	*11 - 120*	*06/15/13 07:39*	*06/18/13 12:08*	*500*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/15/13 07:39*	*06/18/13 12:08*	*500*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/15/13 07:39*	*06/18/13 12:08*	*500*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.7**		1.0		ug/L		06/13/13 09:30	06/13/13 23:16	1
Chromium	**190**		3.0		ug/L		06/13/13 09:30	06/14/13 15:13	2
Copper	**120**		1.0		ug/L		06/13/13 09:30	06/13/13 23:16	1
Lead	**48**		1.0		ug/L		06/13/13 09:30	06/13/13 23:16	1
Zinc	**540**		10		ug/L		06/13/13 09:30	06/13/13 23:16	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.2**		1.0		ug/L		06/13/13 09:30	06/14/13 01:48	1
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/14/13 01:48	1
Copper	**1.5**		1.0		ug/L		06/13/13 09:30	06/14/13 01:48	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 01:48	1
Zinc	**33**		10		ug/L		06/13/13 09:30	06/14/13 01:48	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-09I
Date Collected: 06/11/13 07:45
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 14:12	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 14:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 14:12	1
Acetone	**22**		10		ug/L			06/13/13 14:12	1
Benzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 14:12	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 14:12	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 14:12	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 14:12	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:12	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 14:12	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 14:12	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 14:12	1
Styrene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Toluene	1.0	U	1.0		ug/L			06/13/13 14:12	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:12	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 14:12	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 14:12	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 14:12	1
Xylenes, Total	2.0	U	2.0		ug/L			06/13/13 14:12	1

Client Sample ID: DP13N-09I
Date Collected: 06/11/13 07:45
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*06/13/13 14:12*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/13/13 14:12*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/13/13 14:12*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
bis (2-chloroisopropyl) ether	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4,5-Trichlorophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4,6-Trichlorophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4-Dichlorophenol	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4-Dimethylphenol	5.2	U *	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4-Dinitrophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,4-Dinitrotoluene	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2,6-Dinitrotoluene	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Chloronaphthalene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Chlorophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Methylnaphthalene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Methylphenol	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Nitroaniline	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
2-Nitrophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
3,3'-Dichlorobenzidine	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
3-Nitroaniline	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4,6-Dinitro-2-methylphenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Bromophenyl phenyl ether	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Chloro-3-methylphenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Chloroaniline	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Chlorophenyl phenyl ether	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Methylphenol	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Nitroaniline	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
4-Nitrophenol	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Acenaphthene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Acenaphthylene	1.6	U	1.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Acetophenone	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Anthracene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Atrazine	10	U	10		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzaldehyde	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzo(a)anthracene	1.6	U	1.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzo(a)pyrene	0.94	U	0.94		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzo(b)fluoranthene	1.6	U	1.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzo(g,h,i)perylene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Benzo(k)fluoranthene	1.6	U	1.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Bis(2-chloroethoxy)methane	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Bis(2-chloroethyl)ether	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Bis(2-ethylhexyl) phthalate	26	U *	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Butyl benzyl phthalate	16	U	16		ug/L		06/15/13 07:39	06/18/13 12:35	5
Caprolactam	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Carbazole	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Chrysene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Dibenz(a,h)anthracene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-09I
Date Collected: 06/11/13 07:45
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Diethyl phthalate	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Dimethyl phthalate	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Di-n-butyl phthalate	**31**		10		ug/L		06/15/13 07:39	06/18/13 12:35	5
Di-n-octyl phthalate	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Fluoranthene	**4.8**		2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Fluorene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Hexachlorobenzene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Hexachlorobutadiene	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
Hexachlorocyclopentadiene	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
Hexachloroethane	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Indeno(1,2,3-cd)pyrene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Isophorone	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
Naphthalene	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
Nitrobenzene	2.6	U	2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5
N-Nitrosodi-n-propylamine	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
N-Nitrosodiphenylamine	26	U	26		ug/L		06/15/13 07:39	06/18/13 12:35	5
Pentachlorophenol	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
Phenanthrene	**3.5**		1.0		ug/L		06/15/13 07:39	06/18/13 12:35	5
Phenol	5.2	U	5.2		ug/L		06/15/13 07:39	06/18/13 12:35	5
Pyrene	**3.8**		2.6		ug/L		06/15/13 07:39	06/18/13 12:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*62*		*34 - 132*	*06/15/13 07:39*	*06/18/13 12:35*	*5*
2-Fluorobiphenyl	*52*		*37 - 120*	*06/15/13 07:39*	*06/18/13 12:35*	*5*
p-Terphenyl-d14	*36*	*X*	*58 - 147*	*06/15/13 07:39*	*06/18/13 12:35*	*5*
Phenol-d5	*20*		*11 - 120*	*06/15/13 07:39*	*06/18/13 12:35*	*5*
2-Fluorophenol	*27*		*18 - 120*	*06/15/13 07:39*	*06/18/13 12:35*	*5*
2,4,6-Tribromophenol	*57*		*39 - 146*	*06/15/13 07:39*	*06/18/13 12:35*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0		ug/L		06/13/13 09:30	06/13/13 23:22	1
Chromium	**120**		3.0		ug/L		06/13/13 09:30	06/14/13 15:19	2
Copper	**52**		1.0		ug/L		06/13/13 09:30	06/13/13 23:22	1
Lead	**24**		1.0		ug/L		06/13/13 09:30	06/13/13 23:22	1
Zinc	**150**		10		ug/L		06/13/13 09:30	06/13/13 23:22	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.4**		1.0		ug/L		06/13/13 09:30	06/14/13 01:53	1
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/14/13 01:53	1
Copper	**4.3**		1.0		ug/L		06/13/13 09:30	06/14/13 01:53	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 01:53	1
Zinc	**15**		10		ug/L		06/13/13 09:30	06/14/13 01:53	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-08S
Date Collected: 06/11/13 12:15
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 14:36	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 14:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 14:36	1
Acetone	10	U	10		ug/L			06/13/13 14:36	1
Benzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 14:36	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 14:36	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 14:36	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 14:36	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:36	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Isopropylbenzene	**1.9**		1.0		ug/L			06/13/13 14:36	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 14:36	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 14:36	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 14:36	1
Styrene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Toluene	1.0	U	1.0		ug/L			06/13/13 14:36	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 14:36	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 14:36	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 14:36	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 14:36	1
Xylenes, Total	**3.2**		2.0		ug/L			06/13/13 14:36	1

Client Sample ID: DP13N-08S
Date Collected: 06/11/13 12:15
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*06/13/13 14:36*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/13/13 14:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/13/13 14:36*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
bis (2-chloroisopropyl) ether	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4,5-Trichlorophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4,6-Trichlorophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4-Dichlorophenol	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4-Dimethylphenol	480	U *	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4-Dinitrophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,4-Dinitrotoluene	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2,6-Dinitrotoluene	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Chloronaphthalene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Chlorophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Methylnaphthalene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Methylphenol	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Nitroaniline	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
2-Nitrophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
3,3'-Dichlorobenzidine	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
3-Nitroaniline	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4,6-Dinitro-2-methylphenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Bromophenyl phenyl ether	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Chloro-3-methylphenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Chloroaniline	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Chlorophenyl phenyl ether	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Methylphenol	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Nitroaniline	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
4-Nitrophenol	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Acenaphthene	**490**		240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Acenaphthylene	140	U	140		ug/L		06/15/13 07:39	06/18/13 13:03	500
Acetophenone	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Anthracene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Atrazine	970	U	970		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzaldehyde	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzo(a)anthracene	140	U	140		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzo(a)pyrene	87	U	87		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzo(b)fluoranthene	140	U	140		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzo(g,h,i)perylene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Benzo(k)fluoranthene	140	U	140		ug/L		06/15/13 07:39	06/18/13 13:03	500
Bis(2-chloroethoxy)methane	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Bis(2-chloroethyl)ether	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Bis(2-ethylhexyl) phthalate	2400	U *	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Butyl benzyl phthalate	1400	U	1400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Caprolactam	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Carbazole	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Chrysene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Dibenz(a,h)anthracene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-08S
Date Collected: 06/11/13 12:15
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Diethyl phthalate	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Dimethyl phthalate	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Di-n-butyl phthalate	970	U	970		ug/L		06/15/13 07:39	06/18/13 13:03	500
Di-n-octyl phthalate	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Fluoranthene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Fluorene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Hexachlorobenzene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Hexachlorobutadiene	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
Hexachlorocyclopentadiene	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
Hexachloroethane	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Indeno(1,2,3-cd)pyrene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Isophorone	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
Naphthalene	**1600**	**B**	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
Nitrobenzene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500
N-Nitrosodi-n-propylamine	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
N-Nitrosodiphenylamine	2400	U	2400		ug/L		06/15/13 07:39	06/18/13 13:03	500
Pentachlorophenol	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
Phenanthrene	**120**		97		ug/L		06/15/13 07:39	06/18/13 13:03	500
Phenol	480	U	480		ug/L		06/15/13 07:39	06/18/13 13:03	500
Pyrene	240	U	240		ug/L		06/15/13 07:39	06/18/13 13:03	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*X*	*34 - 132*	*06/15/13 07:39*	*06/18/13 13:03*	*500*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*06/15/13 07:39*	*06/18/13 13:03*	*500*
p-Terphenyl-d14	*0*	*X*	*58 - 147*	*06/15/13 07:39*	*06/18/13 13:03*	*500*
Phenol-d5	*0*	*X*	*11 - 120*	*06/15/13 07:39*	*06/18/13 13:03*	*500*
2-Fluorophenol	*0*	*X*	*18 - 120*	*06/15/13 07:39*	*06/18/13 13:03*	*500*
2,4,6-Tribromophenol	*0*	*X*	*39 - 146*	*06/15/13 07:39*	*06/18/13 13:03*	*500*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.8**		1.0		ug/L		06/13/13 09:30	06/13/13 23:28	1
Chromium	**23**		1.5		ug/L		06/13/13 09:30	06/13/13 23:28	1
Copper	**10**		1.0		ug/L		06/13/13 09:30	06/13/13 23:28	1
Lead	**19**		1.0		ug/L		06/13/13 09:30	06/13/13 23:28	1
Zinc	**29**		10		ug/L		06/13/13 09:30	06/13/13 23:28	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.0**		1.0		ug/L		06/13/13 09:30	06/14/13 01:58	1
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/14/13 01:58	1
Copper	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 01:58	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 01:58	1
Zinc	10	U	10		ug/L		06/13/13 09:30	06/14/13 01:58	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-06I
Date Collected: 06/11/13 16:40
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 15:00	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 15:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 15:00	1
Acetone	10	U	10		ug/L			06/13/13 15:00	1
Benzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 15:00	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 15:00	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 15:00	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 15:00	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:00	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 15:00	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 15:00	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 15:00	1
Styrene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Toluene	1.0	U	1.0		ug/L			06/13/13 15:00	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:00	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 15:00	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 15:00	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 15:00	1
Xylenes, Total	2.0	U	2.0		ug/L			06/13/13 15:00	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-06I
Date Collected: 06/11/13 16:40
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*06/13/13 15:00*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*06/13/13 15:00*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/13/13 15:00*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
bis (2-chloroisopropyl) ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4,5-Trichlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4,6-Trichlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4-Dichlorophenol	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4-Dimethylphenol	5.0	U *	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4-Dinitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,4-Dinitrotoluene	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2,6-Dinitrotoluene	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Chloronaphthalene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Chlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Methylnaphthalene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Methylphenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
2-Nitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
3,3'-Dichlorobenzidine	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
3-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4,6-Dinitro-2-methylphenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Bromophenyl phenyl ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Chloro-3-methylphenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Chloroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Chlorophenyl phenyl ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Methylphenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
4-Nitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Acenaphthene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Acenaphthylene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Acetophenone	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Anthracene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Atrazine	10	U	10		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzaldehyde	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzo(a)pyrene	0.90	U	0.90		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzo(g,h,i)perylene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Bis(2-chloroethoxy)methane	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Bis(2-chloroethyl)ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Bis(2-ethylhexyl) phthalate	25	U *	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Butyl benzyl phthalate	15	U	15		ug/L		06/15/13 07:39	06/18/13 13:30	5
Caprolactam	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Carbazole	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Chrysene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Dibenz(a,h)anthracene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: DP13N-06I
Date Collected: 06/11/13 16:40
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-4
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Diethyl phthalate	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Dimethyl phthalate	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Di-n-butyl phthalate	10	U	10		ug/L		06/15/13 07:39	06/18/13 13:30	5
Di-n-octyl phthalate	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Fluoranthene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Fluorene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Hexachlorobenzene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Hexachlorobutadiene	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Hexachlorocyclopentadiene	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Hexachloroethane	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Indeno(1,2,3-cd)pyrene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Isophorone	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
Naphthalene	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Nitrobenzene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5
N-Nitrosodi-n-propylamine	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
N-Nitrosodiphenylamine	25	U	25		ug/L		06/15/13 07:39	06/18/13 13:30	5
Pentachlorophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Phenanthrene	**1.7**		1.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Phenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/18/13 13:30	5
Pyrene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 13:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85*		*34 - 132*	*06/15/13 07:39*	*06/18/13 13:30*	*5*
2-Fluorobiphenyl	*72*		*37 - 120*	*06/15/13 07:39*	*06/18/13 13:30*	*5*
p-Terphenyl-d14	*75*		*58 - 147*	*06/15/13 07:39*	*06/18/13 13:30*	*5*
Phenol-d5	*27*		*11 - 120*	*06/15/13 07:39*	*06/18/13 13:30*	*5*
2-Fluorophenol	*37*		*18 - 120*	*06/15/13 07:39*	*06/18/13 13:30*	*5*
2,4,6-Tribromophenol	*85*		*39 - 146*	*06/15/13 07:39*	*06/18/13 13:30*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.9**		1.0		ug/L		06/13/13 09:30	06/13/13 23:34	1
Chromium	**160**		1.5		ug/L		06/13/13 09:30	06/13/13 23:34	1
Copper	**100**		1.0		ug/L		06/13/13 09:30	06/13/13 23:34	1
Lead	**17**		1.0		ug/L		06/13/13 09:30	06/13/13 23:34	1
Zinc	**280**		10		ug/L		06/13/13 09:30	06/13/13 23:34	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 02:04	1
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/14/13 02:04	1
Copper	**3.8**		1.0		ug/L		06/13/13 09:30	06/14/13 02:04	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 02:04	1
Zinc	**15**		10		ug/L		06/13/13 09:30	06/14/13 02:04	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: TRIP BLANK
Date Collected: 06/11/13 00:00
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 15:24	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 15:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 15:24	1
Acetone	10	U	10		ug/L			06/13/13 15:24	1
Benzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 15:24	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 15:24	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 15:24	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 15:24	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:24	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 15:24	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 15:24	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 15:24	1
Styrene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Toluene	1.0	U	1.0		ug/L			06/13/13 15:24	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 15:24	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 15:24	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 15:24	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 15:24	1
Xylenes, Total	2.0	U	2.0		ug/L			06/13/13 15:24	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22077-1

