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November 29, 2012
File No. 04212030.06/.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 2012 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 2012 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 of the Washington Administrative Code (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 modifications to the groundwater analytical program approved by Ecology in 2011 (referenced in this report where applicable).

This report (1) describes field activities performed during the third quarter 2012 at LBLF, (2) presents results of groundwater, stormwater, and LFG 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 2012. The GCCS includes a LFG extraction well field, condensate collection system, and a LFG blower and flare (flare station).

This report also includes recommendations for modifying the groundwater analytical testing program based on volatile organic compound (VOC) testing results collected during the last two years. Analytical data showed that concentrations of VOCs with site-specific compliance levels did not exceed their respective compliance levels, as further discussed in this report.

[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 2012 MAJOR ACTIVITIES

The following major activities were performed during the third quarter 2012 period and are described in more detail in subsequent sections of this report.

- Performed the third quarter 2012 (semiannual) groundwater monitoring in September 2012.
- Conducted monthly stormwater inspections in July, August, and September 2012 (quarterly compliance stormwater sampling was not performed because a qualifying storm event did not occur during the third quarter 2012 monitoring period).
- Conducted quarterly monitoring of the LFG compliance monitoring probes in July 2012.
- 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.
- Performed weekly greenhouse gas (GHG) compliance monitoring per the requirements of Washington State's GHG Reporting rule.

THIRD QUARTER 2012 PROJECT ACTIVITIES AND RESULTS

Project Management, Meetings, and Correspondence

Correspondence conducted during the third quarter 2012 period included the following:

- Submitted July, August, and September monthly update reports to the County and the LLOC.
- Submitted the Second Quarter 2012 Progress Report, dated August 30, 2012, to Ecology, Clark County Public Health (CCPH), the County, and the LLOC.[2]
- Conducted the third quarter 2011 meeting of the LLOC on October 24, 2012 (delayed due to scheduling conflicts).

Third Quarter 2012 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

[2] SCS Engineers. 2012. Second Quarter 2011 Progress Report, Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, August 30.

monitoring well locations are shown in Figure 1. The following describes the monitoring network components and well designation labeling scheme.

- Wells used to monitor groundwater elevation and/or quality in the upper portion of the alluvium WBZ are denoted with an "S" in the well number (e.g., well LB-1S).

- Wells used to monitor groundwater elevation and/or quality in the middle (or intermediate) portion of the alluvium WBZ are denoted with an "I" in the well number (e.g., LB-27I).

- Wells used to monitor groundwater elevation and/or 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 semiannually in accordance with the schedule specified in the 2005 CMP (EMCON, 2005[1]) as follows. During the first semiannual event (termed the annual event), performed during the first quarter monitoring period in late winter-early spring (typically 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 second semiannual monitoring event, performed during the third quarter period in late summer-early fall (typically in 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 2012 (semiannual) groundwater monitoring event was performed from September 10 through 12, 2012.

Sampling 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. Table 1 summarizes the third quarter 2012 groundwater levels measured on September 10, 2012.

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[3] (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. Dedicated, polyethylene discharge tubing was used for each well that is kept inside the well casings for use during groundwater monitoring events.

The monitoring wells were purged at a pump rate less than or equal to 500 milliliters per minute (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

[3] 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. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, July 14.

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 2 summarizes the final field water-quality parameter measurements obtained for each well sampled.

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 offsite 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. Chain-of-custody (COC) documentation accompanied the samples during their storage and transport to the laboratory. The groundwater samples were submitted to TestAmerica Laboratories (TAL) 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 U.S. Environmental Protection (EPA) Method 8260B was used to obtain method reporting limits (MRLs) 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 TAL were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE.

Quality Assurance and Quality Control Methods and Results

Field quality assurance/quality control (QA/QC) procedures used for the third quarter 2012 monitoring event included collecting and submitting for analyses one duplicate samples (sample

[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.

[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.

LB-091212-07 collected at well LB-6S), one equipment blank sample (sample LB-091112-05), 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 TAL (see Attachment 2). TAL 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 2012 Groundwater Monitoring Results

The third quarter (September) 2012 groundwater levels (based on resurvey of well casing reference elevations in May 2012, as reported in the First Quarter 2011 Progress Report [SCS, 2012][2]) and corresponding groundwater elevations are summarized in Table 1. The groundwater elevations are consistent with historical groundwater elevation data. Groundwater potentiometric surface contour maps for the third quarter 2012 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 water quality parameters measured during purging were generally within the range of concentrations from the last five years (since 2007). Field parameter concentrations were within available regulatory or compliance levels, except for pH in groundwater samples from monitoring wells LB-5S, LB-6S, LB-13I, and LB-26I. The pH concentrations in samples from these wells (from 6.11 to 6.47 standard units [S.U.]) were slightly below the lower regulatory limit of 6.5 S.U. (see Table 2). Historical pH measurements in samples from all of these wells have intermittently been below the regulatory limit, including at least once within the last 5 years (since 2007). The historical pH values for these wells have previously been reported to Ecology and are likely reflective of naturally occurring groundwater conditions.

The field-measured specific conductance value in the sample from well LB-27I (706 microSiemens per centimeter [µS/cm]) slightly exceeded the compliance level of 700 µS/cm. Historical specific conductance values in samples from well LB-27I (ranging from 327 to 947 µS/cm) have intermittently exceeded the compliance level, including at least once within the last 5 years (since 2007). The historical pH values for these wells have previously been reported to Ecology and are likely reflective of naturally occurring groundwater conditions.

The third quarter 2012 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 2007). The concentrations of inorganic parameters and dissolved metals did not exceed compliance levels

specified in the 1996 Consent Decree for LBLF, except for the dissolved Mn concentration in the sample from well LB-27I. The dissolved Mn concentration of 0.54 mg/L in the well LB-27I sample exceeded the compliance level of 0.05 mg/L, and is consistent with historical results from this well previously reported to Ecology.

Dissolved Mn (and Fe) concentrations exceeding their respective compliance levels in select wells at the site are 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.

VOCs for which compliance levels have been established for LBLF (i.e., 1,4-dichlorobenzene, 1,1-DCE, tetrachloroethene, trichlorethene, and VC) were not detected in groundwater samples collected during the third quarter 2012 monitoring event. The only VOCs detected in samples collected during the third quarter 2012 was a low concentration of carbon tetrachloride (0.23 µg/L) in the sample collected from well LB-26I and acetone (3.6 µg/L) in the equipment blank sample . For perspective, the carbon tetrachloride concentration is below its conservative, groundwater screening value of 0.3 µg/L specified in Washington Administrative Code 173-200 (Washington Groundwater Contaminant Levels [WGCLs]).

The third quarter 2012 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 2012 Stormwater Monitoring

Quarterly, compliance stormwater monitoring was not performed during the third quarter 2012 period due to the absence of a qualifying storm event. A third quarter 2012 discharge monitoring report (DMR), noting the lack of a qualifying storm event, was submitted to Ecology electronically via its web-based (on-line) WAWebDMR utility on October 10, 2012.

Consistent with requirements of LBLF's Industrial Stormwater General Permit, monthly stormwater inspections were performed during the third quarter 2011 period on July 31, August 31, and September 28, 2012. No problems or concerns were noted during the monthly inspections.

A DMR summarizing the second quarter 2012 compliance stormwater monitoring results was submitted to Ecology electronically via its web-based (on-line) WAWebDMR utility on July 30, 2012. Stormwater quality benchmarks specified in LBLF's Industrial Stormwater General Permit were not exceeded. The stormwater sample was collected at Outfall 1 shown in Figure 4.

Third Quarter 2012 LFG 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 2012 compliance LFG monitoring event was performed on July 31 and August 1, 2012. Methane concentrations were below the MFS compliance level of 5 percent methane by volume in all LFG monitoring probes, including new LFG monitoring probe GP-8R that was installed on May 25, 2012 (the installation of probe GP-8R was previously described in the Second Quarter 2012 Progress Report).

A summary of the third quarter 2012 compliance LFG monitoring probe data is provided in Attachment 4. The LFG monitoring probe locations are shown in Figure 5.

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 2012. There were no problems or concerns noted during the monitoring and adjustment of the LFG extraction wells.

Greenhouse Gas Monitoring

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; however, the emissions do exceed the threshold limit for the State of Washington, which requires GHG emissions reporting for calendar year 2012. As a result, the LFG flare system was monitored on a weekly basis during the third quarter 2012 period for criteria required for evaluating GHG emissions per the requirements of Washington State's GHG Reporting rule. It should be noted that routine monitoring of the LFG flare system was also performed for optimizing the performance and efficiency of the LFG blowers and flare.

GCCS Operations and Maintenance

Routine operations, maintenance, and repair of the GCCS performed during the third quarter 2012 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 2012 are described below.

July 2012

- Replumbed the wellhead at extraction well NE-20.
- Replaced 2-inch PVC gate valves with 1-inch valves at extraction wells SE-39 and SW-19.
- Replaced 3-inch flex hose at extraction well SW-12.
- Filled the oil to Pump No. 1 at the north detention pond.
- For safety purposes, re-graded (excavated) the east side of the utility vault at the south detection pond to lower existing grade down to the utility vault.
- Installed an air conditioning unit in the air compressor shed.
- Performed troubleshooting of the LFG remote monitoring and control system (RMCS; installed in May 2012) and file transfer protocol (FTP) test due to file upload problem. An adaptive security appliance (ASA) mounting bracket for the RMCS was also installed.
- Replaced a pressure gauge and refilled the propane tank for the blower flare system.
- Installed guard rails around the concrete platform for the north detention pond pumping system.

August 2012

- Completed installing and painting the guard rail around the concrete platform for the north detention pond pumping system.
- Replaced damaged 6-inch flex hoses at extraction wells SW-20 and NE-15, and repaired leaking flex hoses at several LFG headers.
- Performed a video survey of a main LFG header pipe due to suspected damage of the pipe. The header is installed under the main access road between the northwest and northeast quadrants of the site. A memorandum dated August 21, 2012, of the survey results was submitted to the County. Liquid found in the pipe during the video survey was subsequently pumped out to allow for more efficient LFG flow through the header pipe. It is recommended that another video survey be performed during the 2012-2013 rainy season to assess whether the liquid is LFG condensate or associated with infiltrating stormwater.
- Replaced or retrofitted LFG header valves at 12 extraction wells.
- Removed a 4-inch corrugated stormwater drain line near the northwest quadrant that was conveying surface water to the adjacent Waste Connections property.
- Measured water levels in the condensate sumps.

- Observed and evaluated drainage design features in the northwest quadrant due to surface water ponding and runoff to an adjacent (off-site) property.

September 2012

- Replaced the No. 1 thermal couple and conduit on the enclosed flare.
- Replaced a damaged labcock valve and polyvinyl chloride (PVC) pipe section at the northwest-northeast quadrant gas composition connection.
- Repaired a separated 3-inch PVC pipe at LFG extraction well NW-35.
- Installed a kick board at the South Detention Pond sediment vault.
- Installed 1-inch gate valves at several additional LFG extraction wells.
- Performed minor repair to a LFG header pipe.

REPAIR/REPLACEMENT/RENOVATION ACTIVITIES

Engineering services related to repair, replacement, or renovation activities during the third quarter 2012 included (1) evaluating specifications and costs for LFG blower upgrades (including installing variable frequency drives [VFDs] on the blower motors) versus purchase of new blowers, and (2) evaluating costs for additional condensate pump retrofits.

RECOMMENDATIONS

SCS recommends modifying the groundwater analytical testing program based on VOC testing results over the last two years. Consistent with Ecology's request, groundwater samples were analyzed for VOCs over the last 2 years (initiated March 2011) using a low-level procedure for EPA Method 8260B to meet the compliance level of 0.1 micrograms per liter (µg/L) for VC and 1,1-DCE. The MRLs reported by TAL were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE. Analytical data showed that concentrations of these two VOCs did not exceed their respective compliance levels.

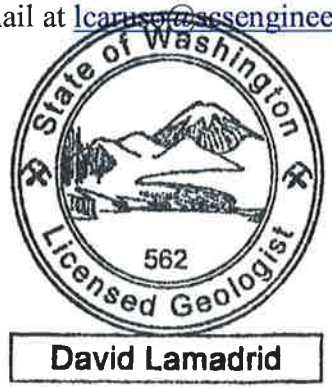
Ecology's letter dated April 27, 2011,[4] stated the following:

> 3. *Vinyl Chloride (VC) and 1,1-(Dichloroethene) to be tested at method reporting limit (MRL) of 0.1 µg/L in order to show compliance with the values established in the Cleanup Action Plan (CAP). If after two years of testing (four quarterly events), the results show concentrations at or below the MRL of 0.1µg/L, then the testing for these parameters will be discontinued.*

Consistent with Ecology's above statement, SCS recommends discontinuing testing of these two VOCs. Analytical testing by the standard EPA Method 8260B for the other required VOCs will be performed consistent with the requirements in the 2005 CAP and Consent Decree.

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,



David Lamadrid, LG
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Attachments:
Table 1 – Groundwater Elevation Data
Table 2 – Field Water Quality Parameters Measurements
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 (March 12, 2012)
Figure 3 – Groundwater Potentiometric Surface Contours, Troutdale Formation Aquifer (March 12, 2012)
Figure 4 – Site Map and Stormwater System
Figure 5 – 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; Horenstein Law Group
Craig Leichner; LBLRC
SCS Leichner Project File

TABLES

Table 1
Groundwater Elevation Data
Third Quarter (September) 2012
Leichner Brothers Landfill

Monitoring Well	Reference Elevation (feet, Clark Co. Datum) [a]	Depth to Groundwater (feet, BTOC) [b]	Groundwater Elevation
LB-R2	222.27	43.70	178.57
LB-1S	210.12	31.71	178.41
LB-1D	209.74	34.85	174.89
LB-3S	218.25	37.22	181.03
LB-3D	219.29	38.24	181.05
LB-4S(R)	226.46	22.77	203.69
LB-4C	228.08	45.42	182.66
LB-4D	228.00	54.51	173.49
LB-5S	206.89	15.78	191.11
LB-5C	206.70	37.05	169.65
LB-5D	207.56	35.80	171.76
LB-6S	202.80	25.55	177.25
LB-9S(R)	217.94	33.88	184.06
LB-10SR	204.04	29.21	174.83
LB-10CR	203.05	28.12	174.93
LB-10DR	203.36	41.46	161.90
LB-13I	202.36	26.23	176.13
LB-13C	202.68	26.64	176.04
LB-13D	202.96	26.95	176.01
LB-17S	208.18	29.48	178.70
LB-17I	213.14	34.62	178.52
LB-17C	206.55	28.31	178.24
LB-17D	213.17	35.58	177.59
LB-20S	221.22	38.74	182.48
LB-21S	223.35	36.40	186.95
LB-21C	223.32	36.79	186.53
LB-21D	223.63	39.71	183.92
LB-22S	208.42	6.17	202.25
LB-23S	229.19	30.65	198.54
LB-24S	235.13	38.51	196.62
LB-26I	200.22	23.58	176.64
LB-26D	200.75	23.28	177.47
LB-27I	205.35	29.50	175.85
LB-27D	204.63	35.78	168.85
MW-1 N	216.58	Dry	NA
MW-1 S	216.13	36.17	179.96
MW-1 E	216.45	Dry	NA
MW-NE	220.06	13.72	206.34

Notes:

BTOC = below top of casing; NA = not applicable; NM = not measured

[a] Monitoring wells and piezometers were resurveyed on May 30 and 31, 2012.

