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Third Quarter 2011 Progress Report
Closed Leichner Brothers Landfill
Vancouver Washington

Consent Decree 96-2-03081-7
Facility ID No. 1017

Prepared for:

Clark County
Environmental Services
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Prepared by:

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November 30, 2011
File No. 04211030.06/.18

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November 30, 2011
File No. 04211030.06/.18

Mr. Mohsen Kourehdar, P.E.
Washington State Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
300 Desmond Drive
Lacey, Washington 98503

Subject: Third Quarter 2011 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017

Dear Mr. Kourehdar:

This letter presents the third quarter 2011 progress report for the closed Leichner Brothers Landfill (LBLF) located in Vancouver, Washington. SCS Engineers, Inc. (SCS) prepared this progress report on behalf of Clark County Environmental Services (County) and the Leichner Landfill Oversight Committee (LLOC), whose members include the City of Vancouver and Leichner Brothers Land Reclamation Corporation (LBLRC). The report is being submitted in accordance with reporting requirements specified in the July 1996 Consent Decree issued to the LBLRC by the Washington State Department of Ecology (Ecology).

Compliance monitoring of groundwater, surface water (i.e., stormwater), and landfill gas (LFG) is performed at LBLF to fulfill certain requirements of the 1996 Consent Decree and associated Cleanup Action Plan (CAP), as well as to concurrently fulfill the requirements of LBLF's post-closure monitoring under Minimum Functional Standards (MFS), Chapter 173-304 WAC. Compliance monitoring was performed in accordance with the methods and procedures described in the site's compliance monitoring plan (CMP; EMCON, 2005[1]), and subsequent recent modifications to the groundwater analytical program approved by Ecology in 2011 (referenced in this report where applicable).

The progress report (1) describes field activities performed during the third quarter 2011 at LBLF, (2) presents results of groundwater, LFG, and stormwater compliance monitoring, and the monitoring and maintenance of the facility's landfill gas collection and control system (GCCS), and (3) describes other pertinent, non-routine activities performed during the third quarter 2011. The GCCS includes a LFG extraction well field, condensate collection system, and a LFG blower and flare.

[1] EMCON. 2005. Compliance Monitoring Plan, Leichner Landfill, Clark County, Washington. Prepared by EMCON/OWT, Inc., Portland, Oregon, for the Leichner Brothers Land Reclamation Corp. April.

THIRD QUARTER 2011 MAJOR ACTIVITIES

The following major activities were performed during the third quarter 2011 period and are described in more detail in subsequent sections of this report.

- Conducted third quarter 2011 (semiannual) groundwater monitoring in September 2011.
- Conducted monthly stormwater inspections in July, August, and September 2011.
- Conducted quarterly monitoring of the LFG compliance monitoring probes in July 2011.
- Conducted monitoring and balancing of the LFG extraction well field at least semimonthly (twice a month).
- Monitored and maintained the performance and operation of the GCCS.
- Conducted vegetation control in the North Detention Basin in September 2011.

THIRD QUARTER 2011 PROJECT ACTIVITIES AND RESULTS

Project Management, Meetings, and Correspondence

Correspondence conducted during the third quarter 2011 period included the following:

- Submitted July, August, and September 2011 monthly updates to County and the LLOC.
- Submitted to Ecology and Clark County Public Health (CCPH) a letter dated July 14, 2011[2], requesting approval to use the low-flow purge sampling method for collecting groundwater samples from the site monitoring wells. The County received approval from both Ecology and CCPH in e-mail correspondence dated July 19, 2011. Low-flow purge sampling was implemented during the third quarter 2011 groundwater monitoring event as described in more detail in this report.
- Submitted to Ecology on August 10, 2011, a discharge monitoring report (DMR) for the second quarter 2011 stormwater monitoring sample collected on June 20, 2011.
- Submitted to Ecology the Second Quarter 2011 Progress Report dated August 25, 2011[3].
- At the request of the County, SCS reviewed financial assurance documentation and prepared updated project net worth spreadsheets.

[2] SCS Engineers (SCS). 2011. Request for Approval to Use the Low-Flow Purge Method to Collect Groundwater Samples from Site Monitoring Wells at the Closed Leichner Brothers Landfill, Vancouver, Washington, Facility ID No. 1017

[3] SCS Engineers (SCS). 2011. Second Quarter 2011 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Wasington, Consent Decree 96-2-03081-7, Facility ID No. 1017. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, August 25.

- Conducted the second quarter 2011 meeting of the LLOC on August 9, 2011.
- Conducted the third quarter 2011 meeting of the LLOC on September 29, 2011.

Third Quarter 2011 Groundwater Monitoring

Groundwater Monitoring Network and Schedule

The current groundwater monitoring network consists of 20 monitoring wells screened in the alluvium (alluvial water-bearing zone [WBZ]) or the Troutdale Formation aquifer. The monitoring well locations are shown in Figure 1. The following describes the monitoring network components.

- Wells monitoring groundwater elevation and quality in the upper portion of the alluvial WBZ are denoted with an "S" in the well number (e.g., well LB-1S).
- Wells monitoring groundwater elevation and quality in the middle (or intermediate) portion of the alluvial WBZ are denoted with an "I" in the well number (e.g., LB-27I).
- Wells monitoring groundwater elevation and quality in the deeper Troutdale Formation aquifer are denoted with a "D" in the well number (e.g., well LB-1D).

The groundwater monitoring network wells are monitored annually or semiannually in accordance with the schedule specified in the 2005 CMP (EMCON, 2005[1]). During the annual event, typically performed during the first quarterly monitoring period in late winter-early spring (usually in March), groundwater samples are collected from the following 20 monitoring wells: LB-1S, LB-1D, LB-3S, LB-3D, LB-4SR, LB-4D, LB-5S, LB-5D, LB-6S, LB-10SR, LB-10DR, LB-13I, LB-13D, LB-17I, LB-17D, LB-20S, LB-26I, LB-26D, LB-27I, and LB-27D. During the semiannual monitoring event, typically performed during the third quarterly period in late summer-early fall (usually September), groundwater samples are collected from the following 7 monitoring wells: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-26I, and LB–27I.

The third quarter 2011 (semiannual) groundwater monitoring event was performed from September 6 through 8, 2011.

Field Procedures and Laboratory Methods

Before collecting groundwater samples, groundwater levels in all site monitoring wells were measured and recorded with an electronic water level meter.

Groundwater sampling of the semiannual groundwater monitoring network wells was performed (1) in general accordance with the procedures described in the 2005 CMP, and (2) using low-flow purge sampling procedures as described in SCS's July 14, 2011, letter to Ecology requesting approval to conduct low-flow purge sampling (approved by Ecology on July 19, 2011). A non-dedicated, portable, stainless steel bladder pump (QED Sample Pro portable micropurge pump) was used to purge and sample the monitoring wells. A new, disposable, polyethylene bladder was

used for each well. New, dedicated, polyethylene discharge tubing was used for each well that was subsequently kept inside the well casings for use during subsequent monitoring events.

The monitoring wells were purged at a pump rate less than or equal to 500 mL/min, using a flow controller to maintain a constant pump rate. During pumping, the water level in the wells was monitored to document that water level stabilization (i.e., less than 0.3 foot of drawdown over three successive measurements) was achieved. Before recording field water quality parameters, the approximate volume of the stagnant water in the discharge tubing was purged. A field-calibrated, water quality meter attached to a flow-through cell was used to measure pH, temperature, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). Field water quality parameters were recorded on a field sampling data sheet (FSDS) at the beginning of the purging process (after stagnant water within the discharge tubing was removed) and at approximately 0.1 to 0.25-gallon intervals (approximately 2 to 3 minute intervals) during purging. Purging continued until field parameters stabilized for three consecutive measurements to within ±0.2 units for pH, ±1° Celsius for temperature, 5 percent for specific conductance, and 10 percent for DO. There is no stabilization criteria established for ORP. Copies of the FSDSs are provided in Attachment 1. Table 1 summarizes the field water-quality parameter measurements.

The stainless steel bladder pump assembly was dismantled and decontaminated between sampling each well. The decontamination procedure consisted of (1) an initial scrub rinse with tap water, (2) a scrub wash with non-phosphatic detergent consisting of a dilute mixture of Liquinox (or equivalent) and tap water, and (3) a final rise with distilled water. Equipment decontamination liquids were placed in the onsite condensate holding tank for eventual off-site disposal.

Groundwater samples were collected directly from the discharge tubing after disconnecting it from the flow-through cell. The samples were stored and transported in coolers chilled with ice, and chain-of-custody (COC) documentation accompanied the samples during their storage and transport to the laboratory. The groundwater samples were submitted to Test America in Beaverton, Oregon, for analyses of the following list of long-term monitoring parameters approved by Ecology and specified in the 2005 CMP: inorganic indicator parameters (nitrate [as nitrogen], total dissolved solids [TDS], chloride [Cl], dissolved iron [Fe], dissolved manganese [Mn]) and volatile organic compounds (VOCs).

The analytical test methods were consistent with those described in the 2005 CMP, except that a low-level procedure for VOCs analysis by EPA Method 8260B was used to obtain method reporting limits (MRL) that meet the compliance level of 0.1 micrograms per liter (µg/L) for vinyl chloride (VC) and 1,1-dichloroethene (1,1-DCE), as requested by Ecology.[4,5] The MRLs reported by Test America were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE.

[4] Washington Department of Ecology (Ecology). 2011. Letter (Re: Periodic Review Under Model Toxics Control Act (MTCA), Leichner Brothers Landfill), to Michael Davis, Clark County Public Works Department, Vancouver, Washington, from Mohsen Kourehdar, Ecology, Southwest Region Office. April 27.

Quality Assurance and Quality Control Methods and Results

Field quality assurance/quality control (QA/QC) procedures used for the third quarter 2011 monitoring event included collecting and submitting one field duplicate sample (sample LB-090711-04) collected at well LB-6S, one equipment rinsate blank (sample LB-090811-09), and one trip blank. Laboratory QA/QC procedures included analyzing surrogate spikes, method blanks, matrix spikes, and matrix spike duplicates. The laboratory QA/QC results are included with the laboratory analytical reports provided by Test America (see Attachment 2). Test America incorporated its laboratory data quality review comments in the QA/QC narrative of the laboratory reports. Copies of the laboratory analytical reports (along with copies of the COC forms) are provided in Attachment 2.

Field and laboratory QA/QC data were also reviewed by SCS to determine whether the data met EPA QC guidance criteria. The results of SCS's QA/QC reviews of the laboratory data and results are provided in Attachment 3. The QA/QC reviews indicated that the data were acceptable for their intended use.

Third Quarter 2011 Groundwater Monitoring Results

Groundwater levels measured in the site monitoring wells on September 6, 2011, and corresponding groundwater elevations are summarized in Table 2. The groundwater elevations are consistent with historical groundwater elevation data. Groundwater potentiometric surface contour maps for the third quarter (September) 2011 monitoring event are provided in Figures 2 and 3 for the alluvial WBZ and Troutdale Formation aquifer, respectively. Consistent with previous interpretations, groundwater in the alluvial WBZ flows towards the west to southwest, and groundwater in the Troutdale Formation aquifer flows towards the south to southeast.

The field-measured water quality parameter concentrations in groundwater samples measured during purging were generally within the range of concentrations from the last five years (since 2006). Field parameter concentrations were within available compliance levels, except for pH in groundwater from monitoring well LB-5S and specific conductance in groundwater from monitoring well LB-27I (see Table 1). The pH concentration in well LB-5S (5.9 standard units [S.U.]) was below the lower regulatory limit of 6.5 S.U., but is within the range of concentrations measured since 2006 (5.8 to 6.8 S.U.). The specific conductance concentration in well LB-27I (707 microSiemens per centimeter [(µS/cm]) slightly exceeds the compliance level of 700 µS/cm specified in the 1996 Consent Decree for LBLF; however, the concentration is within the range of concentrations measured since 2006 (376 to 786 µS/cm). The historical concentrations for these wells and parameters have previously been reported to Ecology and are likely reflective of naturally occurring fluctuations.

[5] As described in Ecology's April 27, 2011, letter, if after two years of testing (beginning first quarter 2011), the analytical results show that VC and 1,1-DCE are not detected above a MRL of 0.1 µg/L, then the testing for these two VOCs can be discontinued.

The third quarter 2011 laboratory analytical data are summarized in Table 3 for inorganic parameters (Cl, nitrate, and TDS) and dissolved metals (Fe and Mn), and in Table 4 for VOCs. The groundwater analytical results for inorganic parameters and dissolved metals are generally consistent with results obtained from the last five years of groundwater monitoring (since 2006). The concentrations of inorganic parameters and dissolved metals did not exceed compliance levels specified in the 1996 Consent Decree for LBLF, except for dissolved Mn in the sample from well LB-27I (0.456 milligrams per liter [mg/L]) that exceeded the compliance level of 0.05 mg/L. However, the dissolved Mn concentration is within the range of historical results collected since 2006 for well LB-27I (0.121 to 0.530 mg/L), and is likely attributed in part to natural groundwater conditions, as previously reported to Ecology. Historical data indicate that background levels for Fe and Mn exhibit natural variability and fluctuate above and below the compliance levels at several well locations, including upgradient well LB-4SR and crossgradient well LB-3S.

Low levels of some VOCs were detected (see Table 4) as follows:

- Acetone was detected in all samples, except from well LB-13I, at concentrations (2.1 to 2.8 µg/L) slightly above the MRL of 2.0 µg/L.

- Chloroethane was detected at a very low concentration of 0.25 µg/L in the sample collected from well LB-27I, which is equivalent to the MRL.

- VC was detected at concentrations slightly above the MRL of 0.02 µg/L in the samples collected from wells LB-26I (at 0.044 µg/L) and LB-27I (at 0.053 µg/L).

- Low-level concentrations of 2-butanone, acetone, methylene chloride, and toluene were detected in the equipment rinsate blank sample.

Laboratory QA/QC data do not indicate that the presence of acetone in groundwater samples is related to laboratory contamination. However, acetone was detected in the equipment rinsate blank sample at a concentration of 3.8 µg/L. It appears that the low-level acetone detections in most of the groundwater samples are due to either unconfirmed laboratory contamination or inadvertent contamination from the sampling equipment (i.e., the non-dedicated bladder pump) because (1) acetone has historically not been detected in the site monitoring wells, (2) it is highly unlikely that acetone would be detected at nearly equivalent concentrations in almost all groundwater samples collected this quarter, and (3) the concentrations detected in the groundwater samples are similar to the concentration detected in the equipment rinsate blank.

Chloroethane and VC had not been previously detected for at least five years prior to 2011 when the low-level testing method for VOCs was implemented at the request of Ecology. VOCs for which compliance levels have been established for LBLF (i.e., 1,4-dichlorobenzene, 1,1-dichloroethene, tetrachloroethene, trichlorethene, and VC) were not detected during the third quarter 2011 monitoring event, except for VC. The concentrations of VC in the samples from wells MW-26I and MW-27I were about an order of magnitude below the compliance level (see Table 4). A site-specific compliance level or other regulatory limit (e.g., MTCA or EPA Region 9 screening levels) for chloroethane has not been established.

The third quarter 2011 VOC analytical data demonstrate that the post-closure, remedial action measures implemented at LBLF (i.e., maintenance of the engineered landfill cap, operation of the GCCS, and surface water controls) continue to be effective at maintaining VOC concentrations substantially below compliance levels.

Third Quarter 2011 Stormwater Monitoring

A third quarter 2011 stormwater sample was collected on September 29, 2011. The sample was submitted to Test America, for the permit-required laboratory analyses. Analytical results of this stormwater sample indicated that water quality benchmarks specified in LBLF's Industrial Stormwater General Permit (issued in October 2009) were not exceeded. A DMR summarizing the third quarter 2011 stormwater monitoring results will be submitted to Ecology during the fourth quarter 2011 period.

