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December 10, 1013
File No. 04213030.06/.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 2013 Progress Report for the Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017

Dear Mr. Kourehdar:

This letter report presents the third quarter 2013 progress report for the closed Leichner Landfill located in Vancouver, Washington. SCS Engineers, Inc. (SCS) prepared this 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 the Leichner Landfill to fulfill certain requirements of the 1996 Consent Decree and associated Cleanup Action Plan (CAP), as well as to concurrently fulfill the requirements of Leichner Landfill's post-closure monitoring under Minimum Functional Standards (MFS), Chapter 173-304 WAC. Compliance monitoring is performed in accordance with the methods and procedures described in the site's updated compliance monitoring plan (CMP) submitted to Ecology in July 2013 (SCS, 2013b[1]), and subsequent modifications to the groundwater analytical program approved by Ecology.

This report (1) describes field activities performed during the third quarter 2013 at Leichner Landfill, (2) presents results of 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 2013. The GCCS includes a LFG extraction well field, condensate collection system, and a LFG blower and flare station (BFS).

[1] SCS Engineers (SCS), 2013b, Compliance Monitoring Plan, Leichner Landfill, Clark County, Washington, prepared by SCS, Inc., Portland, Oregon, for Clark County Department of Environmental Services, July 30.

THIRD QUARTER 2013 MAJOR ACTIVITIES

The major activities performed during the third quarter (July through September) 2013 are listed below, and several are described in more detail in subsequent sections of this report.

- Performed the third quarter 2013 (semiannual) groundwater monitoring in August.
- Submitted the Second Quarter 2013 Progress Report to Ecology and Clark County Public Health (CCPH) in September 2013.
- Conducted monthly stormwater inspections in July, August, and September 2013, and third quarter 2013 stormwater sampling in September 2013.
- Conducted quarterly monitoring of the LFG compliance monitoring probes in September 2013.
- 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 and BFS.
- Performed weekly greenhouse gas (GHG) monitoring per the requirements of Washington State's GHG Reporting rule.
- Prepared an updated version of the Stormwater Pollution Prevention Plan (SWPPP) [2] and retained a copy in the on-site project files.

THIRD QUARTER 2013 PROJECT ACTIVITIES AND RESULTS

Project Management, Meetings, and Correspondence

Correspondence conducted during the third quarter 2013 included the following:

- Submitted the July, August, and September 2013 monthly update reports to the County and the LLOC.
- Submitted the Second Quarter 2013 Progress report, dated September 5, 2013, to Ecology, the County, and the LLOC (SCS, 2013a[3]).

[2] SCS Engineers (SCS), 2013, Stormwater Pollution Prevention Plan, Plan Date: July 2013, State of Washington, Industrial Stormwater General Permit, Permit Number: WAR005572B, Leichner Brothers Landfill. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, July.

[3] SCS Engineers (SCS), 2013a, Second Quarter 2013 Progress Report for the 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, June 12.

- Conducted the Third Quarter 2013 meeting with the LLOC on July 24, 2013. The meeting included a video conference with Ecology regarding the process for terminating the Consent Decree.

- Prepared an updated version of the Compliance Monitoring Plan (CMP) and submitted the final version, dated July 30, 2013, to Ecology and CCPH.

- Attended a meeting with Maul Foster and Alongi (MFA) representatives on September 25, 2013. The purpose of the meeting was to formalize roles and responsibilities for SCS and MFA during the master planning and Consent Decree discussion process with Ecology for the Leichner property.

Third Quarter 2013 Groundwater Monitoring

Groundwater Monitoring Network and Schedule

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

- Wells 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 annually or semiannually in accordance with the schedule specified in the CMP[1]. During the annual event, typically performed during the first quarter, groundwater samples are collected from the following 20 monitoring wells: LB-1S, LB-1D, LB-3S, LB-3D, LB-4SR, LB-4D, LB-5S, LB-5D, LB-6S, LB-10SR, LB-10DR, LB-13I, LB-13D, LB-17I, LB-17D, LB-20S, LB-26I, LB-26D, LB-27I, and LB-27D. During the semiannual monitoring event, typically performed during the third quarterly period in late summer-early fall, 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.

Sampling Procedures and Laboratory Methods

Before collecting groundwater samples, SCS measured depth-to-groundwater in all site monitoring wells (see Table 1). Groundwater sampling was then performed (1) in general accordance with the procedures described in the CMP[1], 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[4] (approved by Ecology on July 19, 2011). A non-dedicated, portable, stainless steel QED® Sample Pro portable micropurge bladder pump was used to purge and sample the monitoring wells. A new, disposable, polyethylene bladder was used for each well. Dedicated polyethylene discharge tubing was used for sampling 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. During pumping, the water level in the wells was monitored to document that water-level stabilization (i.e., less than 0.3 foot of drawdown over three successive measurements) was achieved. Before recording field water quality parameters, the approximate volume of the stagnant water in the discharge tubing was purged. A calibrated, potable water-quality meter attached to a flow-through cell was used to measure pH, temperature, specific conductance, 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 measurements of field water-quality parameter 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 potable water, (2) a scrub wash with non-phosphatic detergent consisting of a dilute mixture of Liquinox (or equivalent) and potable 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 of the QED® Sample Pro portable pump. 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 CMP[1]: inorganic indicator parameters (nitrate as nitrogen [nitrate], total dissolved solids [TDS], chloride [Cl], dissolved iron [Fe], dissolved manganese [Mn]), and volatile organic compounds (VOCs).

The laboratory analytical methods used were consistent with those described in the CMP. This included discontinuing analysis of vinyl chloride (VC) and 1,1-dichloroethene (1,1-DCE) from the groundwater analytical program as approved by Ecology in an email correspondence to the

[4] 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.

County dated February 12, 2013[5]. Laboratory analysis by the standard EPA Method 8260B for the other required VOCs was performed consistent with the requirements in the CMP and Consent Decree.

Quality Assurance and Quality Control Methods and Results

Field quality assurance/quality control (QA/QC) procedures used for this monitoring event included collecting and submitting for analyses one duplicate sample (samples LB-082113-03 and LB-082113-05 collected at well LB-27I) and one field equipment blank sample (sample LB-082113-02). 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 2013 Groundwater Monitoring Results

Depth-to-groundwater levels and corresponding groundwater elevations (based on reference 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 2013 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.