[b] Measured on September 10, 2012

Table 2
Field Water Quality Parameters Measurements
Third Quarter (September) 2012
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-091212-08	9/12/2012	6.70	177	13.0	93.1	2.91
LB-5S	LB-091112-01	9/11/2012	**6.11**	188	13.4	70.0	8.12
LB-6S	LB-091212-06	9/12/2012	**6.40**	214	12.7	58.6	4.02
LB-10SR	LB-091212-09	9/12/2012	6.78	480	14.5	54.3	0.59
LB-13I	LB-091112-03	9/11/2012	**6.47**	266	14.1	50.4	2.40
LB-26I	LB-091112-04	9/11/2012	**6.31**	253	13.1	45.9	5.07
LB-27I	LB-091112-02	9/11/2012	6.72	**706**	14.0	38.1	1.02

Notes:

S.U. = standard units

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

^{o}C = degrees celsius

mV = millivolts

mg/L = milligrams per liter

ORP = oxidiation-reduction potential

Bold = value 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 3
Inorganic Parameters and Dissolved Metals Concentrations
Third Quarter (September) 2012
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)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
Compliance Levels (mg/L) [a]				250	10	500	0.3	0.05
LB-1S	LB-091212-08	Alluvium	9/12/2012	14	5.9	210	0.025 U	0.0020
LB-5S	LB-091112-01	Alluvium	9/11/2012	4.2	4.7	160	0.025 U	0.0020 U
LB-6S	LB-091212-06	Alluvium	9/12/2012	5.5	0.78	160	0.025 U	0.0020 U
LB-6S (Dup)	LB-091212-07	Alluvium	9/12/2012	9.8	0.75	160	0.025 U	0.0020 U
LB-10SR	LB-091212-09	Alluvium	9/12/2012	30	0.91	310	0.025 U	0.0033
LB-13I	LB-091112-03	Alluvium	9/11/2012	12	4.4	220	0.025 U	0.0020 U
LB-26I	LB-091112-04	Alluvium	9/11/2012	5.8	5.2	200	0.025 U	0.0020
LB-27I	LB-091112-02	Alluvium	9/11/2012	32	0.2 U, H	420	0.032	**0.54**
Equipment Blank	LB-091112-05	NA	9/11/2012	0.5 U	0.1 U	10 U	0.025 U	0.0020 U

Notes:
mg/L = milligrams per liter
Dup = duplicate sample
H = laboratory inadvertently prepped or analyzed the sample beyond the specified holding time
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) 2012
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-091212-08	Alluvium	9/12/2012	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-091112-01	Alluvium	9/11/2012	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-091212-06	Alluvium	9/12/2012	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-091212-07	Alluvium	9/12/2012	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-091212-09	Alluvium	9/12/2012	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-091112-03	Alluvium	9/11/2012	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-091112-04	Alluvium	9/11/2012	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-27I	LB-091112-02	Alluvium	9/11/2012	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
Equipment Blank	LB-091112-05	NA	9/11/2012	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) 2012
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	Bromoform	Bromomethane	Carton disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
				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-091212-08	Alluvium	9/12/2012	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-5S	LB-091112-01	Alluvium	9/11/2012	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-6S	LB-091212-06	Alluvium	9/12/2012	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-6S (Dup)	LB-091212-07	Alluvium	9/12/2012	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-10SR	LB-091212-09	Alluvium	9/12/2012	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-13I	LB-091112-03	Alluvium	9/11/2012	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-091112-04	Alluvium	9/11/2012	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	**0.23**	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-091112-02	Alluvium	9/11/2012	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
Equipment Blank	LB-091112-05	NA	9/11/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	**3.6**	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
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Bold = detected concentration

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

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (September) 2012
Leichner Brothers Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Dichlorobromomethane	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-091212-08	Alluvium	9/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 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-091112-01	Alluvium	9/11/2012	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-091212-06	Alluvium	9/12/2012	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-091212-07	Alluvium	9/12/2012	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-091212-09	Alluvium	9/12/2012	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-091112-03	Alluvium	9/11/2012	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-091112-04	Alluvium	9/11/2012	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-091112-02	Alluvium	9/11/2012	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-091112-05	NA	9/11/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 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
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
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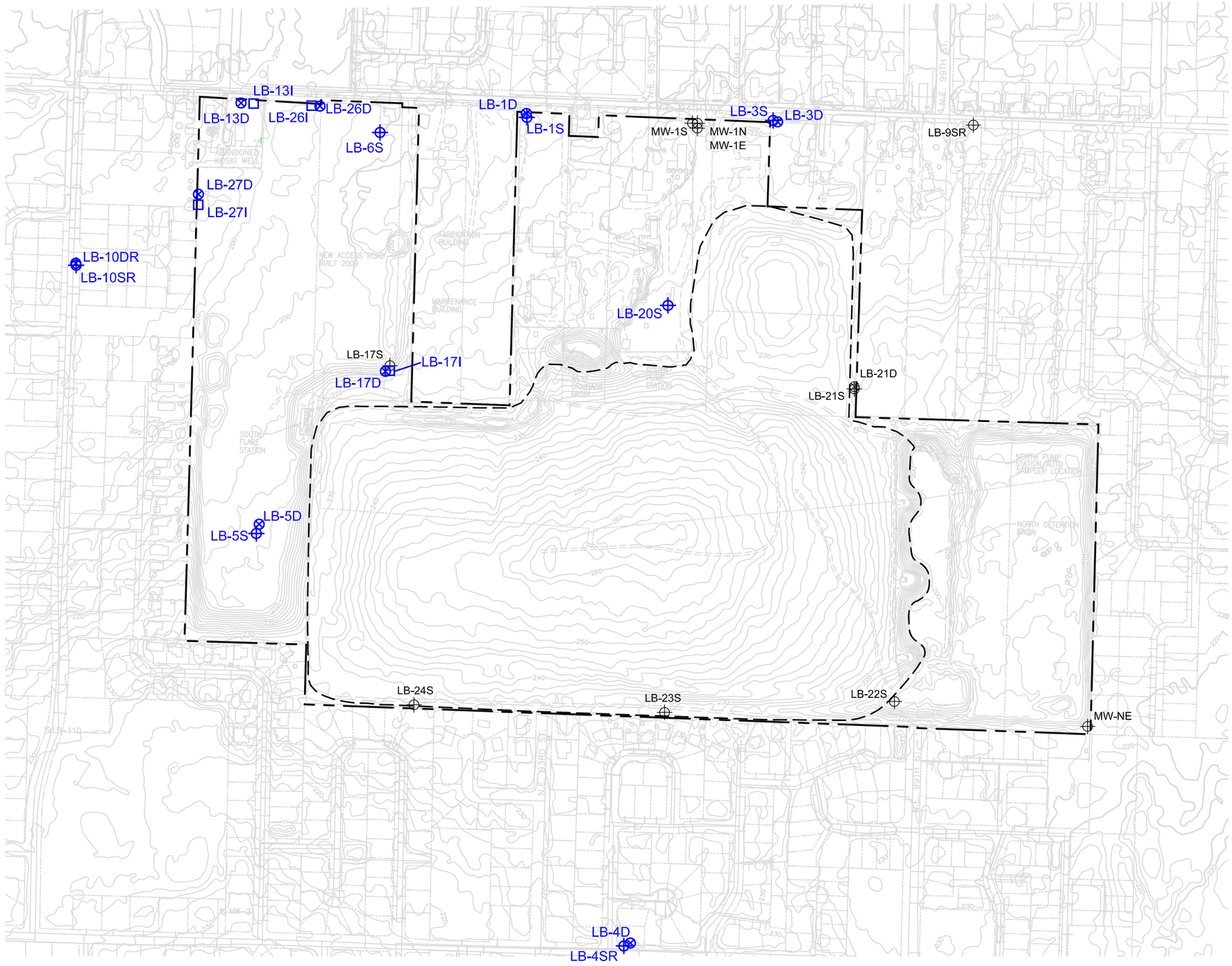
Bold = detected concentration

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

FIGURES



LEGEND:

LB-5S ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-5D ⊗	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

NOTES:

1. Monitoring wells designated by blue color are compliance monitoring wells.
2. Topography taken from Clark County GIS, December 2008.

SCALE
0 400 800 FEET

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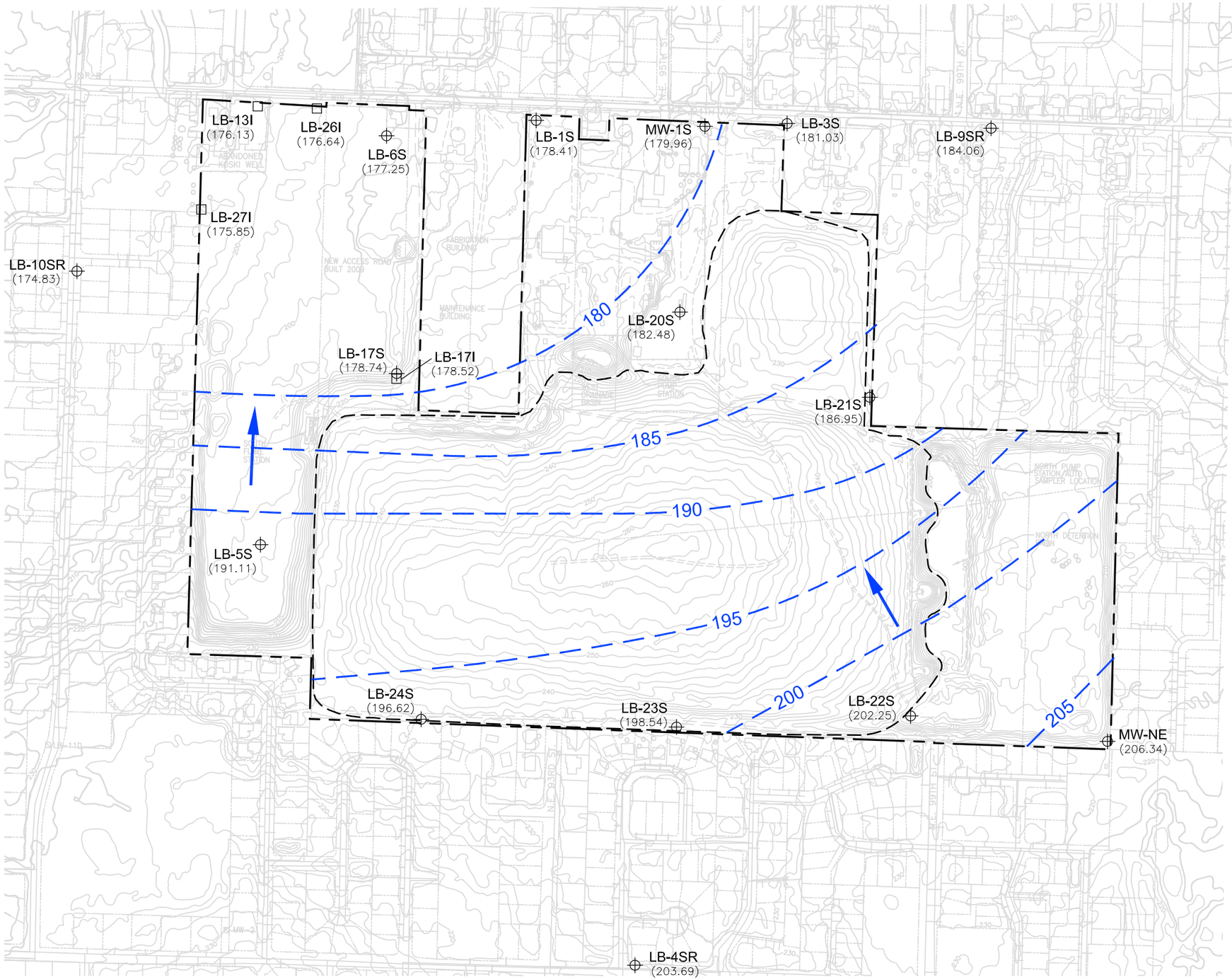
14945 SW Sequoia Parkway, Suite 180
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04212030.06/.18	DES BY D.L.	GROUNDWATER MONITORING LOCATIONS	DATE NOVEMBER 2012
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY L.C.		



LEGEND:

LB-5S ⊕	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
(206.34)	Groundwater Elevation Measured on September 10, 2012
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

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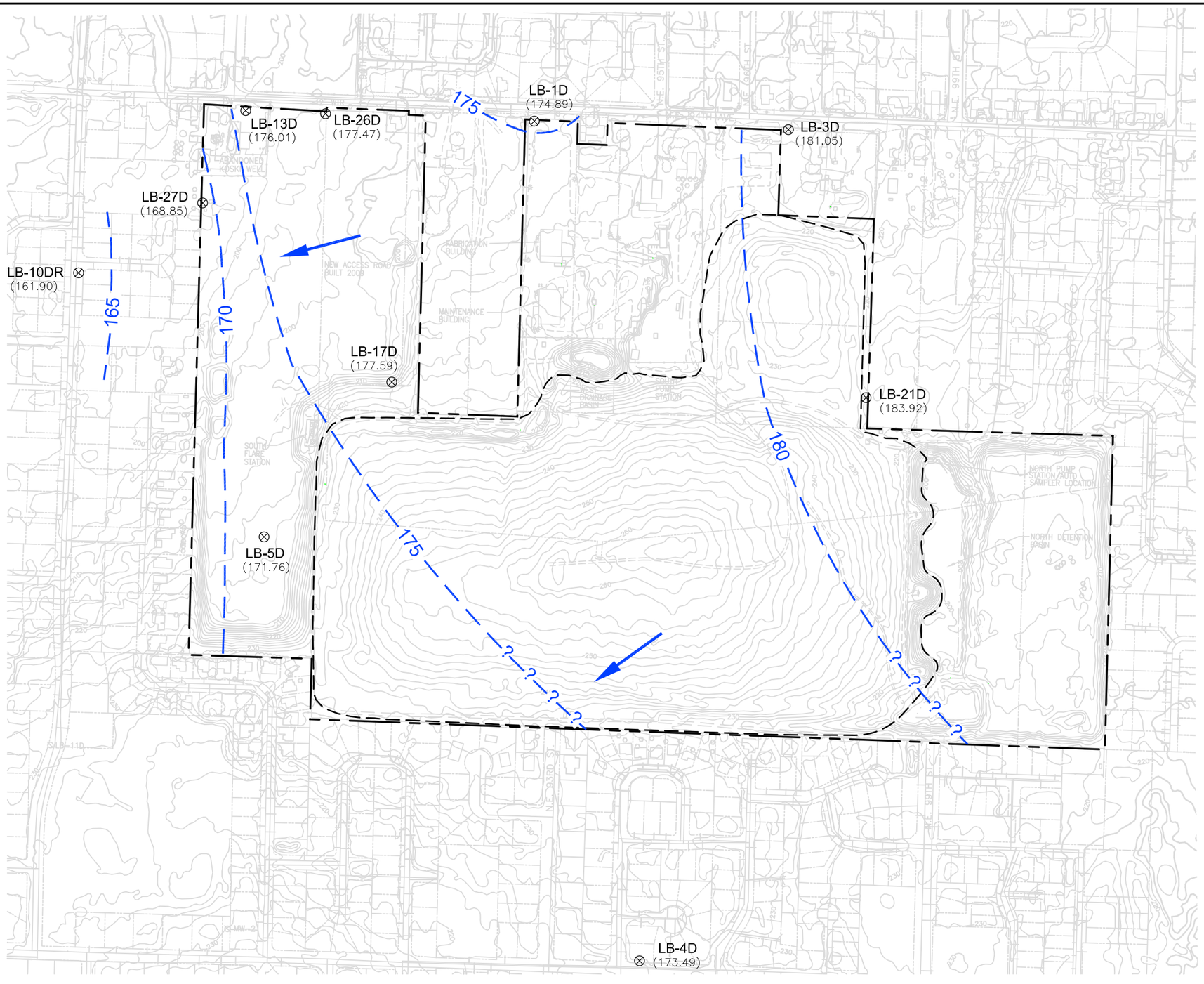
PROJECT NO. 04212030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE SEPTEMBER 10, 2012 LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE NOVEMBER 2012
SCALE AS SHOWN	CHK BY D.L.		FIGURE 2
CAD FILE FIGURE 2	APP BY L.C.		



LEGEND:

LB-5D ⊗	Monitoring Well Location, Troutdale Aquifer
— — — —	Property Boundary
— — — — —	Limit of Landfill Cover and Approximate Edge of Waste
— —180— —	Groundwater Potentiometric Surface Contour
(183.92)	Groundwater Elevation Measured on September 10, 2012
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

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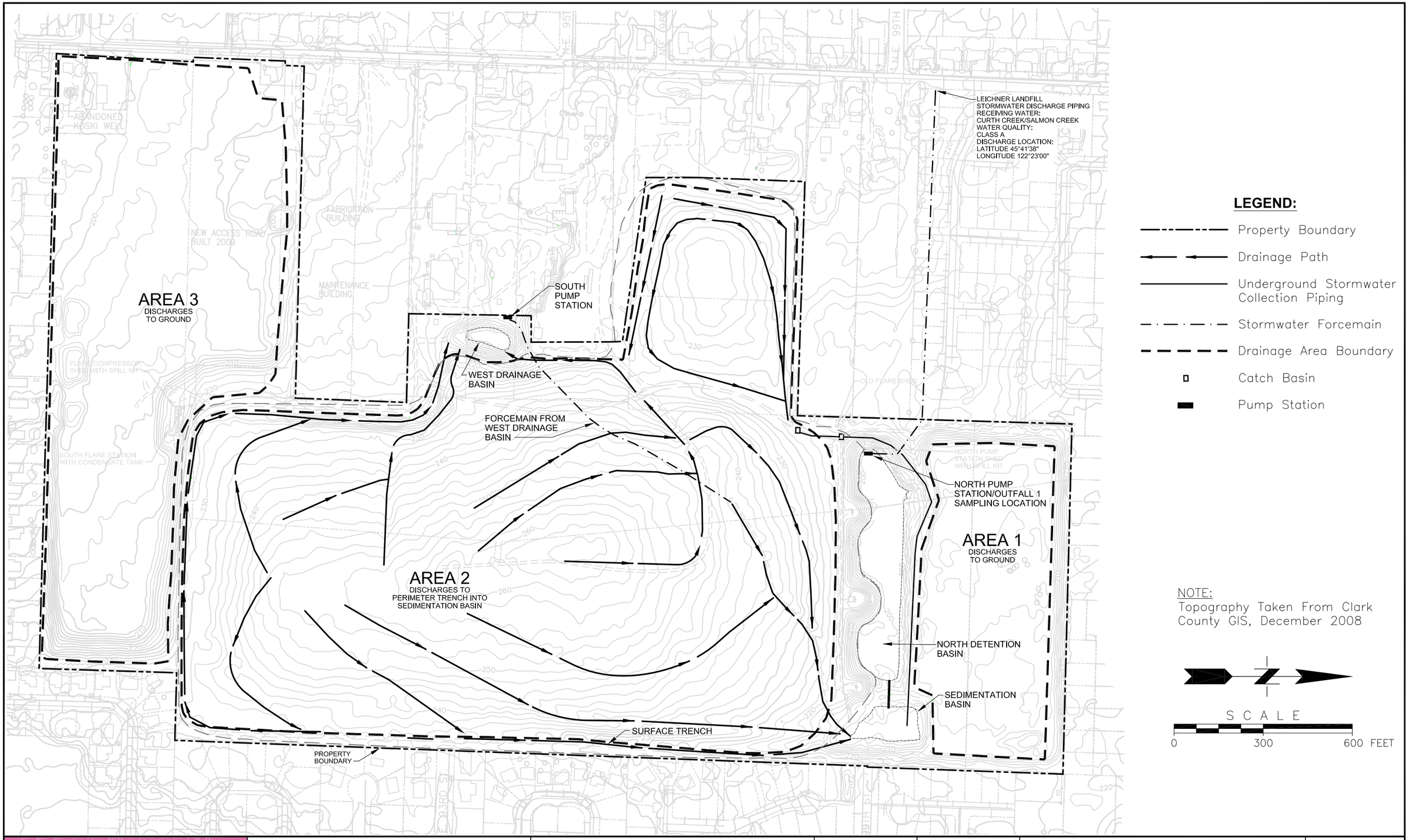
PROJECT NO. 04212030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER SEPTEMBER 10, 2012 LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE NOVEMBER 2012
SCALE AS SHOWN	CHK BY D.L.		FIGURE 3
CAD FILE FIGURE 3	APP BY L.C.		