Consistent with requirements of LBLF's Industrial Stormwater General Permit, monthly stormwater inspections were performed during the third quarter 2011 period on July 29, August 31, and September 29, 2011. No problems or concerns were noted during the monthly inspections.

SCS submitted to Ecology on August 10, 2011, a DMR for the second quarter 2011 stormwater monitoring sample collected on June 20, 2011. Analytical results of this stormwater sample indicated that water quality benchmarks specified in LBLF's Industrial Stormwater General Permit (issued in October 2009) were not exceeded.

Landfill Gas System Monitoring and Results

Compliance LFG Migration Monitoring

The schedule for performing LFG monitoring of the perimeter, compliance LFG probes was modified from monthly to quarterly beginning in the third quarter 2011 period, as approved by Ecology.[4] The third quarter 2011 compliance LFG monitoring was performed on July 25, 2011. Methane concentrations were below the MFS compliance level of 5 percent methane by volume in all probes on July 25, 2011. A summary of the July 25, 2011, compliance LFG monitoring probe data is provided in Attachment 4. The monitoring probe locations are shown in Figure 4.

LFG Extraction System

The LFG extraction wells (north and south LFG extraction wells; shown on Figure 4) were monitored and adjusted (balanced) at least semi-monthly (twice a month) during the third quarter 2011 on July 1 and 8 – 11, August 10 and 13, and September 1 and 15, 2011. There were no problems or concerns noted during the monitoring and adjustment of the LFG extraction wells in the third quarter 2011.

Greenhouse Gas Monitoring

The LFG flare system was monitored on a weekly basis for criteria required for evaluated for green house gas (GHG) emissions.

SCS submitted to the County/LLOC, Ecology, and CCPH a report dated June 29, 2011, presenting the results of a GHG applicability and emissions modeling study. The results of the study indicated that GHG emissions at the LBLF do not exceed the federal threshold limit for annual GHG emissions reporting, but do exceed the threshold limit for the State of Washington, which will require GHG emissions reporting for calendar year 2012. In accordance with the County's and LLOC's request, SCS will continue routine monitoring of the LFG flare system in 2011 for optimizing the performance and efficiency of the LFG blow and flare.

GCCS Operations and Maintenance

Routine operations, maintenance, and repair of the GCCS performed during the third quarter 2011 generally included the following:

- Routine checks and adjustments to the LFG flare system.
- Maintenance and repair (as needed) of the LFG extraction wells and piping.
- Maintenance and repair (as needed) of the LFG flare system, condensate collection system, including the condensate sumps, airlines, discharge lines, and compressors.
- Repair (as needed) of minor leaks in the GCCS conveyance lines due to loosely attached flex hoses or fittings.

Other non-routine maintenance and repair activities performed during each month of the third quarter 2011 period are described below.

July 2011

- Discussed with LFG Specialties flare details and operating parameters in preparation for modifying the blower.
- Modified the two blowers so they could accommodate lower LFG generation rates by installing new sheaves and bushings to reduce their speed and vacuum potential.
- Retained Pacific Air to service the compressor refrigeration unit for the air compressor.
- Replaced the fan motor in the air compressor shed.
- Replaced the propane tank.
- Repaired the casing for extraction well NW-25.
- Restarted the flare after it was determined to have automatically shut down on July 11, 2011. After it was restarted, flare system reverberations were noticed. As a result, the flare stack bolts and plates were tightened, corrosion on the port for the fire eye was cleaned off, and the louvers were adjusted. These actions appeared to stop the reverberations. The flare system operated efficiently since these repairs were made.

August 2011

- Repaired extraction well NW-39 by extending the well casing by two inches and connecting it to the flex hose.
- Replaced valves at extraction wells NE-4, -6, -9, -11, and -12.
- Installed a gas sampling port where the NW gas extraction piping meets the NE gas extraction piping.
- Installed current transducers in LFG blower motor control.
- Measured sediment thickness of the North and South Detention Ponds pumping vaults.
- Inspected vegetation removal activities performed under the direction of the County.
- Conducted technical discussions and site visits with Mike Davis regarding dewatering and vegetation removal of the North Detention Pond. SCS subsequently provided to the County a scope of work on August 15, 2011, and cost estimate on August 25, 2011, and received the County's authorization to proceed with vegetation removal activities on August 29, 2011. SCS performed the following activities in August 2011 in preparation for this work: (1) dewatered the North Detention Pond, (2) measured sediment thickness of the North and South Detention Pond pumping vaults, and (3) evaluated materials used in the past to prevent algae from stagnating in the sump.
- Performed a site-wide fence inspection on August 19, 2011. Several minor fencing issues were identified (e.g., small holes, barb wire missing, gaps underneath the fence). SCS notified the County of these issues and the County will coordinate repairs to the fencing that pose a potential security issue.

September 2011

- Repaired drip leg at sump N-8 and S-4.
- Performed pitot readings on header in northeast quadrant to determine gas flow direction.
- Performed remote troubleshooting of the flare system programmable logic control (PLC) with LFG Specialties (using FT Connect) to evaluate flare performance and PLC settings.
- As part of preparation for sediment and vegetation removal of the North and South Detention Ponds, the North Pond was dewatered on September 1, 5, 10, and 12, 2011, and an 18-inch cap was temporarily installed on the north basin inlet pipe.

- Conducted sediment and vegetation removal during the week of September 12, 2011, in the North and South Detention Ponds, as approved by the County on August 29, 2011. SCS also repaired a large hole identified in the North Detention Pond liner during the removal activities. A technical memorandum dated September 20, 2011, describing the sediment removal and liner repair activities was submitted to the County.

- Assessed significant damage to the perimeter fence near gas probe GP-11. The damage appeared to be related to fill placement activities and heavy equipment operations conducted by Moore Excavation in the vicinity of the damaged fence. Moore Excavation subsequently repaired the fence.

REPAIR/REPLACEMENT/RENOVATION ACTIVITIES

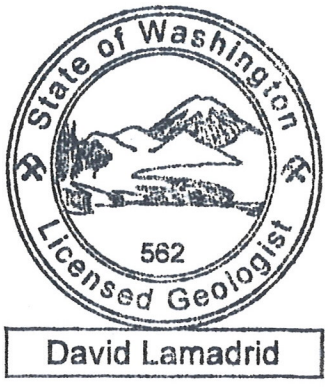
The following repair, replacement, and/or renovation activities were performed during the third quarter 2011:

- SCS obtained and submitted to the County on August 18, 2011, final subcontractor bids for replacing the electrical control panel for the South Detention Basin pumping system. Grundfos CBS, Inc., was selected as the preferred contractor based evaluation of the bids, and SCS received authorized to proceed from the County on August 24, 2011. This work is anticipated to be completed during the fourth quarter 2011 period.

- Coordinated procurement of a safety railing system that will be installed around the concrete pad for the North Detention Pond pumping system.

If you have any questions or comments regarding this report, please contact Mr. Louis Caruso at (503) 639-9208 or by email at lcaruso@scsengineers.com.

Sincerely,



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Attachments: Table 1 – Field Water Quality Parameters Measurements
Table 2 – Groundwater Elevation Data
Table 3 – Inorganic Parameters Concentrations
Table 4 – Volatile Organic Compounds Concentrations
Figure 1 – Groundwater Monitoring Locations
Figure 2 – Groundwater Potentiometric Surface Contours, Alluvial Water Bearing Zone (September 6, 2011)
Figure 3 – Groundwater Potentiometric Surface Contours, Troutdale Formation Aquifer (September 6, 2011)
Figure 4 – Landfill Gas Probe and Extraction Well Locations
Attachment 1 – Field Sampling Data Sheets (FSDSs)
Attachment 2 – Groundwater Laboratory Analytical Reports
Attachment 3 – Results of Laboratory QA/QC Reviews
Attachment 4 – Quarterly Compliance LFG Monitoring Probe Data

cc: Mike Davis; Clark County Environmental Services
Gary Bickett and Melissa Sutton; Clark County Public Health
Brian Carlson; City of Vancouver
Steve Horenstein; Miller Nash
Craig Leichner; LBLRC
SCS Leichner Project File

TABLES

Table 1
Field Water Quality Parameters Measurements
Third Quarter (September) 2011
Leichner Brothers Landfill

Monitoring Well	Sample Blind ID	Sample Date	pH (S.U.)	Specific Conductance (µS/cm)	Temperature (^{o}C)	ORP (mv)	Dissolved Oxygen (mg/L)
Regulatory Limit or Compliance Level			6.5 - 8.5 [a]	700 [b]	NA	NA	NA
LB-1S	LB-090811-07	9/8/2011	6.6	296	14.2	-9.0	5.35
LB-5S	LB-090811-06	9/8/2011	**5.9**	273	13.3	-7.9	8.10
LB-6S	LB-090711-05	9/7/2011	6.8	219	15.0	44.4	7.01
LB-10SR	LB-090811-08	9/8/2011	6.5	410	14.8	-82.0	0.80
LB-13I	LB-090711-02	9/7/2011	6.9	252	13.9	-3.0	1.38
LB-26I	LB-090711-03	9/7/2011	6.8	230	15.1	47.8	4.41
LB-27I	LB-090711-01	9/7/2011	6.5	**707**	14.2	71.7	1.11

Notes:

S.U. = standard units

µS = microSiemens per centimeter (equivalent to micro mho per centimeter [µmho/cm])

^{o}C = degrees celsius

mV = millivolts

mg/L = milligrams per liter

Bold = concentration exceeds the regulatory limit or compliance level

[a] Regulatory limit specified inWashington Administrative Code, secondary maximum contaminant level (SMCL).

[b] Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.

Table 2
Groundwater Elevation Data
Third Quarter (September) 2011
Leichner Brothers Landfill

Monitoring Well	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC) [a]	Groundwater Elevation (feet, AMSL)
LB-R2	219.09	43.25	175.84
LB-1S	210.11	31.30	178.81
LB-1D	209.71	34.53	175.18
LB-3S	219.19	36.70	182.49
LB-3D	219.27	37.67	181.60
LB-4S(R)	226.47	21.68	204.79
LB-4C	227.58	45.42	182.16
LB-4D	227.27	54.00	173.27
LB-5S	206.85	15.35	191.50
LB-5C	206.64	NM [b]	--
LB-5D	207.60	35.65	171.95
LB-6S	202.86	25.20	177.66
LB-9S(R)	218.44	33.32	185.12
LB-10SR	202.96	28.80	174.16
LB-10CR	202.97	27.74	175.23
LB-10DR	203.24	40.54	162.70
LB-13I	202.30	25.84	176.46
LB-13C	202.63	26.27	176.36
LB-13D	202.90	26.57	176.33
LB-17S	207.92	29.02	178.90
LB-17I	213.20	34.37	178.83
LB-17C	214.10	NM [b]	--
LB-17D	213.11	35.11	178.00
LB-20S	221.22	38.15	183.07
LB-21S	223.43	35.76	187.67
LB-21C	223.38	36.17	187.21
LB-21D	223.69	39.13	184.56
LB-22S	208.46	5.20	203.26
LB-23S	229.27	29.80	199.47
LB-24S	235.21	37.77	197.44
LB-26I	200.17	23.16	177.01
LB-26D	200.70	22.89	177.81
LB-27I	205.28	29.15	176.13
LB-27D	204.61	35.70	168.91
MW-1 N	216.52	Dry	NA
MW-1 S	216.07	35.71	180.36
MW-1 E	216.38	Dry	NA
MW-NE	219.80	12.61	207.19

Notes:

AMSL = above mean sea level; BTOC = below top of casing; NA = not applicable; NM = not measured

[a] Measured on September 6, 2011.

[b] Not measured due to active wasp nests inside the protective casing.

Table 3
Inorganic Parameters and Dissolved Metals Concentrations
Third Quarter (September) 2011
Leichner Brothers Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Iron (mg/L)	Manganese (mg/L)
Compliance Levels (mg/L) [a]				250	10	500	0.3	0.05
LB-1S	LB-090811-07	Alluvium	09/08/11	5.71	6.87	205	0.025 U	0.00200 U
LB-5S	LB-090811-06	Alluvium	09/08/11	7.08	6.19	210	0.025 U	0.00200 U
LB-6S	LB-090711-05	Alluvium	09/07/11	9.09	0.73	178	0.025 U	0.00200 U
LB-6S (Dup)	LB-090711-04	Alluvium	09/07/11	8.97	0.73	177	0.025 U	0.00200 U
LB-10SR	LB-090811-08	Alluvium	09/08/11	17.7	1.15	251	0.025 U	0.00205
LB-13I	LB-090711-02	Alluvium	09/07/11	5.99	4.53	204	0.025 U	0.00200 U
LB-26I	LB-090711-03	Alluvium	09/07/11	6.22	5.02	200	0.0392	0.00356
LB-27I	LB-090711-01	Alluvium	09/07/11	41.2	0.10 U	464	0.050 U	**0.456**
Equipment Blank	LB-090811-09	NA	09/08/11	0.50 U	0.10 U	10 U	0.025 U	0.00200 U

Notes:
mg/L = milligrams per liter
Dup = duplicate sample
NA = not applicable
U = not detected at or above the laboratory method reporting limit indicated
Bold = concentration exceeds the compliance level

[a] Compliance levels specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (September) 2011
Leichner Brothers Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	1,1-Dichloroethene	1,4-Dichlorobenzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl chloride	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane
				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compliance Level [a]				**0.1**	**1.8**	**5.0**	**5.0**	**0.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-090811-07	Alluvium	09/08/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-5S	LB-090811-06	Alluvium	09/08/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-6S	LB-090711-05	Alluvium	09/07/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-6S (Dup)	LB-090711-04	Alluvium	09/07/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-10SR	LB-090811-08	Alluvium	09/08/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-13I	LB-090711-02	Alluvium	09/07/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-26I	LB-090711-03	Alluvium	09/07/11	0.1 U	0.2 U	0.1 U	0.1 U	**0.044**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
LB-27I	LB-090711-01	Alluvium	09/07/11	0.1 U	0.2 U	0.1 U	0.1 U	**0.053**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Equipment Blank	LB-090811-09	NA	09/08/11	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Trip Blank	NA	NA	NA	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U

Notes:
ug/L = micrograms per liter
Dup = duplicate sample
NA = not applicable or compliance level is not available
U = not detected at or above the method reporting limit indicated
Bold = detected concentration

a Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (September) 2011
Leichner Brothers Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carton disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane
				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compliance Level [a]				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-090811-07	Alluvium	09/08/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5S	LB-090811-06	Alluvium	09/08/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S	LB-090711-05	Alluvium	09/07/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.3**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S (Dup)	LB-090711-04	Alluvium	09/07/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10SR	LB-090811-08	Alluvium	09/08/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I	LB-090711-02	Alluvium	09/07/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26I	LB-090711-03	Alluvium	09/07/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27I	LB-090711-01	Alluvium	09/07/11	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**2.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.25**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Equipment Blank	LB-090811-09	NA	09/08/11	0.1 U	**3.0**	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**3.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trip Blank	NA	NA	NA	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

Notes:
ug/L = micrograms per liter
Dup = duplicate sample
NA = not applicable or compliance level is not available
U = not detected at or above the method reporting limit indicated
Bold = detected concentration

[a] Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Actior

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (September) 2011
Leichner Brothers Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene chloride	m,p-Xylene (Sum of Isomers)	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichlorofluoromethane
				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compliance Level [a]				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-090811-07	Alluvium	09/08/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5S	LB-090811-06	Alluvium	09/08/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S	LB-090711-05	Alluvium	09/07/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S (Dup)	LB-090711-04	Alluvium	09/07/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10SR	LB-090811-08	Alluvium	09/08/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I	LB-090711-02	Alluvium	09/07/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26I	LB-090711-03	Alluvium	09/07/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27I	LB-090711-01	Alluvium	09/07/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Equipment Blank	LB-090811-09	NA	09/08/11	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	**1.8**	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.11**	0.1 U	0.1 U	0.1 U
Trip Blank	NA	NA	NA	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