Client Sample ID: TRIP BLANK
Date Collected: 06/11/13 00:00
Date Received: 06/12/13 09:00

Lab Sample ID: 180-22077-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		06/13/13 15:24	1
Toluene-d8 (Surr)	94		71 - 126		06/13/13 15:24	1
4-Bromofluorobenzene (Surr)	97		73 - 120		06/13/13 15:24	1

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

Lab Sample ID: MB 480-123735/6
Matrix: Water
Analysis Batch: 123735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 12:40	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 12:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 12:40	1
Acetone	10	U	10		ug/L			06/13/13 12:40	1
Benzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 12:40	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 12:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 12:40	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 12:40	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 12:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 12:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 12:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 12:40	1
Styrene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Toluene	1.0	U	1.0		ug/L			06/13/13 12:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 12:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 12:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 12:40	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 12:40	1
Xylenes, Total	2.0	U	2.0		ug/L			06/13/13 12:40	1

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

Lab Sample ID: MB 480-123735/6
Matrix: Water
Analysis Batch: 123735

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*06/13/13 12:40*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*06/13/13 12:40*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/13/13 12:40*	*1*

Lab Sample ID: LCS 480-123735/5
Matrix: Water
Analysis Batch: 123735

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.4		ug/L		98	71 - 129
1,1-Dichloroethene	25.0	21.4		ug/L		86	58 - 121
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	27.8		ug/L		111	75 - 127
Benzene	25.0	24.0		ug/L		96	71 - 124
Chlorobenzene	25.0	25.0		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	74 - 124
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
Methyl tert-butyl ether	25.0	25.2		ug/L		101	64 - 127
Tetrachloroethene	25.0	24.4		ug/L		98	74 - 122
Toluene	25.0	24.4		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	73 - 127
Trichloroethene	25.0	25.0		ug/L		100	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*
Toluene-d8 (Surr)	*98*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-124151/1-A
Matrix: Water
Analysis Batch: 124347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-124151/1-A
Matrix: Water
Analysis Batch: 124347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Methylphenol	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Acenaphthene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Acenaphthylene	0.30	U	0.30		ug/L		06/15/13 07:39	06/17/13 15:18	1
Acetophenone	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Anthracene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Atrazine	2.0	U	2.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzaldehyde	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/15/13 07:39	06/17/13 15:18	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Caprolactam	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Carbazole	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Chrysene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Dibenzofuran	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Fluoranthene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Fluorene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Hexachloroethane	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Isophorone	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
Naphthalene	2.12		1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Nitrobenzene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-124151/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124347 — **Prep Batch: 124151**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Phenanthrene	0.20	U	0.20		ug/L		06/15/13 07:39	06/17/13 15:18	1
Phenol	1.0	U	1.0		ug/L		06/15/13 07:39	06/17/13 15:18	1
Pyrene	0.50	U	0.50		ug/L		06/15/13 07:39	06/17/13 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*34 - 132*	*06/15/13 07:39*	*06/17/13 15:18*	*1*
2-Fluorobiphenyl	*95*		*37 - 120*	*06/15/13 07:39*	*06/17/13 15:18*	*1*
p-Terphenyl-d14	*126*		*58 - 147*	*06/15/13 07:39*	*06/17/13 15:18*	*1*
Phenol-d5	*33*		*11 - 120*	*06/15/13 07:39*	*06/17/13 15:18*	*1*
2-Fluorophenol	*53*		*18 - 120*	*06/15/13 07:39*	*06/17/13 15:18*	*1*
2,4,6-Tribromophenol	*97*		*39 - 146*	*06/15/13 07:39*	*06/17/13 15:18*	*1*

Lab Sample ID: LCS 480-124151/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124347 — **Prep Batch: 124151**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	9.13		ug/L		114	22 - 167
2-Chlorophenol	8.00	6.92		ug/L		86	44 - 106
4-Chloro-3-methylphenol	8.00	7.67		ug/L		96	60 - 131
4-Nitrophenol	16.0	6.92		ug/L		43	10 - 105
Acenaphthene	8.00	8.19		ug/L		102	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	10.7		ug/L		134	69 - 136
Fluorene	8.00	8.41		ug/L		105	54 - 137
Hexachloroethane	8.00	6.27		ug/L		78	32 - 104
N-Nitrosodi-n-propylamine	8.00	8.01		ug/L		100	50 - 123
Pentachlorophenol	16.0	14.0		ug/L		88	10 - 131
Phenol	8.00	2.92		ug/L		37	17 - 61
Pyrene	8.00	10.3		ug/L		128	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*91*		*34 - 132*
2-Fluorobiphenyl	*102*		*37 - 120*
p-Terphenyl-d14	*128*		*58 - 147*
Phenol-d5	*36*		*11 - 120*
2-Fluorophenol	*54*		*18 - 120*
2,4,6-Tribromophenol	*118*		*39 - 146*

Lab Sample ID: LCSD 480-124151/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124347 — **Prep Batch: 124151**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	8.38		ug/L		105	22 - 167	9	20
2-Chlorophenol	8.00	6.32		ug/L		79	44 - 106	9	20
4-Chloro-3-methylphenol	8.00	7.66		ug/L		96	60 - 131	0	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-124151/3-A
Matrix: Water
Analysis Batch: 124347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 124151

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	7.10		ug/L		44	10 - 105	2	20
Acenaphthene			8.00	7.52		ug/L		94	35 - 143	9	24
Bis(2-ethylhexyl) phthalate			8.00	11.3	*	ug/L		141	69 - 136	5	15
Fluorene			8.00	7.59		ug/L		95	54 - 137	10	15
Hexachloroethane			8.00	5.42		ug/L		68	32 - 104	15	20
N-Nitrosodi-n-propylamine			8.00	7.17		ug/L		90	50 - 123	11	20
Pentachlorophenol			16.0	14.7		ug/L		92	10 - 131	4	37
Phenol			8.00	2.60		ug/L		32	17 - 61	12	34
Pyrene			8.00	10.5		ug/L		132	58 - 143	3	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*34 - 132*
2-Fluorobiphenyl	*96*		*37 - 120*
p-Terphenyl-d14	*132*		*58 - 147*
Phenol-d5	*34*		*11 - 120*
2-Fluorophenol	*49*		*18 - 120*
2,4,6-Tribromophenol	*117*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-123685/1-A
Matrix: Water
Analysis Batch: 124031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 09:30	06/13/13 20:55	1
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/13/13 20:55	1
Copper	1.0	U	1.0		ug/L		06/13/13 09:30	06/13/13 20:55	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/13/13 20:55	1
Zinc	10	U	10		ug/L		06/13/13 09:30	06/13/13 20:55	1

Lab Sample ID: LCS 480-123685/2-A
Matrix: Water
Analysis Batch: 124031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123685

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			20.0	20.7		ug/L		104	80 - 120		
Chromium			20.0	20.2		ug/L		101	80 - 120		
Copper			20.0	20.7		ug/L		104	80 - 120		
Lead			20.0	20.3		ug/L		101	80 - 120		
Zinc			50.0	54.2		ug/L		108	80 - 120		

Lab Sample ID: MB 480-123156/19-B
Matrix: Water
Analysis Batch: 124032

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 123686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 00:29	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 480-123156/19-B
Matrix: Water
Analysis Batch: 124032

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 123686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.5	U	1.5		ug/L		06/13/13 09:30	06/14/13 00:29	1
Copper	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 00:29	1
Lead	1.0	U	1.0		ug/L		06/13/13 09:30	06/14/13 00:29	1
Zinc	10	U	10		ug/L		06/13/13 09:30	06/14/13 00:29	1

Lab Sample ID: LCS 480-123156/20-B
Matrix: Water
Analysis Batch: 124032

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 123686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.7		ug/L		104	80 - 120
Chromium	20.0	20.7		ug/L		103	80 - 120
Copper	20.0	20.0		ug/L		100	80 - 120
Lead	20.0	20.5		ug/L		103	80 - 120
Zinc	50.0	52.4		ug/L		105	80 - 120

GC/MS VOA

Analysis Batch: 123735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	8260B	
180-22077-2	DP13N-09I	Total/NA	Water	8260B	
180-22077-3	DP13N-08S	Total/NA	Water	8260B	
180-22077-4	DP13N-06I	Total/NA	Water	8260B	
180-22077-5	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-123735/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123735/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 124151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	3510C	
180-22077-2	DP13N-09I	Total/NA	Water	3510C	
180-22077-3	DP13N-08S	Total/NA	Water	3510C	
180-22077-4	DP13N-06I	Total/NA	Water	3510C	
LCS 480-124151/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-124151/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-124151/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 124347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-124151/2-A	Lab Control Sample	Total/NA	Water	8270C LL	124151
LCSD 480-124151/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	124151
MB 480-124151/1-A	Method Blank	Total/NA	Water	8270C LL	124151

Analysis Batch: 124527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	8270C LL	124151
180-22077-2	DP13N-09I	Total/NA	Water	8270C LL	124151
180-22077-3	DP13N-08S	Total/NA	Water	8270C LL	124151
180-22077-4	DP13N-06I	Total/NA	Water	8270C LL	124151

Metals

Prep Batch: 123685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	3020A	
180-22077-2	DP13N-09I	Total/NA	Water	3020A	
180-22077-3	DP13N-08S	Total/NA	Water	3020A	
180-22077-4	DP13N-06I	Total/NA	Water	3020A	
LCS 480-123685/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-123685/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 123686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Dissolved	Water	3020A	
180-22077-2	DP13N-09I	Dissolved	Water	3020A	
180-22077-3	DP13N-08S	Dissolved	Water	3020A	
180-22077-4	DP13N-06I	Dissolved	Water	3020A	

Metals (Continued)

Prep Batch: 123686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-123156/20-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-123156/19-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 124031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	6020	123685
180-22077-2	DP13N-09I	Total/NA	Water	6020	123685
180-22077-3	DP13N-08S	Total/NA	Water	6020	123685
180-22077-4	DP13N-06I	Total/NA	Water	6020	123685
LCS 480-123685/2-A	Lab Control Sample	Total/NA	Water	6020	123685
MB 480-123685/1-A	Method Blank	Total/NA	Water	6020	123685

Analysis Batch: 124032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Dissolved	Water	6020	123686
180-22077-2	DP13N-09I	Dissolved	Water	6020	123686
180-22077-3	DP13N-08S	Dissolved	Water	6020	123686
180-22077-4	DP13N-06I	Dissolved	Water	6020	123686
LCS 480-123156/20-B	Lab Control Sample	Dissolved	Water	6020	123686
MB 480-123156/19-B	Method Blank	Dissolved	Water	6020	123686

Analysis Batch: 124111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22077-1	DP13N-08I	Total/NA	Water	6020	123685
180-22077-2	DP13N-09I	Total/NA	Water	6020	123685

180-22677

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
KEY ENVIRONMENTAL	ANGIE GATCHIE	6/11/13	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
20C THIRD AVE	412-428-9411	716-691-2600	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
CARNEGIE / PA / 15106	M. VALESKY	V BOYOT	
Project Name and Location (State)	**Carrier/Waybill Number**		
S OAKDALE TI ZONE DELINEATION HOUSTON, TX	FED EX		
Contract/Purchase Order/Quote No.			
B665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 8260B (VOC)	8270C (SVOC)	TOTAL METALS (6020)	DISS METALS (6020)
DP13N-08I	6/11/13	1050		X			2		2	3			3	2	1	1
DP13N-09I	6/11/13	0745		X			2		2	3			3	2	1	1
DP13N-08S	6/11/13	1215		X			2		2	3			3	2	1	1
DP13N-06I	6/11/13	1640		X			2		2	3			3	2	1	1
TRIP BLANK	6/11/13	—		X						1			1			

Special Instructions/ Conditions of Receipt

DISSOLVED METALS WERE FIELD FILTERED

180-22077 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAYS

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	[signature] T.	6/11/13	1900	[signature] TA BUFFALO	6/12/13	0900
2.				[signature]		
3.						