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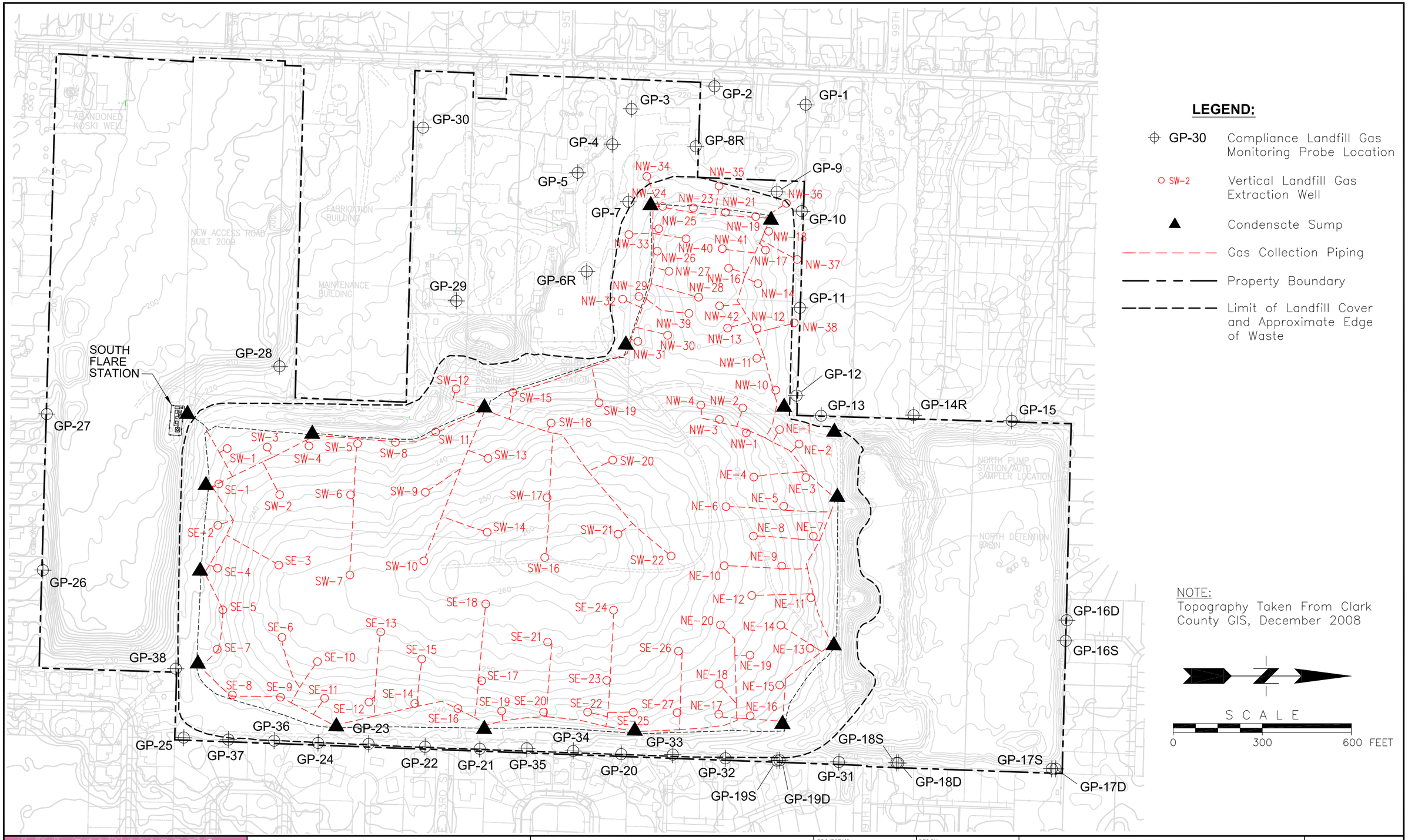
PROJECT NO. 04212030.06/.18	DES BY D.L.	SITE MAP AND STORMWATER SYSTEM	DATE NOVEMBER 2012
SCALE AS SHOWN	CHK BY J.D.	LEICHNER BROTHERS LANDFILL VANCOUVER COUNTY, WASHINGTON	FIGURE 4
CAD FILE FIGURE 4	APP BY L.C.		



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(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04212030.06/.18	DES BY D.L.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS	DATE NOVEMBER 2012
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 5
CAD FILE FIGURE 5	APP BY L.C.		

ATTACHMENT 1

Field Sampling Data Sheets
Third Quarter 2012

Leichner Brothers Landfill
Groundwater Elevation Survey

Project #: 0421203001.17

Sampler: TAndrews

Quarter: 1 2 (3) 4

Date: 9/10/14

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	1027	Dry @ 15.0'
MW-1 S	216.07	44.50	36.17	1023	
MW-1 E	216.38	29.05	Dry	1033	Dry @ 29.05'
MW-NE	219.8	50.34	13.72	1147	
LB-R2	219.09	77.36	43.70	1230	
LB-1S	210.11	45.00	31.71	1043	
LB-1D	209.71	137.45	34.85	1047	
LB-3S	219.19	52.50	37.22	1010	
LB-3D	219.27	117.28	38.24	1005	
LB-4SR	226.47	40.00	22.77	1521	
LB-4C	227.58	77.25	45.42	1501	
LB-4D	227.27	133.75	54.51	1511	
LB-5S	206.85	30.32	15.78	1218	
LB-5C	206.64	74.71	37.05	1216	
LB-5D	207.60	122.40	35.80	1221	
LB-6S	202.86	39.07	25.55	1300	
LB-9SR	218.44	49.60	33.88	1002	
LB-10SR	202.96	42.35	29.21	1425	
LB-10CR	202.97	71.95	28.12	1430	
LB-10DR	203.24	121.10	40.46	1438	
LB-13I	202.30	55.03	26.23	1340	
LB-13C	202.63	66.00	26.64	1344	
LB-13D	202.90	88.88	26.95	1349	
LB-17S	207.92	34.38	29.48	1250	
LB-17I	213.20	51.95	34.62	1235	
LB-17C	214.10	72.35	28.31	1270	
LB-17D	213.11	100.91	35.55	1245	
LB-20S	221.22	61.50	38.74	1038	
LB-21S	223.43	54.24	36.40	1130	
LB-21C	223.38	79.10	36.79	1126	
LB-21D	223.69	110.73	39.71	1133	
LB-22S	208.46	36.97	6.17	1154	
LB-23S	229.27	45.40	30.65	1208	
LB-24S	235.21	54.16	38.51	1212	
LB-26I	200.17	58.30	23.55	1320	
LB-26D	200.70	101.78	23.28	1323	
LB-27I	205.28	57.15	29.50	1400	
LB-27D	204.61	115.10	35.78	1404	

Notes: Sunny ~ 70°F
Decored probe between locations

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-15
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091212-08
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 65 .	°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)
9/12/12	11:00	45.00	.	31.78	.	.	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	9/12/12	11:40	A	3	(40 mL)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/12/12	11:40	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	9/12/12	11:40	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: 11:07/1121 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(1123)	0.00	6.16	116.0	191	15.39	31.78	6.45	clear/colorless
1	A(1126)	0.30	6.75	91.5	179	13.10	31.78	2.85	clear/colorless
2	A(1129)	0.60	6.74	92.9	178	13.04	31.78	2.86	clear/colorless
3	A(1132)	0.90	6.72	92.3	178	13.03	31.78	2.82	clear/colorless
4	A(1135)	1.20	6.71	92.1	177	13.01	31.78	2.90	clear/colorless
5	A(1138)	1.45	6.70	93.1	177	13.02	31.78	2.91	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 100mL/pulse (4pulses/min) 8/7/30ps.

SAMPLER: T Andrews (PRINTED NAME) (SIGNATURE)

@ 1104 Pump was not pumping. Pulled pump, did trouble shooting, and started pump.

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-091112-01
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?					**TEMPERATURE:**	(°F) 53.	°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)
9/11/12	:	30.32	.	15.79	.	.	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	09/11/12	10:20	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/11/12	10:30	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	9/11/12	10:20	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 [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: 10:00 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(1001)	0.00	5.32	161.1	193	13.93	15.79	9.21	clear/colorless
1	A(1004)	0.3	6.08	75.6	190	13.40	15.79	8.43	clear/colorless
2	A(1007)	0.6	6.13	69.3	189	13.36	15.79	7.99	clear/colorless
3	A(1010)	0.9	6.14	68.7	189	13.36	15.79	8.16	clear/colorless
4	A(1013)	1.2	6.11	69.6	189	13.35	15.79	8.17	clear/colorless
5	A(1016)	1.5	6.11	70.0	188	13.36	15.79	8.13	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 100mL/pulse (4pulses/min) 8/7 20psi

SAMPLER: T Andrews (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 65
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091212-06
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 60 .	°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)
9/12/12	:	39.67	.	25.55	.	.	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	9/12/12	10:20	A	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/12/12	10:20	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	9/12/12	10:20	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 [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: 10:01 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 (1003)	0.00	6.01	106.1	203	13.50	25.55	7.03	clear / colorless
1	A (1006)	0.25	6.30	79.9	207	12.81	25.55	4.58	clear / colorless
2	A (1009)	0.50	6.36	68.1	210	12.74	25.55	4.10	clear / colorless
3	A (1012)	0.75	6.39	60.6	214	12.68	25.55	4.08	clear / colorless
4	A (1015)	1.0	6.40	59.1	214	12.70	25.55	4.04	clear / colorless
5	A (1018)	1.25	6.40	58.6	214	12.66	25.55	4.02	clear / colorless
6			.			.	.	.	

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

Low Flow Purge Method - 100mL / pulse (4 pulses / min) 8/7 2lps

SAMPLER: T Andrews (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:** D OP1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091212-07

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					TEMPERATURE:	°F 60.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] 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	9/12/12	10:00	A	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/12/12	10:00	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	9/12/12	10:00	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-65

SAMPLER: T Andrews (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-091212-09
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:** (°F) 72 . °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)
9/12/12	:	42.35	.	29.21	.	.	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:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	9/12/12	12:25	A	3	(40 ml)	(HCl)	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/12/12	12:25	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	9/12/12	12:25	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: 12:04 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 (1205)	0.00	6.76	82.3	456	15.09	29.21	2.73	cloudy
1	A (1208)	0.25	6.78	59.3	487	14.46	29.21	0.79	clear/colorless
2	A (1211)	0.50	6.78	56.0	483	14.49	29.21	0.70	clear/colorless
3	A (1214)	0.75	6.78	55.0	482	14.45	29.21	0.67	clear/colorless
4	A (1217)	1.0	6.78	54.6	481	14.44	29.21	0.66	clear/colorless
5	A (1220)	1.25	6.78	54.3	480	14.46	29.21	0.59	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 75 mL/pulse (4 pulses/min) 8/7 30ps:

SAMPLER: T Andrews (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-13I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091112-03
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	**TEMPERATURE:**	68 .	°F / °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)
9/11/12	12:45	55.03	.	26.23	.	.	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	9/11/12	13:25	A	3	40 ml HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/11/12	13:25	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	9/11/12	13:25	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: 13:01 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 (1305)	0.00	6.92	64.7	278	15.08	26.23	4.48	clear/colorless
1	A (1308)	0.25	6.70	52.2	271	14.51	26.23	3.45	clear/colorless
2	A (1311)	0.50	6.51	48.5	266	14.14	26.23	2.67	clear/colorless
3	A (1314)	0.70	6.50	50.1	267	14.06	26.23	2.61	clear/colorless
4	A (1317)	0.90	6.48	49.8	266	14.01	26.23	2.42	clear/colorless
5	A (1320)	1.10	6.48	50.6	266	14.04	26.23	2.43	clear/colorless
6	A (1323)	1.30	6.47	50.4	266	14.05	26.23	2.40	clear/colorless

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

Low Flow Purge Method ~ 75mL/pulse (4 pulses/min) 8/7 30ps.

SAMPLER: T Andrews (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-091112-04
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 70.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
9/11/12	:	58.30	.	23.55	.	.	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:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	9/11/12	14:30	A	3	40 ml (HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/11/12	14:30	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	9/11/12	14:30	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 [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: 14:04 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 (1408)	0.00	6.63	49.3	253	14.28	23.55	7.02	clear colorless
1	A (1411)	0.20	6.37	47.2	253	13.35	23.55	5.41	clear colorless
2	A (1414)	0.40	6.34	47.1	252	13.30	23.55	5.43	clear colorless
3	A (1417)	0.60	6.30	46.8	253	13.18	23.55	5.19	clear colorless
4	A (1420)	0.80	6.29	46.7	253	13.07	23.55	5.06	clear colorless
5	A (1423)	1.0	6.30	46.0	253	13.08	23.55	5.05	clear colorless
6	A (1426)	1.2	6.31	45.9	253	13.07	23.55	5.07	clear colorless

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

Low Flow Purge Method ~ 75mL/pulse (4 pulses/min) 8/7 35psi

SAMPLER: T Andrews (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:** EB1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091112-05

DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 70 .	° 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)
/ /	:	.	.	.	.	.	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 = Transfer

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	9/11/12	15:00	G	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/11/12	15:00	G	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	9/11/12	15:00	G	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) (Mg) (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 Near LB-26I using lab DI pump through pump, bladder, and Filter for D Metals

SAMPLER: T Andrews (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-27I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-091112-03
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY		RAIN		?			**TEMPERATURE:**	(F) 57.	°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)
9/11/12	11:00	57.15	.	29.50	.	.	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:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	9/11/12	11:30	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	9/11/12	11:30	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	9/11/12	11:30	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: 11:02

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	6.61	95.7	621	14.84	29.50	9.13	clear/colorless
1	A (1110)	0.3	6.70	50.4	702	14.14	29.50	1.62	clear/colorless
2	A (1113)	0.6	6.73	46.3	704	14.02	29.50	1.49	clear/colorless
3	A (1116)	0.8	6.73	43.6	705	13.99	29.50	1.20	clear/colorless
4	A (1119)	1.0	6.72	42.1	705	14.02	29.50	1.00	clear/colorless
5	A (1122)	1.2	6.72	39.3	706	14.03	29.50	0.98	clear/colorless
6	A (1125)	1.4	6.72	38.1	706	14.04	29.50	01.02	clear/colorless

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

Low Flow Purge Method ~ 50mL/pulse (4pulses/min) 8/7 30ps:

SAMPLER: T Andrews (PRINTED NAME) (SIGNATURE)

ATTACHMENT 2

Groundwater Laboratory Analytical Reports
Third Quarter 2012

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: 250-6614-1
Client Project/Site: Leichner Brothers Landfill

For:
SCS Engineers
14945 SW Sequoia Parkway
Suite 180
Portland, Oregon 97224

Attn: Mr. David Lamadrid

Authorized for release by:
9/28/2012 4:04:59 PM
Peggy Siegfried
Project Manager I
peggy.siegfried@testamericainc.com

Designee for

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

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

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

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

Table of Contents

Sample Summary

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-6614-1	LB-091112-01	Water	09/11/12 10:20	09/11/12 16:10
250-6614-2	LB-091112-02	Water	09/11/12 11:30	09/11/12 16:10
250-6614-3	LB-091112-03	Water	09/11/12 13:25	09/11/12 16:10
250-6614-4	LB-091112-04	Water	09/11/12 14:30	09/11/12 16:10
250-6614-5	LB-091112-05	Water	09/11/12 15:00	09/11/12 16:10

Job ID: 250-6614-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-6614-1

Comments
No additional comments.

Receipt
The samples were received on 9/11/2012 4:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8º C.

GC/MS VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Field Service / Mobile Lab
No analytical or quality issues were noted.

General Chemistry
Method(s) 300.0: The following sample required a dilution which was performed outside of the analytical holding time. The original sample ran at no dilution was within hold time: LB-091112-02 (250-6614-2).

No other analytical or quality issues were noted.