Notes:

ug/L = micrograms per liter

Dup = duplicate sample

NA = not applicable or compliance level is not available

U = not detected at or above the method reporting limit indicated

Bold = detected concentration

[a] Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Actior

FIGURES

LEGEND:

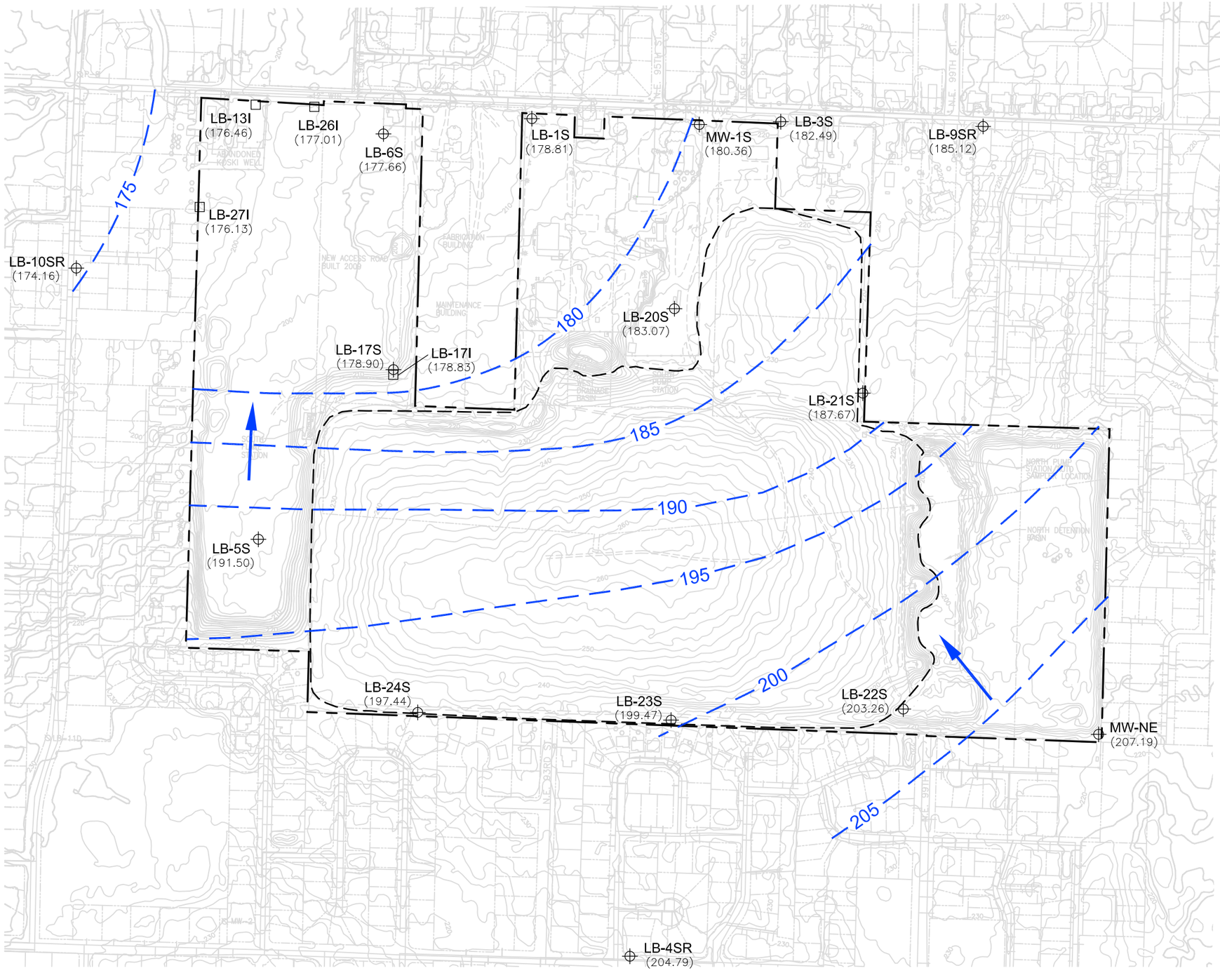
LB-4SR ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-4D ⊗	Monitoring Well Location, Troutdale Aquifer
LB-17I □	Monitoring Well Location, Middle of Alluvial Water–Bearing Zone
—— – – ——	Property Boundary
– – – – – –	Limit of Landfill Cover and Approximate Edge of Waste

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

SCS ENGINEERS
Environmental Consultants and Contractors
14945 SW Sequoia Parkway, Suite 180
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04211030.06/.18	DES BY D.L.	GROUNDWATER MONITORING LOCATIONS	DATE OCTOBER 2011
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL CLARK COUNTY, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY L.C.		



LEGEND:

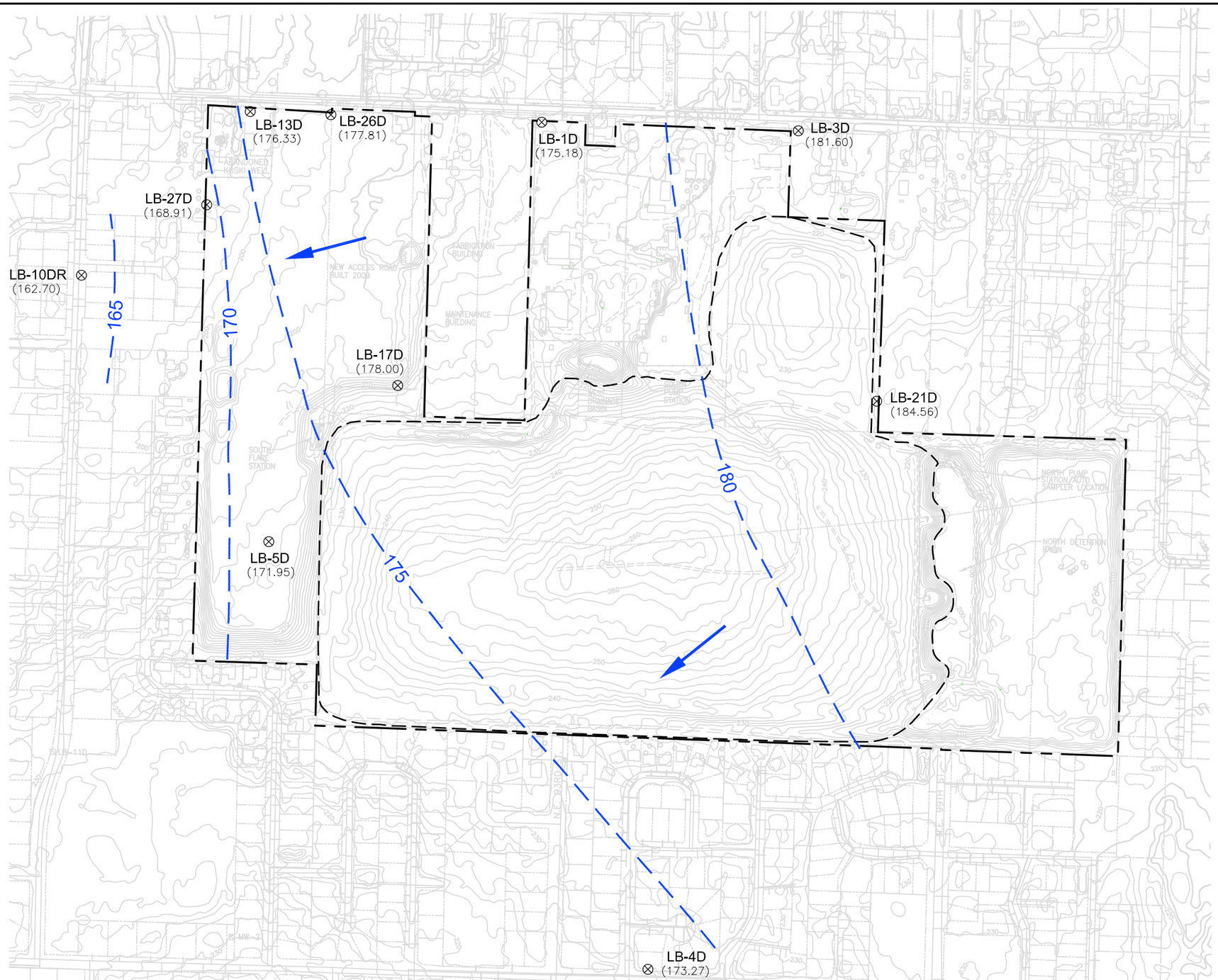
LB-4SR ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-17I □	Monitoring Well Location, Middle of Alluvial Water–Bearing Zone
— — —	Property Boundary
— — —	Limit of Landfill Cover and Approximate Edge of Waste
— —205— —	Groundwater Potentiometric Surface Contour
(207.19)	Groundwater Elevation Measured on September 6, 2011
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

SCS ENGINEERS
Environmental Consultants and Contractors
14945 SW Sequoia Parkway, Suite 180
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04211030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE SEPTEMBER 6, 2011	DATE NOVEMBER 2011
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL CLARK COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY L.C.		



LEGEND:

LB-4D ⊗	Monitoring Well Location, Troutdale Aquifer
— — — —	Property Boundary
— — — — —	Limit of Landfill Cover and Approximate Edge of Waste
— —180— —	Groundwater Potentiometric Surface Contour
(184.56)	Groundwater Elevation Measured on September 6, 2011
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

SCS ENGINEERS
Environmental Consultants and Contractors
14945 SW Sequoia Parkway, Suite 180
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04211030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER SEPTEMBER 6, 2011 LEICHNER BROTHERS LANDFILL CLARK COUNTY, WASHINGTON	DATE NOVEMBER 2011
SCALE AS SHOWN	CHK BY D.L.		FIGURE 3
CAD FILE FIGURE 3	APP BY L.C.		

LEGEND:

- GP-30 — Compliance Landfill Gas Monitoring Probe Location
- SW-2 — Vertical Landfill Gas Extraction Well
- Condensate Sump
- Gas Collection Piping
- Property Boundary
- Limit of Landfill Cover and Approximate Edge of Waste

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

SCS ENGINEERS
Environmental Consultants and Contractors
14945 SW Sequoia Parkway, Suite 180
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04211030.06/.18	DES BY D.L.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS	DATE NOVEMBER 2011
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL CLARK COUNTY, WASHINGTON	FIGURE 4
CAD FILE FIGURE 4	APP BY L.C.		

ATTACHMENT 1

Field Sampling Data Sheets
Third Quarter 2011

Leichner Brothers Landfill
Groundwater Elevation Survey

Project #: 04211050.01/.17

Sampler: T LaVague

Quarter: 1 2 (3) 4

Date: 9/6/11

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1 N	216.52	15.00	Dry	1245	
MW-1 S	216.07	44.50	35.71	1250	
MW-1 E	216.38	29.05	Dry	1255	
MW-NE	219.8	50.34	12.61	932	
LB-R2	219.09	77.36	43.25	1005	
LB-1S	210.11	45.00	31.30	1325	New exp cap
LB-1D	209.71	137.45	34.53	1320	
LB-3S	219.19	52.50	36.70	1305	
LB-3D	219.27	117.28	37.67	1310	
LB-4SR	226.47	40.00	21.68	1155	
LB-4C	227.58	77.25	45.42	1205	
LB-4D	227.27	133.75	54.00	1200	
LB-5S	206.85	30.32	15.35	947	
LB-5C	206.64	74.71	—	-	Lots of bees in monument
LB-5D	207.60	122.40	35.65	950	
LB-6S	202.86	39.07	25.20	1100	
LB-9SR	218.44	49.60	33.32	1235	
LB-10SR	202.96	42.35	28.80	1210	
LB-10CR	202.97	71.95	27.74	1230	
LB-10DR	203.24	121.10	40.54	1220	
LB-13I	202.30	55.03	25.84	1041	New Exp Cap
LB-13C	202.63	66.00	26.27	1037	
LB-13D	202.90	88.88	26.57	1035	
LB-17S	207.92	34.38	29.02	1010	
LB-17I	213.20	51.95	34.37	1012	Lots of bees in monument
LB-17C	214.10	72.35	—	—	Lots of bees in monument. (2)
LB-17D	213.11	100.91	35.11	1015	
LB-20S	221.22	61.50	38.15	1315	
LB-21S	223.43	54.24	35.76	927	
LB-21C	223.38	79.10	36.17	925	
LB-21D	223.69	110.73	39.13	929	
LB-22S	208.46	36.97	5.20	937	
LB-23S	229.27	45.40	29.80	940	
LB-24S	235.21	54.16	37.77	943	
LB-26I	200.17	58.30	23.16	1050	New Exp Cap
LB-26D	200.70	101.78	22.89	1056	Bees in Monument
LB-27I	205.28	57.15	29.15	1025	Bees in Monument · new exp cap
LB-27D	204.61	115.10	35.70	1027	

Notes: Sunny ~ 89°F

Probe deconed between locations

No reading from LB-5C and LB-17C due to aggressive wasps.

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-1S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090811-07

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY		RAIN		?			**TEMPERATURE:**	(°F) 80.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
9/8/11	9:28	45.00	.	31.38	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/8/11	9:45	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/8/11	9:45	A	1 250 (500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	9/8/11	9:45	A	1 (250) 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 — 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) Low Level OR [ ] WA~~AT~~
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO_3)
	YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 8:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (933)	0.00	6.62	50.8	304	15.73	31.38	7.06	clear/colorless
1	A (937)	0.25	6.61	1.8	301	14.41	31.38	5.64	clear/colorless
2	A (939)	0.35	6.61	-6.0	299	14.12	31.38	5.38	clear/colorless
3	A (941)	0.45	6.61	-9.5	297	14.05	31.38	5.28	clear/colorless
4	A (942)	0.50	6.61	-9.3	297	14.18	31.38	5.38	clear/colorless
5	A (943)	0.55	6.61	-9.0	296	14.17	31.38	5.35	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method -

SAMPLER: T La Vague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-5S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090811-06
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 75 .	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW	[Water Column x Gal/ft]	Volume (gal)
9/8/11	8:00	30.32	.	15.39	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/8/11	8:35	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/8/11	8:35	A	1 250, (500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/8/11	8:35	A	1 (250), 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA [X]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 8:12 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (815)	0.00	5.76	125.9	263	14.06	15.39	9.39	clear/colorless
1	A (823)	0.25	5.90	1.9	275	13.46	15.39	8.15	clear/colorless
2	A (828)	0.50	5.92	-7.5	273	13.34	15.39	8.13	clear/colorless
3	A (830)	0.60	5.92	-8.1	273	13.33	15.39	8.14	clear/colorless
4	A (832)	0.70	5.92	-7.9	273	13.34	15.39	8.10	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 100mL/pulse (2pulses/min)

SAMPLER: T LaVague
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-6S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090711-05
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 94 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
9/7/11	13:30	39.07	.	25.21	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" = 0.163)	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/7/11	13:50	A	3 (40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/7/11	13:50	A	1 250, (500) 1L	(None)	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	9/7/11	13:50	A	1 (250), 500, 1L	(HNO_3)	YES	YES		✓
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA [X]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 13:32 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1335)	0.00	6.97	44.4	179	17.32	25.21	9.80	clear/colorless
1	A (1340)	0.25	6.77	44.0	219	14.88	25.21	7.24	clear/colorless
2	A (1342)	0.35	6.76	44.8	219	14.91	25.21	7.15	clear/colorless
3	A (1344)	0.45	6.76	44.5	218	15.04	25.21	7.03	clear/colorless
4	A (1346)	0.55	6.77	44.9	219	14.96	25.21	7.00	clear/colorless
5	A (1348)	0.65	6.76	44.4	219	14.95	25.21	7.01	clear/colorless
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 100mL/pulse (2 pulses/min)