Comments

#3 22 3.1, 3.7

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/18/2013

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22077-1

Login Number: 22077

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22077-1

Login Number: 22077
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 03:32 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1 C & 3.7 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22077-1

Login Number: 22077
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 03:33 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1 C & 3.7 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-22142-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/17/2013 5:36:45 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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

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

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Job ID: 180-22142-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-22142-1

Comments
No additional comments.

Receipt
The samples were received on 6/13/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 123927 recovered outside control limits for the following analyte: 4-Nitrophenol. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

Method(s) 8270C LL: The following samples were diluted due to the nature of the sample matrix: DP13S - 12I (180-22142-1), DP13S - 13S (180-22142-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The following sample contained one acid and/or one base surrogate outside acceptance limits: DP13S - 12I (180-22142-1). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals
Method(s) 6020: The Serial Dilution (180-22142-2 SD) associated with batch 480-123808, exhibited results outside the quality control limits for total chromium and lead. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6020: Due to sample matrix effect on the internal standard (scandium), a dilution was required for total chromium for the following sample(s): DP13S - 12I (180-22142-1).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22142-1	DP13S - 12I	Water	06/12/13 13:20	06/13/13 09:00
180-22142-2	DP13S - 13S	Water	06/12/13 15:50	06/13/13 09:00
180-22142-3	TRIP BLANK	Water	06/12/13 00:00	06/13/13 09:00

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: DP13S - 12I

Lab Sample ID: 180-22142-1

Date Collected: 06/12/13 13:20

Matrix: Water

Date Received: 06/13/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123880	06/14/13 01:47	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1033.6 mL	1 mL	123827	06/13/13 15:08	TG	TAL BUF
Total/NA	Analysis	8270C LL		10			124347	06/17/13 14:23	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123808	06/13/13 14:45	JM	TAL BUF
Total/NA	Analysis	6020		1			124028	06/13/13 18:51	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	123808	06/13/13 14:45	JM	TAL BUF
Total/NA	Analysis	6020		2			124028	06/13/13 18:57	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123810	06/13/13 14:45	JM	TAL BUF
Dissolved	Analysis	6020		1			124030	06/13/13 19:59	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S - 13S

Lab Sample ID: 180-22142-2

Date Collected: 06/12/13 15:50

Matrix: Water

Date Received: 06/13/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123880	06/14/13 02:09	TRF	TAL BUF
	Instrument ID: HP5973S									
Total/NA	Prep	3510C			1001.9 mL	1 mL	123827	06/13/13 15:08	TG	TAL BUF
Total/NA	Analysis	8270C LL		5			124347	06/17/13 14:51	RMM	TAL BUF
	Instrument ID: HP5973Y									
Total/NA	Prep	3020A			50 mL	50 mL	123808	06/13/13 14:45	JM	TAL BUF
Total/NA	Analysis	6020		1			124028	06/13/13 19:03	MM	TAL BUF
	Instrument ID: ELAN									
Dissolved	Prep	3020A			50 mL	50 mL	123810	06/13/13 14:45	JM	TAL BUF
Dissolved	Analysis	6020		1			124030	06/13/13 20:05	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-22142-3

Date Collected: 06/12/13 00:00

Matrix: Water

Date Received: 06/13/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	123880	06/14/13 02:31	TRF	TAL BUF
	Instrument ID: HP5973S									

Laboratory References:

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

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Analyst References:

Lab: TAL BUF

Batch Type: Prep

JM = Jaclyn Mantell

TG = Taylor Gentner

Batch Type: Analysis

MM = Michael Mosscrop

RMM = Ryan McKernan

TRF = Tyler Ferguson

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: DP13S - 12I
Date Collected: 06/12/13 13:20
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
2-Hexanone	5.0	U	5.0		ug/L			06/14/13 01:47	1
2-Butanone (MEK)	10	U	10		ug/L			06/14/13 01:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/14/13 01:47	1
Acetone	10	U	10		ug/L			06/14/13 01:47	1
Benzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Bromoform	1.0	U	1.0		ug/L			06/14/13 01:47	1
Bromomethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Carbon disulfide	1.0	U	1.0		ug/L			06/14/13 01:47	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/14/13 01:47	1
Chlorobenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Chloroethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Chloroform	1.0	U	1.0		ug/L			06/14/13 01:47	1
Chloromethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 01:47	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Cyclohexane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Ethylbenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Methyl acetate	1.0	U	1.0		ug/L			06/14/13 01:47	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/14/13 01:47	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Methylene Chloride	1.0	U	1.0		ug/L			06/14/13 01:47	1
Styrene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Toluene	1.0	U	1.0		ug/L			06/14/13 01:47	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 01:47	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Trichloroethene	1.0	U	1.0		ug/L			06/14/13 01:47	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/14/13 01:47	1
Vinyl chloride	1.0	U	1.0		ug/L			06/14/13 01:47	1
Xylenes, Total	2.0	U	2.0		ug/L			06/14/13 01:47	1

Client Sample ID: DP13S - 12I
Date Collected: 06/12/13 13:20
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*06/14/13 01:47*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/14/13 01:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/14/13 01:47*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
bis (2-chloroisopropyl) ether	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4,5-Trichlorophenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4,6-Trichlorophenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4-Dichlorophenol	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4-Dimethylphenol	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4-Dinitrophenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,4-Dinitrotoluene	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2,6-Dinitrotoluene	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Chloronaphthalene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Chlorophenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Methylnaphthalene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Methylphenol	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Nitroaniline	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
2-Nitrophenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
3,3'-Dichlorobenzidine	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
3-Nitroaniline	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4,6-Dinitro-2-methylphenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Bromophenyl phenyl ether	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Chloro-3-methylphenol	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Chloroaniline	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Chlorophenyl phenyl ether	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Methylphenol	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Nitroaniline	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
4-Nitrophenol	48	U *	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Acenaphthene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Acenaphthylene	2.9	U	2.9		ug/L		06/13/13 15:08	06/17/13 14:23	10
Acetophenone	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Anthracene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Atrazine	19	U	19		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzaldehyde	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzo(a)anthracene	2.9	U	2.9		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzo(a)pyrene	1.7	U	1.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzo(b)fluoranthene	2.9	U	2.9		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzo(g,h,i)perylene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Benzo(k)fluoranthene	2.9	U	2.9		ug/L		06/13/13 15:08	06/17/13 14:23	10
Bis(2-chloroethoxy)methane	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Bis(2-chloroethyl)ether	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Bis(2-ethylhexyl) phthalate	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Butyl benzyl phthalate	29	U	29		ug/L		06/13/13 15:08	06/17/13 14:23	10
Caprolactam	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Carbazole	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Chrysene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Dibenz(a,h)anthracene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: DP13S - 12I
Date Collected: 06/12/13 13:20
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Diethyl phthalate	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Dimethyl phthalate	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Di-n-butyl phthalate	19	U	19		ug/L		06/13/13 15:08	06/17/13 14:23	10
Di-n-octyl phthalate	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Fluoranthene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Fluorene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Hexachlorobenzene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Hexachlorobutadiene	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Hexachlorocyclopentadiene	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Hexachloroethane	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Indeno(1,2,3-cd)pyrene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Isophorone	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
Naphthalene	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Nitrobenzene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10
N-Nitrosodi-n-propylamine	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
N-Nitrosodiphenylamine	48	U	48		ug/L		06/13/13 15:08	06/17/13 14:23	10
Pentachlorophenol	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Phenanthrene	1.9	U	1.9		ug/L		06/13/13 15:08	06/17/13 14:23	10
Phenol	9.7	U	9.7		ug/L		06/13/13 15:08	06/17/13 14:23	10
Pyrene	4.8	U	4.8		ug/L		06/13/13 15:08	06/17/13 14:23	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*111*		*34 - 132*	*06/13/13 15:08*	*06/17/13 14:23*	*10*
2-Fluorobiphenyl	*100*		*37 - 120*	*06/13/13 15:08*	*06/17/13 14:23*	*10*
p-Terphenyl-d14	*54*	*X*	*58 - 147*	*06/13/13 15:08*	*06/17/13 14:23*	*10*
Phenol-d5	*42*		*11 - 120*	*06/13/13 15:08*	*06/17/13 14:23*	*10*
2-Fluorophenol	*54*		*18 - 120*	*06/13/13 15:08*	*06/17/13 14:23*	*10*
2,4,6-Tribromophenol	*120*		*39 - 146*	*06/13/13 15:08*	*06/17/13 14:23*	*10*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.5**		1.0		ug/L		06/13/13 14:45	06/13/13 18:51	1
Chromium	**180**		3.0		ug/L		06/13/13 14:45	06/13/13 18:57	2
Copper	**130**		1.0		ug/L		06/13/13 14:45	06/13/13 18:51	1
Lead	**49**		1.0		ug/L		06/13/13 14:45	06/13/13 18:51	1
Zinc	**340**		10		ug/L		06/13/13 14:45	06/13/13 18:51	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 19:59	1
Chromium	1.5	U	1.5		ug/L		06/13/13 14:45	06/13/13 19:59	1
Copper	**1.9**		1.0		ug/L		06/13/13 14:45	06/13/13 19:59	1
Lead	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 19:59	1
Zinc	**21**		10		ug/L		06/13/13 14:45	06/13/13 19:59	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: DP13S - 13S
Date Collected: 06/12/13 15:50
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
2-Hexanone	5.0	U	5.0		ug/L			06/14/13 02:09	1
2-Butanone (MEK)	10	U	10		ug/L			06/14/13 02:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/14/13 02:09	1
Acetone	10	U	10		ug/L			06/14/13 02:09	1
Benzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Bromoform	1.0	U	1.0		ug/L			06/14/13 02:09	1
Bromomethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Carbon disulfide	1.0	U	1.0		ug/L			06/14/13 02:09	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/14/13 02:09	1
Chlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Chloroethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Chloroform	1.0	U	1.0		ug/L			06/14/13 02:09	1
Chloromethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:09	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Cyclohexane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Ethylbenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Methyl acetate	1.0	U	1.0		ug/L			06/14/13 02:09	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/14/13 02:09	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Methylene Chloride	1.0	U	1.0		ug/L			06/14/13 02:09	1
Styrene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Toluene	1.0	U	1.0		ug/L			06/14/13 02:09	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:09	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Trichloroethene	1.0	U	1.0		ug/L			06/14/13 02:09	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/14/13 02:09	1
Vinyl chloride	1.0	U	1.0		ug/L			06/14/13 02:09	1
Xylenes, Total	2.0	U	2.0		ug/L			06/14/13 02:09	1