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

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

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

Client Sample ID: LB-091112-01
Date Collected: 09/11/12 10:20
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/20/12 04:04	1
Benzene	ND		0.10		ug/L			09/20/12 04:04	1
Bromobenzene	ND		0.10		ug/L			09/20/12 04:04	1
Bromoform	ND		0.10		ug/L			09/20/12 04:04	1
Bromomethane	ND		0.10		ug/L			09/20/12 04:04	1
2-Butanone	ND		2.0		ug/L			09/20/12 04:04	1
Carbon disulfide	ND		0.10		ug/L			09/20/12 04:04	1
Carbon tetrachloride	ND		0.10		ug/L			09/20/12 04:04	1
Chlorobenzene	ND		0.10		ug/L			09/20/12 04:04	1
Chlorobromomethane	ND		0.10		ug/L			09/20/12 04:04	1
Chlorodibromomethane	ND		0.10		ug/L			09/20/12 04:04	1
Chloroethane	ND		0.25		ug/L			09/20/12 04:04	1
Chloroform	ND		0.10		ug/L			09/20/12 04:04	1
Chloromethane	ND		0.10		ug/L			09/20/12 04:04	1
2-Chlorotoluene	ND		0.10		ug/L			09/20/12 04:04	1
4-Chlorotoluene	ND		0.20		ug/L			09/20/12 04:04	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:04	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:04	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/20/12 04:04	1
1,2-Dibromoethane	ND		0.10		ug/L			09/20/12 04:04	1
Dibromomethane	ND		0.10		ug/L			09/20/12 04:04	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:04	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:04	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:04	1
Dichlorobromomethane	ND		0.10		ug/L			09/20/12 04:04	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/20/12 04:04	1
1,1-Dichloroethane	ND		0.10		ug/L			09/20/12 04:04	1
1,2-Dichloroethane	ND		0.10		ug/L			09/20/12 04:04	1
1,1-Dichloroethene	ND		0.10		ug/L			09/20/12 04:04	1
1,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:04	1
1,3-Dichloropropane	ND		0.10		ug/L			09/20/12 04:04	1
2,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:04	1
1,1-Dichloropropene	ND		0.10		ug/L			09/20/12 04:04	1
Ethylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
Hexachlorobutadiene	ND		0.20		ug/L			09/20/12 04:04	1
2-Hexanone	ND		1.0		ug/L			09/20/12 04:04	1
Isopropylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
4-Isopropyltoluene	ND		0.20		ug/L			09/20/12 04:04	1
Methylene Chloride	ND		0.50		ug/L			09/20/12 04:04	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/20/12 04:04	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/20/12 04:04	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/20/12 04:04	1
Naphthalene	ND		0.40		ug/L			09/20/12 04:04	1
n-Butylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
N-Propylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
o-Xylene	ND		0.10		ug/L			09/20/12 04:04	1
sec-Butylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
Styrene	ND		0.10		ug/L			09/20/12 04:04	1
tert-Butylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:04	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:04	1

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

Client Sample ID: LB-091112-01
Date Collected: 09/11/12 10:20
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/20/12 04:04	1
Toluene	ND		0.10		ug/L			09/20/12 04:04	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:04	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:04	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/20/12 04:04	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/20/12 04:04	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/20/12 04:04	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/20/12 04:04	1
Trichloroethene	ND		0.10		ug/L			09/20/12 04:04	1
Trichlorofluoromethane	ND		0.10		ug/L			09/20/12 04:04	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/20/12 04:04	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:04	1
Vinyl chloride	ND		0.020		ug/L			09/20/12 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/20/12 04:04*	*1*
Ethylbenzene-d10	*100*		*75 - 125*		*09/20/12 04:04*	*1*
Fluorobenzene (Surr)	*99*		*70 - 130*		*09/20/12 04:04*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/20/12 04:04*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 125*		*09/20/12 04:04*	*1*

Client Sample ID: LB-091112-02
Date Collected: 09/11/12 11:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/20/12 04:28	1
Benzene	ND		0.10		ug/L			09/20/12 04:28	1
Bromobenzene	ND		0.10		ug/L			09/20/12 04:28	1
Bromoform	ND		0.10		ug/L			09/20/12 04:28	1
Bromomethane	ND		0.10		ug/L			09/20/12 04:28	1
2-Butanone	ND		2.0		ug/L			09/20/12 04:28	1
Carbon disulfide	ND		0.10		ug/L			09/20/12 04:28	1
Carbon tetrachloride	ND		0.10		ug/L			09/20/12 04:28	1
Chlorobenzene	ND		0.10		ug/L			09/20/12 04:28	1
Chlorobromomethane	ND		0.10		ug/L			09/20/12 04:28	1
Chlorodibromomethane	ND		0.10		ug/L			09/20/12 04:28	1
Chloroethane	ND		0.25		ug/L			09/20/12 04:28	1
Chloroform	ND		0.10		ug/L			09/20/12 04:28	1
Chloromethane	ND		0.10		ug/L			09/20/12 04:28	1
2-Chlorotoluene	ND		0.10		ug/L			09/20/12 04:28	1
4-Chlorotoluene	ND		0.20		ug/L			09/20/12 04:28	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:28	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:28	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/20/12 04:28	1
1,2-Dibromoethane	ND		0.10		ug/L			09/20/12 04:28	1
Dibromomethane	ND		0.10		ug/L			09/20/12 04:28	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:28	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:28	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:28	1
Dichlorobromomethane	ND		0.10		ug/L			09/20/12 04:28	1

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

Client Sample ID: LB-091112-02
Date Collected: 09/11/12 11:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/20/12 04:28	1
1,1-Dichloroethane	ND		0.10		ug/L			09/20/12 04:28	1
1,2-Dichloroethane	ND		0.10		ug/L			09/20/12 04:28	1
1,1-Dichloroethene	ND		0.10		ug/L			09/20/12 04:28	1
1,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:28	1
1,3-Dichloropropane	ND		0.10		ug/L			09/20/12 04:28	1
2,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:28	1
1,1-Dichloropropene	ND		0.10		ug/L			09/20/12 04:28	1
Ethylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
Hexachlorobutadiene	ND		0.20		ug/L			09/20/12 04:28	1
2-Hexanone	ND		1.0		ug/L			09/20/12 04:28	1
Isopropylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
4-Isopropyltoluene	ND		0.20		ug/L			09/20/12 04:28	1
Methylene Chloride	ND		0.50		ug/L			09/20/12 04:28	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/20/12 04:28	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/20/12 04:28	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/20/12 04:28	1
Naphthalene	ND		0.40		ug/L			09/20/12 04:28	1
n-Butylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
N-Propylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
o-Xylene	ND		0.10		ug/L			09/20/12 04:28	1
sec-Butylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
Styrene	ND		0.10		ug/L			09/20/12 04:28	1
tert-Butylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:28	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:28	1
Tetrachloroethene	ND		0.10		ug/L			09/20/12 04:28	1
Toluene	ND		0.10		ug/L			09/20/12 04:28	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:28	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:28	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/20/12 04:28	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/20/12 04:28	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/20/12 04:28	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/20/12 04:28	1
Trichloroethene	ND		0.10		ug/L			09/20/12 04:28	1
Trichlorofluoromethane	ND		0.10		ug/L			09/20/12 04:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/20/12 04:28	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:28	1
Vinyl chloride	ND		0.020		ug/L			09/20/12 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/20/12 04:28*	*1*
Ethylbenzene-d10	*99*		*75 - 125*		*09/20/12 04:28*	*1*
Fluorobenzene (Surr)	*99*		*70 - 130*		*09/20/12 04:28*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/20/12 04:28*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 125*		*09/20/12 04:28*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

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

Client Sample ID: LB-091112-03
Date Collected: 09/11/12 13:25
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/20/12 04:51	1
Benzene	ND		0.10		ug/L			09/20/12 04:51	1
Bromobenzene	ND		0.10		ug/L			09/20/12 04:51	1
Bromoform	ND		0.10		ug/L			09/20/12 04:51	1
Bromomethane	ND		0.10		ug/L			09/20/12 04:51	1
2-Butanone	ND		2.0		ug/L			09/20/12 04:51	1
Carbon disulfide	ND		0.10		ug/L			09/20/12 04:51	1
Carbon tetrachloride	ND		0.10		ug/L			09/20/12 04:51	1
Chlorobenzene	ND		0.10		ug/L			09/20/12 04:51	1
Chlorobromomethane	ND		0.10		ug/L			09/20/12 04:51	1
Chlorodibromomethane	ND		0.10		ug/L			09/20/12 04:51	1
Chloroethane	ND		0.25		ug/L			09/20/12 04:51	1
Chloroform	ND		0.10		ug/L			09/20/12 04:51	1
Chloromethane	ND		0.10		ug/L			09/20/12 04:51	1
2-Chlorotoluene	ND		0.10		ug/L			09/20/12 04:51	1
4-Chlorotoluene	ND		0.20		ug/L			09/20/12 04:51	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:51	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:51	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/20/12 04:51	1
1,2-Dibromoethane	ND		0.10		ug/L			09/20/12 04:51	1
Dibromomethane	ND		0.10		ug/L			09/20/12 04:51	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:51	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:51	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/20/12 04:51	1
Dichlorobromomethane	ND		0.10		ug/L			09/20/12 04:51	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/20/12 04:51	1
1,1-Dichloroethane	ND		0.10		ug/L			09/20/12 04:51	1
1,2-Dichloroethane	ND		0.10		ug/L			09/20/12 04:51	1
1,1-Dichloroethene	ND		0.10		ug/L			09/20/12 04:51	1
1,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:51	1
1,3-Dichloropropane	ND		0.10		ug/L			09/20/12 04:51	1
2,2-Dichloropropane	ND		0.10		ug/L			09/20/12 04:51	1
1,1-Dichloropropene	ND		0.10		ug/L			09/20/12 04:51	1
Ethylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
Hexachlorobutadiene	ND		0.20		ug/L			09/20/12 04:51	1
2-Hexanone	ND		1.0		ug/L			09/20/12 04:51	1
Isopropylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
4-Isopropyltoluene	ND		0.20		ug/L			09/20/12 04:51	1
Methylene Chloride	ND		0.50		ug/L			09/20/12 04:51	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/20/12 04:51	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/20/12 04:51	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/20/12 04:51	1
Naphthalene	ND		0.40		ug/L			09/20/12 04:51	1
n-Butylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
N-Propylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
o-Xylene	ND		0.10		ug/L			09/20/12 04:51	1
sec-Butylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
Styrene	ND		0.10		ug/L			09/20/12 04:51	1
tert-Butylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:51	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 04:51	1

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

Client Sample ID: LB-091112-03
Date Collected: 09/11/12 13:25
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/20/12 04:51	1
Toluene	ND		0.10		ug/L			09/20/12 04:51	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 04:51	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 04:51	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/20/12 04:51	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/20/12 04:51	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/20/12 04:51	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/20/12 04:51	1
Trichloroethene	ND		0.10		ug/L			09/20/12 04:51	1
Trichlorofluoromethane	ND		0.10		ug/L			09/20/12 04:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/20/12 04:51	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/20/12 04:51	1
Vinyl chloride	ND		0.020		ug/L			09/20/12 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/20/12 04:51*	*1*
Ethylbenzene-d10	*96*		*75 - 125*		*09/20/12 04:51*	*1*
Fluorobenzene (Surr)	*100*		*70 - 130*		*09/20/12 04:51*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/20/12 04:51*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 125*		*09/20/12 04:51*	*1*

Client Sample ID: LB-091112-04
Date Collected: 09/11/12 14:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/20/12 05:14	1
Benzene	ND		0.10		ug/L			09/20/12 05:14	1
Bromobenzene	ND		0.10		ug/L			09/20/12 05:14	1
Bromoform	ND		0.10		ug/L			09/20/12 05:14	1
Bromomethane	ND		0.10		ug/L			09/20/12 05:14	1
2-Butanone	ND		2.0		ug/L			09/20/12 05:14	1
Carbon disulfide	**0.23**		0.10		ug/L			09/20/12 05:14	1
Carbon tetrachloride	ND		0.10		ug/L			09/20/12 05:14	1
Chlorobenzene	ND		0.10		ug/L			09/20/12 05:14	1
Chlorobromomethane	ND		0.10		ug/L			09/20/12 05:14	1
Chlorodibromomethane	ND		0.10		ug/L			09/20/12 05:14	1
Chloroethane	ND		0.25		ug/L			09/20/12 05:14	1
Chloroform	ND		0.10		ug/L			09/20/12 05:14	1
Chloromethane	ND		0.10		ug/L			09/20/12 05:14	1
2-Chlorotoluene	ND		0.10		ug/L			09/20/12 05:14	1
4-Chlorotoluene	ND		0.20		ug/L			09/20/12 05:14	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 05:14	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 05:14	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/20/12 05:14	1
1,2-Dibromoethane	ND		0.10		ug/L			09/20/12 05:14	1
Dibromomethane	ND		0.10		ug/L			09/20/12 05:14	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:14	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:14	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:14	1
Dichlorobromomethane	ND		0.10		ug/L			09/20/12 05:14	1

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

Client Sample ID: LB-091112-04
Date Collected: 09/11/12 14:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/20/12 05:14	1
1,1-Dichloroethane	ND		0.10		ug/L			09/20/12 05:14	1
1,2-Dichloroethane	ND		0.10		ug/L			09/20/12 05:14	1
1,1-Dichloroethene	ND		0.10		ug/L			09/20/12 05:14	1
1,2-Dichloropropane	ND		0.10		ug/L			09/20/12 05:14	1
1,3-Dichloropropane	ND		0.10		ug/L			09/20/12 05:14	1
2,2-Dichloropropane	ND		0.10		ug/L			09/20/12 05:14	1
1,1-Dichloropropene	ND		0.10		ug/L			09/20/12 05:14	1
Ethylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
Hexachlorobutadiene	ND		0.20		ug/L			09/20/12 05:14	1
2-Hexanone	ND		1.0		ug/L			09/20/12 05:14	1
Isopropylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
4-Isopropyltoluene	ND		0.20		ug/L			09/20/12 05:14	1
Methylene Chloride	ND		0.50		ug/L			09/20/12 05:14	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/20/12 05:14	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/20/12 05:14	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/20/12 05:14	1
Naphthalene	ND		0.40		ug/L			09/20/12 05:14	1
n-Butylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
N-Propylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
o-Xylene	ND		0.10		ug/L			09/20/12 05:14	1
sec-Butylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
Styrene	ND		0.10		ug/L			09/20/12 05:14	1
tert-Butylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 05:14	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 05:14	1
Tetrachloroethene	ND		0.10		ug/L			09/20/12 05:14	1
Toluene	ND		0.10		ug/L			09/20/12 05:14	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 05:14	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 05:14	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/20/12 05:14	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/20/12 05:14	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/20/12 05:14	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/20/12 05:14	1
Trichloroethene	ND		0.10		ug/L			09/20/12 05:14	1
Trichlorofluoromethane	ND		0.10		ug/L			09/20/12 05:14	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/20/12 05:14	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/20/12 05:14	1
Vinyl chloride	ND		0.020		ug/L			09/20/12 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*09/20/12 05:14*	*1*
Ethylbenzene-d10	*97*		*75 - 125*		*09/20/12 05:14*	*1*
Fluorobenzene (Surr)	*100*		*70 - 130*		*09/20/12 05:14*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/20/12 05:14*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 125*		*09/20/12 05:14*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

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

Client Sample ID: LB-091112-05
Date Collected: 09/11/12 15:00
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.6**		2.0		ug/L			09/20/12 05:38	1
Benzene	ND		0.10		ug/L			09/20/12 05:38	1
Bromobenzene	ND		0.10		ug/L			09/20/12 05:38	1
Bromoform	ND		0.10		ug/L			09/20/12 05:38	1
Bromomethane	ND		0.10		ug/L			09/20/12 05:38	1
2-Butanone	ND		2.0		ug/L			09/20/12 05:38	1
Carbon disulfide	ND		0.10		ug/L			09/20/12 05:38	1
Carbon tetrachloride	ND		0.10		ug/L			09/20/12 05:38	1
Chlorobenzene	ND		0.10		ug/L			09/20/12 05:38	1
Chlorobromomethane	ND		0.10		ug/L			09/20/12 05:38	1
Chlorodibromomethane	ND		0.10		ug/L			09/20/12 05:38	1
Chloroethane	ND		0.25		ug/L			09/20/12 05:38	1
Chloroform	ND		0.10		ug/L			09/20/12 05:38	1
Chloromethane	ND		0.10		ug/L			09/20/12 05:38	1
2-Chlorotoluene	ND		0.10		ug/L			09/20/12 05:38	1
4-Chlorotoluene	ND		0.20		ug/L			09/20/12 05:38	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 05:38	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 05:38	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/20/12 05:38	1
1,2-Dibromoethane	ND		0.10		ug/L			09/20/12 05:38	1
Dibromomethane	ND		0.10		ug/L			09/20/12 05:38	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:38	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:38	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/20/12 05:38	1
Dichlorobromomethane	ND		0.10		ug/L			09/20/12 05:38	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/20/12 05:38	1
1,1-Dichloroethane	ND		0.10		ug/L			09/20/12 05:38	1
1,2-Dichloroethane	ND		0.10		ug/L			09/20/12 05:38	1
1,1-Dichloroethene	ND		0.10		ug/L			09/20/12 05:38	1
1,2-Dichloropropane	ND		0.10		ug/L			09/20/12 05:38	1
1,3-Dichloropropane	ND		0.10		ug/L			09/20/12 05:38	1
2,2-Dichloropropane	ND		0.10		ug/L			09/20/12 05:38	1
1,1-Dichloropropene	ND		0.10		ug/L			09/20/12 05:38	1
Ethylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
Hexachlorobutadiene	ND		0.20		ug/L			09/20/12 05:38	1
2-Hexanone	ND		1.0		ug/L			09/20/12 05:38	1
Isopropylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
4-Isopropyltoluene	ND		0.20		ug/L			09/20/12 05:38	1
Methylene Chloride	ND		0.50		ug/L			09/20/12 05:38	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/20/12 05:38	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/20/12 05:38	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/20/12 05:38	1
Naphthalene	ND		0.40		ug/L			09/20/12 05:38	1
n-Butylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
N-Propylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
o-Xylene	ND		0.10		ug/L			09/20/12 05:38	1
sec-Butylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
Styrene	ND		0.10		ug/L			09/20/12 05:38	1
tert-Butylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 05:38	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/20/12 05:38	1

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

Client Sample ID: LB-091112-05
Date Collected: 09/11/12 15:00
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/20/12 05:38	1
Toluene	ND		0.10		ug/L			09/20/12 05:38	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/20/12 05:38	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/20/12 05:38	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/20/12 05:38	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/20/12 05:38	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/20/12 05:38	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/20/12 05:38	1
Trichloroethene	ND		0.10		ug/L			09/20/12 05:38	1
Trichlorofluoromethane	ND		0.10		ug/L			09/20/12 05:38	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/20/12 05:38	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/20/12 05:38	1
Vinyl chloride	ND		0.020		ug/L			09/20/12 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/20/12 05:38*	*1*
Ethylbenzene-d10	*99*		*75 - 125*		*09/20/12 05:38*	*1*
Fluorobenzene (Surr)	*97*		*70 - 130*		*09/20/12 05:38*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/20/12 05:38*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 125*		*09/20/12 05:38*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: LB-091112-01
Date Collected: 09/11/12 10:20
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 17:52	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 17:52	1