SAMPLER: T LaVague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224

Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** DUP1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090711-04

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 94 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/7/11	13:00	A	3	(40 mL)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/7/11	13:00	A	1	250, (500), 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/7/11	13:00	A	1	(250), 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected at LB-GS

SAMPLER: T LaVigne (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-10SR
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090811-08
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 80. °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
9/8/11	11:05	42.35	.	28.86	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/8/11	11:20	A	3	(40 mL)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/8/11	11:20	A	1	250, (500), 1L	~~None~~	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/8/11	11:20	A	1	~~250~~, 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA ~~[ ]~~
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 11:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1107)	0.00	6.86	90.3	408	17.15	28.86	3.61	clear/colorless
1	A (1110)	0.25	6.56	-79.7	412	14.86	28.86	0.86	clear/colorless
2	A (1115)	0.50	6.55	-82.1	411	14.87	28.86	0.84	clear/colorless
3	A (1117)	0.60	6.53	-84.5	411	14.81	28.86	0.82	clear/colorless
4	A (1119)	0.70	6.52	-83.0	410	14.82	28.86	0.80	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 100 mL/pulse (2 pulses/min

SAMPLER: T La Vague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-1ST
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090711-02
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 86 . °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
9/7/11	10:50	55.03	.	25.87	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" =	0.163)	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/7/11	11:15	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/7/11	11:15	A	1	250, (500), 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/7/11	11:15	A	1	(250), 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA [T]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 10:55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1054)	0.00	7.22	57.0	272	14.93	25.89	3.94	clear/colorless
1	A (1107)	0.50	6.90	35.5	253	14.04	25.89	1.69	clear/colorless
2	A (1109)	0.60	6.89	18.0	252	14.00	25.89	1.48	clear/colorless
3	A (1111)	0.10	6.87	0.2	252	13.89	25.89	1.44	clear/colorless
4	A (1113)	0.75	6.85	-0.5	252	13.90	25.89	1.41	clear/colorless
5	A (1114)	0.80	6.85	-3.0	252	13.87	25.89	1.38	clear/colorless
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 100mL/pulse (2 pulses/min)

SAMPLER: T LaVague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LB-26I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090711-03
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 90. °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
9/7/11	12:30	58.30	.	23.20	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/7/11	12:55	A	3	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/7/11	12:55	A	1	250, (500) 1L	(None)	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/7/11	12:55	A	1	(250) 500, 1L	(HNO_3)	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA ~~[ ]~~
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 12:34 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1237)	0.00	7.24	72.7	231	17.21	23.20	9.55	clear/colorless
1	A (1244)	0.25	6.82	49.7	229	16.20	23.20	4.57	clear/colorless
2	A (1250)	0.50	6.79	48.9	229	15.14	23.20	4.48	clear/colorless
3	A (1252)	0.55	6.78	49.1	229	15.07	23.20	4.49	clear/colorless
4	A (1254)	0.60	6.77	47.8	230	15.05	23.20	4.41	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 100mL/pulse (2 pulses/min)

SAMPLER: T La Vague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** LR-27I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-090711-01
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 75 . °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
9/7/11	9:00	57.15	.	29.15	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/7/11	10:10	A	3	40 ml (HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/7/11	10:10	A	1	250, (500) 1L (~~None~~)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	9/7/11	10:10	A	1	(250), 500, 1L (HNO3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA ~~[ ]~~
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 9:48 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (953)	0.00	7.00	182.6	707	15.54	29.18	4.77	clear/colorless
1	A (957)	0.25	6.27	90.4	705	14.32	29.18	0.96	clear/colorless
2	A (1001)	0.50	6.41	79.7	705	14.20	29.18	1.10	clear/colorless
3	A (1003)	0.60	6.43	72.4	706	14.21	29.18	1.10	clear/colorless
4	A (1005)	0.70	6.46	71.7	707	14.17	29.18	1.11	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Low Flow Purge Method ~ 75mL/pulse 2pulses/min

SAMPLER: T La Vague (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS
14945 SW Sequoia Parkway, Suite 180,
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6984

PROJECT NAME: Leichner Brothers Landfill **WELL ID:** FB1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-090811-09

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 85 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	9/8/11	12:00	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/8/11	12:00	A	1	250, (500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	9/8/11	12:00	A	1	(250) 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) Low Level OR [ ] WA [X]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Collected Noar ~~MW~~ LB-10SR using pump w/ New bladder, tubing, and DI Water

SAMPLER: T LaVague (PRINTED NAME) (SIGNATURE)

ATTACHMENT 2

Groundwater Laboratory Analytical Reports
Third Quarter 2011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503) 906-9200

TestAmerica Job ID: PUI0226
Client Project/Site: 04211030.011.17
Client Project Description: Leichner Landfill 2011

For:
SCS Engineers - Portland
14945 SW Sequoia Pkwy Suite 180
Portland, OR 97224

Attn: David LaMadrid

Authorized for release by:
09/26/2011 02:18:39 PM

Darrell Auvil
Project Manager
darrell.auvil@testamericainc.com

Table of Contents

Sample Summary

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
PUI0226-01	LB-090711-01	Water	09/07/11 10:10	09/08/11 11:42
PUI0226-02	LB-090711-02	Water	09/07/11 11:15	09/08/11 11:42
PUI0226-03	LB-090711-03	Water	09/07/11 12:55	09/08/11 11:42
PUI0226-04	LB-090711-04	Water	09/07/11 13:00	09/08/11 11:42
PUI0226-05	LB-090711-05	Water	09/07/11 13:50	09/08/11 11:42
PUI0226-06	Trip Blank	Water	09/07/11 00:00	09/08/11 11:42

Qualifiers

Wet Chem

Qualifier	Qualifier Description
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-01 — Lab Sample ID: PUI0226-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.456		0.00400		mg/l	2.00		EPA 6020	Dissolved
Total Dissolved Solids	464		10.0		mg/l	1.00		EPA 160.1	Total
Chloride	41.2		5.00		mg/l	10.0		EPA 300.0	Total
Acetone	2.8		2.0		ug/L	1		8260B STD	Total
Chloroethane	0.25		0.25		ug/L	1		8260B STD	Total
Vinyl chloride	0.053		0.020		ug/L	1		8260B STD	Total

Client Sample ID: LB-090711-02 — Lab Sample ID: PUI0226-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	204		10.0		mg/l	1.00		EPA 160.1	Total
Chloride	5.99		0.500		mg/l	1.00		EPA 300.0	Total
Nitrate-Nitrogen	4.53		0.100		mg/l	1.00		EPA 300.0	Total

Client Sample ID: LB-090711-03 — Lab Sample ID: PUI0226-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.0392		0.0250		mg/l	1.00		EPA 6020	Dissolved
Manganese	0.00356		0.00200		mg/l	1.00		EPA 6020	Dissolved
Total Dissolved Solids	200		10.0		mg/l	1.00		EPA 160.1	Total
Chloride	6.22		0.500		mg/l	1.00		EPA 300.0	Total
Nitrate-Nitrogen	5.02		0.100		mg/l	1.00		EPA 300.0	Total
Acetone	2.1		2.0		ug/L	1		8260B STD	Total
Vinyl chloride	0.044		0.020		ug/L	1		8260B STD	Total

Client Sample ID: LB-090711-04 — Lab Sample ID: PUI0226-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	177		10.0		mg/l	1.00		EPA 160.1	Total
Chloride	8.97		0.500		mg/l	1.00		EPA 300.0	Total
Nitrate-Nitrogen	0.730		0.100		mg/l	1.00		EPA 300.0	Total
Acetone	2.1		2.0		ug/L	1		8260B STD	Total

Client Sample ID: LB-090711-05 — Lab Sample ID: PUI0226-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	178		10.0		mg/l	1.00		EPA 160.1	Total
Chloride	9.09		0.500		mg/l	1.00		EPA 300.0	Total
Nitrate-Nitrogen	0.730		0.100		mg/l	1.00		EPA 300.0	Total
Acetone	2.3		2.0		ug/L	1		8260B STD	Total

Client Sample ID: Trip Blank — Lab Sample ID: PUI0226-06

No Detections

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-01
Date Collected: 09/07/11 10:10
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-01
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500		mg/l		09/19/11 11:49	09/19/11 21:37	2.00
Manganese	**0.456**		0.00400		mg/l		09/19/11 11:49	09/19/11 21:37	2.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**464**		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41.2**		5.00		mg/l		09/08/11 16:05	09/08/11 19:40	10.0
Nitrate-Nitrogen	ND		0.100		mg/l		09/08/11 16:05	09/08/11 18:22	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
2-Butanone	ND		2.0		ug/L		09/15/11 15:36	09/15/11 15:36	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
2-Hexanone	ND		1.0		ug/L		09/15/11 15:36	09/15/11 15:36	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 15:36	09/15/11 15:36	1
Acetone	**2.8**		2.0		ug/L		09/15/11 15:36	09/15/11 15:36	1
Benzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Bromobenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Bromoform	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Bromomethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-01
Date Collected: 09/07/11 10:10
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-01
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**0.25**		0.25		ug/L		09/15/11 15:36	09/15/11 15:36	1
Chloroform	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Chloromethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Dibromomethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 15:36	09/15/11 15:36	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 15:36	09/15/11 15:36	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 15:36	09/15/11 15:36	1
Naphthalene	ND		0.40		ug/L		09/15/11 15:36	09/15/11 15:36	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
o-Xylene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Styrene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Toluene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Trichloroethene	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 15:36	09/15/11 15:36	1
Vinyl chloride	**0.053**		0.020		ug/L		09/15/11 15:36	09/15/11 15:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*	*09/15/11 15:36*	*09/15/11 15:36*	*1*
Ethylbenzene-d10	*93*		*75 - 125*	*09/15/11 15:36*	*09/15/11 15:36*	*1*
Fluorobenzene (Surr)	*88*		*70 - 130*	*09/15/11 15:36*	*09/15/11 15:36*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*	*09/15/11 15:36*	*09/15/11 15:36*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 125*	*09/15/11 15:36*	*09/15/11 15:36*	*1*

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-02
Date Collected: 09/07/11 11:15
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-02
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/19/11 11:49	09/19/11 21:45	1.00
Manganese	ND		0.00200		mg/l		09/19/11 11:49	09/19/11 21:45	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**204**		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.99**		0.500		mg/l		09/08/11 16:05	09/08/11 18:38	1.00
Nitrate-Nitrogen	**4.53**		0.100		mg/l		09/08/11 16:05	09/08/11 18:38	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
2-Butanone	ND		2.0		ug/L		09/15/11 16:02	09/15/11 16:02	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
2-Hexanone	ND		1.0		ug/L		09/15/11 16:02	09/15/11 16:02	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 16:02	09/15/11 16:02	1
Acetone	ND		2.0		ug/L		09/15/11 16:02	09/15/11 16:02	1
Benzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Bromobenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Bromoform	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Bromomethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-02
Date Collected: 09/07/11 11:15
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-02
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 16:02	09/15/11 16:02	1
Chloroform	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Chloromethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Dibromomethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 16:02	09/15/11 16:02	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 16:02	09/15/11 16:02	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 16:02	09/15/11 16:02	1
Naphthalene	ND		0.40		ug/L		09/15/11 16:02	09/15/11 16:02	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
o-Xylene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Styrene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Toluene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Trichloroethene	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 16:02	09/15/11 16:02	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 16:02	09/15/11 16:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*	*09/15/11 16:02*	*09/15/11 16:02*	*1*
Ethylbenzene-d10	*95*		*75 - 125*	*09/15/11 16:02*	*09/15/11 16:02*	*1*
Fluorobenzene (Surr)	*91*		*70 - 130*	*09/15/11 16:02*	*09/15/11 16:02*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*	*09/15/11 16:02*	*09/15/11 16:02*	*1*
Trifluorotoluene (Surr)	*117*		*80 - 125*	*09/15/11 16:02*	*09/15/11 16:02*	*1*

Client Sample ID: LB-090711-03
Date Collected: 09/07/11 12:55
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-03
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0392		0.0250		mg/l		09/19/11 11:49	09/19/11 21:56	1.00
Manganese	0.00356		0.00200		mg/l		09/19/11 11:49	09/19/11 21:56	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.22		0.500		mg/l		09/08/11 16:05	09/08/11 18:53	1.00
Nitrate-Nitrogen	5.02		0.100		mg/l		09/08/11 16:05	09/08/11 18:53	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
2-Butanone	ND		2.0		ug/L		09/15/11 16:27	09/15/11 16:27	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
2-Hexanone	ND		1.0		ug/L		09/15/11 16:27	09/15/11 16:27	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 16:27	09/15/11 16:27	1
Acetone	2.1		2.0		ug/L		09/15/11 16:27	09/15/11 16:27	1
Benzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Bromobenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Bromoform	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Bromomethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-03
Date Collected: 09/07/11 12:55
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-03
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 16:27	09/15/11 16:27	1
Chloroform	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Chloromethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Dibromomethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 16:27	09/15/11 16:27	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 16:27	09/15/11 16:27	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 16:27	09/15/11 16:27	1
Naphthalene	ND		0.40		ug/L		09/15/11 16:27	09/15/11 16:27	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
o-Xylene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Styrene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Toluene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Trichloroethene	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 16:27	09/15/11 16:27	1
Vinyl chloride	**0.044**		0.020		ug/L		09/15/11 16:27	09/15/11 16:27	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*	*09/15/11 16:27*	*09/15/11 16:27*	*1*
Ethylbenzene-d10	*94*		*75 - 125*	*09/15/11 16:27*	*09/15/11 16:27*	*1*
Fluorobenzene (Surr)	*99*		*70 - 130*	*09/15/11 16:27*	*09/15/11 16:27*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*	*09/15/11 16:27*	*09/15/11 16:27*	*1*
Trifluorotoluene (Surr)	*101*		*80 - 125*	*09/15/11 16:27*	*09/15/11 16:27*	*1*

Client Sample ID: LB-090711-04
Date Collected: 09/07/11 13:00
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-04
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/19/11 11:49	09/19/11 22:00	1.00
Manganese	ND		0.00200		mg/l		09/19/11 11:49	09/19/11 22:00	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**177**		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.97**		0.500		mg/l		09/08/11 16:05	09/08/11 19:09	1.00
Nitrate-Nitrogen	**0.730**		0.100		mg/l		09/08/11 16:05	09/08/11 19:09	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
2-Butanone	ND		2.0		ug/L		09/15/11 16:53	09/15/11 16:53	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
2-Hexanone	ND		1.0		ug/L		09/15/11 16:53	09/15/11 16:53	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 16:53	09/15/11 16:53	1
Acetone	**2.1**		2.0		ug/L		09/15/11 16:53	09/15/11 16:53	1
Benzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Bromobenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Bromoform	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Bromomethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-04
Date Collected: 09/07/11 13:00
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-04
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 16:53	09/15/11 16:53	1
Chloroform	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Chloromethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Dibromomethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 16:53	09/15/11 16:53	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 16:53	09/15/11 16:53	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 16:53	09/15/11 16:53	1
Naphthalene	ND		0.40		ug/L		09/15/11 16:53	09/15/11 16:53	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
o-Xylene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Styrene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Toluene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Trichloroethene	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 16:53	09/15/11 16:53	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 16:53	09/15/11 16:53	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*	*09/15/11 16:53*	*09/15/11 16:53*	*1*
Ethylbenzene-d10	*91*		*75 - 125*	*09/15/11 16:53*	*09/15/11 16:53*	*1*
Fluorobenzene (Surr)	*91*		*70 - 130*	*09/15/11 16:53*	*09/15/11 16:53*	*1*
Toluene-d8 (Surr)	*90*		*75 - 125*	*09/15/11 16:53*	*09/15/11 16:53*	*1*
Trifluorotoluene (Surr)	*102*		*80 - 125*	*09/15/11 16:53*	*09/15/11 16:53*	*1*