Client Sample ID: DP13S - 13S
Date Collected: 06/12/13 15:50
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*06/14/13 02:09*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*06/14/13 02:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/14/13 02:09*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
bis (2-chloroisopropyl) ether	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4,5-Trichlorophenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4,6-Trichlorophenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4-Dichlorophenol	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4-Dimethylphenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4-Dinitrophenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,4-Dinitrotoluene	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2,6-Dinitrotoluene	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Chloronaphthalene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Chlorophenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Methylnaphthalene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Methylphenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Nitroaniline	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
2-Nitrophenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
3,3'-Dichlorobenzidine	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
3-Nitroaniline	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4,6-Dinitro-2-methylphenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Bromophenyl phenyl ether	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Chloro-3-methylphenol	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Chloroaniline	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Chlorophenyl phenyl ether	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Methylphenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Nitroaniline	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
4-Nitrophenol	25	U *	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Acenaphthene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Acenaphthylene	1.5	U	1.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Acetophenone	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Anthracene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Atrazine	10	U	10		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzaldehyde	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzo(a)pyrene	0.90	U	0.90		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzo(g,h,i)perylene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Bis(2-chloroethoxy)methane	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Bis(2-chloroethyl)ether	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Bis(2-ethylhexyl) phthalate	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Butyl benzyl phthalate	15	U	15		ug/L		06/13/13 15:08	06/17/13 14:51	5
Caprolactam	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Carbazole	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Chrysene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Dibenz(a,h)anthracene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: DP13S - 13S
Date Collected: 06/12/13 15:50
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Diethyl phthalate	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Dimethyl phthalate	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Di-n-butyl phthalate	10	U	10		ug/L		06/13/13 15:08	06/17/13 14:51	5
Di-n-octyl phthalate	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Fluoranthene	**2.8**		2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Fluorene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Hexachlorobenzene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Hexachlorobutadiene	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Hexachlorocyclopentadiene	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Hexachloroethane	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Indeno(1,2,3-cd)pyrene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Isophorone	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
Naphthalene	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Nitrobenzene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5
N-Nitrosodi-n-propylamine	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
N-Nitrosodiphenylamine	25	U	25		ug/L		06/13/13 15:08	06/17/13 14:51	5
Pentachlorophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Phenanthrene	**4.2**		1.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Phenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/17/13 14:51	5
Pyrene	2.5	U	2.5		ug/L		06/13/13 15:08	06/17/13 14:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*83*		*34 - 132*	*06/13/13 15:08*	*06/17/13 14:51*	*5*
2-Fluorobiphenyl	*96*		*37 - 120*	*06/13/13 15:08*	*06/17/13 14:51*	*5*
p-Terphenyl-d14	*109*		*58 - 147*	*06/13/13 15:08*	*06/17/13 14:51*	*5*
Phenol-d5	*32*		*11 - 120*	*06/13/13 15:08*	*06/17/13 14:51*	*5*
2-Fluorophenol	*49*		*18 - 120*	*06/13/13 15:08*	*06/17/13 14:51*	*5*
2,4,6-Tribromophenol	*98*		*39 - 146*	*06/13/13 15:08*	*06/17/13 14:51*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**		1.0		ug/L		06/13/13 14:45	06/13/13 19:03	1
Chromium	**6.1**		1.5		ug/L		06/13/13 14:45	06/13/13 19:03	1
Copper	**3.9**		1.0		ug/L		06/13/13 14:45	06/13/13 19:03	1
Lead	**3.1**		1.0		ug/L		06/13/13 14:45	06/13/13 19:03	1
Zinc	**16**		10		ug/L		06/13/13 14:45	06/13/13 19:03	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 20:05	1
Chromium	1.5	U	1.5		ug/L		06/13/13 14:45	06/13/13 20:05	1
Copper	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 20:05	1
Lead	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 20:05	1
Zinc	10	U	10		ug/L		06/13/13 14:45	06/13/13 20:05	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: TRIP BLANK
Date Collected: 06/12/13 00:00
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
2-Hexanone	5.0	U	5.0		ug/L			06/14/13 02:31	1
2-Butanone (MEK)	10	U	10		ug/L			06/14/13 02:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/14/13 02:31	1
Acetone	10	U	10		ug/L			06/14/13 02:31	1
Benzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Bromoform	1.0	U	1.0		ug/L			06/14/13 02:31	1
Bromomethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Carbon disulfide	1.0	U	1.0		ug/L			06/14/13 02:31	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/14/13 02:31	1
Chlorobenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Chloroethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Chloroform	1.0	U	1.0		ug/L			06/14/13 02:31	1
Chloromethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:31	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Cyclohexane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Ethylbenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Methyl acetate	1.0	U	1.0		ug/L			06/14/13 02:31	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/14/13 02:31	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Methylene Chloride	**1.1**		1.0		ug/L			06/14/13 02:31	1
Styrene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Toluene	1.0	U	1.0		ug/L			06/14/13 02:31	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/14/13 02:31	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Trichloroethene	1.0	U	1.0		ug/L			06/14/13 02:31	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/14/13 02:31	1
Vinyl chloride	1.0	U	1.0		ug/L			06/14/13 02:31	1
Xylenes, Total	2.0	U	2.0		ug/L			06/14/13 02:31	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22142-1

Client Sample ID: TRIP BLANK
Date Collected: 06/12/13 00:00
Date Received: 06/13/13 09:00

Lab Sample ID: 180-22142-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		06/14/13 02:31	1
Toluene-d8 (Surr)	100		71 - 126		06/14/13 02:31	1
4-Bromofluorobenzene (Surr)	96		73 - 120		06/14/13 02:31	1

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

Lab Sample ID: MB 480-123880/5
Matrix: Water
Analysis Batch: 123880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
2-Hexanone	5.0	U	5.0		ug/L			06/13/13 23:40	1
2-Butanone (MEK)	10	U	10		ug/L			06/13/13 23:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/13/13 23:40	1
Acetone	10	U	10		ug/L			06/13/13 23:40	1
Benzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Bromoform	1.0	U	1.0		ug/L			06/13/13 23:40	1
Bromomethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Carbon disulfide	1.0	U	1.0		ug/L			06/13/13 23:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/13/13 23:40	1
Chlorobenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Chloroethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Chloroform	1.0	U	1.0		ug/L			06/13/13 23:40	1
Chloromethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 23:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Cyclohexane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Ethylbenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Methyl acetate	1.0	U	1.0		ug/L			06/13/13 23:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/13/13 23:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Methylene Chloride	1.0	U	1.0		ug/L			06/13/13 23:40	1
Styrene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Toluene	1.0	U	1.0		ug/L			06/13/13 23:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/13/13 23:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Trichloroethene	1.0	U	1.0		ug/L			06/13/13 23:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/13/13 23:40	1
Vinyl chloride	1.0	U	1.0		ug/L			06/13/13 23:40	1
Xylenes, Total	2.0	U	2.0		ug/L			06/13/13 23:40	1

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

Lab Sample ID: MB 480-123880/5
Matrix: Water
Analysis Batch: 123880

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*06/13/13 23:40*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*06/13/13 23:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/13/13 23:40*	*1*

Lab Sample ID: LCS 480-123880/4
Matrix: Water
Analysis Batch: 123880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.9		ug/L		104	71 - 129
1,1-Dichloroethene	25.0	21.0		ug/L		84	58 - 121
1,2-Dichlorobenzene	25.0	27.4		ug/L		110	80 - 124
1,2-Dichloroethane	25.0	27.2		ug/L		109	75 - 127
Benzene	25.0	27.0		ug/L		108	71 - 124
Chlorobenzene	25.0	27.4		ug/L		110	72 - 120
cis-1,2-Dichloroethene	25.0	26.9		ug/L		108	74 - 124
Ethylbenzene	25.0	27.0		ug/L		108	77 - 123
Methyl tert-butyl ether	25.0	23.9		ug/L		95	64 - 127
Tetrachloroethene	25.0	27.9		ug/L		112	74 - 122
Toluene	25.0	27.1		ug/L		108	80 - 122
trans-1,2-Dichloroethene	25.0	22.6		ug/L		90	73 - 127
Trichloroethene	25.0	26.6		ug/L		106	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*
Toluene-d8 (Surr)	*100*		*71 - 126*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 480-123827/1-A
Matrix: Water
Analysis Batch: 123995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123827

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4-Dichlorophenol	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4-Dimethylphenol	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4-Dinitrophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2-Chloronaphthalene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2-Methylnaphthalene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123827/1-A
Matrix: Water
Analysis Batch: 123995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123827

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2-Nitroaniline	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
3-Nitroaniline	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Methylphenol	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Nitroaniline	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
4-Nitrophenol	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Acenaphthene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Acenaphthylene	0.30	U	0.30		ug/L		06/13/13 15:08	06/14/13 11:24	1
Acetophenone	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Anthracene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Atrazine	2.0	U	2.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzaldehyde	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzo(a)anthracene	0.30	U	0.30		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzo(b)fluoranthene	0.30	U	0.30		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzo(g,h,i)perylene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Benzo(k)fluoranthene	0.30	U	0.30		ug/L		06/13/13 15:08	06/14/13 11:24	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Butyl benzyl phthalate	3.0	U	3.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Caprolactam	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Carbazole	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Chrysene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Dibenz(a,h)anthracene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Dibenzofuran	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Diethyl phthalate	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Dimethyl phthalate	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Di-n-butyl phthalate	2.0	U	2.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Fluoranthene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Fluorene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Hexachlorobenzene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Hexachlorobutadiene	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Hexachlorocyclopentadiene	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Hexachloroethane	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Indeno(1,2,3-cd)pyrene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Isophorone	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
Naphthalene	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Nitrobenzene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 480-123827/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123995 — **Prep Batch: 123827**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Pentachlorophenol	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Phenanthrene	0.20	U	0.20		ug/L		06/13/13 15:08	06/14/13 11:24	1
Phenol	1.0	U	1.0		ug/L		06/13/13 15:08	06/14/13 11:24	1
Pyrene	0.50	U	0.50		ug/L		06/13/13 15:08	06/14/13 11:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*34 - 132*	*06/13/13 15:08*	*06/14/13 11:24*	*1*
2-Fluorobiphenyl	*100*		*37 - 120*	*06/13/13 15:08*	*06/14/13 11:24*	*1*
p-Terphenyl-d14	*134*		*58 - 147*	*06/13/13 15:08*	*06/14/13 11:24*	*1*
Phenol-d5	*38*		*11 - 120*	*06/13/13 15:08*	*06/14/13 11:24*	*1*
2-Fluorophenol	*51*		*18 - 120*	*06/13/13 15:08*	*06/14/13 11:24*	*1*
2,4,6-Tribromophenol	*111*		*39 - 146*	*06/13/13 15:08*	*06/14/13 11:24*	*1*

Lab Sample ID: LCS 480-123827/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123995 — **Prep Batch: 123827**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	8.00	9.42		ug/L		118	22 - 167
2-Chlorophenol	8.00	6.92		ug/L		87	44 - 106
4-Chloro-3-methylphenol	8.00	8.10		ug/L		101	60 - 131
4-Nitrophenol	16.0	8.28		ug/L		52	10 - 105
Acenaphthene	8.00	8.56		ug/L		107	35 - 143
Bis(2-ethylhexyl) phthalate	8.00	9.98		ug/L		125	69 - 136
Fluorene	8.00	8.76		ug/L		110	54 - 137
Hexachloroethane	8.00	6.71		ug/L		84	32 - 104
N-Nitrosodi-n-propylamine	8.00	8.36		ug/L		104	50 - 123
Pentachlorophenol	16.0	15.9		ug/L		99	10 - 131
Phenol	8.00	3.75		ug/L		47	17 - 61
Pyrene	8.00	10.8		ug/L		136	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*101*		*34 - 132*
2-Fluorobiphenyl	*109*		*37 - 120*
p-Terphenyl-d14	*130*		*58 - 147*
Phenol-d5	*40*		*11 - 120*
2-Fluorophenol	*57*		*18 - 120*
2,4,6-Tribromophenol	*126*		*39 - 146*

Lab Sample ID: LCSD 480-123827/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123995 — **Prep Batch: 123827**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	8.00	9.48		ug/L		118	22 - 167	1	20
2-Chlorophenol	8.00	6.68		ug/L		84	44 - 106	3	20
4-Chloro-3-methylphenol	8.00	7.99		ug/L		100	60 - 131	1	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 480-123827/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123995 — **Prep Batch: 123827**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol			16.0	6.35	*	ug/L		40	10 - 105	26	20
Acenaphthene			8.00	8.41		ug/L		105	35 - 143	2	24
Bis(2-ethylhexyl) phthalate			8.00	9.57		ug/L		120	69 - 136	4	15
Fluorene			8.00	8.56		ug/L		107	54 - 137	2	15
Hexachloroethane			8.00	6.66		ug/L		83	32 - 104	1	20
N-Nitrosodi-n-propylamine			8.00	7.92		ug/L		99	50 - 123	5	20
Pentachlorophenol			16.0	15.4		ug/L		97	10 - 131	3	37
Phenol			8.00	3.37		ug/L		42	17 - 61	11	34
Pyrene			8.00	10.7		ug/L		133	58 - 143	2	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*34 - 132*
2-Fluorobiphenyl	*106*		*37 - 120*
p-Terphenyl-d14	*130*		*58 - 147*
Phenol-d5	*38*		*11 - 120*
2-Fluorophenol	*51*		*18 - 120*
2,4,6-Tribromophenol	*121*		*39 - 146*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-123808/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124028 — **Prep Batch: 123808**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 18:34	1
Chromium	1.5	U	1.5		ug/L		06/13/13 14:45	06/13/13 18:34	1
Copper	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 18:34	1
Lead	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 18:34	1
Zinc	10	U	10		ug/L		06/13/13 14:45	06/13/13 18:34	1

Lab Sample ID: LCS 480-123808/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124028 — **Prep Batch: 123808**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			20.0	21.5		ug/L		108	80 - 120
Chromium			20.0	21.0		ug/L		105	80 - 120
Copper			20.0	21.1		ug/L		105	80 - 120
Lead			20.0	20.8		ug/L		104	80 - 120
Zinc			50.0	54.7		ug/L		109	80 - 120

Lab Sample ID: 180-22142-2 MS — **Client Sample ID: DP13S - 13S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124028 — **Prep Batch: 123808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.2		20.0	22.6		ug/L		107	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-22142-2 MS
Matrix: Water
Analysis Batch: 124028

Client Sample ID: DP13S - 13S
Prep Type: Total/NA
Prep Batch: 123808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	6.1		20.0	24.4		ug/L		92	75 - 125
Copper	3.9		20.0	23.2		ug/L		96	75 - 125
Lead	3.1		20.0	23.3		ug/L		101	75 - 125
Zinc	16		50.0	65.3		ug/L		99	75 - 125