Client Sample ID: LB-091112-02
Date Collected: 09/11/12 11:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.032**		0.025		mg/L		09/13/12 14:34	09/13/12 18:09	1
Manganese	**0.54**		0.0020		mg/L		09/13/12 14:34	09/13/12 18:09	1

Client Sample ID: LB-091112-03
Date Collected: 09/11/12 13:25
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:15	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 18:15	1

Client Sample ID: LB-091112-04
Date Collected: 09/11/12 14:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:20	1
Manganese	**0.0020**		0.0020		mg/L		09/13/12 14:34	09/13/12 18:20	1

Client Sample ID: LB-091112-05
Date Collected: 09/11/12 15:00
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:23	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 18:23	1

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

General Chemistry

Client Sample ID: LB-091112-01
Date Collected: 09/11/12 10:20
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		10		mg/L			09/12/12 18:27	1
Chloride	**4.2**		0.50		mg/L			09/12/12 18:22	1
Nitrogen, Nitrate	**4.7**		0.10		mg/L			09/12/12 18:22	1

Client Sample ID: LB-091112-02
Date Collected: 09/11/12 11:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**420**		10		mg/L			09/12/12 18:27	1
Chloride	**32**		1.0		mg/L			09/13/12 17:35	2
Nitrogen, Nitrate	ND	H	0.20		mg/L			09/13/12 17:35	2

Client Sample ID: LB-091112-03
Date Collected: 09/11/12 13:25
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**220**		10		mg/L			09/12/12 18:27	1
Chloride	**12**		0.50		mg/L			09/12/12 18:53	1
Nitrogen, Nitrate	**4.4**		0.10		mg/L			09/12/12 18:53	1

Client Sample ID: LB-091112-04
Date Collected: 09/11/12 14:30
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**200**		10		mg/L			09/12/12 18:27	1
Chloride	**5.8**		0.50		mg/L			09/12/12 19:09	1
Nitrogen, Nitrate	**5.2**		0.10		mg/L			09/12/12 19:09	1

Client Sample ID: LB-091112-05
Date Collected: 09/11/12 15:00
Date Received: 09/11/12 16:10

Lab Sample ID: 250-6614-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			09/12/12 18:27	1
Chloride	ND		0.50		mg/L			09/12/12 19:25	1
Nitrogen, Nitrate	ND		0.10		mg/L			09/12/12 19:25	1

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

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

Lab Sample ID: MB 580-120464/6
Matrix: Water
Analysis Batch: 120464

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/19/12 21:43	1
Benzene	ND		0.10		ug/L			09/19/12 21:43	1
Bromobenzene	ND		0.10		ug/L			09/19/12 21:43	1
Bromoform	ND		0.10		ug/L			09/19/12 21:43	1
Bromomethane	ND		0.10		ug/L			09/19/12 21:43	1
2-Butanone	ND		2.0		ug/L			09/19/12 21:43	1
Carbon disulfide	ND		0.10		ug/L			09/19/12 21:43	1
Carbon tetrachloride	ND		0.10		ug/L			09/19/12 21:43	1
Chlorobenzene	ND		0.10		ug/L			09/19/12 21:43	1
Chlorobromomethane	ND		0.10		ug/L			09/19/12 21:43	1
Chlorodibromomethane	ND		0.10		ug/L			09/19/12 21:43	1
Chloroethane	ND		0.25		ug/L			09/19/12 21:43	1
Chloroform	ND		0.10		ug/L			09/19/12 21:43	1
Chloromethane	ND		0.10		ug/L			09/19/12 21:43	1
2-Chlorotoluene	ND		0.10		ug/L			09/19/12 21:43	1
4-Chlorotoluene	ND		0.20		ug/L			09/19/12 21:43	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/19/12 21:43	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/19/12 21:43	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/19/12 21:43	1
1,2-Dibromoethane	ND		0.10		ug/L			09/19/12 21:43	1
Dibromomethane	ND		0.10		ug/L			09/19/12 21:43	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/19/12 21:43	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/19/12 21:43	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/19/12 21:43	1
Dichlorobromomethane	ND		0.10		ug/L			09/19/12 21:43	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/19/12 21:43	1
1,1-Dichloroethane	ND		0.10		ug/L			09/19/12 21:43	1
1,2-Dichloroethane	ND		0.10		ug/L			09/19/12 21:43	1
1,1-Dichloroethene	ND		0.10		ug/L			09/19/12 21:43	1
1,2-Dichloropropane	ND		0.10		ug/L			09/19/12 21:43	1
1,3-Dichloropropane	ND		0.10		ug/L			09/19/12 21:43	1
2,2-Dichloropropane	ND		0.10		ug/L			09/19/12 21:43	1
1,1-Dichloropropene	ND		0.10		ug/L			09/19/12 21:43	1
Ethylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
Hexachlorobutadiene	ND		0.20		ug/L			09/19/12 21:43	1
2-Hexanone	ND		1.0		ug/L			09/19/12 21:43	1
Isopropylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
4-Isopropyltoluene	ND		0.20		ug/L			09/19/12 21:43	1
Methylene Chloride	ND		0.50		ug/L			09/19/12 21:43	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/19/12 21:43	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/19/12 21:43	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/19/12 21:43	1
Naphthalene	ND		0.40		ug/L			09/19/12 21:43	1
n-Butylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
N-Propylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
o-Xylene	ND		0.10		ug/L			09/19/12 21:43	1
sec-Butylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
Styrene	ND		0.10		ug/L			09/19/12 21:43	1
tert-Butylbenzene	ND		0.10		ug/L			09/19/12 21:43	1

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

Lab Sample ID: MB 580-120464/6
Matrix: Water
Analysis Batch: 120464

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/19/12 21:43	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/19/12 21:43	1
Tetrachloroethene	ND		0.10		ug/L			09/19/12 21:43	1
Toluene	ND		0.10		ug/L			09/19/12 21:43	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/19/12 21:43	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/19/12 21:43	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/19/12 21:43	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/19/12 21:43	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/19/12 21:43	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/19/12 21:43	1
Trichloroethene	ND		0.10		ug/L			09/19/12 21:43	1
Trichlorofluoromethane	ND		0.10		ug/L			09/19/12 21:43	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/19/12 21:43	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/19/12 21:43	1
Vinyl chloride	ND		0.020		ug/L			09/19/12 21:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*09/19/12 21:43*	*1*
Ethylbenzene-d10	*103*		*75 - 125*		*09/19/12 21:43*	*1*
Fluorobenzene (Surr)	*99*		*70 - 130*		*09/19/12 21:43*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/19/12 21:43*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 125*		*09/19/12 21:43*	*1*

Lab Sample ID: LCS 580-120464/7
Matrix: Water
Analysis Batch: 120464

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	21.4		ug/L		86	30 - 200
Benzene	5.00	5.19		ug/L		104	80 - 120
Bromobenzene	5.01	4.98		ug/L		100	80 - 130
Bromoform	5.00	3.99		ug/L		80	65 - 130
Bromomethane	4.99	4.47		ug/L		90	70 - 135
2-Butanone	25.0	25.9		ug/L		104	20 - 200
Carbon disulfide	5.01	4.73		ug/L		94	65 - 160
Carbon tetrachloride	5.02	4.63		ug/L		92	75 - 140
Chlorobenzene	5.00	5.38		ug/L		108	80 - 120
Chlorobromomethane	5.01	5.14		ug/L		103	80 - 125
Chlorodibromomethane	5.06	4.44		ug/L		88	70 - 120
Chloroethane	5.00	4.60		ug/L		92	75 - 140
Chloroform	5.00	5.32		ug/L		106	80 - 130
Chloromethane	5.00	5.06		ug/L		101	50 - 140
2-Chlorotoluene	5.01	5.53		ug/L		111	75 - 130
4-Chlorotoluene	5.01	5.39		ug/L		108	75 - 130
cis-1,2-Dichloroethene	5.01	5.30		ug/L		106	80 - 130
cis-1,3-Dichloropropene	4.94	4.78		ug/L		97	70 - 120
1,2-Dibromo-3-Chloropropane	5.01	4.59		ug/L		92	55 - 120
1,2-Dibromoethane	5.01	5.24		ug/L		104	70 - 130

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

Lab Sample ID: LCS 580-120464/7
Matrix: Water
Analysis Batch: 120464

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	5.02	5.47		ug/L		109	80 - 130
1,2-Dichlorobenzene	5.00	5.29		ug/L		106	80 - 130
1,3-Dichlorobenzene	5.01	5.50		ug/L		110	80 - 120
1,4-Dichlorobenzene	5.01	5.21		ug/L		104	80 - 120
Dichlorobromomethane	5.06	5.62		ug/L		111	80 - 125
Dichlorodifluoromethane	5.00	5.73		ug/L		115	30 - 180
1,1-Dichloroethane	5.00	5.63		ug/L		113	75 - 135
1,2-Dichloroethane	5.01	5.11		ug/L		102	80 - 140
1,1-Dichloroethene	5.01	5.44		ug/L		109	70 - 150
1,2-Dichloropropane	5.00	5.00		ug/L		100	80 - 120
1,3-Dichloropropane	5.01	5.20		ug/L		104	80 - 130
2,2-Dichloropropane	4.99	5.50		ug/L		110	60 - 150
1,1-Dichloropropene	5.01	5.73		ug/L		114	80 - 130
Ethylbenzene	5.00	5.10		ug/L		102	80 - 125
Hexachlorobutadiene	5.01	5.33		ug/L		106	75 - 135
2-Hexanone	25.0	27.1		ug/L		108	52 - 160
Isopropylbenzene	5.02	5.76		ug/L		115	75 - 120
4-Isopropyltoluene	5.00	5.02		ug/L		100	80 - 120
Methylene Chloride	5.00	5.57		ug/L		111	60 - 145
4-Methyl-2-pentanone	25.0	25.5		ug/L		102	55 - 135
Methyl tert-butyl ether	5.00	4.96		ug/L		99	75 - 120
m-Xylene & p-Xylene	10.0	11.0		ug/L		109	80 - 130
Naphthalene	5.00	4.43		ug/L		88	45 - 130
n-Butylbenzene	5.00	5.79		ug/L		116	75 - 125
N-Propylbenzene	5.00	5.71		ug/L		114	80 - 120
o-Xylene	5.02	5.43		ug/L		108	80 - 120
sec-Butylbenzene	5.00	5.19		ug/L		104	80 - 125
Styrene	5.01	5.50		ug/L		110	75 - 130
tert-Butylbenzene	5.01	5.45		ug/L		109	80 - 130
1,1,1,2-Tetrachloroethane	5.01	4.64		ug/L		93	75 - 125
1,1,2,2-Tetrachloroethane	4.99	5.19		ug/L		104	75 - 125
Tetrachloroethene	5.00	4.60		ug/L		92	40 - 180
Toluene	5.01	5.08		ug/L		101	80 - 120
trans-1,2-Dichloroethene	5.01	5.32		ug/L		106	80 - 140
trans-1,3-Dichloropropene	5.08	4.57		ug/L		90	60 - 140
1,2,3-Trichlorobenzene	5.00	5.26		ug/L		105	60 - 125
1,2,4-Trichlorobenzene	5.01	5.23		ug/L		104	60 - 125
1,1,1-Trichloroethane	5.00	5.54		ug/L		111	80 - 140
1,1,2-Trichloroethane	5.01	5.10		ug/L		102	80 - 130
Trichloroethene	5.07	5.36		ug/L		106	80 - 130
Trichlorofluoromethane	5.00	5.28		ug/L		106	30 - 180
1,2,3-Trichloropropane	5.01	5.30		ug/L		106	75 - 120
1,2,4-Trimethylbenzene	5.00	5.52		ug/L		110	80 - 125
1,3,5-Trimethylbenzene	5.00	5.67		ug/L		114	80 - 125
Vinyl chloride	5.00	5.35		ug/L		107	65 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Ethylbenzene-d10	*102*		*75 - 125*

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

Lab Sample ID: LCS 580-120464/7
Matrix: Water
Analysis Batch: 120464

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Fluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*75 - 125*
Trifluorotoluene (Surr)	*108*		*80 - 125*

Lab Sample ID: LCSD 580-120464/8
Matrix: Water
Analysis Batch: 120464

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			25.0	21.2		ug/L		85	30 - 200	1	20
Benzene			5.00	5.06		ug/L		101	80 - 120	2	20
Bromobenzene			5.01	5.13		ug/L		103	80 - 130	3	20
Bromoform			5.00	3.97		ug/L		79	65 - 130	0	20
Bromomethane			4.99	4.68		ug/L		94	70 - 135	4	20
2-Butanone			25.0	26.5		ug/L		106	20 - 200	2	20
Carbon disulfide			5.01	4.98		ug/L		99	65 - 160	5	20
Carbon tetrachloride			5.02	4.91		ug/L		98	75 - 140	6	20
Chlorobenzene			5.00	5.29		ug/L		106	80 - 120	2	20
Chlorobromomethane			5.01	5.18		ug/L		103	80 - 125	1	20
Chlorodibromomethane			5.06	4.34		ug/L		86	70 - 120	2	20
Chloroethane			5.00	5.55		ug/L		111	75 - 140	19	20
Chloroform			5.00	5.32		ug/L		106	80 - 130	0	20
Chloromethane			5.00	5.13		ug/L		103	50 - 140	1	20
2-Chlorotoluene			5.01	5.44		ug/L		109	75 - 130	2	20
4-Chlorotoluene			5.01	5.45		ug/L		109	75 - 130	1	20
cis-1,2-Dichloroethene			5.01	5.44		ug/L		109	80 - 130	3	20
cis-1,3-Dichloropropene			4.94	4.71		ug/L		95	70 - 120	1	20
1,2-Dibromo-3-Chloropropane			5.01	4.38		ug/L		87	55 - 120	5	20
1,2-Dibromoethane			5.01	5.12		ug/L		102	70 - 130	2	20
Dibromomethane			5.02	5.23		ug/L		104	80 - 130	5	20
1,2-Dichlorobenzene			5.00	5.23		ug/L		105	80 - 130	1	20
1,3-Dichlorobenzene			5.01	5.46		ug/L		109	80 - 120	1	20
1,4-Dichlorobenzene			5.01	5.20		ug/L		104	80 - 120	0	20
Dichlorobromomethane			5.06	5.53		ug/L		109	80 - 125	2	20
Dichlorodifluoromethane			5.00	5.89		ug/L		118	30 - 180	3	20
1,1-Dichloroethane			5.00	5.51		ug/L		110	75 - 135	2	20
1,2-Dichloroethane			5.01	4.98		ug/L		100	80 - 140	2	20
1,1-Dichloroethene			5.01	5.33		ug/L		107	70 - 150	2	20
1,2-Dichloropropane			5.00	4.98		ug/L		100	80 - 120	0	20
1,3-Dichloropropane			5.01	4.99		ug/L		100	80 - 130	4	20
2,2-Dichloropropane			4.99	5.41		ug/L		108	60 - 150	2	20
1,1-Dichloropropene			5.01	5.42		ug/L		108	80 - 130	6	20
Ethylbenzene			5.00	5.10		ug/L		102	80 - 125	0	20
Hexachlorobutadiene			5.01	5.69		ug/L		114	75 - 135	6	20
2-Hexanone			25.0	26.9		ug/L		107	52 - 160	1	20
Isopropylbenzene			5.02	5.85		ug/L		117	75 - 120	2	20
4-Isopropyltoluene			5.00	5.06		ug/L		101	80 - 120	1	20
Methylene Chloride			5.00	5.47		ug/L		109	60 - 145	2	20
4-Methyl-2-pentanone			25.0	24.8		ug/L		99	55 - 135	3	20

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

Lab Sample ID: LCSD 580-120464/8
Matrix: Water
Analysis Batch: 120464

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	5.00	4.92		ug/L		98	75 - 120	1	20
m-Xylene & p-Xylene	10.0	10.6		ug/L		106	80 - 130	3	20
Naphthalene	5.00	4.48		ug/L		89	45 - 130	1	20
n-Butylbenzene	5.00	5.82		ug/L		116	75 - 125	1	20
N-Propylbenzene	5.00	5.61		ug/L		112	80 - 120	2	20
o-Xylene	5.02	5.54		ug/L		110	80 - 120	2	20
sec-Butylbenzene	5.00	5.17		ug/L		103	80 - 125	0	20
Styrene	5.01	5.49		ug/L		109	75 - 130	0	20
tert-Butylbenzene	5.01	5.59		ug/L		112	80 - 130	3	20
1,1,1,2-Tetrachloroethane	5.01	4.69		ug/L		93	75 - 125	1	20
1,1,2,2-Tetrachloroethane	4.99	5.04		ug/L		101	75 - 125	3	20
Tetrachloroethene	5.00	4.56		ug/L		91	40 - 180	1	20
Toluene	5.01	5.07		ug/L		101	80 - 120	0	20
trans-1,2-Dichloroethene	5.01	5.12		ug/L		102	80 - 140	4	20
trans-1,3-Dichloropropene	5.08	4.74		ug/L		93	60 - 140	4	20
1,2,3-Trichlorobenzene	5.00	5.32		ug/L		106	60 - 125	1	20
1,2,4-Trichlorobenzene	5.01	5.37		ug/L		107	60 - 125	3	20
1,1,1-Trichloroethane	5.00	5.51		ug/L		110	80 - 140	0	20
1,1,2-Trichloroethane	5.01	4.96		ug/L		99	80 - 130	3	20
Trichloroethene	5.07	5.24		ug/L		103	80 - 130	2	20
Trichlorofluoromethane	5.00	5.53		ug/L		111	30 - 180	5	20
1,2,3-Trichloropropane	5.01	5.30		ug/L		106	75 - 120	0	20
1,2,4-Trimethylbenzene	5.00	5.52		ug/L		111	80 - 125	0	20
1,3,5-Trimethylbenzene	5.00	5.50		ug/L		110	80 - 125	3	20
Vinyl chloride	5.00	5.53		ug/L		111	65 - 140	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Ethylbenzene-d10	*100*		*75 - 125*
Fluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*75 - 125*
Trifluorotoluene (Surr)	*111*		*80 - 125*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 250-9826/1-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 17:45	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 17:45	1