Field water-quality parameter concentrations measured in the third quarter 2013 groundwater samples were generally consistent with previous results. Field parameter concentrations were within available regulatory or compliance levels, except for pH in groundwater samples from monitoring wells LB-1S, LB-5S, LB-6S, LB-13I, LB-26I, and LB-27I. The pH values in samples from these wells (from 5.84 to 6.1 standard units [S.U.]) were slightly below the lower regulatory range of 6.5 to 8.5 S.U. (see Table 2). Historical pH measurements in samples collected from all of these wells have occasionally been below the regulatory limit. The historical pH values for these wells have previously been reported to Ecology and are likely reflective of naturally-occurring groundwater conditions. This conclusion is based on the occurrence of pH values below the regulatory range in groundwater samples collected from monitoring wells screened in both the alluvial WBZ and Troutdale Formation aquifer that are upgradient of the former landfilling areas.

[5] Washington State Department of Ecology (Ecology), 2013, Email (re: Letter to WDOE requesting to discontinue GW sampling for VC and DCE) to M. Davis, Clark County Environmental Services, and L. Caruso, SCS Engineers, from M. Kourehdar, Ecology, Toxics Cleanup Program, February 12.

The field-measured specific conductance value in the sample collected from well LB-27I (720 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 periodically exceeded the compliance level. The historical conductance values for these wells have previously been reported to Ecology and are likely reflective of naturally occurring groundwater conditions.

The third quarter 2013 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 previous results. The concentrations of inorganic parameters and dissolved metals did not exceed compliance levels except for the dissolved Mn concentration in the sample from well LB-27I. The dissolved Mn concentration of 0.41 mg/L exceeded the 0.05 mg/L compliance level and is consistent with historical results. The dissolved Mn concentration described above is consistent with historical results and likely attributed in part to natural groundwater conditions, as previously reported to Ecology. Historical data indicate that background levels for both Fe and Mn exhibit natural variability and have fluctuated above and below the compliance levels at several well locations, including upgradient wells.

No VOCs were detected in the groundwater samples collected in the third quarter 2013, including VOCs for which compliance levels have been established for LBLF (i.e., 1,4-dichlorobenzene, tetrachloroethene, and trichloroethene) (see Table 4). One VOC (chloroethane. 0.18µg/L) was detected at an extremely low concentration (i.e., 0.17µg/L) slightly above the detection limit in the duplicate sample for well LB-27I.

The third quarter 2013 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 2013 Stormwater Monitoring and Reporting

Quarterly compliance stormwater monitoring was performed during the third quarter 2013 on September 23, 2013, in accordance with Leichner Landfill's Industrial Stormwater General Permit, effective January 1, 2010. The stormwater sample was collected at Outfall 1 (see Figure 1) in accordance with the procedures described in Leichner Landfill's SWPPP[2], and the sample was submitted to TestAmerica Laboratories for permit-required laboratory analyses. Analytical results of this stormwater sample indicated that water-quality benchmarks specified in the Leichner Landfill's General Permit were not exceeded.

Consistent with requirements of Leichner Landfill's General Permit, monthly stormwater inspections were performed during the third quarter 2013 period on July 31, August 30, and September 23, 2013. No significant problems or concerns were noted during the monthly inspections.

Third Quarter 2013 LFG System Monitoring and Results

Compliance LFG Monitoring

The third quarter 2013 compliance LFG monitoring was performed on September 3, 2013. Methane concentrations in all probes were below 5 percent, except for probe GP-7 (see Figure 5). The methane concentration detected in compliance monitoring probe GP-7 was 7.2 percent. Adjustments to the GCCS LFG extraction wells in the vicinity of GP-7 successfully reduced methane concentrations in this probe to below the compliance level (i.e., the methane concentration was measured at 0.2 percent on September 6). A summary of the 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) were monitored and adjusted (balanced) at least twice a month during the third quarter 2013. There were no problems or concerns noted during the monitoring and adjustment of the LFG extraction well fields.

Greenhouse Gas Monitoring

The LFG flare system was monitored weekly during the third quarter 2013 period for emissions criteria required by the State of Washington's GHG Reporting rule. Routine monitoring of the LFG flare system was also performed to optimize the performance and efficiency of the LFG blowers and flare.

Flare Emissions and Testing

No activities were performed in third quarter 2013 related to this task.

GCCS Operations and Maintenance

Routine operations, maintenance, and repair of the GCCS performed during the third quarter 2013 included the following:

- Performed general maintenance of the flare station blowers, North and South Detention Pond pumps, and air compressor. Activities performed included conducting inspections, adding oil to the pumps, and lubricating the blowers.

- Maintained and repaired (as needed) the LFG extraction wells and piping, including making repair (as needed) of minor leaks in the GCCS conveyance lines due to loosely attached flex hoses or fittings.

- Maintained and repaired (as needed) of the LFG flare system, condensate collection system, including the condensate sumps, airlines, discharge lines, and compressors.

Other non-routine maintenance and repair activities performed during each month are described in subsequent sections of the report.

July 2013

- Painted the protective steel casings (and protective bollards if present) for a subset of 20 LFG compliance monitoring probes.

- Met with Emerald Services on site to oversee pumping of liquid from the 20,000 gallon storage tank inside the BFS enclosure.

- Electrical subcontractor (EC Electric) began installing the variable frequency drives (VFDs) used to control motor speed on the new blowers.

August 2013

- Completed annual flare O&M that included removing/cleaning the flame arrestor, cleaning flare site glass, removing debris from burner deck, painting the fail safe electric valve, replacing damaged propane line, filling propane bottle, and cleaning the knockout pot.

- Finalized the installation of two new blowers (LFG#1 and LFG#2). This included completing the VFD installations.

- Purchased and installed designation labels on the protective casings of the site monitoring wells and gas probes.

REPAIR/REPLACEMENT/RENOVATION ACTIVITIES

The following repair, replacement, and renovation activities were performed during the third quarter 2013:

- Performed remote programming of the recently installed Remote Monitoring and Control (RMC) system upgrades, including building the C-more interface screens and setting up the high-level alarms for the North and South Detection Ponds.

- Backfilled a small excavation near the South Detention Pond that was trenched to accommodate installing a transducer as part of the RMC system installation activities performed in June.

- At the request of the County, made additional revisions to the engineering drawings for the Module 2 stormwater improvement project.

- Began construction of stormwater improvements along the western side of former Module 2 in mid-September 2013. Work performed included (1) started excavating the stormwater collection trench, (2) reviewing variance submittals prepared by the construction contractor (SCS Field Services), (3) conducting site visits and conference calls, (4) reviewing and updating the construction schedule, and (5) providing field quality assurance oversight. It should be noted that significant delays to the Module 2 stormwater improvement project were realized because of historical rain events in late September. Additional effort was required to manage storm runoff and prevent overflow into adjacent properties.