Lab Sample ID: 180-22142-2 MSD
Matrix: Water
Analysis Batch: 124028

Client Sample ID: DP13S - 13S
Prep Type: Total/NA
Prep Batch: 123808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.2		20.0	22.6		ug/L		107	75 - 125	0	20
Chromium	6.1		20.0	25.4		ug/L		96	75 - 125	4	20
Copper	3.9		20.0	23.5		ug/L		98	75 - 125	1	20
Lead	3.1		20.0	23.7		ug/L		103	75 - 125	2	20
Zinc	16		50.0	68.3		ug/L		105	75 - 125	4	20

Lab Sample ID: MB 480-123156/27-B
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 123810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 19:48	1
Chromium	1.5	U	1.5		ug/L		06/13/13 14:45	06/13/13 19:48	1
Copper	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 19:48	1
Lead	1.0	U	1.0		ug/L		06/13/13 14:45	06/13/13 19:48	1
Zinc	10	U	10		ug/L		06/13/13 14:45	06/13/13 19:48	1

Lab Sample ID: LCS 480-123156/28-B
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 123810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.9		ug/L		104	80 - 120
Chromium	20.0	20.5		ug/L		102	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	20.7		ug/L		103	80 - 120
Zinc	50.0	52.1		ug/L		104	80 - 120

Lab Sample ID: 180-22142-2 MS
Matrix: Water
Analysis Batch: 124030

Client Sample ID: DP13S - 13S
Prep Type: Dissolved
Prep Batch: 123810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	22.5		ug/L		110	75 - 125
Chromium	1.5	U	20.0	18.5		ug/L		92	75 - 125
Copper	1.0	U	20.0	19.8		ug/L		95	75 - 125
Lead	1.0	U	20.0	20.1		ug/L		100	75 - 125
Zinc	10	U	50.0	58.0		ug/L		101	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-22142-2 MSD
Matrix: Water
Analysis Batch: 124030

Client Sample ID: DP13S - 13S
Prep Type: Dissolved
Prep Batch: 123810

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	22.3		ug/L		109	75 - 125	1	20
Chromium	1.5	U	20.0	19.0		ug/L		94	75 - 125	3	20
Copper	1.0	U	20.0	19.8		ug/L		95	75 - 125	0	20
Lead	1.0	U	20.0	20.2		ug/L		101	75 - 125	0	20
Zinc	10	U	50.0	57.7		ug/L		101	75 - 125	1	20

GC/MS VOA

Analysis Batch: 123880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	8260B	
180-22142-2	DP13S - 13S	Total/NA	Water	8260B	
180-22142-3	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-123880/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-123880/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 123827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	3510C	
180-22142-2	DP13S - 13S	Total/NA	Water	3510C	
LCS 480-123827/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-123827/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-123827/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 123995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-123827/2-A	Lab Control Sample	Total/NA	Water	8270C LL	123827
LCSD 480-123827/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	123827
MB 480-123827/1-A	Method Blank	Total/NA	Water	8270C LL	123827

Analysis Batch: 124347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	8270C LL	123827
180-22142-2	DP13S - 13S	Total/NA	Water	8270C LL	123827

Metals

Prep Batch: 123808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	3020A	
180-22142-2	DP13S - 13S	Total/NA	Water	3020A	
180-22142-2 MS	DP13S - 13S	Total/NA	Water	3020A	
180-22142-2 MSD	DP13S - 13S	Total/NA	Water	3020A	
LCS 480-123808/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-123808/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 123810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Dissolved	Water	3020A	
180-22142-2	DP13S - 13S	Dissolved	Water	3020A	
180-22142-2 MS	DP13S - 13S	Dissolved	Water	3020A	
180-22142-2 MSD	DP13S - 13S	Dissolved	Water	3020A	
LCS 480-123156/28-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-123156/27-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 124028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	6020	123808

Metals (Continued)

Analysis Batch: 124028 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Total/NA	Water	6020	123808
180-22142-2	DP13S - 13S	Total/NA	Water	6020	123808
180-22142-2 MS	DP13S - 13S	Total/NA	Water	6020	123808
180-22142-2 MSD	DP13S - 13S	Total/NA	Water	6020	123808
LCS 480-123808/2-A	Lab Control Sample	Total/NA	Water	6020	123808
MB 480-123808/1-A	Method Blank	Total/NA	Water	6020	123808

Analysis Batch: 124030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22142-1	DP13S - 12I	Dissolved	Water	6020	123810
180-22142-2	DP13S - 13S	Dissolved	Water	6020	123810
180-22142-2 MS	DP13S - 13S	Dissolved	Water	6020	123810
180-22142-2 MSD	DP13S - 13S	Dissolved	Water	6020	123810
LCS 480-123156/28-B	Lab Control Sample	Dissolved	Water	6020	123810
MB 480-123156/27-B	Method Blank	Dissolved	Water	6020	123810

Chain of Custody Record

22142

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TAL-4124 (1007)

Client: KEY ENVIRONMENTAL	Project Manager: ANGIE GATCHIE	Date: 6/12/13	Chain of Custody Number: 220358
Address: 200 THIRD AVE	Telephone Number (Area Code)/Fax Number: 412-428-9411	Lab Number: 716-691-2600	Page 1 of 1
City: CARNEGIE / State: PA / Zip Code: 15106	Site Contact: M. UALESKY	Lab Contact: V. BORTOT	
Project Name and Location (State): S. CAVALCADE TI ZONE DELINEATION HOUSTON, TX	Carrier/Waybill Number: FED EX		
Contract/Purchase Order/Quote No.: 136665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260B (VOCs)	8270C LL (BNAs)	6020 TOTAL METALS	6020 DISS METALS
DP135-12I	6/12/13	1320		X			2		2	3			3	2	1	1
DP135-13S	6/12/13	1550		X			2		2	3			3	2	1	1
TRIP BLANK	6/12/13	—		X						1			1			

Special Instructions/ Conditions of Receipt

DISSOLVED METALS WERE FIELD FILTERED

* QUICK TAT

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

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

Turn Around Time Required
☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: T.	6/12/13	1830	1. Received By:	6/13/13	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 4.1°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22142-1

Login Number: 22142

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Skowronek, Elyse N

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?	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22142-1

Login Number: 22142
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 06/13/13 02:31 PM

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-22198-1
Client Project/Site: South Cavalcade

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/19/2013 12:20:24 PM

Veronica Bortot, Project Manager II
veronica.bortot@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 180-22198-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-22198-1

Comments
No additional comments.

Receipt
The samples were received on 6/14/2013 2:27 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

GC/MS VOA
Method(s) 8260B: The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DP13S-13I (180-22198-1).

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C LL: Surrogate recovery was outside control limits for the following sample: DP13S-13I (180-22198-1). Re-extraction and re-analysis is required. A revised report w/ the reextractions will be issued when those analyses are completed

Method(s) 8270C LL: The following samples were diluted due to the abundance of non-target analytes: DP13S-13I (180-22198-1), DP13W-10I (180-22198-3). Elevated reporting limits (RLs) are provided.

Method(s) 8270C LL: The method blank associated with batch 124151 contained Napthalene greater greater than the reporting limit (RL). The asssociated sample requires re-extraction and re-analysis.

Method(s) 8270C LL: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 124151 recovered outside control limits for the following analytes: 2,4-dimethylphenol. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

Method(s) 8270C LL: The laboratory control sample duplicate (LCSD) for batch124151 recovered outside control limits for the following analyte: Bis[2-ethylhexyl] phthalate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
Method(s) 3510C: The following samples formed emulsions during the extraction procedure: DP13S-13I (180-22198-1). The emulsions were broken up using centrifugation.

Method(s) 3510C: A significant amount of sediment was present in the following samples: DP13S-11I (180-22198-2), DP13S-13I (180-22198-1). These samples were decanted prior to preparation.

No other analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
NC	Not Calculated
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)

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Laboratory: TestAmerica Buffalo (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
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Sample Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22198-1	DP13S-13I	Water	06/13/13 13:30	06/14/13 14:27
180-22198-2	DP13S-11I	Water	06/13/13 14:20	06/14/13 14:27
180-22198-3	DP13W-10I	Water	06/13/13 18:10	06/14/13 14:27
180-22198-4	Trip Blank	Water	06/13/13 00:00	06/14/13 14:27

Method Summary

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Client Sample ID: DP13S-13I

Lab Sample ID: 180-22198-1

Date Collected: 06/13/13 13:30

Matrix: Water

Date Received: 06/14/13 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124296	06/17/13 14:40	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1057.6 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		5			124527	06/18/13 13:57	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	124171	06/15/13 11:50	SS	TAL BUF
Dissolved	Analysis	6020		1			124323	06/15/13 17:07	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	124170	06/15/13 11:50	SS	TAL BUF
Total/NA	Analysis	6020		1			124324	06/15/13 18:09	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	124170	06/15/13 11:50	SS	TAL BUF
Total/NA	Analysis	6020		10			124395	06/17/13 15:02	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13S-11I

Lab Sample ID: 180-22198-2

Date Collected: 06/13/13 14:20

Matrix: Water

Date Received: 06/14/13 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124296	06/17/13 15:04	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			1027.4 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		1			124527	06/18/13 14:25	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	124171	06/15/13 11:50	SS	TAL BUF
Dissolved	Analysis	6020		1			124323	06/15/13 17:12	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	124170	06/15/13 11:50	SS	TAL BUF
Total/NA	Analysis	6020		1			124324	06/15/13 18:15	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: DP13W-10I

Lab Sample ID: 180-22198-3

Date Collected: 06/13/13 18:10

Matrix: Water

Date Received: 06/14/13 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124296	06/17/13 15:28	NQN	TAL BUF
	Instrument ID: HP5973N									
Total/NA	Prep	3510C			983.8 mL	1 mL	124151	06/15/13 07:39	ND	TAL BUF
Total/NA	Analysis	8270C LL		5			124527	06/18/13 14:52	RMM	TAL BUF
	Instrument ID: HP5973Y									
Dissolved	Prep	3020A			50 mL	50 mL	124171	06/15/13 11:50	SS	TAL BUF

Client Sample ID: DP13W-10I

Lab Sample ID: 180-22198-3

Date Collected: 06/13/13 18:10

Matrix: Water

Date Received: 06/14/13 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		1			124323	06/15/13 17:18	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	124170	06/15/13 11:50	SS	TAL BUF
Total/NA	Analysis	6020		1			124324	06/15/13 18:21	MM	TAL BUF
	Instrument ID: ELAN									
Total/NA	Prep	3020A			50 mL	50 mL	124170	06/15/13 11:50	SS	TAL BUF
Total/NA	Analysis	6020		2			124395	06/17/13 15:31	MM	TAL BUF
	Instrument ID: ELAN									

Client Sample ID: Trip Blank

Lab Sample ID: 180-22198-4

Date Collected: 06/13/13 00:00

Matrix: Water

Date Received: 06/14/13 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124296	06/17/13 15:52	NQN	TAL BUF
	Instrument ID: HP5973N									

Laboratory References:

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

Analyst References:

Lab: TAL BUF

Batch Type: Prep

ND = Nicole Dwyer

SS = Steven Setang

Batch Type: Analysis

MM = Michael Mosscrop

NQN = Nhu Quynh Nguyen-Dudziak

RMM = Ryan McKernan

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13S-13I
Date Collected: 06/13/13 13:30
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
2-Hexanone	5.0	U	5.0		ug/L			06/17/13 14:40	1
2-Butanone (MEK)	10	U	10		ug/L			06/17/13 14:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/17/13 14:40	1
Acetone	**36**		10		ug/L			06/17/13 14:40	1
Benzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Bromoform	1.0	U	1.0		ug/L			06/17/13 14:40	1
Bromomethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Carbon disulfide	1.0	U	1.0		ug/L			06/17/13 14:40	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/17/13 14:40	1
Chlorobenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Chloroethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Chloroform	1.0	U	1.0		ug/L			06/17/13 14:40	1
Chloromethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 14:40	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Cyclohexane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Ethylbenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Methyl acetate	1.0	U	1.0		ug/L			06/17/13 14:40	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/17/13 14:40	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Methylene Chloride	1.0	U	1.0		ug/L			06/17/13 14:40	1
Styrene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Toluene	1.0	U	1.0		ug/L			06/17/13 14:40	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 14:40	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Trichloroethene	1.0	U	1.0		ug/L			06/17/13 14:40	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/17/13 14:40	1
Vinyl chloride	1.0	U	1.0		ug/L			06/17/13 14:40	1
Xylenes, Total	2.0	U	2.0		ug/L			06/17/13 14:40	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13S-13I
Date Collected: 06/13/13 13:30
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*06/17/13 14:40*	*1*
Toluene-d8 (Surr)	*94*		*71 - 126*		*06/17/13 14:40*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/17/13 14:40*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
bis (2-chloroisopropyl) ether	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4,5-Trichlorophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4,6-Trichlorophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4-Dichlorophenol	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4-Dimethylphenol	4.7	U *	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4-Dinitrophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,4-Dinitrotoluene	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2,6-Dinitrotoluene	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Chloronaphthalene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Chlorophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Methylnaphthalene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Methylphenol	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Nitroaniline	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
2-Nitrophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
3,3'-Dichlorobenzidine	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
3-Nitroaniline	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4,6-Dinitro-2-methylphenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Bromophenyl phenyl ether	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Chloro-3-methylphenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Chloroaniline	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Chlorophenyl phenyl ether	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Methylphenol	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Nitroaniline	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
4-Nitrophenol	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Acenaphthene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Acenaphthylene	1.4	U	1.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Acetophenone	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Anthracene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Atrazine	9.5	U	9.5		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzaldehyde	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzo(a)anthracene	1.4	U	1.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzo(a)pyrene	0.85	U	0.85		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzo(b)fluoranthene	1.4	U	1.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzo(g,h,i)perylene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Benzo(k)fluoranthene	1.4	U	1.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Bis(2-chloroethoxy)methane	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Bis(2-chloroethyl)ether	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Bis(2-ethylhexyl) phthalate	24	U *	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Butyl benzyl phthalate	14	U	14		ug/L		06/15/13 07:39	06/18/13 13:57	5
Caprolactam	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Carbazole	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Chrysene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Dibenz(a,h)anthracene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13S-13I
Date Collected: 06/13/13 13:30
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-1
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Diethyl phthalate	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Dimethyl phthalate	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Di-n-butyl phthalate	9.5	U	9.5		ug/L		06/15/13 07:39	06/18/13 13:57	5
Di-n-octyl phthalate	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Fluoranthene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Fluorene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Hexachlorobenzene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Hexachlorobutadiene	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
Hexachlorocyclopentadiene	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
Hexachloroethane	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Indeno(1,2,3-cd)pyrene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Isophorone	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
Naphthalene	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
Nitrobenzene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5
N-Nitrosodi-n-propylamine	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
N-Nitrosodiphenylamine	24	U	24		ug/L		06/15/13 07:39	06/18/13 13:57	5
Pentachlorophenol	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
Phenanthrene	0.95	U	0.95		ug/L		06/15/13 07:39	06/18/13 13:57	5
Phenol	4.7	U	4.7		ug/L		06/15/13 07:39	06/18/13 13:57	5
Pyrene	2.4	U	2.4		ug/L		06/15/13 07:39	06/18/13 13:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*29*	*X*	*34 - 132*	*06/15/13 07:39*	*06/18/13 13:57*	*5*
2-Fluorobiphenyl	*19*	*X*	*37 - 120*	*06/15/13 07:39*	*06/18/13 13:57*	*5*
p-Terphenyl-d14	*8*	*X*	*58 - 147*	*06/15/13 07:39*	*06/18/13 13:57*	*5*
Phenol-d5	*9*	*X*	*11 - 120*	*06/15/13 07:39*	*06/18/13 13:57*	*5*
2-Fluorophenol	*12*	*X*	*18 - 120*	*06/15/13 07:39*	*06/18/13 13:57*	*5*
2,4,6-Tribromophenol	*18*	*X*	*39 - 146*	*06/15/13 07:39*	*06/18/13 13:57*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**28**		1.0		ug/L		06/15/13 11:50	06/15/13 18:09	1
Chromium	**450**		15		ug/L		06/15/13 11:50	06/17/13 15:02	10
Copper	**170**		1.0		ug/L		06/15/13 11:50	06/15/13 18:09	1
Lead	**140**		1.0		ug/L		06/15/13 11:50	06/15/13 18:09	1
Zinc	**590**		10		ug/L		06/15/13 11:50	06/15/13 18:09	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:07	1
Chromium	1.5	U	1.5		ug/L		06/15/13 11:50	06/15/13 17:07	1
Copper	**2.9**		1.0		ug/L		06/15/13 11:50	06/15/13 17:07	1
Lead	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:07	1
Zinc	10	U	10		ug/L		06/15/13 11:50	06/15/13 17:07	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13S-11I
Date Collected: 06/13/13 14:20
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,2-Dichlorobenzene	**61**		1.0		ug/L			06/17/13 15:04	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
1,4-Dichlorobenzene	**15**		1.0		ug/L			06/17/13 15:04	1
2-Hexanone	5.0	U	5.0		ug/L			06/17/13 15:04	1
2-Butanone (MEK)	10	U	10		ug/L			06/17/13 15:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/17/13 15:04	1
Acetone	10	U	10		ug/L			06/17/13 15:04	1
Benzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Bromoform	1.0	U	1.0		ug/L			06/17/13 15:04	1
Bromomethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Carbon disulfide	1.0	U	1.0		ug/L			06/17/13 15:04	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/17/13 15:04	1
Chlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Chloroethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Chloroform	1.0	U	1.0		ug/L			06/17/13 15:04	1
Chloromethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:04	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Cyclohexane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Ethylbenzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Methyl acetate	1.0	U	1.0		ug/L			06/17/13 15:04	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/17/13 15:04	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Methylene Chloride	1.0	U	1.0		ug/L			06/17/13 15:04	1
Styrene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Toluene	1.0	U	1.0		ug/L			06/17/13 15:04	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:04	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Trichloroethene	1.0	U	1.0		ug/L			06/17/13 15:04	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/17/13 15:04	1
Vinyl chloride	1.0	U	1.0		ug/L			06/17/13 15:04	1
Xylenes, Total	2.0	U	2.0		ug/L			06/17/13 15:04	1

Client Sample ID: DP13S-11I
Date Collected: 06/13/13 14:20
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*06/17/13 15:04*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/17/13 15:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/17/13 15:04*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
bis (2-chloroisopropyl) ether	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4,5-Trichlorophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4,6-Trichlorophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4-Dichlorophenol	**1.4**		0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4-Dimethylphenol	0.97	U *	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4-Dinitrophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,4-Dinitrotoluene	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2,6-Dinitrotoluene	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Chloronaphthalene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Chlorophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Methylnaphthalene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Methylphenol	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Nitroaniline	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
2-Nitrophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
3,3'-Dichlorobenzidine	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
3-Nitroaniline	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Bromophenyl phenyl ether	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Chloro-3-methylphenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Chloroaniline	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Chlorophenyl phenyl ether	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Methylphenol	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Nitroaniline	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
4-Nitrophenol	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Acenaphthene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Acenaphthylene	0.29	U	0.29		ug/L		06/15/13 07:39	06/18/13 14:25	1
Acetophenone	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Anthracene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Atrazine	1.9	U	1.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzaldehyde	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzo(a)anthracene	0.29	U	0.29		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzo(a)pyrene	0.18	U	0.18		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzo(b)fluoranthene	0.29	U	0.29		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzo(g,h,i)perylene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Benzo(k)fluoranthene	0.29	U	0.29		ug/L		06/15/13 07:39	06/18/13 14:25	1
Bis(2-chloroethoxy)methane	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Bis(2-chloroethyl)ether	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Bis(2-ethylhexyl) phthalate	4.9	U *	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Butyl benzyl phthalate	2.9	U	2.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Caprolactam	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Carbazole	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Chrysene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Dibenz(a,h)anthracene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13S-11I
Date Collected: 06/13/13 14:20
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-2
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Diethyl phthalate	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Dimethyl phthalate	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Di-n-butyl phthalate	**2.0**		1.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Di-n-octyl phthalate	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Fluoranthene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Fluorene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Hexachlorobenzene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Hexachlorobutadiene	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
Hexachlorocyclopentadiene	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
Hexachloroethane	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Indeno(1,2,3-cd)pyrene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Isophorone	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
Naphthalene	**1.3**	**B**	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
Nitrobenzene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1
N-Nitrosodi-n-propylamine	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
N-Nitrosodiphenylamine	4.9	U	4.9		ug/L		06/15/13 07:39	06/18/13 14:25	1
Pentachlorophenol	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
Phenanthrene	**0.31**		0.19		ug/L		06/15/13 07:39	06/18/13 14:25	1
Phenol	0.97	U	0.97		ug/L		06/15/13 07:39	06/18/13 14:25	1
Pyrene	0.49	U	0.49		ug/L		06/15/13 07:39	06/18/13 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*34 - 132*	*06/15/13 07:39*	*06/18/13 14:25*	*1*
2-Fluorobiphenyl	*97*		*37 - 120*	*06/15/13 07:39*	*06/18/13 14:25*	*1*
p-Terphenyl-d14	*81*		*58 - 147*	*06/15/13 07:39*	*06/18/13 14:25*	*1*
Phenol-d5	*31*		*11 - 120*	*06/15/13 07:39*	*06/18/13 14:25*	*1*
2-Fluorophenol	*46*		*18 - 120*	*06/15/13 07:39*	*06/18/13 14:25*	*1*
2,4,6-Tribromophenol	*107*		*39 - 146*	*06/15/13 07:39*	*06/18/13 14:25*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.9**		1.0		ug/L		06/15/13 11:50	06/15/13 18:15	1
Chromium	**12**		1.5		ug/L		06/15/13 11:50	06/15/13 18:15	1
Copper	**9.3**		1.0		ug/L		06/15/13 11:50	06/15/13 18:15	1
Lead	**6.6**		1.0		ug/L		06/15/13 11:50	06/15/13 18:15	1
Zinc	**36**		10		ug/L		06/15/13 11:50	06/15/13 18:15	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:12	1
Chromium	1.5	U	1.5		ug/L		06/15/13 11:50	06/15/13 17:12	1
Copper	**1.5**		1.0		ug/L		06/15/13 11:50	06/15/13 17:12	1
Lead	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:12	1
Zinc	**12**		10		ug/L		06/15/13 11:50	06/15/13 17:12	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13W-10I
Date Collected: 06/13/13 18:10
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
2-Hexanone	5.0	U	5.0		ug/L			06/17/13 15:28	1
2-Butanone (MEK)	10	U	10		ug/L			06/17/13 15:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/17/13 15:28	1
Acetone	10	U	10		ug/L			06/17/13 15:28	1
Benzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Bromoform	1.0	U	1.0		ug/L			06/17/13 15:28	1
Bromomethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Carbon disulfide	1.0	U	1.0		ug/L			06/17/13 15:28	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/17/13 15:28	1
Chlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Chloroethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Chloroform	1.0	U	1.0		ug/L			06/17/13 15:28	1
Chloromethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:28	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Cyclohexane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Ethylbenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Methyl acetate	1.0	U	1.0		ug/L			06/17/13 15:28	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/17/13 15:28	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Methylene Chloride	1.0	U	1.0		ug/L			06/17/13 15:28	1
Styrene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Toluene	1.0	U	1.0		ug/L			06/17/13 15:28	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:28	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Trichloroethene	1.0	U	1.0		ug/L			06/17/13 15:28	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/17/13 15:28	1
Vinyl chloride	1.0	U	1.0		ug/L			06/17/13 15:28	1
Xylenes, Total	2.0	U	2.0		ug/L			06/17/13 15:28	1