Lab Sample ID: LCS 250-9826/2-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.98		mg/L		99	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 250-9826/2-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.0993		mg/L		99	80 - 120

Lab Sample ID: 250-6614-2 MS
Matrix: Water
Analysis Batch: 9847

Client Sample ID: LB-091112-02
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.032		2.00	1.94		mg/L		95	75 - 125
Manganese	0.54		0.100	0.653	4	mg/L		111	75 - 125

Lab Sample ID: 250-6658-D-2-B MS
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		2.00	1.92		mg/L		96	75 - 125
Manganese	ND		0.100	0.0977		mg/L		96	75 - 125

Lab Sample ID: 250-6614-1 DU
Matrix: Water
Analysis Batch: 9847

Client Sample ID: LB-091112-01
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	ND		ND		mg/L		NC	20
Manganese	ND		ND		mg/L		NC	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 250-9765/1
Matrix: Water
Analysis Batch: 9765

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			09/12/12 18:27	1

Lab Sample ID: LCS 250-9765/2
Matrix: Water
Analysis Batch: 9765

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	100	98.0		mg/L		98	80 - 120

Lab Sample ID: 250-6614-1 DU
Matrix: Water
Analysis Batch: 9765

Client Sample ID: LB-091112-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	160		157		mg/L		1	20

Method: 300.0 - Nitrate

Lab Sample ID: MB 250-9824/3
Matrix: Water
Analysis Batch: 9824

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10		mg/L			09/12/12 14:29	1

Lab Sample ID: LCS 250-9824/4
Matrix: Water
Analysis Batch: 9824

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.00	4.94		mg/L		99	90 - 110

Lab Sample ID: MB 250-9859/3
Matrix: Water
Analysis Batch: 9859

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10		mg/L			09/13/12 14:28	1

Lab Sample ID: LCS 250-9859/4
Matrix: Water
Analysis Batch: 9859

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.00	4.90		mg/L		98	90 - 110

Lab Sample ID: 250-6552-E-4 MS ^5
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	ND		10.0	9.50		mg/L		95	80 - 120

Lab Sample ID: 250-6552-E-4 MSD ^5
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	ND		10.0	9.58		mg/L		96	80 - 120	1	20

Lab Sample ID: 250-6636-A-7 MS
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	ND		2.00	1.95		mg/L		97	80 - 120

Lab Sample ID: 250-6636-A-7 MSD
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	ND		2.00	1.99		mg/L		99	80 - 120	2	20

Method: 300.0 - Nitrate (Continued)

Lab Sample ID: 250-6552-E-4 DU ^5
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrogen, Nitrate	ND		ND		mg/L		NC	20

Lab Sample ID: 250-6636-A-7 DU
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrogen, Nitrate	ND		ND		mg/L		NC	20

Method: 300.0 - Chloride

Lab Sample ID: MB 250-9823/3
Matrix: Water
Analysis Batch: 9823

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			09/12/12 14:29	1

Lab Sample ID: LCS 250-9823/4
Matrix: Water
Analysis Batch: 9823

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: MB 250-9858/3
Matrix: Water
Analysis Batch: 9858

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			09/13/12 14:28	1

Lab Sample ID: LCS 250-9858/4
Matrix: Water
Analysis Batch: 9858

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: 250-6552-E-4 MS
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	64		10.0	66.5	4	mg/L		29	80 - 120

Method: 300.0 - Chloride (Continued)

Lab Sample ID: 250-6552-E-4 MSD
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	64		10.0	66.1	4	mg/L		25	80 - 120	1	20

Lab Sample ID: 250-6636-A-7 MS
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	13		2.00	13.7	4	mg/L		34	80 - 120		

Lab Sample ID: 250-6636-A-7 MSD
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13		2.00	13.8	4	mg/L		38	80 - 120	1	20

Lab Sample ID: 250-6552-E-4 DU
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	64			63.4		mg/L				0.4	20

Lab Sample ID: 250-6636-A-7 DU
Matrix: Water
Analysis Batch: 9858

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	13			13.1		mg/L				0.6	20

Certification Summary

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	OR00040	06-30-13
Alaska (UST)	State Program	10	UST-012	12-26-12
California	State Program	9	2597	09-30-13
Oregon	NELAC	10	OR100021	01-09-13
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-12

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-13
California	NELAC	9	1115CA	01-31-13
L-A-B	DoD ELAP		L2236	01-19-13
L-A-B	ISO/IEC 17025		L2236	01-19-13
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAC	10	WA100007	11-06-12
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-13

Method Summary

Client: SCS Engineers
Project/Site: Leichner Brothers Landfill

TestAmerica Job ID: 250-6614-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL SEA
6020	Metals (ICP/MS)	SW846	TAL PRT
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL PRT
300.0	Nitrate	MCAWW	TAL PRT
300.0	Chloride	40CFR136A	TAL PRT

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PRT = 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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Loc: 250
6614

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: SCS Engineers
REPORT TO: David Lamadrid
ADDRESS: DLamadrid@scsengineers.com
PHONE: 503 639-9315 FAX:

INVOICE TO: SCS Engineers
Portland, OR
P.O. NUMBER:

PROJECT NAME: Leichner Brothers Landfill
PROJECT NUMBER: 04212030.01 / 04212030.17
SAMPLED BY: T Andrews

PRESERVATIVE: HCl | H2O2 | — | — | —

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOCs 8260 low level	Dissolved Mn, Fe (6020)	TDS (160.1)	Chloride (300.0)	Nitrate (300.0)	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	LB-091112-01	09/11/12 @ 1020	X	X	X	X	X	W	5	low level VOCs	
2	LB-091112-02	9/11/12 @ 1130	X	X	X	X	X	W	5	samples were field filtered	
3	LB-091112-03	9/11/12 @ 1325	X	X	X	X	X	W	5		
4	LB-091112-04	9/11/12 @ 1430	X	X	X	X	X	W	5		
5	LB-091112-05	9/11/12 @ 1508	X	X	X	X	X	W	5		
6											
7											
8											
9											
10											

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.

RELEASED BY: JMA
PRINT NAME: TAndrews
FIRM: SCS Engineers
DATE: 9/11/12
TIME: 1610

RECEIVED BY:
PRINT NAME: Tom Krause
FIRM: TAP
DATE: 09/11/12
TIME: 1610

RELEASED BY:
PRINT NAME:
FIRM:
DATE:
TIME:

RECEIVED BY:
PRINT NAME:
FIRM:
DATE:
TIME:

ADDRESS: tandrews@scsengineers.com

IR/P/L

TEMP: 5.8

PAGE OF

TAL-1000(0408)

Page 27 of 29

9/28/2012

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-6614-1

Login Number: 6614

List Number: 1

Creator: Krause, Thomas

List Source: TestAmerica Portland

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Ph checked 09/11/12 TK
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-6614-1

Login Number: 6614
List Number: 1
Creator: Riley, Nicole

List Source: TestAmerica Seattle
List Creation: 09/14/12 03:27 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Time of relinquishment not included on ICOC.
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

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: 250-6657-1
TestAmerica SDG: 04212030.01/04212030.17
Client Project/Site: Leichner Brothers

For:
SCS Engineers
14945 SW Sequoia Parkway
Suite 180
Portland, Oregon 97224

Attn: Mr. David Lamadrid

Pamela R. Johnson

Authorized for release by:
9/30/2012 1:12:29 PM
Pam Johnson
Project Manager I
pamr.johnson@testamericainc.com

Designee for

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

Table of Contents

Sample Summary

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-6657-1	LB-091212-06	Water	09/12/12 10:20	09/12/12 12:10
250-6657-2	LB-091212-07	Water	09/12/12 01:00	09/12/12 11:23
250-6657-3	LB-091212-08	Water	09/12/12 11:40	09/12/12 11:23
250-6657-4	LB-091212-09	Water	09/12/12 12:25	09/12/12 11:23
250-6657-6	Trip Blank	Water	09/12/12 00:00	09/12/12 11:23

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

Job ID: 250-6657-1

Laboratory: TestAmerica Portland

Narrative

Comments
No additional comments.

Receipt
The samples were received on 9/12/2012 11:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

GC/MS VOA - Method 8260B
Method blank MB 580-120952/19 contained Acetone and Methylene Chloride above the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Field Service / Mobile Lab
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

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

Client Sample ID: LB-091212-06
Date Collected: 09/12/12 10:20
Date Received: 09/12/12 12:10

Lab Sample ID: 250-6657-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/26/12 20:06	1
Benzene	ND		0.10		ug/L			09/26/12 20:06	1
Bromobenzene	ND		0.10		ug/L			09/26/12 20:06	1
Bromoform	ND		0.10		ug/L			09/26/12 20:06	1
Bromomethane	ND		0.10		ug/L			09/26/12 20:06	1
2-Butanone	ND		2.0		ug/L			09/26/12 20:06	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 20:06	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 20:06	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 20:06	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 20:06	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 20:06	1
Chloroethane	ND		0.25		ug/L			09/26/12 20:06	1
Chloroform	ND		0.10		ug/L			09/26/12 20:06	1
Chloromethane	ND		0.10		ug/L			09/26/12 20:06	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 20:06	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 20:06	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:06	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:06	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 20:06	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 20:06	1
Dibromomethane	ND		0.10		ug/L			09/26/12 20:06	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:06	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:06	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:06	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 20:06	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 20:06	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 20:06	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 20:06	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 20:06	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:06	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 20:06	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:06	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 20:06	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 20:06	1
2-Hexanone	ND		1.0		ug/L			09/26/12 20:06	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 20:06	1
Methylene Chloride	ND		0.50		ug/L			09/26/12 20:06	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 20:06	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 20:06	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 20:06	1
Naphthalene	ND		0.40		ug/L			09/26/12 20:06	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
o-Xylene	ND		0.10		ug/L			09/26/12 20:06	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
Styrene	ND		0.10		ug/L			09/26/12 20:06	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:06	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:06	1

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

Client Sample ID: LB-091212-06
Date Collected: 09/12/12 10:20
Date Received: 09/12/12 12:10

Lab Sample ID: 250-6657-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/26/12 20:06	1
Toluene	ND		0.10		ug/L			09/26/12 20:06	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:06	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:06	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 20:06	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 20:06	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 20:06	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 20:06	1
Trichloroethene	ND		0.10		ug/L			09/26/12 20:06	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 20:06	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 20:06	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:06	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/26/12 20:06*	*1*
Ethylbenzene-d10	*93*		*75 - 125*		*09/26/12 20:06*	*1*
Fluorobenzene (Surr)	*101*		*70 - 130*		*09/26/12 20:06*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/26/12 20:06*	*1*
Trifluorotoluene (Surr)	*112*		*80 - 125*		*09/26/12 20:06*	*1*

Client Sample ID: LB-091212-07
Date Collected: 09/12/12 01:00
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/26/12 20:31	1
Benzene	ND		0.10		ug/L			09/26/12 20:31	1
Bromobenzene	ND		0.10		ug/L			09/26/12 20:31	1
Bromoform	ND		0.10		ug/L			09/26/12 20:31	1
Bromomethane	ND		0.10		ug/L			09/26/12 20:31	1
2-Butanone	ND		2.0		ug/L			09/26/12 20:31	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 20:31	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 20:31	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 20:31	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 20:31	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 20:31	1
Chloroethane	ND		0.25		ug/L			09/26/12 20:31	1
Chloroform	ND		0.10		ug/L			09/26/12 20:31	1
Chloromethane	ND		0.10		ug/L			09/26/12 20:31	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 20:31	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 20:31	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:31	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:31	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 20:31	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 20:31	1
Dibromomethane	ND		0.10		ug/L			09/26/12 20:31	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:31	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:31	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:31	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 20:31	1

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

Client Sample ID: LB-091212-07
Date Collected: 09/12/12 01:00
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 20:31	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 20:31	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 20:31	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 20:31	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:31	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 20:31	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:31	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 20:31	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 20:31	1
2-Hexanone	ND		1.0		ug/L			09/26/12 20:31	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 20:31	1
Methylene Chloride	ND		0.50		ug/L			09/26/12 20:31	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 20:31	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 20:31	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 20:31	1
Naphthalene	ND		0.40		ug/L			09/26/12 20:31	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
o-Xylene	ND		0.10		ug/L			09/26/12 20:31	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
Styrene	ND		0.10		ug/L			09/26/12 20:31	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:31	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:31	1
Tetrachloroethene	ND		0.10		ug/L			09/26/12 20:31	1
Toluene	ND		0.10		ug/L			09/26/12 20:31	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:31	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:31	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 20:31	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 20:31	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 20:31	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 20:31	1
Trichloroethene	ND		0.10		ug/L			09/26/12 20:31	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 20:31	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 20:31	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:31	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/26/12 20:31*	*1*
Ethylbenzene-d10	*97*		*75 - 125*		*09/26/12 20:31*	*1*
Fluorobenzene (Surr)	*99*		*70 - 130*		*09/26/12 20:31*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/26/12 20:31*	*1*
Trifluorotoluene (Surr)	*118*		*80 - 125*		*09/26/12 20:31*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

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

Client Sample ID: LB-091212-08
Date Collected: 09/12/12 11:40
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/26/12 20:56	1
Benzene	ND		0.10		ug/L			09/26/12 20:56	1
Bromobenzene	ND		0.10		ug/L			09/26/12 20:56	1
Bromoform	ND		0.10		ug/L			09/26/12 20:56	1
Bromomethane	ND		0.10		ug/L			09/26/12 20:56	1
2-Butanone	ND		2.0		ug/L			09/26/12 20:56	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 20:56	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 20:56	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 20:56	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 20:56	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 20:56	1
Chloroethane	ND		0.25		ug/L			09/26/12 20:56	1
Chloroform	ND		0.10		ug/L			09/26/12 20:56	1
Chloromethane	ND		0.10		ug/L			09/26/12 20:56	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 20:56	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 20:56	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:56	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:56	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 20:56	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 20:56	1
Dibromomethane	ND		0.10		ug/L			09/26/12 20:56	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:56	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:56	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 20:56	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 20:56	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 20:56	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 20:56	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 20:56	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 20:56	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:56	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 20:56	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 20:56	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 20:56	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 20:56	1
2-Hexanone	ND		1.0		ug/L			09/26/12 20:56	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 20:56	1
Methylene Chloride	ND		0.50		ug/L			09/26/12 20:56	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 20:56	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 20:56	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 20:56	1
Naphthalene	ND		0.40		ug/L			09/26/12 20:56	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
o-Xylene	ND		0.10		ug/L			09/26/12 20:56	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
Styrene	ND		0.10		ug/L			09/26/12 20:56	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:56	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 20:56	1

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

Client Sample ID: LB-091212-08
Date Collected: 09/12/12 11:40
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/26/12 20:56	1
Toluene	ND		0.10		ug/L			09/26/12 20:56	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 20:56	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 20:56	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 20:56	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 20:56	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 20:56	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 20:56	1
Trichloroethene	ND		0.10		ug/L			09/26/12 20:56	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 20:56	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 20:56	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 20:56	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/26/12 20:56*	*1*
Ethylbenzene-d10	*97*		*75 - 125*		*09/26/12 20:56*	*1*
Fluorobenzene (Surr)	*101*		*70 - 130*		*09/26/12 20:56*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/26/12 20:56*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 125*		*09/26/12 20:56*	*1*

Client Sample ID: LB-091212-09
Date Collected: 09/12/12 12:25
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/26/12 21:23	1
Benzene	ND		0.10		ug/L			09/26/12 21:23	1
Bromobenzene	ND		0.10		ug/L			09/26/12 21:23	1
Bromoform	ND		0.10		ug/L			09/26/12 21:23	1
Bromomethane	ND		0.10		ug/L			09/26/12 21:23	1
2-Butanone	ND		2.0		ug/L			09/26/12 21:23	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 21:23	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 21:23	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 21:23	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 21:23	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 21:23	1
Chloroethane	ND		0.25		ug/L			09/26/12 21:23	1
Chloroform	ND		0.10		ug/L			09/26/12 21:23	1
Chloromethane	ND		0.10		ug/L			09/26/12 21:23	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 21:23	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 21:23	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 21:23	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 21:23	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 21:23	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 21:23	1
Dibromomethane	ND		0.10		ug/L			09/26/12 21:23	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 21:23	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 21:23	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 21:23	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 21:23	1

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

Client Sample ID: LB-091212-09
Date Collected: 09/12/12 12:25
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 21:23	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 21:23	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 21:23	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 21:23	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 21:23	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 21:23	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 21:23	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 21:23	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 21:23	1
2-Hexanone	ND		1.0		ug/L			09/26/12 21:23	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 21:23	1
Methylene Chloride	ND		0.50		ug/L			09/26/12 21:23	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 21:23	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 21:23	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 21:23	1
Naphthalene	ND		0.40		ug/L			09/26/12 21:23	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
o-Xylene	ND		0.10		ug/L			09/26/12 21:23	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
Styrene	ND		0.10		ug/L			09/26/12 21:23	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 21:23	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 21:23	1
Tetrachloroethene	ND		0.10		ug/L			09/26/12 21:23	1
Toluene	ND		0.10		ug/L			09/26/12 21:23	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 21:23	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 21:23	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 21:23	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 21:23	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 21:23	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 21:23	1
Trichloroethene	ND		0.10		ug/L			09/26/12 21:23	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 21:23	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 21:23	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 21:23	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*09/26/12 21:23*	*1*
Ethylbenzene-d10	*96*		*75 - 125*		*09/26/12 21:23*	*1*
Fluorobenzene (Surr)	*98*		*70 - 130*		*09/26/12 21:23*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/26/12 21:23*	*1*
Trifluorotoluene (Surr)	*117*		*80 - 125*		*09/26/12 21:23*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