- Performed management duties related of oversight of the Module 2 stormwater improvement project. Activities performed included conducting site visits and conference calls, reviewing and updating the construction schedule, and providing field quality assurance oversight.

- Managed stormwater ponding related to historical rain events in September. The focus of the work was around the construction area of the Module 2 stormwater improvement project and south side of Module 2. Ponding stormwater was pumped to the north detention basin.

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,

Tim Browning, LG
Project Manager
SCS ENGINEERS

Louis Caruso, LG, LHG
Project Director/Vice President
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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 (August 20, 2013)
Figure 3 – Groundwater Potentiometric Surface Contours, Troutdale Formation Aquifer (August 20. 2013)
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 (August) 2013
Leichner Landfill

Monitoring Well	Reference Elevation (Clark Co. Datum) [a]	Depth to Groundwater (feet, BTOC) [b]	Groundwater Elevation
LB-R2	222.27	44.37	177.90
LB-1S	210.12	32.32	177.80
LB-1D	209.74	35.47	174.27
LB-3S	218.25	37.75	180.50
LB-3D	219.29	38.76	180.53
LB-4S(R)	226.46	23.32	203.14
LB-4C	228.08	45.95	182.13
LB-4D	228.00	55.45	172.55
LB-5S	206.89	16.01	190.88
LB-5C	206.70	31.75	174.95
LB-5D	207.56	36.59	170.97
LB-6S	202.80	26.12	176.68
LB-9S(R)	217.94	34.34	183.60
LB-10SR	204.04	29.88	174.16
LB-10CR	203.05	28.81	174.24
LB-10DR	203.36	41.41	161.95
LB-13I	202.36	26.85	175.51
LB-13C	202.68	27.23	175.45
LB-13D	202.96	27.60	175.36
LB-17S	208.18	30.11	178.07
LB-17I	213.14	35.29	177.85
LB-17C	206.55	28.95	177.60
LB-17D	213.17	36.18	176.99
LB-20S	221.22	39.25	181.97
LB-21S	223.35	36.85	186.50
LB-21C	223.32	37.25	186.07
LB-21D	223.63	40.20	183.43
LB-22S	208.42	6.61	201.81
LB-23S	229.19	31.12	198.07
LB-24S	235.13	38.94	196.19
LB-26I	200.22	24.19	176.03
LB-26D	200.75	23.90	176.85
LB-27I	205.35	30.16	175.19
LB-27D	204.63	36.60	168.03
MW-1 N	216.58	Dry	NA
MW-1 S	216.13	36.72	179.41
MW-1 E	216.45	Dry	NA
MW-NE	220.06	14.31	205.75

Notes:

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

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

[b] Measured on August 20, 2013

Table 2
Field Water Quality Parameters Measurements
Third Quarter (August) 2013
Leichner 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-082213-08	8/22/2013	**5.84**	312	13.0	228.7	4.12
LB-5S	LB-082113-01	8/21/2013	**6.10**	127	13.7	166.7	6.01
LB-6S	LB-082113-07	8/21/2013	**6.03**	181	13.6	192.7	4.61
LB-10SR	LB-082213-09	8/22/2013	6.70	319	14.0	105.4	0.26
LB-13I	LB-082113-05	8/21/2013	**6.01**	280	14.5	167.1	2.31
LB-26I	LB-082113-06	8/21/2013	**6.00**	244	13.7	219.3	4.25
LB-27I	LB-082113-03	8/21/2013	**6.00**	**720**	14.5	145.2	0.38

Notes:

S.U. = standard units

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

^{o}C = degrees celsius

mV = millivolts

mg/L = milligrams per liter

Bold = concentration exceeds the regulatory limit or compliance level

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

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

Table 3
Inorganic Parameters and Dissolved Metals Concentrations
Third Quarter (August) 2013
Leichner Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Iron (mg/L)	Manganese (mg/L)
Compliance Levels (mg/L) [a]				250	10	500	0.3	0.05
LB-1S	LB-082213-08	Alluvium	8/22/2013	13.0	8.7	250	0.025 U	0.0020 U
LB-5S	LB-082113-01	Alluvium	8/21/2013	3.9	4.8	150	0.025 U	0.0020 U
LB-6S	LB-082113-07	Alluvium	8/21/2013	3.7	1.5	150	0.025 U	0.0020 U
LB-10SR	LB-082213-09	Alluvium	8/22/2013	18	0.8	270	0.025 U	0.0025
LB-13I	LB-082113-05	Alluvium	8/21/2013	11.0	4.3	210	0.025 U	0.0020 U
LB-26I	LB-082113-06	Alluvium	8/21/2013	7.5	5.0	200	0.025 U	0.0020 U
LB-27I	LB-082113-03	Alluvium	8/21/2013	51	0.10 U	420	0.025 U	**0.41**
LB-27I (DUP)	LB-082113-05	Alluvium	8/21/2013	51	0.10 U	420	0.025 U	**0.42**
Field Blank	LB-082113-02	NA	8/21/2013	0.5 U	0.1 U	10 U	0.025 U	0.0020 U

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

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

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (August) 2013
Leichner Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	1,4-Dichlorobenzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	1,1-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	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
				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]	**1.8**	**5.0**	**5.0**	**2.4** [b]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-082213-08	Alluvium	8/22/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-5S	LB-082113-01	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-6S	LB-082113-07	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-10SR	LB-082213-09	Alluvium	8/22/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-13I	LB-082113-05	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-26I	LB-082113-06	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-27I	LB-082113-03	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
LB-27I (DUP)	LB-082113-04	Alluvium	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
Field Blank	LB-082113-02	NA	8/21/2013	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U
Trip Blank	NA	NA	NA	0.16 U	0.15 U	0.13 U	0.14 U	0.18 U	0.14 U	0.13 U	0.17 U	0.19 U	0.27 U	0.18 U	0.17 U	0.16 U	5.0 U	0.14 U	0.15 U	0.13 U

Notes:

ug/L = micrograms per liter.

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

Bold = detected concentration.

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

[b] Udated regional screening level (RSL) of 2.4 µg/L for the ingestion exposure pathway (EPA Region 9 RSLs, April 2012).

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (August) 2013
Leichner Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	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
				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
LB-1S	LB-082213-08	Alluvium	8/22/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-5S	LB-082113-01	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-6S	LB-082113-07	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-10SR	LB-082213-09	Alluvium	8/22/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-13I	LB-082113-05	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-26I	LB-082113-06	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-27I	LB-082113-03	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
LB-27I (DUP)	LB-082113-04	Alluvium	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
Field Blank	LB-082113-02	NA	8/21/2013	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U
Trip Blank	NA	NA	NA	0.14 U	0.16 U	0.20 U	0.16 U	0.14 U	3.0 U	0.14 U	2.0 U	0.14 U	0.16 U	1.5 U	5.0 U	0.06 U	0.16 U	0.44 U	1.0 U	2.0 U

Notes:

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[b] Udated regional screening level (RSL) of 2.4 µg/L for the ingestion exposure pathway (EPA Region 9 RSLs, April 2012).