Client Sample ID: DP13W-10I
Date Collected: 06/13/13 18:10
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*06/17/13 15:28*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/17/13 15:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/17/13 15:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
bis (2-chloroisopropyl) ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4,5-Trichlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4,6-Trichlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4-Dichlorophenol	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4-Dimethylphenol	5.1	U *	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4-Dinitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,4-Dinitrotoluene	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2,6-Dinitrotoluene	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Chloronaphthalene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Chlorophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Methylnaphthalene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Methylphenol	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
2-Nitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
3,3'-Dichlorobenzidine	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
3-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4,6-Dinitro-2-methylphenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Bromophenyl phenyl ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Chloro-3-methylphenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Chloroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Chlorophenyl phenyl ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Methylphenol	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Nitroaniline	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
4-Nitrophenol	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Acenaphthene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Acenaphthylene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Acetophenone	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Anthracene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Atrazine	10	U	10		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzaldehyde	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzo(a)anthracene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzo(a)pyrene	0.91	U	0.91		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzo(b)fluoranthene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzo(g,h,i)perylene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Benzo(k)fluoranthene	1.5	U	1.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Bis(2-chloroethoxy)methane	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Bis(2-chloroethyl)ether	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Bis(2-ethylhexyl) phthalate	25	U *	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Butyl benzyl phthalate	15	U	15		ug/L		06/15/13 07:39	06/18/13 14:52	5
Caprolactam	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Carbazole	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Chrysene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Dibenz(a,h)anthracene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: DP13W-10I
Date Collected: 06/13/13 18:10
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-3
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Diethyl phthalate	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Dimethyl phthalate	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Di-n-butyl phthalate	10	U	10		ug/L		06/15/13 07:39	06/18/13 14:52	5
Di-n-octyl phthalate	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Fluoranthene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Fluorene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Hexachlorobenzene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Hexachlorobutadiene	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
Hexachlorocyclopentadiene	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
Hexachloroethane	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Indeno(1,2,3-cd)pyrene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Isophorone	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
Naphthalene	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
Nitrobenzene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5
N-Nitrosodi-n-propylamine	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
N-Nitrosodiphenylamine	25	U	25		ug/L		06/15/13 07:39	06/18/13 14:52	5
Pentachlorophenol	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
Phenanthrene	1.0	U	1.0		ug/L		06/15/13 07:39	06/18/13 14:52	5
Phenol	5.1	U	5.1		ug/L		06/15/13 07:39	06/18/13 14:52	5
Pyrene	2.5	U	2.5		ug/L		06/15/13 07:39	06/18/13 14:52	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*34 - 132*	*06/15/13 07:39*	*06/18/13 14:52*	*5*
2-Fluorobiphenyl	*83*		*37 - 120*	*06/15/13 07:39*	*06/18/13 14:52*	*5*
p-Terphenyl-d14	*69*		*58 - 147*	*06/15/13 07:39*	*06/18/13 14:52*	*5*
Phenol-d5	*27*		*11 - 120*	*06/15/13 07:39*	*06/18/13 14:52*	*5*
2-Fluorophenol	*39*		*18 - 120*	*06/15/13 07:39*	*06/18/13 14:52*	*5*
2,4,6-Tribromophenol	*86*		*39 - 146*	*06/15/13 07:39*	*06/18/13 14:52*	*5*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.9**		1.0		ug/L		06/15/13 11:50	06/15/13 18:21	1
Chromium	**170**		3.0		ug/L		06/15/13 11:50	06/17/13 15:31	2
Copper	**84**		1.0		ug/L		06/15/13 11:50	06/15/13 18:21	1
Lead	**44**		1.0		ug/L		06/15/13 11:50	06/15/13 18:21	1
Zinc	**200**		10		ug/L		06/15/13 11:50	06/15/13 18:21	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:18	1
Chromium	1.5	U	1.5		ug/L		06/15/13 11:50	06/15/13 17:18	1
Copper	**1.7**		1.0		ug/L		06/15/13 11:50	06/15/13 17:18	1
Lead	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:18	1
Zinc	10	U	10		ug/L		06/15/13 11:50	06/15/13 17:18	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: Trip Blank
Date Collected: 06/13/13 00:00
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
2-Hexanone	5.0	U	5.0		ug/L			06/17/13 15:52	1
2-Butanone (MEK)	10	U	10		ug/L			06/17/13 15:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/17/13 15:52	1
Acetone	10	U	10		ug/L			06/17/13 15:52	1
Benzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Bromoform	1.0	U	1.0		ug/L			06/17/13 15:52	1
Bromomethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Carbon disulfide	1.0	U	1.0		ug/L			06/17/13 15:52	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/17/13 15:52	1
Chlorobenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Chloroethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Chloroform	1.0	U	1.0		ug/L			06/17/13 15:52	1
Chloromethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:52	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Cyclohexane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Ethylbenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Methyl acetate	1.0	U	1.0		ug/L			06/17/13 15:52	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/17/13 15:52	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Methylene Chloride	**4.1**		1.0		ug/L			06/17/13 15:52	1
Styrene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Toluene	1.0	U	1.0		ug/L			06/17/13 15:52	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 15:52	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Trichloroethene	1.0	U	1.0		ug/L			06/17/13 15:52	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/17/13 15:52	1
Vinyl chloride	1.0	U	1.0		ug/L			06/17/13 15:52	1
Xylenes, Total	2.0	U	2.0		ug/L			06/17/13 15:52	1

Client: Field & Technical Services LLC
Project/Site: South Cavalcade

TestAmerica Job ID: 180-22198-1

Client Sample ID: Trip Blank
Date Collected: 06/13/13 00:00
Date Received: 06/14/13 14:27

Lab Sample ID: 180-22198-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		66 - 137		06/17/13 15:52	1
Toluene-d8 (Surr)	95		71 - 126		06/17/13 15:52	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/17/13 15:52	1

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

Lab Sample ID: MB 480-124296/6
Matrix: Water
Analysis Batch: 124296

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
2-Hexanone	5.0	U	5.0		ug/L			06/17/13 13:05	1
2-Butanone (MEK)	10	U	10		ug/L			06/17/13 13:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			06/17/13 13:05	1
Acetone	10	U	10		ug/L			06/17/13 13:05	1
Benzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Bromodichloromethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Bromoform	1.0	U	1.0		ug/L			06/17/13 13:05	1
Bromomethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Carbon disulfide	1.0	U	1.0		ug/L			06/17/13 13:05	1
Carbon tetrachloride	1.0	U	1.0		ug/L			06/17/13 13:05	1
Chlorobenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Dibromochloromethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Chloroethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Chloroform	1.0	U	1.0		ug/L			06/17/13 13:05	1
Chloromethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 13:05	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Cyclohexane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Ethylbenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Isopropylbenzene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Methyl acetate	1.0	U	1.0		ug/L			06/17/13 13:05	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			06/17/13 13:05	1
Methylcyclohexane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Methylene Chloride	1.0	U	1.0		ug/L			06/17/13 13:05	1
Styrene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Tetrachloroethene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Toluene	1.0	U	1.0		ug/L			06/17/13 13:05	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			06/17/13 13:05	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Trichloroethene	1.0	U	1.0		ug/L			06/17/13 13:05	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			06/17/13 13:05	1
Vinyl chloride	1.0	U	1.0		ug/L			06/17/13 13:05	1
Xylenes, Total	2.0	U	2.0		ug/L			06/17/13 13:05	1

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

Lab Sample ID: MB 480-124296/6
Matrix: Water
Analysis Batch: 124296

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*06/17/13 13:05*	*1*
Toluene-d8 (Surr)	*97*		*71 - 126*		*06/17/13 13:05*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/17/13 13:05*	*1*

Lab Sample ID: LCS 480-124296/5
Matrix: Water
Analysis Batch: 124296

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.1		ug/L		93	71 - 129
1,1-Dichloroethene	25.0	19.5		ug/L		78	58 - 121
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 127
Benzene	25.0	22.6		ug/L		90	71 - 124
Chlorobenzene	25.0	22.6		ug/L		90	72 - 120
cis-1,2-Dichloroethene	25.0	22.4		ug/L		90	74 - 124
Ethylbenzene	25.0	24.0		ug/L		96	77 - 123
Methyl tert-butyl ether	25.0	24.5		ug/L		98	64 - 127
Tetrachloroethene	25.0	21.9		ug/L		88	74 - 122
Toluene	25.0	22.1		ug/L		88	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	73 - 127
Trichloroethene	25.0	22.9		ug/L		91	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*
Toluene-d8 (Surr)	*96*		*71 - 126*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 480-124170/1-A
Matrix: Water
Analysis Batch: 124324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124170

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:58	1
Chromium	1.5	U	1.5		ug/L		06/15/13 11:50	06/15/13 17:58	1
Copper	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:58	1
Lead	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 17:58	1
Zinc	10	U	10		ug/L		06/15/13 11:50	06/15/13 17:58	1

Lab Sample ID: LCS 480-124170/2-A
Matrix: Water
Analysis Batch: 124324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.5		ug/L		102	80 - 120
Chromium	20.0	20.6		ug/L		103	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-124170/2-A
Matrix: Water
Analysis Batch: 124324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	20.0	20.5		ug/L		102	80 - 120
Lead	20.0	20.4		ug/L		102	80 - 120
Zinc	50.0	53.9		ug/L		108	80 - 120

Lab Sample ID: MB 480-123825/29-B
Matrix: Water
Analysis Batch: 124323

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 124171

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 16:56	1
Chromium	1.5	U	1.5		ug/L		06/15/13 11:50	06/15/13 16:56	1
Copper	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 16:56	1
Lead	1.0	U	1.0		ug/L		06/15/13 11:50	06/15/13 16:56	1
Zinc	10	U	10		ug/L		06/15/13 11:50	06/15/13 16:56	1

Lab Sample ID: LCS 480-123825/30-B
Matrix: Water
Analysis Batch: 124323

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 124171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20.0	20.8		ug/L		104	80 - 120
Chromium	20.0	20.5		ug/L		102	80 - 120
Copper	20.0	20.6		ug/L		103	80 - 120
Lead	20.0	21.2		ug/L		106	80 - 120
Zinc	50.0	52.5		ug/L		105	80 - 120

Lab Sample ID: 180-22198-3 MS
Matrix: Water
Analysis Batch: 124323

Client Sample ID: DP13W-10I
Prep Type: Dissolved
Prep Batch: 124171

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	U	20.0	21.6		ug/L		107	75 - 125
Chromium	1.5	U	20.0	18.7		ug/L		93	75 - 125
Copper	1.7		20.0	20.6		ug/L		95	75 - 125
Lead	1.0	U	20.0	19.9		ug/L		99	75 - 125
Zinc	10	U	50.0	58.8		ug/L		98	75 - 125

Lab Sample ID: 180-22198-3 MSD
Matrix: Water
Analysis Batch: 124323

Client Sample ID: DP13W-10I
Prep Type: Dissolved
Prep Batch: 124171

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	U	20.0	21.5		ug/L		106	75 - 125	0	20
Chromium	1.5	U	20.0	18.3		ug/L		91	75 - 125	2	20
Copper	1.7		20.0	21.1		ug/L		97	75 - 125	2	20
Lead	1.0	U	20.0	19.6		ug/L		98	75 - 125	1	20
Zinc	10	U	50.0	60.3		ug/L		102	75 - 125	3	20

GC/MS VOA

Analysis Batch: 124296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	8260B	
180-22198-2	DP13S-11I	Total/NA	Water	8260B	
180-22198-3	DP13W-10I	Total/NA	Water	8260B	
180-22198-4	Trip Blank	Total/NA	Water	8260B	
LCS 480-124296/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-124296/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 124151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	3510C	
180-22198-2	DP13S-11I	Total/NA	Water	3510C	
180-22198-3	DP13W-10I	Total/NA	Water	3510C	

Analysis Batch: 124527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	8270C LL	124151
180-22198-2	DP13S-11I	Total/NA	Water	8270C LL	124151
180-22198-3	DP13W-10I	Total/NA	Water	8270C LL	124151

Metals

Prep Batch: 124170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	3020A	
180-22198-2	DP13S-11I	Total/NA	Water	3020A	
180-22198-3	DP13W-10I	Total/NA	Water	3020A	
LCS 480-124170/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-124170/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 124171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Dissolved	Water	3020A	
180-22198-2	DP13S-11I	Dissolved	Water	3020A	
180-22198-3	DP13W-10I	Dissolved	Water	3020A	
180-22198-3 MS	DP13W-10I	Dissolved	Water	3020A	
180-22198-3 MSD	DP13W-10I	Dissolved	Water	3020A	
LCS 480-123825/30-B	Lab Control Sample	Dissolved	Water	3020A	
MB 480-123825/29-B	Method Blank	Dissolved	Water	3020A	

Analysis Batch: 124323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Dissolved	Water	6020	124171
180-22198-2	DP13S-11I	Dissolved	Water	6020	124171
180-22198-3	DP13W-10I	Dissolved	Water	6020	124171
180-22198-3 MS	DP13W-10I	Dissolved	Water	6020	124171
180-22198-3 MSD	DP13W-10I	Dissolved	Water	6020	124171
LCS 480-123825/30-B	Lab Control Sample	Dissolved	Water	6020	124171
MB 480-123825/29-B	Method Blank	Dissolved	Water	6020	124171

Metals (Continued)

Analysis Batch: 124324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	6020	124170
180-22198-2	DP13S-11I	Total/NA	Water	6020	124170
180-22198-3	DP13W-10I	Total/NA	Water	6020	124170
LCS 480-124170/2-A	Lab Control Sample	Total/NA	Water	6020	124170
MB 480-124170/1-A	Method Blank	Total/NA	Water	6020	124170

Analysis Batch: 124395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22198-1	DP13S-13I	Total/NA	Water	6020	124170
180-22198-3	DP13W-10I	Total/NA	Water	6020	124170

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
KEY ENVIRONMENTAL	ANGIE GATCHIE	6/13/13	220355
Address 200 THIRD AVE	**Telephone Number (Area Code)/Fax Number** 412-428-9411	**Lab Number** 716-691-2600	**Page** 1 of 1
City CARNEGIE / **State** PA / **Zip Code** 15106	**Site Contact** M. VALESKY	**Lab Contact** V. BORTOT	
Project Name and Location (State) S. CAVALCADE TX TI ZONE DELINEATION HOUSTON TX	**Carrier/Waybill Number** FED EX		
Contract/Purchase Order/Quote No. 13665-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: VOCs (8260B)	SVOCs (8270C)	TOTAL METALS (6020)	DISS METALS (6020)
DP13S-13T	6/13/13	1330		X			2		2	3			3	2	1	1
DP13S-11I	6/13/13	1420		X			2		2	3			3	2	1	1
DP13N-10I	6/13/13	1810		X			2		2	3			3	2	1	1
TRIP BLANK	6/13/13	←		X						1			1			

Special Instructions/ Conditions of Receipt

* DISSOLVED METALS WERE FIELD FILTERED.
* QUICK TAT

180-22198 Login
PM: Bortot, Veronica
Company: Field & Technical Services LLC

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

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

Turn Around Time Required
☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/13/13	1900	1. Received By TA BUFFALO	6/14/13	1000
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#2 4.2

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22198-1

Login Number: 22198

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Bortot, Veronica

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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22198-1

Login Number: 22198
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/14/13 03:37 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-22198-1

Login Number: 22198
List Number: 2
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/14/13 03:38 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ATTACHMENT G

ANALYTICAL DATA EVALUATIONS

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21558-1

SAMPLES: OW-09, MW-10, MW-01, PZN-30, MW-12R, TRIP BLANK, DP13S-04I, TRIP BLANK

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: The surrogate recovery of p-terphenyl-d14 was above the control limits in samples OW-09, MW-10, MW-01, PZN-30, and DP13S-04I. The surrogate recovery of phenol-d5 fell below the control limits in sample MW-12R. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliances: None

Key Environmental, Inc.