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-05
Date Collected: 09/07/11 13:50
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-05
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/19/11 11:49	09/19/11 22:04	1.00
Manganese	ND		0.00200		mg/l		09/19/11 11:49	09/19/11 22:04	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**178**		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.09**		0.500		mg/l		09/08/11 16:05	09/08/11 19:25	1.00
Nitrate-Nitrogen	**0.730**		0.100		mg/l		09/08/11 16:05	09/08/11 19:25	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
2-Butanone	ND		2.0		ug/L		09/15/11 17:18	09/15/11 17:18	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
2-Hexanone	ND		1.0		ug/L		09/15/11 17:18	09/15/11 17:18	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 17:18	09/15/11 17:18	1
Acetone	**2.3**		2.0		ug/L		09/15/11 17:18	09/15/11 17:18	1
Benzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Bromobenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Bromoform	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Bromomethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: LB-090711-05
Date Collected: 09/07/11 13:50
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-05
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 17:18	09/15/11 17:18	1
Chloroform	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Chloromethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Dibromomethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 17:18	09/15/11 17:18	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 17:18	09/15/11 17:18	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 17:18	09/15/11 17:18	1
Naphthalene	ND		0.40		ug/L		09/15/11 17:18	09/15/11 17:18	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
o-Xylene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Styrene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Toluene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Trichloroethene	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 17:18	09/15/11 17:18	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 17:18	09/15/11 17:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*75 - 120*	*09/15/11 17:18*	*09/15/11 17:18*	*1*
Ethylbenzene-d10	*83*		*75 - 125*	*09/15/11 17:18*	*09/15/11 17:18*	*1*
Fluorobenzene (Surr)	*95*		*70 - 130*	*09/15/11 17:18*	*09/15/11 17:18*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*	*09/15/11 17:18*	*09/15/11 17:18*	*1*
Trifluorotoluene (Surr)	*105*		*80 - 125*	*09/15/11 17:18*	*09/15/11 17:18*	*1*

Client Sample ID: Trip Blank
Date Collected: 09/07/11 00:00
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-06
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
2-Butanone	ND		2.0		ug/L		09/15/11 15:11	09/15/11 15:11	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
2-Hexanone	ND		1.0		ug/L		09/15/11 15:11	09/15/11 15:11	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 15:11	09/15/11 15:11	1
Acetone	ND		2.0		ug/L		09/15/11 15:11	09/15/11 15:11	1
Benzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Bromobenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Bromoform	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Bromomethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Chloroethane	ND		0.25		ug/L		09/15/11 15:11	09/15/11 15:11	1
Chloroform	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Chloromethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Dibromomethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 15:11	09/15/11 15:11	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 15:11	09/15/11 15:11	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Client Sample ID: Trip Blank
Date Collected: 09/07/11 00:00
Date Received: 09/08/11 11:42

Lab Sample ID: PUI0226-06
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 15:11	09/15/11 15:11	1
Naphthalene	ND		0.40		ug/L		09/15/11 15:11	09/15/11 15:11	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
o-Xylene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Styrene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Toluene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Trichloroethene	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 15:11	09/15/11 15:11	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 15:11	09/15/11 15:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*	*09/15/11 15:11*	*09/15/11 15:11*	*1*
Ethylbenzene-d10	*88*		*75 - 125*	*09/15/11 15:11*	*09/15/11 15:11*	*1*
Fluorobenzene (Surr)	*90*		*70 - 130*	*09/15/11 15:11*	*09/15/11 15:11*	*1*
Toluene-d8 (Surr)	*88*		*75 - 125*	*09/15/11 15:11*	*09/15/11 15:11*	*1*
Trifluorotoluene (Surr)	*103*		*80 - 125*	*09/15/11 15:11*	*09/15/11 15:11*	*1*

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods

Lab Sample ID: 11I0526-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0526 — **Prep Batch: 11I0526_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/19/11 11:49	09/19/11 21:29	1.00
Manganese	ND		0.00200		mg/l		09/19/11 11:49	09/19/11 21:29	1.00

Lab Sample ID: 11I0526-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0526 — **Prep Batch: 11I0526_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Iron	2.00	1.95		mg/l		97.6	80 - 120
Manganese	0.100	0.0987		mg/l		98.7	80 - 120

Lab Sample ID: 11I0526-MS1 — **Client Sample ID: LB-090711-02**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0526 — **Prep Batch: 11I0526_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Iron	ND		2.00	1.87		mg/l		93.7	75 - 125
Manganese	ND		0.100	0.0966		mg/l		95.4	75 - 125

Lab Sample ID: 11I0526-DUP1 — **Client Sample ID: LB-090711-01**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0526 — **Prep Batch: 11I0526_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Iron	ND		0.0418		mg/l		7.23	20
Manganese	0.456		0.444		mg/l		2.71	20

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Lab Sample ID: 11I0333-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0333 — **Prep Batch: 11I0333_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/l		09/13/11 09:50	09/13/11 14:08	1.00

Lab Sample ID: 11I0333-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0333 — **Prep Batch: 11I0333_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Dissolved Solids	100	102		mg/l		102	80 - 120

Lab Sample ID: 11I0333-DUP1 — **Client Sample ID: LB-090711-01**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0333 — **Prep Batch: 11I0333_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	464		469		mg/l		1.07	20

Method: EPA 300.0 - Anions per EPA Method 300.0

Lab Sample ID: 11I0192-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: U002798 — **Prep Batch: 11I0192_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.500		mg/l		09/08/11 13:44	09/08/11 14:28	1.00
Nitrate-Nitrogen	ND		0.100		mg/l		09/08/11 13:44	09/08/11 14:28	1.00

Lab Sample ID: 11I0192-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: U002798 — **Prep Batch: 11I0192_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Chloride			10.0	10.3		mg/l		103	90 - 110		
Nitrate-Nitrogen			5.00	4.97		mg/l		99.4	90 - 110		

Lab Sample ID: 11I0192-MS1 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total**
Analysis Batch: U002798 — **Prep Batch: 11I0192_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Chloride	14.7		2.00	15.5	M8	mg/l		42.0	80 - 120		
Nitrate-Nitrogen	0.310		2.00	2.28		mg/l		98.5	80 - 120		

Lab Sample ID: 11I0192-MSD1 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: U002798 — **Prep Batch: 11I0192_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Chloride	14.7		2.00	15.5	M8	mg/l		43.0	80 - 120	0.129	20
Nitrate-Nitrogen	0.310		2.00	2.30		mg/l		99.5	80 - 120	0.873	20

Lab Sample ID: 11I0192-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: U002798 — **Prep Batch: 11I0192_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Chloride	14.7			14.8		mg/l				0.748	20
Nitrate-Nitrogen	0.310			0.310		mg/l				0.00	20

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

Lab Sample ID: 95426-5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 95426 — **Prep Batch: 95426_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1

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

Lab Sample ID: 95426-5
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 95426_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Butanone	ND		2.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Hexanone	ND		1.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 13:03	09/15/11 13:03	1
Acetone	ND		2.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
Benzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromobenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromoform	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromomethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloroethane	ND		0.25		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloroform	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dibromomethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 13:03	09/15/11 13:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
Naphthalene	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
o-Xylene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Styrene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1

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

Lab Sample ID: 95426-5
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 95426_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Toluene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Trichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 13:03	09/15/11 13:03	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Ethylbenzene-d10	*89*		*75 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Fluorobenzene (Surr)	*95*		*70 - 130*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Toluene-d8 (Surr)	*93*		*75 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*

Lab Sample ID: 95426-6
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 95426_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,1,1,2-Tetrachloroethane	4.93	4.74		ug/L		96	80 - 131
1,1,1-Trichloroethane	5.00	6.00		ug/L		120	60 - 160
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	73 - 121
1,1,2-Trichloroethane	4.94	5.56		ug/L		113	80 - 121
1,1-Dichloroethane	4.95	5.94		ug/L		120	73 - 158
1,1-Dichloroethene	4.95	6.24		ug/L		126	78 - 151
1,1-Dichloropropene	4.98	5.53		ug/L		111	59 - 160
1,2,3-Trichlorobenzene	5.00	4.10		ug/L		82	40 - 160
1,2,3-Trichloropropane	4.93	4.63		ug/L		94	70 - 137
1,2,4-Trichlorobenzene	4.97	4.00		ug/L		81	47 - 135
1,2,4-Trimethylbenzene	5.01	4.99		ug/L		100	80 - 137
1,2-Dibromo-3-Chloropropane	5.00	4.22		ug/L		84	47 - 138
1,2-Dibromoethane	5.00	4.87		ug/L		97	75 - 126
1,2-Dichlorobenzene	4.91	4.84		ug/L		99	80 - 120
1,2-Dichloroethane	4.96	6.16		ug/L		124	54 - 160
1,2-Dichloropropane	5.00	5.36		ug/L		107	71 - 127
1,3,5-Trimethylbenzene	5.00	5.14		ug/L		103	80 - 136
1,3-Dichlorobenzene	4.99	4.96		ug/L		99	76 - 120
1,3-Dichloropropane	5.00	5.14		ug/L		103	78 - 129
1,4-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 120
2,2-Dichloropropane	5.01	6.08		ug/L		121	49 - 160
2-Chlorotoluene	4.95	4.65		ug/L		94	79 - 127
4-Chlorotoluene	4.93	4.64		ug/L		94	76 - 127
4-Isopropyltoluene	4.97	4.72		ug/L		95	80 - 132
Benzene	4.98	5.57		ug/L		112	75 - 142
Bromobenzene	4.98	5.04		ug/L		101	80 - 120
Bromochloromethane	4.96	5.53		ug/L		111	64 - 156
Bromodichloromethane	4.94	5.66		ug/L		115	69 - 149
Bromoform	4.98	4.48		ug/L		90	66 - 137

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

Lab Sample ID: 95426-6
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Bromomethane			5.00	4.82		ug/L		96	40 - 160		
Carbon tetrachloride			5.01	6.22		ug/L		124	56 - 160		
Chlorobenzene			5.00	4.91		ug/L		98	71 - 140		
Chloroethane			4.99	4.60		ug/L		92	44 - 160		
Chloroform			5.00	5.85		ug/L		117	65 - 158		
Chloromethane			5.00	3.84		ug/L		77	52 - 160		
cis-1,2-Dichloroethene			5.00	5.71		ug/L		114	71 - 144		
cis-1,3-Dichloropropene			5.25	5.34		ug/L		102	63 - 127		
Dibromochloromethane			4.96	4.90		ug/L		99	71 - 130		
Dibromomethane			4.93	5.20		ug/L		105	76 - 130		
Dichlorodifluoromethane			4.90	3.26		ug/L		67	40 - 160		
Ethylbenzene			4.96	4.94		ug/L		100	79 - 132		
Hexachlorobutadiene			5.00	4.73		ug/L		95	67 - 141		
Isopropylbenzene			5.00	4.45		ug/L		89	64 - 127		
Methyl tert-butyl ether			5.00	5.43		ug/L		109	77 - 135		
Methylene Chloride			5.00	6.24		ug/L		125	80 - 155		
m-Xylene & p-Xylene			10.0	10.4		ug/L		104	70 - 144		
Naphthalene			5.00	3.54		ug/L		71	40 - 142		
n-Butylbenzene			4.95	4.57		ug/L		92	72 - 131		
N-Propylbenzene			5.00	4.85		ug/L		97	76 - 131		
o-Xylene			5.00	4.70		ug/L		94	72 - 137		
sec-Butylbenzene			5.00	5.11		ug/L		102	72 - 145		
Styrene			4.99	4.87		ug/L		98	80 - 133		
tert-Butylbenzene			4.98	5.02		ug/L		101	74 - 138		
Tetrachloroethene			5.01	6.35		ug/L		127	54 - 161		
Toluene			5.00	5.30		ug/L		106	80 - 126		
trans-1,2-Dichloroethene			5.01	6.10		ug/L		122	73 - 135		
trans-1,3-Dichloropropene			4.75	5.43		ug/L		114	64 - 132		
Trichloroethene			5.00	5.70		ug/L		114	79 - 131		
Trichlorofluoromethane			4.95	5.56		ug/L		112	40 - 160		
Vinyl chloride			5.00	4.98		ug/L		100	47 - 160		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Ethylbenzene-d10	*91*		*75 - 125*
Fluorobenzene (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*95*		*75 - 125*
Trifluorotoluene (Surr)	*105*		*80 - 125*

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			4.93	4.86		ug/L		99	80 - 131	3	20
1,1,1-Trichloroethane			5.00	6.25		ug/L		125	60 - 160	4	20
1,1,2,2-Tetrachloroethane			5.00	4.90		ug/L		98	73 - 121	5	20
1,1,2-Trichloroethane			4.94	5.74		ug/L		116	80 - 121	3	20
1,1-Dichloroethane			4.95	5.92		ug/L		120	73 - 158	0	20

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

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			4.95	6.31		ug/L		127	78 - 151	1	20
1,1-Dichloropropene			4.98	5.59		ug/L		112	59 - 160	1	20
1,2,3-Trichlorobenzene			5.00	4.45		ug/L		89	40 - 160	8	20
1,2,3-Trichloropropane			4.93	5.03		ug/L		102	70 - 137	8	20
1,2,4-Trichlorobenzene			4.97	4.37		ug/L		88	47 - 135	9	20
1,2,4-Trimethylbenzene			5.01	5.13		ug/L		102	80 - 137	3	20
1,2-Dibromo-3-Chloropropane			5.00	4.25		ug/L		85	47 - 138	1	20
1,2-Dibromoethane			5.00	4.98		ug/L		100	75 - 126	2	20
1,2-Dichlorobenzene			4.91	4.79		ug/L		98	80 - 120	1	20
1,2-Dichloroethane			4.96	6.24		ug/L		126	54 - 160	1	20
1,2-Dichloropropane			5.00	5.74		ug/L		115	71 - 127	7	20
1,3,5-Trimethylbenzene			5.00	5.19		ug/L		104	80 - 136	1	20
1,3-Dichlorobenzene			4.99	5.16		ug/L		103	76 - 120	4	20
1,3-Dichloropropane			5.00	5.54		ug/L		111	78 - 129	7	20
1,4-Dichlorobenzene			5.00	5.03		ug/L		101	80 - 120	4	20
2,2-Dichloropropane			5.01	6.15		ug/L		123	49 - 160	1	20
2-Chlorotoluene			4.95	4.80		ug/L		97	79 - 127	3	20
4-Chlorotoluene			4.93	4.68		ug/L		95	76 - 127	1	20
4-Isopropyltoluene			4.97	4.88		ug/L		98	80 - 132	3	20
Benzene			4.98	5.44		ug/L		109	75 - 142	2	20
Bromobenzene			4.98	5.29		ug/L		106	80 - 120	5	20
Bromochloromethane			4.96	5.51		ug/L		111	64 - 156	0	20
Bromodichloromethane			4.94	5.80		ug/L		117	69 - 149	2	20
Bromoform			4.98	4.64		ug/L		93	66 - 137	4	20
Bromomethane			5.00	4.62		ug/L		92	40 - 160	4	20
Carbon tetrachloride			5.01	6.37		ug/L		127	56 - 160	2	20
Chlorobenzene			5.00	5.06		ug/L		101	71 - 140	3	20
Chloroethane			4.99	4.86		ug/L		97	44 - 160	5	20
Chloroform			5.00	6.17		ug/L		123	65 - 158	5	20
Chloromethane			5.00	3.79		ug/L		76	52 - 160	1	20
cis-1,2-Dichloroethene			5.00	5.66		ug/L		113	71 - 144	1	20
cis-1,3-Dichloropropene			5.25	5.64		ug/L		107	63 - 127	5	20
Dibromochloromethane			4.96	5.07		ug/L		102	71 - 130	3	20
Dibromomethane			4.93	5.52		ug/L		112	76 - 130	6	20
Dichlorodifluoromethane			4.90	3.39		ug/L		69	40 - 160	4	20
Ethylbenzene			4.96	4.93		ug/L		99	79 - 132	0	20
Hexachlorobutadiene			5.00	5.03		ug/L		101	67 - 141	6	20
Isopropylbenzene			5.00	4.60		ug/L		92	64 - 127	3	20
Methyl tert-butyl ether			5.00	5.39		ug/L		108	77 - 135	1	20
Methylene Chloride			5.00	5.97		ug/L		119	80 - 155	4	20
m-Xylene & p-Xylene			10.0	10.8		ug/L		108	70 - 144	4	20
Naphthalene			5.00	4.07		ug/L		81	40 - 142	14	20
n-Butylbenzene			4.95	4.73		ug/L		96	72 - 131	3	20
N-Propylbenzene			5.00	5.11		ug/L		102	76 - 131	5	20
o-Xylene			5.00	4.84		ug/L		97	72 - 137	3	20
sec-Butylbenzene			5.00	5.25		ug/L		105	72 - 145	3	20
Styrene			4.99	4.95		ug/L		99	80 - 133	2	20
tert-Butylbenzene			4.98	5.02		ug/L		101	74 - 138	0	20
Tetrachloroethene			5.01	6.88		ug/L		137	54 - 161	8	20
Toluene			5.00	5.47		ug/L		109	80 - 126	3	20