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (August) 2013
Leichner Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene chloride
				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
LB-1S	LB-082213-08	Alluvium	8/22/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-5S	LB-082113-01	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-6S	LB-082113-07	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-10SR	LB-082213-09	Alluvium	8/22/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-13I	LB-082113-05	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-26I	LB-082113-06	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-27I	LB-082113-03	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
LB-27I (DUP)	LB-082113-04	Alluvium	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	**0.18** J	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
Field Blank	LB-082113-02	NA	8/21/2013	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U
Trip Blank	NA	NA	NA	0.17 U	0.11 U	0.18 U	0.14 U	0.17 U	0.10 U	1.0 U	0.16 U	0.14 U	0.17 U	0.21 U	1.0 U	0.10 U	1.0 U	0.50 U	0.18 U	1.0 U

Notes:

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

[b] Udated regional screening level (RSL) of 2.4 µg/L for the ingestion exposure pathway (EPA Region 9 RSLs, April 2012).

Table 4
Volatile Organic Compunds Concentrations
Third Quarter (August) 2013
Leichner Landfill

Location Identification	Sample Blind ID	Unit Screened	Sample Date	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
			Compliance Level [a]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-082213-08	Alluvium	8/22/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-5S	LB-082113-01	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-6S	LB-082113-07	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-10SR	LB-082213-09	Alluvium	8/22/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-13I	LB-082113-05	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-26I	LB-082113-06	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-27I	LB-082113-03	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
LB-27I (DUP)	LB-082113-04	Alluvium	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
Field Blank	LB-082113-02	NA	8/21/2013	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U
Trip Blank	NA	NA	NA	0.25 U	0.20 U	1.0 U	0.20 U	0.13 U	0.14 U	0.10 U	0.20 U	0.11 U	0.10 U	0.20 U	0.10 U

Notes:

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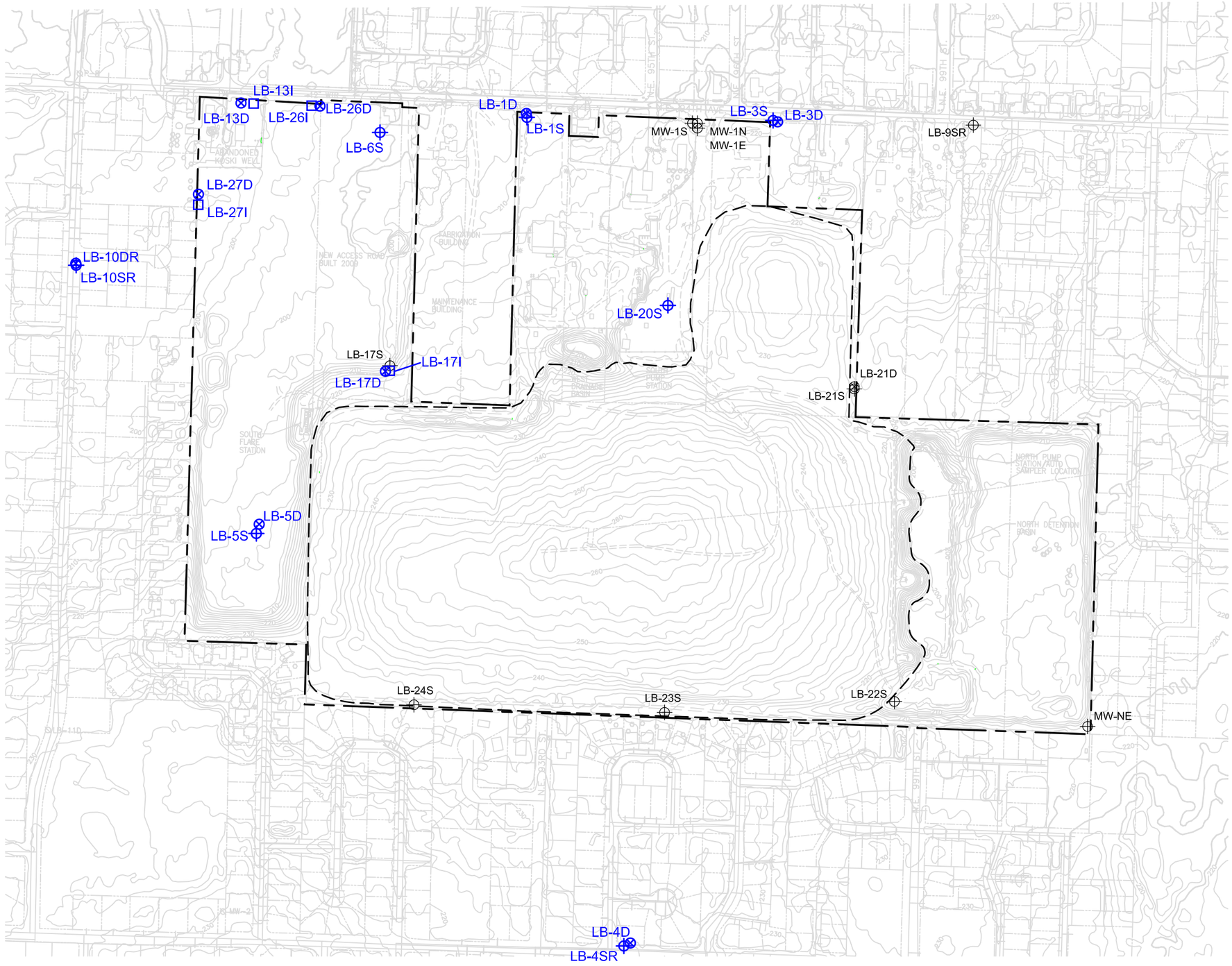
[a] Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.

[b] Udated regional screening level (RSL) of 2.4 µg/L for the ingestion exposure pathway (EPA Region 9 RSLs, April 2012).

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.