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

Client Sample ID: Trip Blank
Date Collected: 09/12/12 00:00
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.0		ug/L			09/26/12 19:41	1
Benzene	ND		0.10		ug/L			09/26/12 19:41	1
Bromobenzene	ND		0.10		ug/L			09/26/12 19:41	1
Bromoform	ND		0.10		ug/L			09/26/12 19:41	1
Bromomethane	ND		0.10		ug/L			09/26/12 19:41	1
2-Butanone	ND		2.0		ug/L			09/26/12 19:41	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 19:41	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 19:41	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 19:41	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 19:41	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 19:41	1
Chloroethane	ND		0.25		ug/L			09/26/12 19:41	1
Chloroform	ND		0.10		ug/L			09/26/12 19:41	1
Chloromethane	ND		0.10		ug/L			09/26/12 19:41	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 19:41	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 19:41	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 19:41	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 19:41	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 19:41	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 19:41	1
Dibromomethane	ND		0.10		ug/L			09/26/12 19:41	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 19:41	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 19:41	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 19:41	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 19:41	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 19:41	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 19:41	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 19:41	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 19:41	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 19:41	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 19:41	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 19:41	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 19:41	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 19:41	1
2-Hexanone	ND		1.0		ug/L			09/26/12 19:41	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 19:41	1
Methylene Chloride	ND		0.50		ug/L			09/26/12 19:41	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 19:41	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 19:41	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 19:41	1
Naphthalene	ND		0.40		ug/L			09/26/12 19:41	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
o-Xylene	ND		0.10		ug/L			09/26/12 19:41	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
Styrene	ND		0.10		ug/L			09/26/12 19:41	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 19:41	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 19:41	1

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

Client Sample ID: Trip Blank
Date Collected: 09/12/12 00:00
Date Received: 09/12/12 11:23

Lab Sample ID: 250-6657-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			09/26/12 19:41	1
Toluene	ND		0.10		ug/L			09/26/12 19:41	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 19:41	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 19:41	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 19:41	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 19:41	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 19:41	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 19:41	1
Trichloroethene	ND		0.10		ug/L			09/26/12 19:41	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 19:41	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 19:41	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 19:41	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/26/12 19:41*	*1*
Ethylbenzene-d10	*98*		*75 - 125*		*09/26/12 19:41*	*1*
Fluorobenzene (Surr)	*97*		*70 - 130*		*09/26/12 19:41*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/26/12 19:41*	*1*
Trifluorotoluene (Surr)	*114*		*80 - 125*		*09/26/12 19:41*	*1*

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: LB-091212-06 — **Lab Sample ID: 250-6657-1**
Date Collected: 09/12/12 10:20 — **Matrix: Water**
Date Received: 09/12/12 12:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:26	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 18:26	1

Client Sample ID: LB-091212-07 — **Lab Sample ID: 250-6657-2**
Date Collected: 09/12/12 01:00 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:30	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 18:30	1

Client Sample ID: LB-091212-08 — **Lab Sample ID: 250-6657-3**
Date Collected: 09/12/12 11:40 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:40	1
Manganese	**0.0020**		0.0020		mg/L		09/13/12 14:34	09/13/12 18:40	1

Client Sample ID: LB-091212-09 — **Lab Sample ID: 250-6657-4**
Date Collected: 09/12/12 12:25 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 18:43	1
Manganese	**0.0033**		0.0020		mg/L		09/13/12 14:34	09/13/12 18:43	1

General Chemistry

Client Sample ID: LB-091212-06 — **Lab Sample ID: 250-6657-1**
Date Collected: 09/12/12 10:20 — **Matrix: Water**
Date Received: 09/12/12 12:10

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		10		mg/L			09/18/12 12:24	1
Chloride	5.5		0.50		mg/L			09/13/12 18:37	1
Nitrogen, Nitrate	0.78		0.10		mg/L			09/13/12 18:37	1

Client Sample ID: LB-091212-07 — **Lab Sample ID: 250-6657-2**
Date Collected: 09/12/12 01:00 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		10		mg/L			09/18/12 12:24	1
Chloride	9.8		0.50		mg/L			09/13/12 18:53	1
Nitrogen, Nitrate	0.75		0.10		mg/L			09/13/12 18:53	1

Client Sample ID: LB-091212-08 — **Lab Sample ID: 250-6657-3**
Date Collected: 09/12/12 11:40 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	210		10		mg/L			09/18/12 12:24	1
Chloride	14		0.50		mg/L			09/13/12 19:09	1
Nitrogen, Nitrate	5.9		0.10		mg/L			09/13/12 19:09	1

Client Sample ID: LB-091212-09 — **Lab Sample ID: 250-6657-4**
Date Collected: 09/12/12 12:25 — **Matrix: Water**
Date Received: 09/12/12 11:23

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	310		10		mg/L			09/18/12 12:24	1
Chloride	30		1.0		mg/L			09/14/12 17:33	2
Nitrogen, Nitrate	0.91		0.10		mg/L			09/13/12 19:24	1

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

Lab Sample ID: MB 580-120952/19
Matrix: Water
Analysis Batch: 120952

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	6.59		2.0		ug/L			09/26/12 17:45	1
Benzene	ND		0.10		ug/L			09/26/12 17:45	1
Bromobenzene	ND		0.10		ug/L			09/26/12 17:45	1
Bromoform	ND		0.10		ug/L			09/26/12 17:45	1
Bromomethane	ND		0.10		ug/L			09/26/12 17:45	1
2-Butanone	ND		2.0		ug/L			09/26/12 17:45	1
Carbon disulfide	ND		0.10		ug/L			09/26/12 17:45	1
Carbon tetrachloride	ND		0.10		ug/L			09/26/12 17:45	1
Chlorobenzene	ND		0.10		ug/L			09/26/12 17:45	1
Chlorobromomethane	ND		0.10		ug/L			09/26/12 17:45	1
Chlorodibromomethane	ND		0.10		ug/L			09/26/12 17:45	1
Chloroethane	ND		0.25		ug/L			09/26/12 17:45	1
Chloroform	ND		0.10		ug/L			09/26/12 17:45	1
Chloromethane	ND		0.10		ug/L			09/26/12 17:45	1
2-Chlorotoluene	ND		0.10		ug/L			09/26/12 17:45	1
4-Chlorotoluene	ND		0.20		ug/L			09/26/12 17:45	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 17:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 17:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/26/12 17:45	1
1,2-Dibromoethane	ND		0.10		ug/L			09/26/12 17:45	1
Dibromomethane	ND		0.10		ug/L			09/26/12 17:45	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/26/12 17:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/26/12 17:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/26/12 17:45	1
Dichlorobromomethane	ND		0.10		ug/L			09/26/12 17:45	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/26/12 17:45	1
1,1-Dichloroethane	ND		0.10		ug/L			09/26/12 17:45	1
1,2-Dichloroethane	ND		0.10		ug/L			09/26/12 17:45	1
1,1-Dichloroethene	ND		0.10		ug/L			09/26/12 17:45	1
1,2-Dichloropropane	ND		0.10		ug/L			09/26/12 17:45	1
1,3-Dichloropropane	ND		0.10		ug/L			09/26/12 17:45	1
2,2-Dichloropropane	ND		0.10		ug/L			09/26/12 17:45	1
1,1-Dichloropropene	ND		0.10		ug/L			09/26/12 17:45	1
Ethylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
Hexachlorobutadiene	ND		0.20		ug/L			09/26/12 17:45	1
2-Hexanone	ND		1.0		ug/L			09/26/12 17:45	1
Isopropylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
4-Isopropyltoluene	ND		0.20		ug/L			09/26/12 17:45	1
Methylene Chloride	0.543		0.50		ug/L			09/26/12 17:45	1
4-Methyl-2-pentanone	ND		0.50		ug/L			09/26/12 17:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/26/12 17:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/26/12 17:45	1
Naphthalene	ND		0.40		ug/L			09/26/12 17:45	1
n-Butylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
N-Propylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
o-Xylene	ND		0.10		ug/L			09/26/12 17:45	1
sec-Butylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
Styrene	ND		0.10		ug/L			09/26/12 17:45	1
tert-Butylbenzene	ND		0.10		ug/L			09/26/12 17:45	1

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

Lab Sample ID: MB 580-120952/19
Matrix: Water
Analysis Batch: 120952

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 17:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/26/12 17:45	1
Tetrachloroethene	ND		0.10		ug/L			09/26/12 17:45	1
Toluene	ND		0.10		ug/L			09/26/12 17:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/26/12 17:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/26/12 17:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/26/12 17:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/26/12 17:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/26/12 17:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/26/12 17:45	1
Trichloroethene	ND		0.10		ug/L			09/26/12 17:45	1
Trichlorofluoromethane	ND		0.10		ug/L			09/26/12 17:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/26/12 17:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/26/12 17:45	1
Vinyl chloride	ND		0.020		ug/L			09/26/12 17:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/26/12 17:45*	*1*
Ethylbenzene-d10	*99*		*75 - 125*		*09/26/12 17:45*	*1*
Fluorobenzene (Surr)	*100*		*70 - 130*		*09/26/12 17:45*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/26/12 17:45*	*1*
Trifluorotoluene (Surr)	*122*		*80 - 125*		*09/26/12 17:45*	*1*

Lab Sample ID: LCS 580-120952/20
Matrix: Water
Analysis Batch: 120952

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	34.9		ug/L		140	30 - 200
Benzene	5.00	5.27		ug/L		106	80 - 120
Bromobenzene	5.01	4.80		ug/L		96	80 - 130
Bromoform	5.05	4.32		ug/L		86	65 - 130
Bromomethane	4.99	4.59		ug/L		92	70 - 135
2-Butanone	25.0	30.4		ug/L		122	20 - 200
Carbon disulfide	5.01	5.70		ug/L		114	65 - 160
Carbon tetrachloride	5.02	5.07		ug/L		101	75 - 140
Chlorobenzene	5.00	4.82		ug/L		96	80 - 120
Chlorobromomethane	5.01	5.28		ug/L		105	80 - 125
Chlorodibromomethane	5.06	5.25		ug/L		104	70 - 120
Chloroethane	5.00	6.17		ug/L		123	75 - 140
Chloroform	5.00	5.13		ug/L		103	80 - 130
Chloromethane	5.00	5.09		ug/L		102	50 - 140
2-Chlorotoluene	5.01	5.27		ug/L		105	75 - 130
4-Chlorotoluene	5.01	5.32		ug/L		106	75 - 130
cis-1,2-Dichloroethene	5.01	5.48		ug/L		109	80 - 130
cis-1,3-Dichloropropene	4.94	5.25		ug/L		106	70 - 120
1,2-Dibromo-3-Chloropropane	5.01	4.69		ug/L		94	55 - 120
1,2-Dibromoethane	5.01	5.28		ug/L		105	70 - 130

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

Lab Sample ID: LCS 580-120952/20
Matrix: Water
Analysis Batch: 120952

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	5.02	5.34		ug/L		107	80 - 130
1,2-Dichlorobenzene	5.00	4.85		ug/L		97	80 - 130
1,3-Dichlorobenzene	5.01	5.08		ug/L		101	80 - 120
1,4-Dichlorobenzene	5.01	4.90		ug/L		98	80 - 120
Dichlorobromomethane	5.06	5.45		ug/L		108	80 - 125
Dichlorodifluoromethane	5.00	5.31		ug/L		106	30 - 180
1,1-Dichloroethane	5.00	5.37		ug/L		107	75 - 135
1,2-Dichloroethane	5.01	4.95		ug/L		99	80 - 140
1,1-Dichloroethene	5.01	5.58		ug/L		111	70 - 150
1,2-Dichloropropane	5.00	4.92		ug/L		98	80 - 120
1,3-Dichloropropane	5.01	5.29		ug/L		106	80 - 130
2,2-Dichloropropane	4.99	5.85		ug/L		117	60 - 150
1,1-Dichloropropene	5.01	5.37		ug/L		107	80 - 130
Ethylbenzene	5.00	4.78		ug/L		96	80 - 125
Hexachlorobutadiene	5.01	5.12		ug/L		102	75 - 135
2-Hexanone	25.0	28.4		ug/L		113	52 - 160
Isopropylbenzene	5.02	5.20		ug/L		104	75 - 120
4-Isopropyltoluene	5.00	4.78		ug/L		96	80 - 120
Methylene Chloride	5.00	5.42		ug/L		108	60 - 145
4-Methyl-2-pentanone	25.0	26.2		ug/L		105	55 - 135
Methyl tert-butyl ether	5.00	5.13		ug/L		103	75 - 120
m-Xylene & p-Xylene	10.0	9.67		ug/L		97	80 - 130
Naphthalene	5.00	4.76		ug/L		95	45 - 130
n-Butylbenzene	5.00	4.85		ug/L		97	75 - 125
N-Propylbenzene	5.00	5.41		ug/L		108	80 - 120
o-Xylene	5.02	5.19		ug/L		104	80 - 120
sec-Butylbenzene	5.00	4.97		ug/L		99	80 - 125
Styrene	5.01	5.11		ug/L		102	75 - 130
tert-Butylbenzene	5.01	5.56		ug/L		111	80 - 130
1,1,1,2-Tetrachloroethane	5.01	4.91		ug/L		98	75 - 125
1,1,2,2-Tetrachloroethane	4.99	4.76		ug/L		95	75 - 125
Tetrachloroethene	5.00	6.14		ug/L		123	40 - 180
Toluene	5.01	5.08		ug/L		102	80 - 120
trans-1,2-Dichloroethene	5.01	5.46		ug/L		109	80 - 140
trans-1,3-Dichloropropene	5.08	4.54		ug/L		89	60 - 140
1,2,3-Trichlorobenzene	5.00	4.73		ug/L		94	60 - 125
1,2,4-Trichlorobenzene	5.01	4.85		ug/L		97	60 - 125
1,1,1-Trichloroethane	5.00	5.61		ug/L		112	80 - 140
1,1,2-Trichloroethane	5.01	4.81		ug/L		96	80 - 130
Trichloroethene	5.07	5.59		ug/L		110	80 - 130
Trichlorofluoromethane	5.00	5.65		ug/L		113	30 - 180
1,2,3-Trichloropropane	5.01	5.26		ug/L		105	75 - 120
1,2,4-Trimethylbenzene	5.00	5.21		ug/L		104	80 - 125
1,3,5-Trimethylbenzene	5.00	5.08		ug/L		102	80 - 125
Vinyl chloride	5.00	5.45		ug/L		109	65 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Ethylbenzene-d10	*95*		*75 - 125*

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

Lab Sample ID: LCS 580-120952/20
Matrix: Water
Analysis Batch: 120952

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Fluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*104*		*75 - 125*
Trifluorotoluene (Surr)	*117*		*80 - 125*

Lab Sample ID: LCSD 580-120952/21
Matrix: Water
Analysis Batch: 120952

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			25.0	35.5		ug/L		142	30 - 200	2	20
Benzene			5.00	5.19		ug/L		104	80 - 120	2	20
Bromobenzene			5.01	5.00		ug/L		100	80 - 130	4	20
Bromoform			5.05	4.51		ug/L		89	65 - 130	4	20
Bromomethane			4.99	5.03		ug/L		101	70 - 135	9	20
2-Butanone			25.0	27.4		ug/L		110	20 - 200	10	20
Carbon disulfide			5.01	5.66		ug/L		113	65 - 160	1	20
Carbon tetrachloride			5.02	4.96		ug/L		99	75 - 140	2	20
Chlorobenzene			5.00	5.00		ug/L		100	80 - 120	4	20
Chlorobromomethane			5.01	5.32		ug/L		106	80 - 125	1	20
Chlorodibromomethane			5.06	5.21		ug/L		103	70 - 120	1	20
Chloroethane			5.00	5.61		ug/L		112	75 - 140	9	20
Chloroform			5.00	4.95		ug/L		99	80 - 130	4	20
Chloromethane			5.00	5.29		ug/L		106	50 - 140	4	20
2-Chlorotoluene			5.01	5.47		ug/L		109	75 - 130	4	20
4-Chlorotoluene			5.01	5.56		ug/L		111	75 - 130	4	20
cis-1,2-Dichloroethene			5.01	5.01		ug/L		100	80 - 130	9	20
cis-1,3-Dichloropropene			4.94	5.25		ug/L		106	70 - 120	0	20
1,2-Dibromo-3-Chloropropane			5.01	4.53		ug/L		90	55 - 120	4	20
1,2-Dibromoethane			5.01	5.21		ug/L		104	70 - 130	1	20
Dibromomethane			5.02	5.16		ug/L		103	80 - 130	3	20
1,2-Dichlorobenzene			5.00	4.88		ug/L		98	80 - 130	1	20
1,3-Dichlorobenzene			5.01	5.13		ug/L		103	80 - 120	1	20
1,4-Dichlorobenzene			5.01	4.99		ug/L		100	80 - 120	2	20
Dichlorobromomethane			5.06	5.20		ug/L		103	80 - 125	5	20
Dichlorodifluoromethane			5.00	5.29		ug/L		106	30 - 180	0	20
1,1-Dichloroethane			5.00	5.41		ug/L		108	75 - 135	1	20
1,2-Dichloroethane			5.01	4.91		ug/L		98	80 - 140	1	20
1,1-Dichloroethene			5.01	5.54		ug/L		111	70 - 150	1	20
1,2-Dichloropropane			5.00	4.81		ug/L		96	80 - 120	2	20
1,3-Dichloropropane			5.01	5.19		ug/L		104	80 - 130	2	20
2,2-Dichloropropane			4.99	5.23		ug/L		105	60 - 150	11	20
1,1-Dichloropropene			5.01	5.39		ug/L		108	80 - 130	0	20
Ethylbenzene			5.00	4.94		ug/L		99	80 - 125	3	20
Hexachlorobutadiene			5.01	5.48		ug/L		109	75 - 135	7	20
2-Hexanone			25.0	27.6		ug/L		110	52 - 160	3	20
Isopropylbenzene			5.02	5.23		ug/L		104	75 - 120	1	20
4-Isopropyltoluene			5.00	4.96		ug/L		99	80 - 120	4	20
Methylene Chloride			5.00	5.41		ug/L		108	60 - 145	0	20
4-Methyl-2-pentanone			25.0	25.8		ug/L		103	55 - 135	1	20