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

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			5.01	6.14		ug/L		123	73 - 135	1	20
trans-1,3-Dichloropropene			4.75	5.76		ug/L		121	64 - 132	6	20
Trichloroethene			5.00	5.92		ug/L		118	79 - 131	4	20
Trichlorofluoromethane			4.95	5.57		ug/L		112	40 - 160	0	20
Vinyl chloride			5.00	5.23		ug/L		105	47 - 160	5	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Ethylbenzene-d10	*102*		*75 - 125*
Fluorobenzene (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*97*		*75 - 125*
Trifluorotoluene (Surr)	*118*		*80 - 125*

Certification Summary

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0226

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Portland	Alaska	Alaska UST	10	UST-012
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	USDA		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	Alaska	TA-Port Heiden Mobile Lab	10	UST-093
TestAmerica Seattle	California	NELAC	9	1115CA
TestAmerica Seattle	Florida	NELAC	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP		L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025		L2236
TestAmerica Seattle	Louisiana	NELAC	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	N/A
TestAmerica Seattle	Oregon	NELAC	10	WA100007
TestAmerica Seattle	USDA	USDA		P330-11-00222
TestAmerica Seattle	Washington	State Program	10	C553

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210 X
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PUI0226

CLIENT: SCS Engineers

REPORT TO: David Lamadrid

ADDRESS: 14945 SW Sequoia Pkwy, Ste 180 Portland, OR 97224

PHONE: 503-639-9315 FAX:

INVOICE TO: SCS Engineers Portland, OR

P.O. NUMBER:

PROJECT NAME: Leichner Brothers Landfill

PROJECT NUMBER: 04211030.01/17

SAMPLED BY: T LaVague

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 | 4 | 3 | 2 | 1 | <1 STD.

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: HCl | HNO3 | — | — | — | —

REQUESTED ANALYSES: VOCs (8260 Low Level) | Dissolved (6020) Fe, Mn | [illegible] | TDS (160.1) | Chloride (300.0) | Nitrate (300.0)

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	LB-090711-01	9/7/11 @ 1010	W	5	low level VOCs	
2	LB-090711-02	9/7/11 @ 1115	W	5		
3	LB-090711-03	9/7/11 @ 1255	W	5		
4	LB-090711-04	9/7/11 @ 1300	W	5		
5	LB-090711-05	9/7/11 @ 1350	W	5		
6	Trip Blank	8/4/11 —	W	1		
7					Samples were field filtered	
8						
9						
10						

D.F. 9/8/11

RELEASED BY: [signature] DATE: 9/8/11
PRINT NAME: T LaVague FIRM: SCS Engineers TIME: 800

RECEIVED BY: [signature] DATE: 9/8/11
PRINT NAME: [illegible] FIRM: TAP TIME: 16:05

RELEASED BY: [signature] DATE: 9/8/11
PRINT NAME: [illegible] FIRM: TAP TIME: 1142

RECEIVED BY: [signature] DATE: 9/8/11
PRINT NAME: Sibyl Martin FIRM: TAP TIME: 1142

ADDITIONAL REMARKS: tlavague@scsengineers.com / DLamadrid@scsengineers.com

TEMP: 1.1

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TAL-1000(0408)

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09/26/2011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Portland Sample Control Checklist

Work Order #: PJI0226 **Date/Time Received:** 9/8/11 11:42
Client Name: SCS Engineers
Project Name: LEICHNER LANDFILL
Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐HI ☐OTHER

Unpacking Checks:
Cooler (s): 1
Temperature (s): 1.1
Digi #1 ☐ **Digi #2** ☐ **IR Gun** ☑ (☐Plastic ☐Glass)
Raytek ☐ (☐Plastic ☐Glass)

Temperature out of Range:
__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Ice Not Needed
__ Other:_____

Ice used: (circle one) GEL (LOOSE) BLUE NONE OTHER: _____ **Initials:** BV

N/A	Yes	No	
☑	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no and ESI client, document on NOD.
	☑	☐	3. Chain of Custody present? If no, document on NOD. Along with "received by" & "relinquished by" signatures with date & time?
	☑	☐	4. Bottles received intact? If no, document on NOD.
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.
	☑	☐	6. Sampler name/signature documented on COC?
	☑	☐	7. Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	8. pH for HN03/ESI samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	9. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	10. HF Dilution required?
	☑	☐	11. Sufficient volume provided for all analysis and requested MS/MSD? If no, document on NOD and consult PM before proceeding.
	☑	☐	12. Did chain of custody agree with samples received? If no, document on NOD.
☐	☑	☐	13. Were VOA samples received without headspace?
	☐	☑	14. Did samples require preservation with sodium thiosulfate?
☑	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☐	☑	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	17. Are analyses with short holding times received in hold?
	☑	☐	18. Were special log- in instructions read and followed?

Checklist Reviewed: **Log-in initials:** PSS **Labeler initials:** PSS

9405 SW Nimbus Ave, Beaverton OR 97008 **tel** 503.906.9200 **fax** 503.906.9210 **www.testamericainc.com**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503) 906-9200

TestAmerica Job ID: PUI0232
Client Project/Site: 04211030.011.17
Client Project Description: Leichner Landfill 2011
Revision: 1

For:
SCS Engineers - Portland
14945 SW Sequoia Pkwy Suite 180
Portland, OR 97224

Attn: David LaMadrid

Authorized for release by:
11/11/2011 10:57:22 AM

Darrell Auvil
Project Manager
darrell.auvil@testamericainc.com

Table of Contents

Sample Summary

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
PUI0232-01	LB-090711-06	Water	09/08/11 08:35	09/08/11 13:00
PUI0232-02	LB-090711-07	Water	09/08/11 09:45	09/08/11 13:00
PUI0232-03	LB-090711-08	Water	09/08/11 11:20	09/08/11 13:00
PUI0232-04	LB-090711-09	Water	09/08/11 12:00	09/08/11 13:00

Case Narrative

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Job ID: PUI0232

Laboratory: TestAmerica Portland

Narrative

Amended report to reflect changes to the dissolved manganese and iron data by EPA method 200.8. The original report had an incorrect final volume of 2mls and should have been 50mls, resulting in reporting limits and results that are 25x lower than they should be for sample data and quality control data. Corrected results are attached.

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Qualifiers

Wet Chem

Qualifier	Qualifier Description
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

Glossary

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

Client Sample ID: LB-090711-06
Date Collected: 09/08/11 08:35
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-01
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/12/11 17:02	09/14/11 00:05	1.00
Manganese	ND		0.00200		mg/l		09/12/11 17:02	09/14/11 00:05	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**210**		10.0		mg/l		09/15/11 10:15	09/15/11 15:38	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.08**		0.500		mg/l		09/09/11 10:46	09/09/11 13:28	1.00
Nitrate-Nitrogen	**6.19**		0.100		mg/l		09/09/11 10:46	09/09/11 13:28	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
2-Butanone	ND		2.0		ug/L		09/15/11 17:48	09/15/11 17:48	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
2-Hexanone	ND		1.0		ug/L		09/15/11 17:48	09/15/11 17:48	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 17:48	09/15/11 17:48	1
Acetone	**2.1**		2.0		ug/L		09/15/11 17:48	09/15/11 17:48	1
Benzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Bromobenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Bromoform	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Bromomethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-06
Date Collected: 09/08/11 08:35
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-01
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 17:48	09/15/11 17:48	1
Chloroform	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Chloromethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Dibromomethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 17:48	09/15/11 17:48	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 17:48	09/15/11 17:48	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 17:48	09/15/11 17:48	1
Naphthalene	ND		0.40		ug/L		09/15/11 17:48	09/15/11 17:48	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
o-Xylene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Styrene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Toluene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Trichloroethene	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 17:48	09/15/11 17:48	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 17:48	09/15/11 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*	*09/15/11 17:48*	*09/15/11 17:48*	*1*
Ethylbenzene-d10	*89*		*75 - 125*	*09/15/11 17:48*	*09/15/11 17:48*	*1*
Fluorobenzene (Surr)	*97*		*70 - 130*	*09/15/11 17:48*	*09/15/11 17:48*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*	*09/15/11 17:48*	*09/15/11 17:48*	*1*
Trifluorotoluene (Surr)	*104*		*80 - 125*	*09/15/11 17:48*	*09/15/11 17:48*	*1*

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-07
Date Collected: 09/08/11 09:45
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-02
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/12/11 17:02	09/14/11 00:09	1.00
Manganese	ND		0.00200		mg/l		09/12/11 17:02	09/14/11 00:09	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**205**		10.0		mg/l		09/15/11 10:15	09/15/11 15:38	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.71**		0.500		mg/l		09/09/11 10:46	09/09/11 13:43	1.00
Nitrate-Nitrogen	**6.87**		0.100		mg/l		09/09/11 10:46	09/09/11 13:43	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
2-Butanone	ND		2.0		ug/L		09/15/11 18:14	09/15/11 18:14	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
2-Hexanone	ND		1.0		ug/L		09/15/11 18:14	09/15/11 18:14	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 18:14	09/15/11 18:14	1
Acetone	**2.1**		2.0		ug/L		09/15/11 18:14	09/15/11 18:14	1
Benzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Bromobenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Bromoform	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Bromomethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-07
Date Collected: 09/08/11 09:45
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-02
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 18:14	09/15/11 18:14	1
Chloroform	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Chloromethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Dibromomethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 18:14	09/15/11 18:14	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 18:14	09/15/11 18:14	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 18:14	09/15/11 18:14	1
Naphthalene	ND		0.40		ug/L		09/15/11 18:14	09/15/11 18:14	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
o-Xylene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Styrene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Toluene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Trichloroethene	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 18:14	09/15/11 18:14	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 18:14	09/15/11 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*	*09/15/11 18:14*	*09/15/11 18:14*	*1*
Ethylbenzene-d10	*95*		*75 - 125*	*09/15/11 18:14*	*09/15/11 18:14*	*1*
Fluorobenzene (Surr)	*98*		*70 - 130*	*09/15/11 18:14*	*09/15/11 18:14*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*	*09/15/11 18:14*	*09/15/11 18:14*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 125*	*09/15/11 18:14*	*09/15/11 18:14*	*1*

Client Sample ID: LB-090711-08
Date Collected: 09/08/11 11:20
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-03
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/12/11 17:02	09/14/11 00:13	1.00
Manganese	**0.00205**		0.00200		mg/l		09/12/11 17:02	09/14/11 00:13	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**251**		10.0		mg/l		09/15/11 10:15	09/15/11 15:38	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.7**		0.500		mg/l		09/09/11 10:46	09/09/11 13:59	1.00
Nitrate-Nitrogen	**1.15**		0.100		mg/l		09/09/11 10:46	09/09/11 13:59	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
2-Butanone	ND		2.0		ug/L		09/15/11 18:43	09/15/11 18:43	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
2-Hexanone	ND		1.0		ug/L		09/15/11 18:43	09/15/11 18:43	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 18:43	09/15/11 18:43	1
Acetone	**2.2**		2.0		ug/L		09/15/11 18:43	09/15/11 18:43	1
Benzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Bromobenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Bromoform	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Bromomethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-08
Date Collected: 09/08/11 11:20
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-03
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 18:43	09/15/11 18:43	1
Chloroform	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Chloromethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Dibromomethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 18:43	09/15/11 18:43	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 18:43	09/15/11 18:43	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 18:43	09/15/11 18:43	1
Naphthalene	ND		0.40		ug/L		09/15/11 18:43	09/15/11 18:43	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
o-Xylene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Styrene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Toluene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Trichloroethene	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 18:43	09/15/11 18:43	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 18:43	09/15/11 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*	*09/15/11 18:43*	*09/15/11 18:43*	*1*
Ethylbenzene-d10	*95*		*75 - 125*	*09/15/11 18:43*	*09/15/11 18:43*	*1*
Fluorobenzene (Surr)	*96*		*70 - 130*	*09/15/11 18:43*	*09/15/11 18:43*	*1*
Toluene-d8 (Surr)	*90*		*75 - 125*	*09/15/11 18:43*	*09/15/11 18:43*	*1*
Trifluorotoluene (Surr)	*96*		*80 - 125*	*09/15/11 18:43*	*09/15/11 18:43*	*1*

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-09
Date Collected: 09/08/11 12:00
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-04
Matrix: Water

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/12/11 17:02	09/14/11 00:19	1.00
Manganese	ND		0.00200		mg/l		09/12/11 17:02	09/14/11 00:19	1.00

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/l		09/15/11 10:15	09/15/11 15:38	1.00

Method: EPA 300.0 - Anions per EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.500		mg/l		09/09/11 10:46	09/09/11 14:15	1.00
Nitrate-Nitrogen	ND		0.100		mg/l		09/09/11 10:46	09/09/11 14:15	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
2-Butanone	**3.0**		2.0		ug/L		09/15/11 19:08	09/15/11 19:08	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
2-Hexanone	ND		1.0		ug/L		09/15/11 19:08	09/15/11 19:08	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 19:08	09/15/11 19:08	1
Acetone	**3.8**		2.0		ug/L		09/15/11 19:08	09/15/11 19:08	1
Benzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Bromobenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Bromoform	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Bromomethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-09
Date Collected: 09/08/11 12:00
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-04
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.25		ug/L		09/15/11 19:08	09/15/11 19:08	1
Chloroform	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Chloromethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Dibromomethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 19:08	09/15/11 19:08	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Methylene Chloride	**1.8**		0.50		ug/L		09/15/11 19:08	09/15/11 19:08	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 19:08	09/15/11 19:08	1
Naphthalene	ND		0.40		ug/L		09/15/11 19:08	09/15/11 19:08	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
o-Xylene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Styrene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Tetrachloroethene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Toluene	**0.11**		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Trichloroethene	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 19:08	09/15/11 19:08	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 19:08	09/15/11 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*	*09/15/11 19:08*	*09/15/11 19:08*	*1*
Ethylbenzene-d10	*96*		*75 - 125*	*09/15/11 19:08*	*09/15/11 19:08*	*1*
Fluorobenzene (Surr)	*91*		*70 - 130*	*09/15/11 19:08*	*09/15/11 19:08*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*	*09/15/11 19:08*	*09/15/11 19:08*	*1*
Trifluorotoluene (Surr)	*98*		*80 - 125*	*09/15/11 19:08*	*09/15/11 19:08*	*1*