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

SCALE
0 400 800 FEET

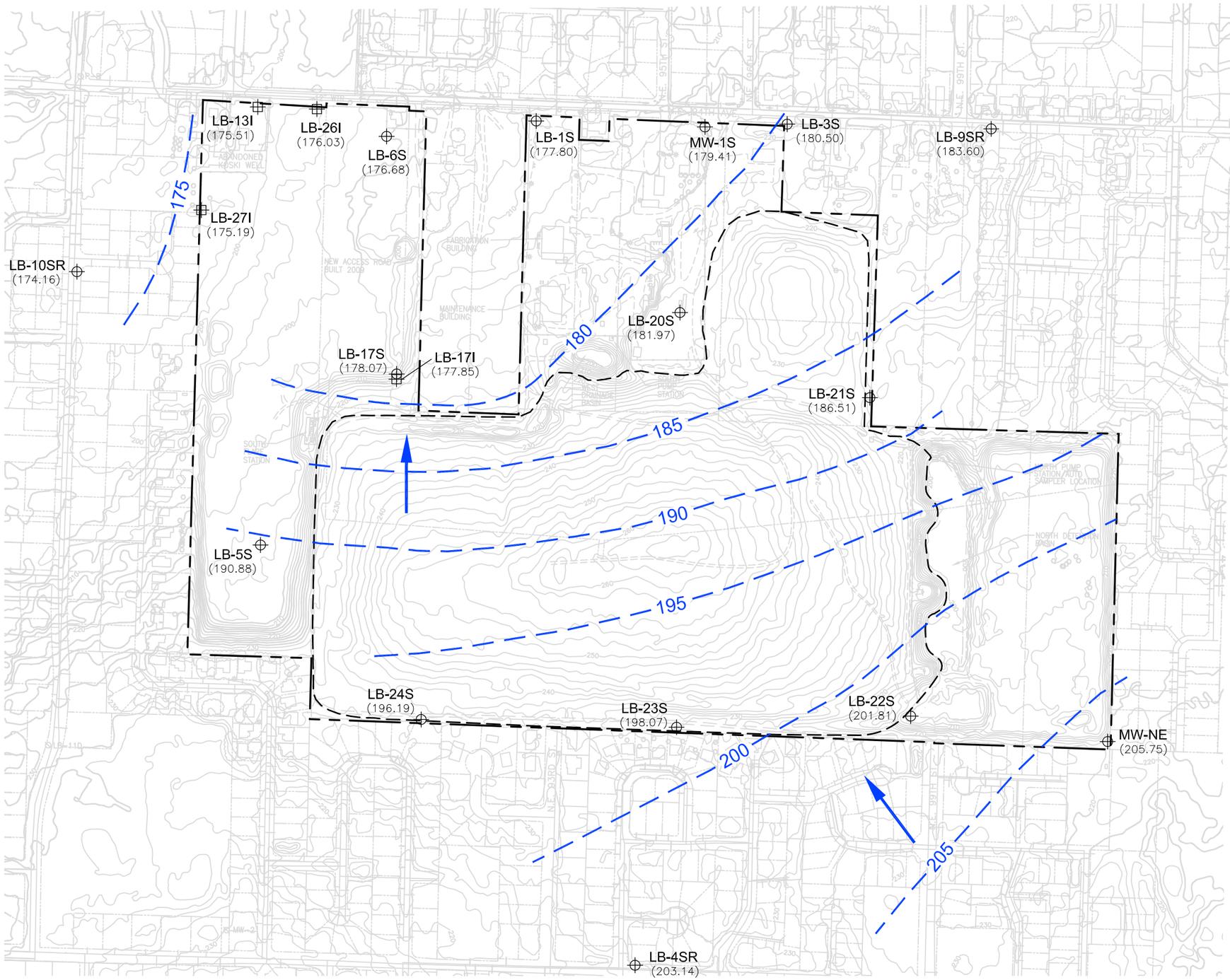
PROJECT NO. 04213030.06/.18	DES BY T.B.
SCALE AS SHOWN	CHK BY J.D.
CAD FILE FIGURE 1	APP BY L.C.

GROUNDWATER MONITORING LOCATIONS

LEICHNER BROTHERS LANDFILL
VANCOUVER, WASHINGTON

DATE DECEMBER 2013

FIGURE 1



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
(205.75)	Groundwater Elevation Measured on August 20, 2013
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

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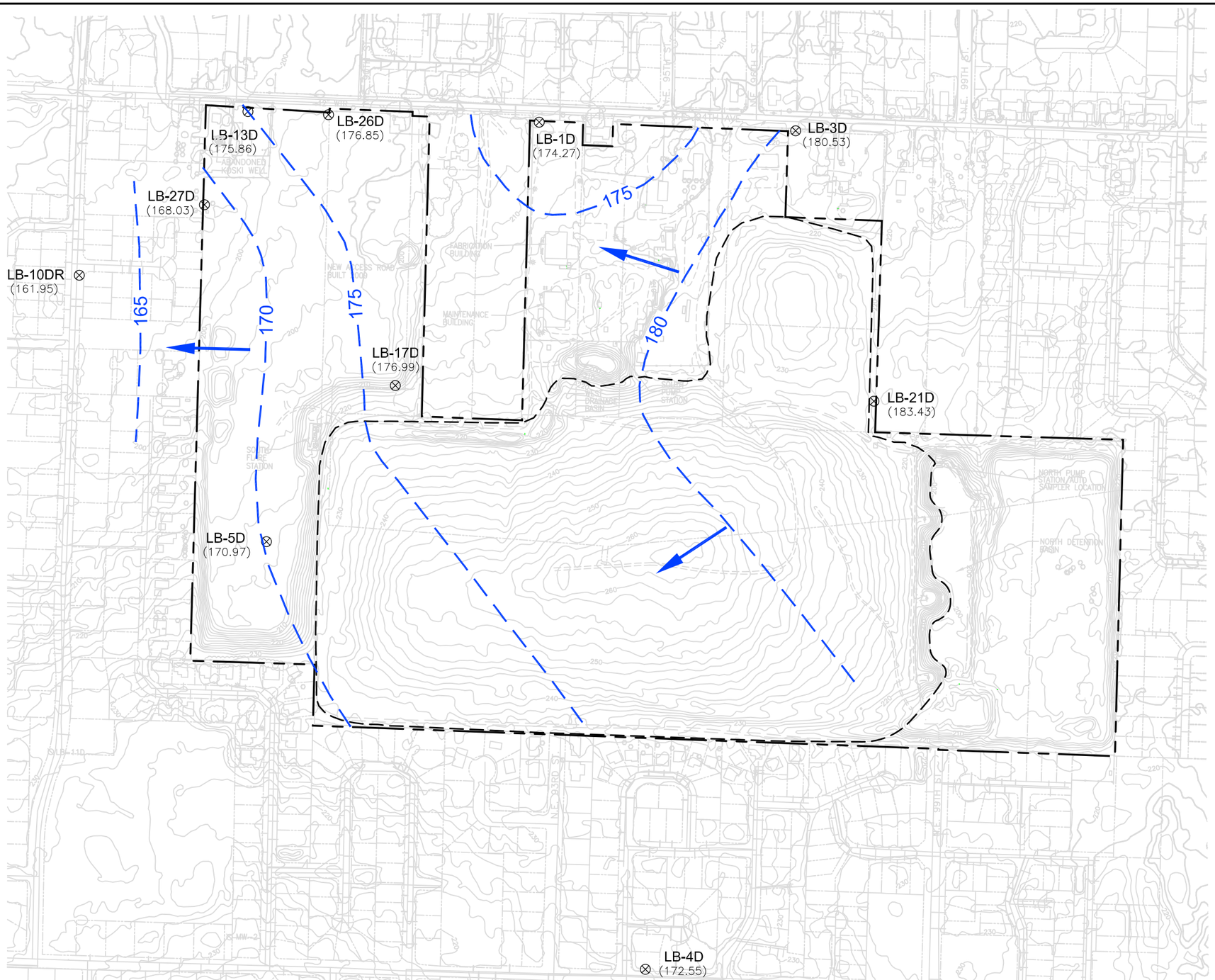
SCALE
0 400 800 FEET