DATE: June 13, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21590-1

SAMPLES: DP13N-03S, DP13N-01S, MW-26

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: Phenanthrene was detected in the method blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Laboratory Blank Contamination:

The following analyte was detected in the aqueous method blank at the following concentration:

Analyte	Maximum Concentration	Blank Analyte
Phenanthrene	0.214 ug/l	1.07 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for laboratory blank contamination. Associated samples with concentrations below the blank action level were qualified with a "U" for laboratory blank contamination.

Key Environmental, Inc.

DATE: June 13, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21590-2

SAMPLES: DP13S-05S

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: Phenanthrene was detected in the method blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Laboratory Blank Contamination:

The following analyte was detected in the aqueous method blank at the following concentration:

Analyte	Maximum Concentration	Blank Analyte
Phenanthrene	0.214 ug/l	1.07 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for laboratory blank contamination. Associated samples with concentrations below the blank action level were qualified with a "U" for laboratory blank contamination.

Key Environmental, Inc.

DATE: June 13, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21650-1

SAMPLES: DP13N-03I, DP13N-01I, TB-052811

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: The LCS recovery of bis(2-ethylhexyl)phthalate was above the control limits. No action was taken on this basis.

Key Environmental, Inc.

DATE: June 20, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21665-1

SAMPLES: PZN-20, PZN-50, PZN-40, PZN-99(PZN-40), OW-15, TB-052813

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: None

□ Field Duplicate Precision
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: The MS/MSD recoveries of 2,4-dinitrotoluene, 2-chlorophenol, 4-chloro-3-methylphenol, and n-nitrosodi-n-propylamine fell below the control limits. The MS/MSD re covery of arsenic was above the control limits. No action was taken as the LCS recoveries were compliant.

□ Laboratory Control Sample
Noncompliances: None

Field Duplicate Precision:

FIELD DUPLICATE PRECISION					
ANALYTE	PZN-40	QUAL	PZN-99A	QUAL	RPD
2,4-Dimethylphenol	390		560		35.79*
2-Methylnaphthalene	680		690		1.46
2-Methylphenol	96	U	120		NC
4-Methylphenol	96	U	130		NC
Acenaphthene	480		510		6.06
Acetone	240		240		0
Arsenic, dissolved	540		570		5.41
Arsenic, total	550		540		1.83
Benzene	13		13		0
Carbazole	480	U	530		NC
Chromium, dissolved	5.3		5.8		9.01
Chromium, total	5.7		5.5		3.57
Ethylbenzene	53		52		1.90
Fluoranthene	48	U	61		NC
Fluorene	220		250		12.77
Isopropylbenzene	4.2		4.1		2.41
Naphthalene	11000		11000		0
Pentachlorophenol	120		120		0
Phenanthrene	260		330		23.73
Toluene	65		63		3.13
Xylenes, total	170		170		0
Zinc, total	11		10		9.52

NC – not calculated due to nondetect result

* - RPD is greater than 30%, associated samples are qualified as estimated, “J,” due to laboratory or field sampling imprecision

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21680-1

SAMPLES: OW-14, OW-16, OW-13, FB-052913, EB-052913, PZS-60, TB-052913, DP13S-06S, DP13S-07S, TB-052913

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Copper and naphthalene were detected in the field blank. Copper was detected in the equipment blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: The surrogate recovery of p-terphenyl-d14 fell below the control limits in sample DP13S-07S. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analytes were detected in the aqueous field blank, FB-052913, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Copper, dissolved	3.5 ug/l	17.5 ug/l
Copper, total	5.3 ug/l	26.5 ug/l
Naphthalene	2.2 ug/l	11 ug/l

The following analytes were detected in the aqueous equipment blank, EB-053013, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Copper, dissolved	4.2 ug/l	21 ug/l
Copper, total	4.3 ug/l	21.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21739-1

SAMPLES: PZS-40, FB-02-053013, MW-04, P-03R, MW-14R, PZN-99B(MW-14R), PZS-30, TB-053013, TB-053013

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Phenanthrene was detected in the field blank. See attached page for details.

□ Field Duplicate Precision
Noncompliances: See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: The MS/MSD recoveries of 1,2-dichloroethane, benzene, cis-1,2-Dichloroethene, trans-1,2-dichloroethene, trichloroethene, and toluene were above the control limits. The MS/MSD recoveries of 2-chlorophenol, 4-nitrophenol, bis(2-ethylhexyl)phthalate, hexachloroethane, and n-nitrosodi-n-propylamine fell below the control limits. No action was taken as the LCS recoveries were compliant.

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous field blank, FB-02-053013, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Phenanthrene	0.2 ug/l	1 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Field Duplicate Precision:

FIELD DUPLICATE PRECISION					
ANALYTE	MW-14R	QUAL	PZN-99B	QUAL	RPD
2-Methylnaphthalene	260		220		16.67
Acenaphthene	380		310		20.29
Arsenic, dissolved	33		34		2.99
Arsenic, total	33		35		5.88
Benzene	220		200		9.52
Carbazole	520		430		18.95
Copper, total	1.5		1.7		12.5
Dibenzofuran	470	U	240		NC
Ethylbenzene	150		140		6.90
Fluorene	210		170		21.05
Isopropylbenzene	10		11		9.52
Naphthalene	9100		7000		26.09
Phenanthrene	190		150		23.53
Toluene	13		13		0
Xylenes, total	170		160		6.06

NC – not calculated due to nondetect result

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21739-2

SAMPLES: DP13S-07I, EB-053013

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Copper, naphthalene, and phenanthrene were detected in the equipment blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analytes were detected in the aqueous equipment blank, EB-053013, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Copper, dissolved	4.2 ug/l	21 ug/l
Copper, total	3.7 ug/l	18.5 ug/l
Naphthalene	5 ug/l	25 ug/l
Phenanthrene	0.3 ug/l	1.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 13, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21739-3

SAMPLES: DP13S-06I

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21781-1

SAMPLES: DP13N-02I, DP13N-04S, DP13N-99A(DP13N-04S)

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Duplicate Precision
Noncompliances: See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Field Duplicate Precision:

FIELD DUPLICATE PRECISION					
ANALYTE	DP13N-04S	QUAL	DP13N-99A	QUAL	RPD
Chromium, total	1.5	U	1.5		NC
Copper, dissolved	1	U	1.2		NC
Copper, total	1.5		1.1		30.77*

NC – not calculated due to nondetect result

* - RPD is greater than 30%, associated samples are qualified as estimated, “J,” due to laboratory or field sampling imprecision

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21834-1

SAMPLES: TB-060313, DP13N-04I, DP12S-08S, DP13N-05S, DP13S-02S, TB-060313

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: The MS/MSD recoveries of 2-chlorophenol, 4-nitrophenol, bis(2-ethylhexyl)phthalate, hexachloroethane, and n-nitrosodi-n-propylamine fell below the control limits. The RPD's of hexachloroethane and pyrene were above the control limits. No action was taken as the LCS recoveries were compliant.

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21834-2

SAMPLES: DP13S-01S

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21845-1

SAMPLES: DP13S-10S, DP13S-99A(DP13S-10S), TB-060413

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Methylene chloride was detected in the trip blank. See attached page for details.

□ Field Duplicate Precision
Noncompliances: See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous trip blank, TB-060413, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	3.1 ug/l	15.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Field Duplicate Precision:

FIELD DUPLICATE PRECISION					
ANALYTE	DP13S-10S	QUAL	DP13S-99A	QUAL	RPD
Arsenic, total	2.4		2.5		4.08
Chromium, total	23		23		0
Copper, dissolved	1.3		1	U	NC
Copper, total	15		16		6.45
Lead, total	21		22		4.65
Methyl tert-butyl ether	2.6		2.6		0
Zinc, total	44		46		4.44

NC – not detected due to nondetect result

Key Environmental, Inc.

DATE: June 14, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21845-2

SAMPLES: DP13S-08I, DP13S-01I, FB-03-060413, TB-060413

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Acetone was detected in the field blank. Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous field blank, FB-03-060413, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Acetone	10 ug/l	50 ug/l

The following analyte was detected in the aqueous trip blank, TB-060413, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	1.2 ug/l	6 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21921-1

SAMPLES: DP13N-05I, EB-060513, DP13S-02I, TB-060513

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Naphthalene was detected in the equipment blank. Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: The MS/MSD recoveries of 1,1-dichloroethene, chlorobenzene, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, toluene, fluorene, and pyrene were above the control limits. The MS/MSD recoveries of 2,4-dinitrotoluene, 2-chlorophenol, 4-chloro-3-methylphenol, and n-nitrosodi-n-propylamine fell below the control limits. The RPD's of 2,4-dinitrotoluene, fluorene, and hexachloroethane were above the control limits. No action was taken as the LCS recoveries were compliant.

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous equipment blank, EB-060513, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Naphthalene	3.3 ug/l	16.5 ug/l

The following analyte was detected in the aqueous trip blank, TB-060513, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	4 ug/l	20 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21921-2

SAMPLES: DP13S-09I, TB-060513

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: The surrogate recovery of p-terphenyl-d14 fell below the control limits in sample DP13S-09I. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous trip blank, TB-060513, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	1.2 ug/l	6 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21993-1

SAMPLES: DP13S-10I, FB-03-060613

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-21994-1

SAMPLES: P-02R, EB-04-060613, TB-060613

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Acetone and naphthalene were detected in the equipment blank. Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

Field Blank Contamination:

The following analytes were detected in the aqueous equipment blank, EB-04-060613, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Acetone	13 ug/l	65 ug/l
Naphthalene	1.9 ug/l	9.5 ug/l

The following analyte was detected in the aqueous trip blank, TB-060613, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	1.1 ug/l	5.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-22042-1

SAMPLES: DP13N-09S, FB-04-060713

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Naphthalene was detected in the field blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: The LCS recoveries of bis(2-ethylhexyl)phthalate and pyrene were above the control limits. No action was taken on this basis.

Field Blank Contamination:

The following analyte was detected in the aqueous field blank, FB-04-060713, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Naphthalene	3.2 ug/l	16 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 17, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-22042-2

SAMPLES: DP13N-07I, TB-060713

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: The LCS recoveries of bis(2-ethylhexyl)phthalate and pyrene were above the control limits. No action was taken on this basis.

Field Blank Contamination:

The following analyte was detected in the aqueous trip blank, TB-060713, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	3.8 ug/l	19 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 18, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-22077-1

SAMPLES: DP13N-08I, DP13N-09I, DP13N-08S, DP13N-06I, TRIP BLANK

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: Naphthalene was detected in the method blank. See attached page for details.

□ Field Blank Contamination
Noncompliances: None

□ Surrogate Recoveries
Noncompliances: The surrogate recovery of p-terphenyl-d14 fell below the control limits in sample DP13N-09I. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliances: The LCS recovery of bis(2-ethylhexyl)phthalate was above the control limits. No action was taken on this basis.

Laboratory Blank Contamination:

The following analyte was detected in the aqueous method blank at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Naphthalene	2.12 ug/l	10.6 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for laboratory blank contamination. Associated samples with concentrations below the blank action level were qualified “U” for laboratory blank contamination.

Key Environmental, Inc.

DATE: June 18, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-22142-1

SAMPLES: DP13S-12I, DP13S-13S, TRIP BLANK

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: The surrogate recovery of p-terphenyl-d14 fell below the control limits in sample DP13S-12I. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliances: The RPD of 4-nitrophenol was above the control limits. No action was taken on this basis.

Field Blank Contamination:

The following analyte was detected in the aqueous trip blank, TB-060713, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	1.1 ug/l	5.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

Key Environmental, Inc.

DATE: June 19, 2013

FROM: Kendra Chintella

SUBJECT: South Cavalcade Groundwater Sampling

SAMPLE DELIVERY GROUP (SDG): 180-22198-1

SAMPLES: DP13S-13I, DP13S-11I, DP13N-10I, Trip Blank

ANALYSES: Method 8260B (VOCs), 8270C LL (SVOCs), 6020 (Total and Dissolved Metals)

LABORATORY: TestAmerica – Pittsburgh, Buffalo

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliances: None

□ Holding Times
Noncompliances: None

□ Laboratory Blank Contamination
Noncompliances: None

□ Field Blank Contamination
Noncompliances: Methylene chloride was detected in the trip blank. See attached page for details.

□ Surrogate Recoveries
Noncompliances: None

□ Laboratory Control Sample
Noncompliances: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliances: None

Field Blank Contamination:

The following analyte was detected in the aqueous trip blank, Trip Blank, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Methylene chloride	4.1 ug/l	20.5 ug/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified “B” for field blank contamination.

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