Method: EPA 6020 - Dissolved Metals per EPA 6000/7000 Series Methods

Lab Sample ID: 11I0306-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0306 — **Prep Batch: 11I0306_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/l		09/12/11 17:02	09/13/11 23:54	1.00
Manganese	ND		0.00200		mg/l		09/12/11 17:02	09/13/11 23:54	1.00

Lab Sample ID: 11I0306-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0306 — **Prep Batch: 11I0306_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.02		mg/l		101	80 - 120
Manganese	0.100	0.104		mg/l		104	80 - 120

Lab Sample ID: 11I0306-MS1 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0306 — **Prep Batch: 11I0306_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		2.00	1.99		mg/l		99.5	75 - 125
Manganese	0.00108		0.100	0.104		mg/l		103	75 - 125

Lab Sample ID: 11I0306-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 11I0306 — **Prep Batch: 11I0306_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Iron	ND		ND		mg/l			20
Manganese	0.000690		0.000740		mg/l		6.99	20

Method: EPA 160.1 - Conventional Chemistry Parameters per APHA/EPA Methods

Lab Sample ID: 11I0422-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0422 — **Prep Batch: 11I0422_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/l		09/15/11 10:15	09/15/11 15:38	1.00

Lab Sample ID: 11I0422-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0422 — **Prep Batch: 11I0422_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	100	102		mg/l		102	80 - 120

Lab Sample ID: 11I0422-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0422 — **Prep Batch: 11I0422_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	296		290		mg/l		2.05	20

Method: EPA 300.0 - Anions per EPA Method 300.0

Lab Sample ID: 11I0231-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0231 — **Prep Batch: 11I0231_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.500		mg/l		09/09/11 10:46	09/09/11 11:54	1.00
Nitrate-Nitrogen	ND		0.100		mg/l		09/09/11 10:46	09/09/11 11:54	1.00

Lab Sample ID: 11I0231-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0231 — **Prep Batch: 11I0231_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.5		mg/l		105	90 - 110		
Nitrate-Nitrogen			5.00	5.05		mg/l		101	90 - 110		

Lab Sample ID: 11I0231-MS1 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0231 — **Prep Batch: 11I0231_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	12.9		2.00	13.8	M8	mg/l		44.0	80 - 120		
Nitrate-Nitrogen	ND		2.00	1.90		mg/l		95.0	80 - 120		

Lab Sample ID: 11I0231-MSD1 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0231 — **Prep Batch: 11I0231_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12.9		2.00	13.8	M8	mg/l		44.0	80 - 120	0.00	20
Nitrate-Nitrogen	ND		2.00	1.94		mg/l		97.0	80 - 120	2.08	20

Lab Sample ID: 11I0231-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 11I0231 — **Prep Batch: 11I0231_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Chloride	12.9			13.0		mg/l				0.541	20
Nitrate-Nitrogen	ND			ND		mg/l					20

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

Lab Sample ID: 95426-5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 95426 — **Prep Batch: 95426_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,1-Trichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1,2-Trichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,1-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1

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

Lab Sample ID: 95426-5
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 95426_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dibromoethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichloroethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,2-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,3-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
1,4-Dichlorobenzene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
2,2-Dichloropropane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Butanone	ND		2.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Chlorotoluene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
2-Hexanone	ND		1.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Chlorotoluene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Isopropyltoluene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
4-Methyl-2-pentanone	ND		0.50		ug/L		09/15/11 13:03	09/15/11 13:03	1
Acetone	ND		2.0		ug/L		09/15/11 13:03	09/15/11 13:03	1
Benzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromobenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromochloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromodichloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromoform	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Bromomethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Carbon disulfide	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Carbon tetrachloride	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chlorobenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloroethane	ND		0.25		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloroform	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Chloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
cis-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dibromochloromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dibromomethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Dichlorodifluoromethane	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
Ethylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Hexachlorobutadiene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
Isopropylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Methyl tert-butyl ether	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Methylene Chloride	ND		0.50		ug/L		09/15/11 13:03	09/15/11 13:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L		09/15/11 13:03	09/15/11 13:03	1
Naphthalene	ND		0.40		ug/L		09/15/11 13:03	09/15/11 13:03	1
n-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
N-Propylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
o-Xylene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
sec-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Styrene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
tert-Butylbenzene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1

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

Lab Sample ID: 95426-5
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 95426_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Toluene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
trans-1,2-Dichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Trichloroethene	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Trichlorofluoromethane	ND		0.10		ug/L		09/15/11 13:03	09/15/11 13:03	1
Vinyl chloride	ND		0.020		ug/L		09/15/11 13:03	09/15/11 13:03	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Ethylbenzene-d10	*89*		*75 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Fluorobenzene (Surr)	*95*		*70 - 130*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Toluene-d8 (Surr)	*93*		*75 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 125*	*09/15/11 13:03*	*09/15/11 13:03*	*1*

Lab Sample ID: 95426-6
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 95426_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.93	4.74		ug/L		96	80 - 131
1,1,1-Trichloroethane	5.00	6.00		ug/L		120	60 - 160
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	73 - 121
1,1,2-Trichloroethane	4.94	5.56		ug/L		113	80 - 121
1,1-Dichloroethane	4.95	5.94		ug/L		120	73 - 158
1,1-Dichloroethene	4.95	6.24		ug/L		126	78 - 151
1,1-Dichloropropene	4.98	5.53		ug/L		111	59 - 160
1,2,3-Trichlorobenzene	5.00	4.10		ug/L		82	40 - 160
1,2,3-Trichloropropane	4.93	4.63		ug/L		94	70 - 137
1,2,4-Trichlorobenzene	4.97	4.00		ug/L		81	47 - 135
1,2,4-Trimethylbenzene	5.01	4.99		ug/L		100	80 - 137
1,2-Dibromo-3-Chloropropane	5.00	4.22		ug/L		84	47 - 138
1,2-Dibromoethane	5.00	4.87		ug/L		97	75 - 126
1,2-Dichlorobenzene	4.91	4.84		ug/L		99	80 - 120
1,2-Dichloroethane	4.96	6.16		ug/L		124	54 - 160
1,2-Dichloropropane	5.00	5.36		ug/L		107	71 - 127
1,3,5-Trimethylbenzene	5.00	5.14		ug/L		103	80 - 136
1,3-Dichlorobenzene	4.99	4.96		ug/L		99	76 - 120
1,3-Dichloropropane	5.00	5.14		ug/L		103	78 - 129
1,4-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 120
2,2-Dichloropropane	5.01	6.08		ug/L		121	49 - 160
2-Chlorotoluene	4.95	4.65		ug/L		94	79 - 127
4-Chlorotoluene	4.93	4.64		ug/L		94	76 - 127
4-Isopropyltoluene	4.97	4.72		ug/L		95	80 - 132
Benzene	4.98	5.57		ug/L		112	75 - 142
Bromobenzene	4.98	5.04		ug/L		101	80 - 120
Bromochloromethane	4.96	5.53		ug/L		111	64 - 156
Bromodichloromethane	4.94	5.66		ug/L		115	69 - 149
Bromoform	4.98	4.48		ug/L		90	66 - 137

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

Lab Sample ID: 95426-6
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 95426_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	5.00	4.82		ug/L		96	40 - 160
Carbon tetrachloride	5.01	6.22		ug/L		124	56 - 160
Chlorobenzene	5.00	4.91		ug/L		98	71 - 140
Chloroethane	4.99	4.60		ug/L		92	44 - 160
Chloroform	5.00	5.85		ug/L		117	65 - 158
Chloromethane	5.00	3.84		ug/L		77	52 - 160
cis-1,2-Dichloroethene	5.00	5.71		ug/L		114	71 - 144
cis-1,3-Dichloropropene	5.25	5.34		ug/L		102	63 - 127
Dibromochloromethane	4.96	4.90		ug/L		99	71 - 130
Dibromomethane	4.93	5.20		ug/L		105	76 - 130
Dichlorodifluoromethane	4.90	3.26		ug/L		67	40 - 160
Ethylbenzene	4.96	4.94		ug/L		100	79 - 132
Hexachlorobutadiene	5.00	4.73		ug/L		95	67 - 141
Isopropylbenzene	5.00	4.45		ug/L		89	64 - 127
Methyl tert-butyl ether	5.00	5.43		ug/L		109	77 - 135
Methylene Chloride	5.00	6.24		ug/L		125	80 - 155
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	70 - 144
Naphthalene	5.00	3.54		ug/L		71	40 - 142
n-Butylbenzene	4.95	4.57		ug/L		92	72 - 131
N-Propylbenzene	5.00	4.85		ug/L		97	76 - 131
o-Xylene	5.00	4.70		ug/L		94	72 - 137
sec-Butylbenzene	5.00	5.11		ug/L		102	72 - 145
Styrene	4.99	4.87		ug/L		98	80 - 133
tert-Butylbenzene	4.98	5.02		ug/L		101	74 - 138
Tetrachloroethene	5.01	6.35		ug/L		127	54 - 161
Toluene	5.00	5.30		ug/L		106	80 - 126
trans-1,2-Dichloroethene	5.01	6.10		ug/L		122	73 - 135
trans-1,3-Dichloropropene	4.75	5.43		ug/L		114	64 - 132
Trichloroethene	5.00	5.70		ug/L		114	79 - 131
Trichlorofluoromethane	4.95	5.56		ug/L		112	40 - 160
Vinyl chloride	5.00	4.98		ug/L		100	47 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Ethylbenzene-d10	*91*		*75 - 125*
Fluorobenzene (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*95*		*75 - 125*
Trifluorotoluene (Surr)	*105*		*80 - 125*

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.93	4.86		ug/L		99	80 - 131	3	20
1,1,1-Trichloroethane	5.00	6.25		ug/L		125	60 - 160	4	20
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	73 - 121	5	20
1,1,2-Trichloroethane	4.94	5.74		ug/L		116	80 - 121	3	20
1,1-Dichloroethane	4.95	5.92		ug/L		120	73 - 158	0	20

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

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			4.95	6.31		ug/L		127	78 - 151	1	20
1,1-Dichloropropene			4.98	5.59		ug/L		112	59 - 160	1	20
1,2,3-Trichlorobenzene			5.00	4.45		ug/L		89	40 - 160	8	20
1,2,3-Trichloropropane			4.93	5.03		ug/L		102	70 - 137	8	20
1,2,4-Trichlorobenzene			4.97	4.37		ug/L		88	47 - 135	9	20
1,2,4-Trimethylbenzene			5.01	5.13		ug/L		102	80 - 137	3	20
1,2-Dibromo-3-Chloropropane			5.00	4.25		ug/L		85	47 - 138	1	20
1,2-Dibromoethane			5.00	4.98		ug/L		100	75 - 126	2	20
1,2-Dichlorobenzene			4.91	4.79		ug/L		98	80 - 120	1	20
1,2-Dichloroethane			4.96	6.24		ug/L		126	54 - 160	1	20
1,2-Dichloropropane			5.00	5.74		ug/L		115	71 - 127	7	20
1,3,5-Trimethylbenzene			5.00	5.19		ug/L		104	80 - 136	1	20
1,3-Dichlorobenzene			4.99	5.16		ug/L		103	76 - 120	4	20
1,3-Dichloropropane			5.00	5.54		ug/L		111	78 - 129	7	20
1,4-Dichlorobenzene			5.00	5.03		ug/L		101	80 - 120	4	20
2,2-Dichloropropane			5.01	6.15		ug/L		123	49 - 160	1	20
2-Chlorotoluene			4.95	4.80		ug/L		97	79 - 127	3	20
4-Chlorotoluene			4.93	4.68		ug/L		95	76 - 127	1	20
4-Isopropyltoluene			4.97	4.88		ug/L		98	80 - 132	3	20
Benzene			4.98	5.44		ug/L		109	75 - 142	2	20
Bromobenzene			4.98	5.29		ug/L		106	80 - 120	5	20
Bromochloromethane			4.96	5.51		ug/L		111	64 - 156	0	20
Bromodichloromethane			4.94	5.80		ug/L		117	69 - 149	2	20
Bromoform			4.98	4.64		ug/L		93	66 - 137	4	20
Bromomethane			5.00	4.62		ug/L		92	40 - 160	4	20
Carbon tetrachloride			5.01	6.37		ug/L		127	56 - 160	2	20
Chlorobenzene			5.00	5.06		ug/L		101	71 - 140	3	20
Chloroethane			4.99	4.86		ug/L		97	44 - 160	5	20
Chloroform			5.00	6.17		ug/L		123	65 - 158	5	20
Chloromethane			5.00	3.79		ug/L		76	52 - 160	1	20
cis-1,2-Dichloroethene			5.00	5.66		ug/L		113	71 - 144	1	20
cis-1,3-Dichloropropene			5.25	5.64		ug/L		107	63 - 127	5	20
Dibromochloromethane			4.96	5.07		ug/L		102	71 - 130	3	20
Dibromomethane			4.93	5.52		ug/L		112	76 - 130	6	20
Dichlorodifluoromethane			4.90	3.39		ug/L		69	40 - 160	4	20
Ethylbenzene			4.96	4.93		ug/L		99	79 - 132	0	20
Hexachlorobutadiene			5.00	5.03		ug/L		101	67 - 141	6	20
Isopropylbenzene			5.00	4.60		ug/L		92	64 - 127	3	20
Methyl tert-butyl ether			5.00	5.39		ug/L		108	77 - 135	1	20
Methylene Chloride			5.00	5.97		ug/L		119	80 - 155	4	20
m-Xylene & p-Xylene			10.0	10.8		ug/L		108	70 - 144	4	20
Naphthalene			5.00	4.07		ug/L		81	40 - 142	14	20
n-Butylbenzene			4.95	4.73		ug/L		96	72 - 131	3	20
N-Propylbenzene			5.00	5.11		ug/L		102	76 - 131	5	20
o-Xylene			5.00	4.84		ug/L		97	72 - 137	3	20
sec-Butylbenzene			5.00	5.25		ug/L		105	72 - 145	3	20
Styrene			4.99	4.95		ug/L		99	80 - 133	2	20
tert-Butylbenzene			4.98	5.02		ug/L		101	74 - 138	0	20
Tetrachloroethene			5.01	6.88		ug/L		137	54 - 161	8	20
Toluene			5.00	5.47		ug/L		109	80 - 126	3	20

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

Lab Sample ID: 95426-7
Matrix: Water
Analysis Batch: 95426

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 95426_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			5.01	6.14		ug/L		123	73 - 135	1	20
trans-1,3-Dichloropropene			4.75	5.76		ug/L		121	64 - 132	6	20
Trichloroethene			5.00	5.92		ug/L		118	79 - 131	4	20
Trichlorofluoromethane			4.95	5.57		ug/L		112	40 - 160	0	20
Vinyl chloride			5.00	5.23		ug/L		105	47 - 160	5	20

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Ethylbenzene-d10	*102*		*75 - 125*
Fluorobenzene (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*97*		*75 - 125*
Trifluorotoluene (Surr)	*118*		*80 - 125*

Lab Chronicle

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-06

Lab Sample ID: PUI0232-01

Date Collected: 09/08/11 08:35

Matrix: Water

Date Received: 09/08/11 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	EPA 200/3005 Diss		1.00	11I0306_P	09/12/11 17:02	JMF	TAL PTL
Dissolved	Analysis	EPA 6020		1.00	11I0306	09/14/11 00:05	AJH/T	TAL PTL
Total	Prep	General Preparation		1.00	11I0231_P	09/09/11 10:46	CC	TAL PTL
Total	Analysis	EPA 300.0		1.00	U002813	09/09/11 13:28	CC	TAL PTL
Total	Prep	General Preparation		1.00	11I0422_P	09/15/11 10:15	IID	TAL PTL
Total	Analysis	EPA 160.1		1.00	11I0422	09/15/11 15:38	IID	TAL PTL
Total	Analysis	8260B STD		1	95426	09/15/11 17:48	SK	TAL SEA
Total	Prep	5030B			95426_P	09/15/11 17:48		TAL SEA