PROJECT NO. 04213030.06/.18	DES BY T.B.
SCALE AS SHOWN	CHK BY J.D.
CAD FILE FIGURE 2	APP BY L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
ALLUVIAL WATER BEARING ZONE
AUGUST 20, 2013
LEICHNER BROTHERS LANDFILL
VANCOUVER, WASHINGTON

DATE DECEMBER 2013
FIGURE 2



LEGEND:

LB-5D ⊗	Monitoring Well Location, Troutdale Aquifer
— — — —	Property Boundary
— — — — —	Limit of Landfill Cover and Approximate Edge of Waste
— —180— —	Groundwater Potentiometric Surface Contour
(183.43)	Groundwater Elevation Measured on August 20, 2013
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

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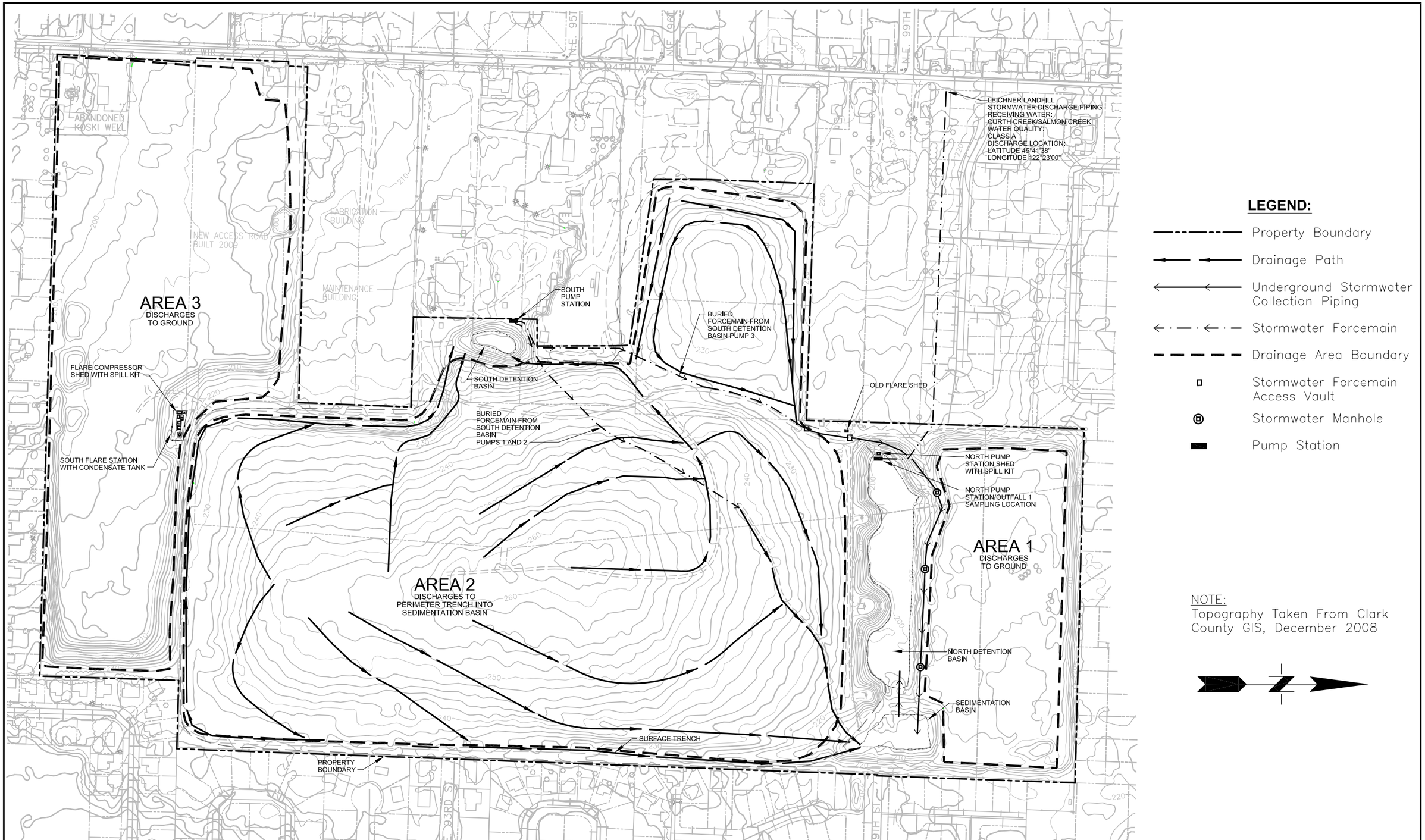
SCALE
0 400 800 FEET

PROJECT NO. 04213030.06/.18	DES BY T.B.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER AUGUST 20, 2013	DATE DECEMBER 2013
SCALE AS SHOWN	CHK BY J.D.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY L.C.		