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

Lab Sample ID: LCSD 580-120952/21
Matrix: Water
Analysis Batch: 120952

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	5.00	5.02		ug/L		100	75 - 120	2	20
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	80 - 130	4	20
Naphthalene	5.00	4.90		ug/L		98	45 - 130	3	20
n-Butylbenzene	5.00	5.05		ug/L		101	75 - 125	4	20
N-Propylbenzene	5.00	5.48		ug/L		110	80 - 120	1	20
o-Xylene	5.02	5.37		ug/L		107	80 - 120	3	20
sec-Butylbenzene	5.00	5.05		ug/L		101	80 - 125	2	20
Styrene	5.01	5.29		ug/L		105	75 - 130	3	20
tert-Butylbenzene	5.01	6.26		ug/L		125	80 - 130	12	20
1,1,1,2-Tetrachloroethane	5.01	5.13		ug/L		102	75 - 125	4	20
1,1,2,2-Tetrachloroethane	4.99	4.88		ug/L		98	75 - 125	2	20
Tetrachloroethene	5.00	6.82		ug/L		137	40 - 180	10	20
Toluene	5.01	4.99		ug/L		100	80 - 120	2	20
trans-1,2-Dichloroethene	5.01	5.30		ug/L		106	80 - 140	3	20
trans-1,3-Dichloropropene	5.08	4.61		ug/L		91	60 - 140	2	20
1,2,3-Trichlorobenzene	5.00	5.06		ug/L		101	60 - 125	7	20
1,2,4-Trichlorobenzene	5.01	5.03		ug/L		100	60 - 125	3	20
1,1,1-Trichloroethane	5.00	5.74		ug/L		115	80 - 140	2	20
1,1,2-Trichloroethane	5.01	4.98		ug/L		99	80 - 130	3	20
Trichloroethene	5.07	5.46		ug/L		108	80 - 130	2	20
Trichlorofluoromethane	5.00	5.59		ug/L		112	30 - 180	1	20
1,2,3-Trichloropropane	5.01	4.90		ug/L		98	75 - 120	7	20
1,2,4-Trimethylbenzene	5.00	5.35		ug/L		107	80 - 125	3	20
1,3,5-Trimethylbenzene	5.00	5.29		ug/L		106	80 - 125	4	20
Vinyl chloride	5.00	5.46		ug/L		109	65 - 140	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Ethylbenzene-d10	*97*		*75 - 125*
Fluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*101*		*75 - 125*
Trifluorotoluene (Surr)	*114*		*80 - 125*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 250-9826/1-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		09/13/12 14:34	09/13/12 17:45	1
Manganese	ND		0.0020		mg/L		09/13/12 14:34	09/13/12 17:45	1

Lab Sample ID: LCS 250-9826/2-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.98		mg/L		99	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 250-9826/2-A
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9826

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			0.100	0.0993		mg/L		99	80 - 120		

Lab Sample ID: 250-6614-B-2-B MS
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	0.032		2.00	1.94		mg/L		95	75 - 125		
Manganese	0.54		0.100	0.653	4	mg/L		111	75 - 125		

Lab Sample ID: 250-6658-D-2-B MS
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	ND		2.00	1.92		mg/L		96	75 - 125		
Manganese	ND		0.100	0.0977		mg/L		96	75 - 125		

Lab Sample ID: 250-6614-B-1-B DU
Matrix: Water
Analysis Batch: 9847

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 9826

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Iron	ND			ND		mg/L				NC	20
Manganese	ND			ND		mg/L				NC	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 250-9950/1
Matrix: Water
Analysis Batch: 9950

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

Analyte	MB Result	MB Qualifier	RL		RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10			mg/L			09/18/12 12:24	1

Lab Sample ID: LCS 250-9950/2
Matrix: Water
Analysis Batch: 9950

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			100	103		mg/L		103	80 - 120		

Lab Sample ID: 250-6657-1 DU
Matrix: Water
Analysis Batch: 9950

Client Sample ID: LB-091212-06
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	160			171		mg/L				NC	20

Method: 300.0 - Nitrate

Lab Sample ID: MB 250-9859/3
Matrix: Water
Analysis Batch: 9859

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10		mg/L			09/13/12 14:28	1

Lab Sample ID: LCS 250-9859/4
Matrix: Water
Analysis Batch: 9859

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrate			5.00	4.90		mg/L		98	90 - 110		

Lab Sample ID: 250-6636-A-7 MS
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrate	ND		2.00	1.95		mg/L		97	80 - 120		

Lab Sample ID: 250-6636-A-7 MSD
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	ND		2.00	1.99		mg/L		99	80 - 120	2	20

Lab Sample ID: 250-6636-A-7 DU
Matrix: Water
Analysis Batch: 9859

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrogen, Nitrate	ND			ND		mg/L				NC	20

Method: 300.0 - Chloride

Lab Sample ID: MB 250-9858/3
Matrix: Water
Analysis Batch: 9858

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			09/13/12 14:28	1

Lab Sample ID: LCS 250-9858/4
Matrix: Water
Analysis Batch: 9858

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.0		mg/L		100	90 - 110		

Method: 300.0 - Chloride (Continued)

Lab Sample ID: 250-6636-A-7 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13		2.00	13.7	4	mg/L		34	80 - 120

Lab Sample ID: 250-6636-A-7 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13		2.00	13.8	4	mg/L		38	80 - 120	1	20

Lab Sample ID: 250-6636-A-7 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9858

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	13		13.1		mg/L		0.6	20

Lab Sample ID: MB 250-9893/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9893

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			09/14/12 15:59	1

Lab Sample ID: LCS 250-9893/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9893

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: 250-6648-A-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	15		2.00	15.9	4	mg/L		26	80 - 120

Lab Sample ID: 250-6648-A-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15		2.00	15.8	4	mg/L		20	80 - 120	1	20

Lab Sample ID: 250-6648-A-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 9893

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	15		15.4		mg/L		0.2	20

Certification Summary

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	OR00040	06-30-13
Alaska (UST)	State Program	10	UST-012	12-26-12
California	State Program	9	2597	09-30-13
Oregon	NELAC	10	OR100021	01-09-13
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-13

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-13
California	NELAC	9	1115CA	01-31-13
L-A-B	DoD ELAP		L2236	01-19-13
L-A-B	ISO/IEC 17025		L2236	01-19-13
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAC	10	WA100007	11-06-12
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-13

Method Summary

Client: SCS Engineers
Project/Site: Leichner Brothers

TestAmerica Job ID: 250-6657-1
SDG: 04212030.01/04212030.17

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL SEA
6020	Metals (ICP/MS)	SW846	TAL PRT
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL PRT
300.0	Chloride	40CFR136A	TAL PRT
300.0	Nitrate	MCAWW	TAL PRT

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PRT = 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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244
11922 E. First Ave, Spokane, WA 99206-5302
9405 SW Nimbus Ave,Beaverton, OR 97008-7145
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

Loc: 250
6657

-9210 ☐
-9290 ☐
-9210 ☒
-9210 ☐

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: SCS Engineers

REPORT TO: David Lamadrid

ADDRESS: Dlamadrid@scsengineers.com

PHONE: 503639-9315 FAX:

INVOICE TO: SCS Engineers Portland, OR

P.O. NUMBER:

PROJECT NAME: Leichner Brothers

PROJECT NUMBER: 04212030.01 / 04212030.17

SAMPLED BY: T Andrews

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: —	REQUESTED ANALYSES: VOCs 8260 low level	REQUESTED ANALYSES: Dissolved Mn, Fe (6020)	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-091212-06	9/12/12 @ 1020						X	X	X	X	X	W	5	low level VOCs samples were field filtered	
2	LB-091212-07	9/12/12 @ 100						X	X	X	X	X	W	5		
3	LB-091212-08	9/12/12 @ 1140						X	X	X	X	X	W	5		
4	LB-091212-09	9/12/12 @ 1225						X	X	X	X	X	W	5		
5	Trip Blank	9/12/12 —						X					W	1		
6																
7																
8																
9																
10																

RELEASED BY: [signature] DATE: 9/12/12
PRINT NAME: T Andrews FIRM: SCS TIME: 1530

RECEIVED BY: [signature] DATE: 09/14/12
PRINT NAME: Tom Krause FIRM: TAP TIME: 1530

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: 1R1P1L

TEMP: 3.4

PAGE OF

TAL-1000(0408)

Page 26 of 28

9/30/2012

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-6657-1
SDG Number: 04212030.01/04212030.17

Login Number: 6657
List Number: 1
Creator: Krause, Thomas

List Source: TestAmerica Portland

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	pH checked 09/12/12 TK
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-6657-1
SDG Number: 04212030.01/04212030.17

Login Number: 6657
List Number: 1
Creator: Riley, Nicole

List Source: TestAmerica Seattle
List Creation: 09/14/12 03:31 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Time of relinquishment not included on ICOC.
Is the Field Sampler's name present on COC?	False	Workshare.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

ATTACHMENT 3

Results of Laboratory QA/QC Reviews
Third Quarter 2012

SCS Engineers QA/QC Review
Groundwater - 3Q 2012 Groundwater Monitoring Event
Leichner Brothers Landfill
TestAmerica-Denver Report No. 250-6614-1

Samples: LB-091112-01 (LB-5S), LB-091112-02 (LB-27I), LB-091112-03 (LB-13I), LB-091112-04 (LB-26I), LB-091112-05 (equipment blank).

Sample Date: 09/11/2012
Laboratory Sample Received Date: 09/11/2012
Sample Receipt Temperature: 5.8°C
Laboratory Data Received Date: 09/28/2012
QA/QC Review Date: 10/25/2012 (DL)

VOCs

Method Blanks	All analytes were reported as non-detect.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits.
LCSD	All relative percent differences (RPDs) were within QC limits.

Dissolved Metals

Method Blanks	All analytes were were reported as non-detect.
LCS	All % recoveries were within control limits.
Matrix Spikes	All % recoveries were within QC limits.
MSD	All RPDs were 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. Chloride present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable. No corrective measure was needed.
MSD	All RPDs were within QC limits. All % recoveries were within QC limits, except for chloride. Chloride present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable. No corrective measure was needed.
Duplicates	All RPDs were within QC limits.

Hold Times
All analytical hold times were met, except for nitrate analysis of sample LB-091112-02 that was inadvertently analyzed beyond the hold time.

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

Field QA/QC
Equipment Blank
An equipment blank sample (LB-091112-05) was collected near monitoring well LB-26I on 09/11/2012. All analytes were reported as non-detect, except for acetone detected at a concentration of 3.6 micrograms per liter (µg/L). No corrective measures were needed because acetone was not detected in any of the monitoring well groundwater samples.

Notes
None.

Data Validation

Upon final review of lab report 250-6614-1 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (10/25/12; DL).

SCS Engineers QA/QC Review
Groundwater - 3Q 2012 Groundwater Monitoring Event
Leichner Brothers Landfill
TestAmerica-Denver Report No. 250-6657-1

Samples: LB-091212-06 (LB-6S), LB-091212-07 (LB-6S Dup), LB-091212-08 (LB-1S), LB-091212-09 (LB-10SR), trip blank.

Sample Date: 09/12/2012
Laboratory Sample Received Date: 09/12/2012
Sample Receipt Temperature: 3.4°C
Laboratory Data Received Date: 09/30/2012
QA/QC Review Date: 10/25/2012 (DL)

VOCs

Method Blanks	All analytes were reported as non-detect, except for acetone and methylene chloride detected above the reporting limits. No corrective action was necessary because acetone and methylene chloride were not detected in any of the monitoring well samples.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits.
LCSD	All relative percent differences (RPDs) were within QC limits.

Dissolved Metals

Method Blanks	All analytes were were reported as non-detect.
LCS	All % recoveries were within control limits.
Matrix Spikes	All % recoveries were within QC limits.
MSD	All RPDs were 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. Chloride present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable. No corrective measure was needed.
MSD	All RPDs were within QC limits. All % recoveries were within QC limits, except for chloride. Chloride present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable. No corrective measure was needed.
Duplicates	All RPDs were 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
Field duplicate sample LB-09212-07) was collected at monitoring well LB-6S on 09/12/2012.

Trip Blank
A laboratory supplied trip blank was carried into the field on 09/12/2012 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All VOCs were reported as non-detect in the trip blank sample.

Notes
None.

Data Validation
Upon final review of lab report 250-6657-1 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (10/25/2012; DL).

ATTACHMENT 4

Quarterly Compliance LFG Monitoring Probe Data
Third Quarter 2012

Compliance Landfill Gas Monitoring Probe Data
Third Quarter (July/August) 2012
Leichner Brothers Landfill

Probe	Date / Time	Methane (% by vol)	Carbon Dioxide (% by vol)	Oxygen (% by vol)	Balance (% by vol)	Relative Pressure (H_2O inch)
GP-1A	7/31/2012 15:48	0.0	2	18.2	79.8	0
GP-1B	7/31/2012 15:46	0.0	2	18	80	-0.01
GP-02	7/31/2012 15:43	0.0	3.2	16.7	80.1	-0.01
GP-03	7/31/2012 15:39	0.0	3.5	15.6	80.9	0.01
GP-4A	7/31/2012 15:34	0.0	2.3	16.8	80.9	-0.1
GP-4B	7/31/2012 15:36	0.0	2.7	15.9	81.4	-0.07
GP-05	7/31/2012 15:32	0.0	3.3	16	80.7	0.32
GP-06	7/31/2012 16:43	0.0	3.6	16.8	79.6	-0.01
GP-07	7/31/2012 16:13	0.5	13.1	0	86.4	-0.01
GP-8R	7/31/2012 16:08	0.0	1.6	17.9	80.5	0
GP-9A	8/1/2012 10:40	0.0	4.9	13.1	82	-0.02
GP-9B	8/1/2012 10:42	0.0	10.1	3.1	86.8	-0.02
GP-10A	8/1/2012 10:37	0.0	3	16.2	80.8	-0.01
GP-10B	8/1/2012 10:39	0.0	2	18.6	79.4	-0.01
GP-11	8/1/2012 10:36	0.0	1.8	18.6	79.6	-0.01
GP-12	8/1/2012 10:34	0.0	0.9	19.9	79.2	0
GP-13	8/1/2012 10:32	0.0	2.4	17.9	79.7	0
GP-14	8/1/2012 10:26	0.0	0.7	20.3	79	0
GP-15	8/1/2012 10:24	0.0	2	18.6	79.4	0
GP-16D	8/1/2012 10:12	0.0	4.8	15.9	79.3	0
GP-16S	8/1/2012 10:10	0.0	2.3	18.7	79	0
GP-17D	8/1/2012 10:07	0.0	0.8	20.4	78.8	-0.47
GP-17S	8/1/2012 10:05	0.0	4.1	17.4	78.5	0
GP-18D	8/1/2012 10:02	0.0	3.7	16.4	79.9	0
GP-18S	8/1/2012 10:00	0.0	2.4	18.2	79.4	0
GP-19D	7/31/2012 18:02	0.0	2.3	17.3	80.4	0
GP-19S	7/31/2012 18:00	0.0	1.3	18.5	80.2	-0.01
GP-20	7/31/2012 17:52	0.0	4.8	12.7	82.5	0
GP-21A	7/31/2012 17:44	0.0	0.9	18.9	80.2	0
GP-21B	7/31/2012 17:45	0.0	1.2	18.7	80.1	0
GP-22	7/31/2012 17:42	0.0	1.1	18.9	80	0
GP-23	7/31/2012 17:40	0.0	1.5	18.5	80	0
GP-24A	7/31/2012 17:36	0.0	0.7	19.6	79.7	0
GP-24B	7/31/2012 17:37	0.0	0.6	19.6	79.8	0
GP-25A	7/31/2012 17:07	0.0	2.6	17.3	80.1	-0.01
GP-25B	7/31/2012 17:09	0.0	3.2	16.3	80.5	-0.03
GP-26	7/31/2012 17:01	0.0	0.4	19.7	79.9	-0.01
GP-27	7/31/2012 16:58	0.0	0.8	19.2	80	-0.01
GP-28	7/31/2012 16:54	0.0	4.5	15.1	80.4	0
GP-29	7/31/2012 16:46	0.0	5	9.1	85.9	0
GP-30A	7/31/2012 15:27	0.0	5.4	13.3	81.3	0
GP-30B	7/31/2012 15:29	0.0	5.3	14.4	80.3	-1.38
GP-31	7/31/2012 18:04	0.0	1.1	18.8	80.1	0
GP-32	7/31/2012 17:57	0.0	1.5	18.1	80.4	-0.01
GP-33	7/31/2012 17:55	0.0	1.1	18.3	80.6	0
GP-34	7/31/2012 17:50	0.0	2.1	16.8	81.1	-0.01
GP-35	7/31/2012 17:48	0.0	1.9	17.2	80.9	0
GP-36	7/31/2012 17:34	0.0	1.3	18.5	80.2	0
GP-37	7/31/2012 17:32	0.0	1.3	18.7	80	0
GP-38	7/31/2012 17:04	0.0	0.7	19.1	80.2	0