Client Sample ID: LB-090711-07

Lab Sample ID: PUI0232-02

Date Collected: 09/08/11 09:45

Matrix: Water

Date Received: 09/08/11 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	EPA 200/3005 Diss		1.00	11I0306_P	09/12/11 17:02	JMF	TAL PTL
Dissolved	Analysis	EPA 6020		1.00	11I0306	09/14/11 00:09	AJH/T	TAL PTL
Total	Prep	General Preparation		1.00	11I0231_P	09/09/11 10:46	CC	TAL PTL
Total	Analysis	EPA 300.0		1.00	U002813	09/09/11 13:43	CC	TAL PTL
Total	Prep	General Preparation		1.00	11I0422_P	09/15/11 10:15	IID	TAL PTL
Total	Analysis	EPA 160.1		1.00	11I0422	09/15/11 15:38	IID	TAL PTL
Total	Analysis	8260B STD		1	95426	09/15/11 18:14	SK	TAL SEA
Total	Prep	5030B			95426_P	09/15/11 18:14		TAL SEA

Client Sample ID: LB-090711-08

Lab Sample ID: PUI0232-03

Date Collected: 09/08/11 11:20

Matrix: Water

Date Received: 09/08/11 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	EPA 200/3005 Diss		1.00	11I0306_P	09/12/11 17:02	JMF	TAL PTL
Dissolved	Analysis	EPA 6020		1.00	11I0306	09/14/11 00:13	AJH/T	TAL PTL
Total	Prep	General Preparation		1.00	11I0231_P	09/09/11 10:46	CC	TAL PTL
Total	Analysis	EPA 300.0		1.00	U002813	09/09/11 13:59	CC	TAL PTL
Total	Prep	General Preparation		1.00	11I0422_P	09/15/11 10:15	IID	TAL PTL
Total	Analysis	EPA 160.1		1.00	11I0422	09/15/11 15:38	IID	TAL PTL
Total	Analysis	8260B STD		1	95426	09/15/11 18:43	SK	TAL SEA
Total	Prep	5030B			95426_P	09/15/11 18:43		TAL SEA

Client Sample ID: LB-090711-09

Lab Sample ID: PUI0232-04

Date Collected: 09/08/11 12:00

Matrix: Water

Date Received: 09/08/11 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	EPA 200/3005 Diss		1.00	11I0306_P	09/12/11 17:02	JMF	TAL PTL
Dissolved	Analysis	EPA 6020		1.00	11I0306	09/14/11 00:19	AJH/T	TAL PTL

Lab Chronicle

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Client Sample ID: LB-090711-09
Date Collected: 09/08/11 12:00
Date Received: 09/08/11 13:00

Lab Sample ID: PUI0232-04
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	General Preparation		1.00	11I0231_P	09/09/11 10:46	CC	TAL PTL
Total	Analysis	EPA 300.0		1.00	U002813	09/09/11 14:15	CC	TAL PTL
Total	Prep	General Preparation		1.00	11I0422_P	09/15/11 10:15	IID	TAL PTL
Total	Analysis	EPA 160.1		1.00	11I0422	09/15/11 15:38	IID	TAL PTL
Total	Analysis	8260B STD		1	95426	09/15/11 19:08	SK	TAL SEA
Total	Prep	5030B			95426_P	09/15/11 19:08		TAL SEA

Laboratory References:

TAL PTL = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503) 906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253) 922-2310

Certification Summary

Client: SCS Engineers - Portland
Project/Site: 04211030.011.17

TestAmerica Job ID: PUI0232

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Portland	Alaska	Alaska UST	10	UST-012
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	USDA		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	Alaska	TA-Port Heiden Mobile Lab	10	UST-093
TestAmerica Seattle	California	NELAC	9	1115CA
TestAmerica Seattle	Florida	NELAC	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP		L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025		L2236
TestAmerica Seattle	Louisiana	NELAC	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	N/A
TestAmerica Seattle	Oregon	NELAC	10	WA100007
TestAmerica Seattle	USDA	USDA		P330-11-00222
TestAmerica Seattle	Washington	State Program	10	C553

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PUT0232

CLIENT: SCS Engineers

REPORT TO: David Landrud

ADDRESS: 14945 SW Sequoia Pkwy, Ste 180 Portland, OR 97224

PHONE: (503) 639-935 FAX:

INVOICE TO: SCS Engineers Portland, OR

P.O. NUMBER:

PROJECT NAME: Leichner Brothers Landfill

PROJECT NUMBER: 04211030.01/017

SAMPLED BY: T LaVague

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: HCl	PRESERVATIVE: HNO3	PRESERVATIVE: —	PRESERVATIVE: —	PRESERVATIVE: —	PRESERVATIVE: —	REQUESTED ANALYSES: VOCs 8260 low level	REQUESTED ANALYSES: Diss Fe, Mn (6010)	REQUESTED ANALYSES: Cond (9050A)	REQUESTED ANALYSES: TDS (160.1)	REQUESTED ANALYSES: Chloride (300.0)	REQUESTED ANALYSES: Nitrate (300.0)	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	LB-090811-06	9/8/11 @ 835							X	X	X	X	X	X	W	5	low level	
2	LB-090811-07	9/8/11 @ 945							X	X	X	X	X	X	W	5	VOCs	
3	LB-090811-08	9/8/11 @ 1130							X	X	X	X	X	X	W	5	Samples were field	
4	LB-090811-09	9/8/11 @ 1200							X	X	X	X	X	X	W	5	filtered	
5																		
6																		
7																		
8																		
9																		
10																		

RELEASED BY: T LaVague DATE: 9/8/11

PRINT NAME: T LaVague FIRM: SCS Engineers TIME: 1300

RECEIVED BY: DATE: 9-8-11

PRINT NAME: KAREN WILSON FIRM: TA-P TIME: 1300

RELEASED BY: DATE:

PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:

PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9°C PAGE OF

TAL-1000(0408)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Portland Sample Control Checklist

Work Order #: PVI0232 **Date/Time Received:** 9/8/11 1300
Client Name: SCS Engineering
Project Name: LEICHNER LANDFILL
Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐HI ☐OTHER

Unpacking Checks:
Cooler (s): 1
Temperature (s): 4.9

Digi #1	Digi #2	IR Gun	Raytek
☐	☐	☑ (☐Plastic ☐Glass)	☐ (☐Plastic ☐Glass)

Temperature out of Range:
__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Ice Not Needed
__ Other:_____

Ice used: (circle one) GEL LOOSE BLUE NONE OTHER: _____ **Initials:** SR

N/A	Yes	No	
☑	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no and ESI client, document on NOD.
	☑	☐	3. Chain of Custody present? If no, document on NOD. Along with "received by" & "relinquished by" signatures with date & time?
	☑	☐	4. Bottles received intact? If no, document on NOD.
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.
	☑	☐	6. Sampler name/signature documented on COC?
	☑	☐	7. Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	8. pH for HN03/ESI samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	9. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	10. HF Dilution required?
	☑	☐	11. Sufficient volume provided for all analysis and requested MS/MSD? If no, document on NOD and consult PM before proceeding.
	☑	☐	12. Did chain of custody agree with samples received? If no, document on NOD.
☐	☑	☐	13. Were VOA samples received without headspace?
	☐	☑	14. Did samples require preservation with sodium thiosulfate?
☑	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☐	☑	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	17. Are analyses with short holding times received in hold?
	☑	☐	18. Were special log- in instructions read and followed?

Checklist Reviewed: **Log-in initials:** PSJ **Labeler initials:** PJ

9405 SW Nimbus Ave, Beaverton OR 97008 **tel** 503.906.9200 **fax** 503.906.9210 **www.testamericainc.com**

ATTACHMENT 3

Results of Laboratory QA/QC Reviews
Third Quarter 2011

SCS Engineers QA/QC Review
Groundwater - 3Q 2011 Groundwater Monitoring Event
Leichner Brothers Landfill
TestAmerica-Denver Report # PUI0226

Samples: LB-6S, DUP1 (LB-6S), LB-13I, LB-26I, LB-27I, and trip blank.

Sample Date: 09/07/2011
Laboratory Sample Received Date: 09/08/2011
Sample Receipt Temperature = 1.1°C
Laboratory Data Received Date: 09/26/2011
QA/QC Review Date: 09/30/2011 (JTD)

VOCs

Surrogates	All sample surrogates are within QC limits.
Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries were within QC limits, and all surrogates within limits.
LCSD	All RPDs within control limits.

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits.
Matrix Spikes	All % recoveries within QC limits.
MSD	All RPDs were within QC limits.

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits except for chloride (M8 flags) in batch U002798. M8 flags denote that the MS was below the acceptable limits. It should be noted that the sample concentration is greater than four times the spike concentration.
MSD	All RPDs within QC limits.
Duplicates	All RPDs within QC limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All project-specific reporting limits were met.

Field QA/QC
Field Duplicate
A field duplicate (DUP1 [LB-090711-04]) was collected on 09/07/2011 at LB-6S. All RPDs were within 20 percent.

Trip Blank
Laboratory supplied trip blanks were carried into the field on 09/07/2011 with all samples and returned to the lab for VOC analysis. All analytes were reported as non-detect.

Notes
None.

Data Validation
Upon final review of lab report PUI0226 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (09/30/2011;JTD).

SCS Engineers QA/QC Review
Groundwater - 3Q 2011 Groundwater Monitoring Event
Leichner Brothers Landfill
TestAmerica-Denver Report # PUI0232

Samples: LB-1S, LB-5S, LB-10S, FB1 (LB-10S), and trip blank.

Sample Date: 09/08/2011
Laboratory Sample Received Date: 09/08/2011
Sample Receipt Temperature = 0.9°C
Laboratory Data Received Date: 09/26/2011
QA/QC Review Date: 10/03/2011 (JTD)

VOCs

Surrogates	All sample surrogates are within QC limits.
Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries were within QC limits, and all surrogates within limits.
LCSD	All RPDs within control limits.

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits.
Matrix Spikes	All % recoveries within QC limits.
Duplicates	All RPDs were within QC limits.

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits except for chloride (M8 flags) in batch 11I0231. M8 flags denote that the MS was below the acceptable limits. It should be noted that the sample concentration is greater than four times the spike concentration.
MSD	All RPDs within QC limits.
Duplicates	All RPDs within QC limits.

Hold Times
All analytical hold times were met.

Reporting Limit Exceedances
All project-specific reporting limits were met.

Field QA/QC
Field Duplicate
A field blank (FB1 [LB-090811-09]) was collected on 09/08/2011 near LB-10S. All analytes reported were as non-detect except for 2-butanone, acetone, methylene chloride, and toluene.

Notes
SCS Engineers received a revised laboratory report on 11/11/2011 with the corrected reporting limits for dissolved metals. This is noted in the case narrative.

Data Validation
Upon final review of lab report PUI0232 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (10/03/2011;JTD).

ATTACHMENT 4

Quarterly Compliance LFG Monitoring Probe Data
Third Quarter 2011

Compliance Landfill Gas Monitoring Probe Data
July 2011
Leichner Brothers Landfill

Probe	Date / Time	Methane (% by vol)	Carbon Dioxide (% by vol)	Oxygen (% by vol)	Balance (% by vol)	Relative Pressure (H_2O inch)
LBLFGP-02	7/25/2011 15:52	0	3.9	17.2	78.9	0
LBLFGP-03	7/25/2011 15:49	0	3.6	16.5	79.9	-0.02
LBLFGP-05	7/25/2011 15:43	0	3.7	16.2	80.1	0
LBLFGP-06	7/25/2011 16:05	0	4.1	15.5	80.4	-15.01
LBLFGP-07	7/25/2011 16:02	4.7	14.8	0.2	80.3	0.02
LBLFGP-08	7/25/2011 18:48	0	9.4	9.4	81.2	0
LBLFGP-11	7/25/2011 18:25	0	2	17.5	80.5	0.1
LBLFGP-12	7/25/2011 18:23	0	1	20.2	78.8	0.01
LBLFGP-13	7/25/2011 18:19	0	1.5	19	79.5	0.02
LBLFGP-14	7/25/2011 18:15	0	0.6	20.7	78.7	0.01
LBLFGP-15	7/25/2011 18:11	0	4.6	18.9	76.5	0
LBLFGP-1A	7/25/2011 15:57	0	2.3	18.9	78.8	0
LBLFGP-1B	7/25/2011 15:55	0	2.3	18.9	78.8	0
LBLFGP-20	7/25/2011 17:13	0	7	10.1	82.9	0
LBLFGP-22	7/25/2011 16:57	0	0.9	20.6	78.5	0.01
LBLFGP-23	7/25/2011 16:55	0	1	20.3	78.7	-0.01
LBLFGP-26	7/25/2011 16:31	0	0.7	20.4	78.9	0
LBLFGP-27	7/25/2011 16:28	0	1.1	19.9	79	0
LBLFGP-28	7/25/2011 16:19	0	5.1	13.7	81.2	0
LBLFGP-29	7/25/2011 16:13	0	5.2	8.2	86.6	0
LBLFGP-31	7/25/2011 17:27	0	1.6	19.7	78.7	0.03
LBLFGP-32	7/25/2011 17:20	0	1.8	18.9	79.3	0.01
LBLFGP-33	7/25/2011 17:18	0	1.7	18.6	79.7	0.02
LBLFGP-34	7/25/2011 17:11	0	2.5	16.7	80.8	0.02
LBLFGP-35	7/25/2011 17:07	0	2.1	17	80.9	0.02
LBLFGP-36	7/25/2011 16:48	0	1.6	19	79.4	0
LBLFGP-37	7/25/2011 16:46	0	2.2	18.4	79.4	0
LBLFGP-38	7/25/2011 16:35	0	0.9	19.9	79.2	0
LBLFGP-4A	7/25/2011 15:47	0	2.7	16.3	81	0
LBLFGP-4B	7/25/2011 15:46	0	2.6	16.5	80.9	-0.02
LBLFGP-9A	7/25/2011 18:40	0	7.7	9.4	82.9	0
LBLFGP-9B	7/25/2011 18:37	0	6.3	9.2	84.5	0
LBLGP-10A	7/25/2011 18:32	0	4	13.9	82.1	-0.23
LBLGP-10B	7/25/2011 18:30	0	2	18.8	79.2	0.01
LBLGP-16D	7/25/2011 17:42	0	5	16.1	78.9	0.02
LBLGP-16S	7/25/2011 17:39	0	1.4	19.2	79.4	0
LBLGP-17D	7/25/2011 17:36	0	0.9	20.7	78.4	0
LBLGP-17S	7/25/2011 17:35	0	3.2	18.5	78.3	0.31
LBLGP-18D	7/25/2011 17:30	0	3.3	17.2	79.5	0.02
LBLGP-18S	7/25/2011 17:32	0	1.9	19.1	79	0.02
LBLGP-19D	7/25/2011 17:23	0	2.3	18.4	79.3	0.02
LBLGP-19S	7/25/2011 17:24	0	1.3	19.8	78.9	0.03
LBLGP-21A	7/25/2011 17:05	0	0.9	20.3	78.8	0.01
LBLGP-21B	7/25/2011 17:04	0	1.2	19.9	78.9	0
LBLGP-24A	7/25/2011 16:52	0	0.4	20.9	78.7	0
LBLGP-24B	7/25/2011 16:50	0	0.6	20.9	78.5	-0.01
LBLGP-25A	7/25/2011 16:43	0	2.7	18.4	78.9	0
LBLGP-25B	7/25/2011 16:42	0	3.2	17.2	79.6	-0.02
LBLGP-30A	7/25/2011 15:24	0	6.5	13.8	79.7	-0.02
LBLGP-30B	7/25/2011 15:26	0	6.3	14	79.7	0

0