LEGEND:

- Property Boundary
- Drainage Path
- Underground Stormwater Collection Piping
- Stormwater Forcemain
- Drainage Area Boundary
- Stormwater Forcemain Access Vault
- Stormwater Manhole
- Pump Station

NOTE:
Topography Taken From Clark County GIS, December 2008

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

SCALE
0 300 600 FEET

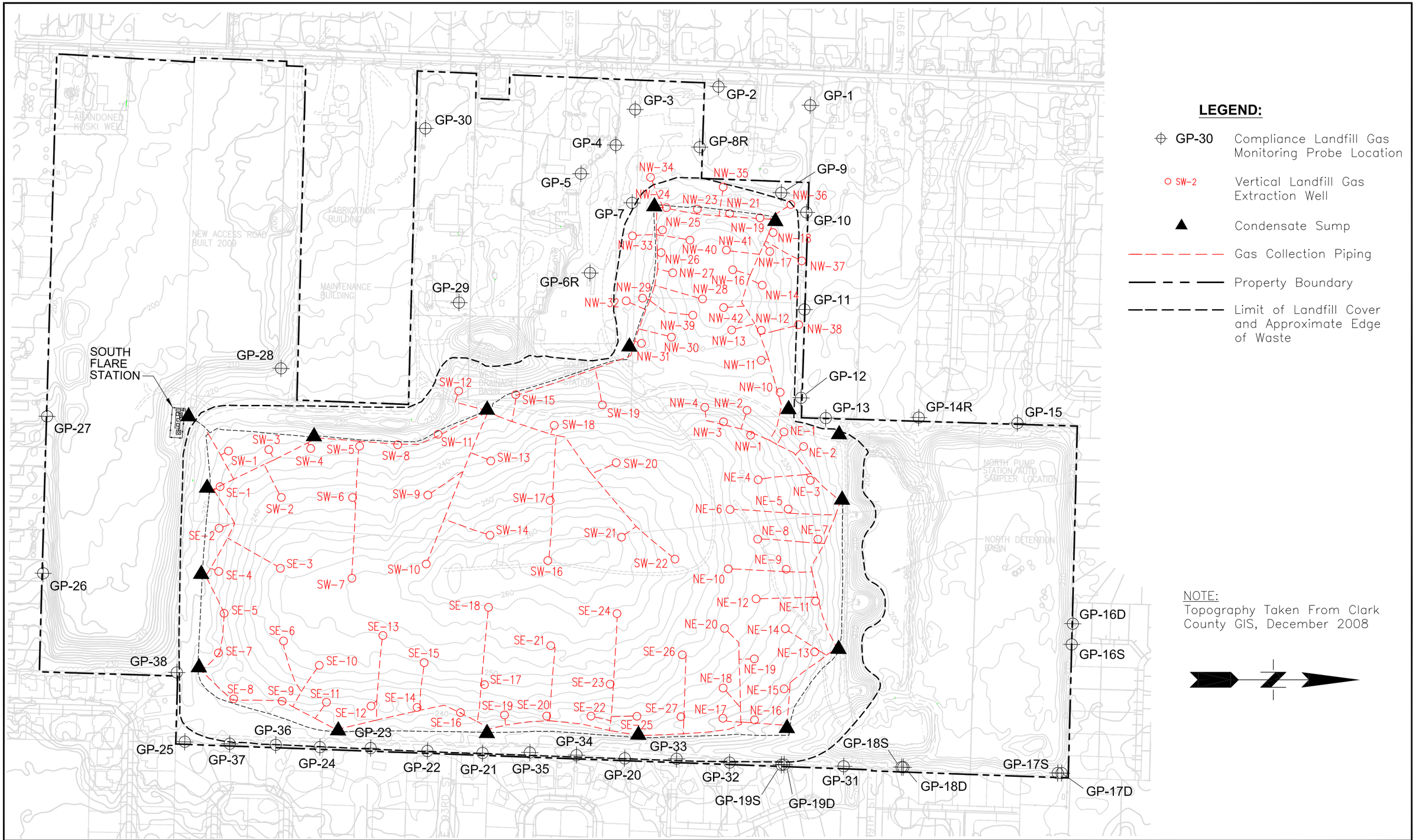
PROJECT NO. 04213030.06/.18	DES BY T.B.
SCALE AS SHOWN	CHK BY J.D.
CAD FILE FIGURE 4	APP BY L.C.

SITE MAP AND STORMWATER SYSTEM

LEICHNER BROTHERS LANDFILL
VANCOUVER, WASHINGTON

DATE DECEMBER 2013

FIGURE 4



LEGEND:

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

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 300 600 FEET

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

PROJECT NO. 04213030.06/.18	DES BY T.B.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS	DATE DECEMBER 2013
SCALE AS SHOWN	CHK BY J.D.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 5
CAD FILE FIGURE 5	APP BY L.C.		

ATTACHMENT 1

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 Landfill **WELL ID:** LR-15
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082213-08
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)
8/22/13	09:38	45.00	.	32.38	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/22/13	10:05	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/22/13	10:05	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	8/22/13	10:05	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) 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 09:40 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(0942)	0.00	7.46	115.7	334	14.64	32.05	7.82	clear/colorless
1	A(0945)	0.3	6.40	192.0	340	13.16	32.05	4.66	clear/colorless
2	A(0948)	0.6	6.12	226.0	332	12.98	32.05	4.45	clear/colorless
3	A(0951)	1.0	6.01	235.6	324	13.00	32.05	4.38	clear/colorless
4	A(0954)	1.3	5.81	236.3	319	13.02	32.05	4.31	clear/colorless
5	A(0957)	1.5	5.83	230.4	313	13.01	32.05	4.14	clear/colorless
6	A(1000)	1.7	5.84	228.7	312	12.99	32.05	4.12	clear/colorless

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (PRINTED NAME) (SIGNATURE)

PH was checked by using two Calibrated YSIs

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 Landfill **WELL ID:** LR-55
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082113-01
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 64 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water	DTP-DTW	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
8/21/13	09:30	30.32	.	16.03	.	.	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	8/21/13	10:25	A	3	~~40 ml~~	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	10:25	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	8/21/13	10:25	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) 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: 09:36 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(0938)	0.00	6.88	100.7	174	15.16	16.03	11.11	Clear/Colorless
1	A(0941)	0.3	5.55	203.4	171	13.96	16.03	7.62	Clear/Colorless
2	A(0944)	0.5	4.99	228.6	171	13.82	16.03	7.46	Clear/Colorless
3	A(1009)	0.7	6.15	141.2	129	14.23	16.03	6.55	Clear/Colorless
4	A(1012)	1.0	6.11	169.7	127	13.67	16.03	5.97	Clear/Colorless
5	A(1015)	1.2	6.15	168.0	127	13.66	16.03	5.55	Clear/Colorless
6	A(1018)	1.4	6.10	166.7	127	13.67	16.03	6.01	Clear/Colorless

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 20psi
Stopped purge @ 0945 to re calibrate YSI

SAMPLER: B mcmullen (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 Landfill **WELL ID:** LB-27I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-02

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	**TEMPERATURE:**	°F 64.	°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)
/ /	:	57.15Bm	.	.	.	.	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	8/21/13	11:00	G	3	40 ml HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11:00	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	8/21/13	11:00	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) 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 near LB-27I using lab supplied DI, pumped water through bladder and filtered for D metals

SAMPLER: B McMullen
(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 Landfill **WELL ID:** LB-GS

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-07

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 64.	°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]
8/21/13	14:52	39.07	.	26.17	.	.	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	8/21/13	15:30	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	15:30	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	8/21/13	15:30	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) 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: 15:10 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(1513)	0.00	6.76	90.8	174	15.49	26.17	6.27	clear/colorless
1	A(1516)	0.2	6.50	102.8	173	14.40	26.17	4.75	clear/colorless
2	A(1519)	0.4	6.13	180.5	176	13.69	26.17	4.40	clear/colorless
3	A(1522)	0.5	6.01	198.1	178	13.64	26.17	4.29	clear/colorless
4	A(1525)	0.7	6.02	194.2	179	13.76	26.17	4.48	clear/colorless
5	A(1528)	0.9	6.03	192.7	181	13.60	26.17	4.61	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 21psi

SAMPLER: R McMullen (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 Landfill **WELL ID:** LR-10SR
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082213-09
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)
8/22/13	:	42.35	.	29.93	.	.	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	8/22/13	11:05	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/22/13	11:05	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	8/22/13	11:05	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) 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: 10:42 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(1045)	0.00	6.81	155.5	325	13.89	29.93	1.43	Cloudy
1	A(1048)	0.4	6.73	110.5	322	13.93	29.93	0.44	Clear/Tan
2	A(1051)	0.6	6.72	109.0	319	13.96	29.93	0.32	Clear/Tan
3	A(1054)	1.0	6.71	107.2	317	13.91	29.93	0.28	Clear/Tan
4	A(1057)	1.25	6.70	106.1	318	13.98	29.93	0.27	Clear/Colorless
5	A(1100)	1.40	6.70	105.4	319	14.00	29.93	0.26	Clear/Colorless
6			.			.	.	.	

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

Low Flow Purge Method - 100ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: R McMullen (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 Landfill **WELL ID:** LR-13T

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082113-05

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 64.	°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)
8/21/13	12:54	55.03	.	28.86	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	8/21/13	13:15	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	13:15	A	1 250,(500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	8/21/13	13:15	A	1 (250) 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: 12:55

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1256)	0.00	7.56	122.4	282	25.16	28.86	8.28	clear/Colorless
1	A(1259)	0.3	7.17	76.0	281	14.79	28.86	4.42	clear/Colorless
2	A(1302)	0.4	6.74	88.4	280	14.61	28.87	3.33	clear/Colorless
3	A(1305)	0.5	6.12	148.6	279	14.60	28.87	2.74	clear/Colorless
4	A(1308)	0.7	6.08	164.1	279	14.62	28.87	2.43	clear/Colorless
5	A(1311)	0.9	6.01	167.1	280	14.46	28.88	2.31	clear/Colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 75ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** LB-26I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-06
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	(°F) 64 .	°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)
8/21/13	14:00	58.30	.	24.21	.	.	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	8/21/13	14:30	A	5	(40 ml) HCl	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	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	8/21/13	14:30	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) 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA

Purge Start Time: 14:12 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1413)	0.00	7.11	54.2	246	15.08	24.21	6.50	clear/colorless
1	A(1416)	0.3	6.24	103.7	245	14.04	24.21	5.06	clear/colorless
2	A(1419)	0.5	6.01	206.6	246	14.07	24.21	4.83	clear/colorless
3	A(1422)	0.7	5.99	206.1	245	13.80	24.21	4.70	clear/colorless
4	A(1425)	0.8	6.02	210.2	245	13.76	24.21	4.39	clear/colorless
5	A(1428)	0.9	6.00	219.3	244	13.69	24.21	4.25	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 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** LB- 27I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-03
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 64 .	°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)
8/21/13	11 : 25	57.15	.	30.19	.	.	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	8/21/13	11 : 55	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11 : 55	A	1	(250) (500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/21/13	11 : 55	A	1	(250) 500 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) No Vinyl Ch / 1,1 DCE 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 : 26 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(1129)	0.00	6.81	104.7	584	15.86	30.19	7.61	clear/Colorless
1	A(1132)	0.30	6.08	137.7	711	14.65	30.19	0.68	clear/Colorless
2	A(1135)	0.50	6.01	149.7	716	14.44	30.19	0.42	clear/Colorless
3	A(1138)	0.75	6.01	149.5	716	14.46	30.19	0.42	clear/Colorless
4	A(1141)	0.9	6.00	147.2	721	14.48	30.19	0.37	clear/Colorless
5	A(1144)	1.1	6.00	145.2	720	14.53	30.19	0.38	clear/Colorless
6		.				.	.	.	

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

Low flow Purge Method ~ 50ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** DUP1
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-98113-04
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	**TEMPERATURE:**	°F 64 .	°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 =

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	8/21/13	11 : 50	A	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11 : 50	A	1	250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/21/13	11 : 50	A	1	250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

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

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

Collected at LB-27I

SAMPLER: B Mcmullin
(PRINTED NAME) (SIGNATURE)

ATTACHMENT 2

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: 250-13704-1
TestAmerica SDG: 04213030.01 04213030.17
Client Project/Site: Leichner Landfill - Wash.
Revision: 1

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

Attn: Mr. Jason Davendonis

Authorized for release by:
9/9/2013 3:49:14 PM
Erica Fot, Project Mgmt. Assistant
erica.fot@testamericainc.com

Designee for

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

Table of Contents

Sample Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-13704-1	LB-082113-01	Water	08/21/13 10:25	08/21/13 17:30
250-13704-2	LB-082113-02	Water	08/21/13 11:00	08/21/13 17:30
250-13704-3	LB-082113-03	Water	08/21/13 11:55	08/21/13 17:30
250-13704-4	LB-082113-04	Water	08/21/13 11:50	08/21/13 17:30
250-13704-5	LB-082113-05	Water	08/21/13 13:15	08/21/13 17:30
250-13704-6	LB-082113-06	Water	08/21/13 14:30	08/21/13 17:30
250-13704-7	LB-082113-07	Water	08/21/13 15:30	08/21/13 17:30
250-13704-8	Trip Blank	Water	08/21/13 10:00	08/21/13 17:30
250-13704-9	LB-082213-08	Water	08/22/13 10:05	08/22/13 12:30
250-13704-10	LB-082213-09	Water	08/22/13 11:05	08/22/13 12:30

Job ID: 250-13704-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-13704-1

Comments
No additional comments.

Receipt
The samples were received on 8/22/2013 12:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

Except:

LB-082213-08 (250-13704-9), LB-082213-09 (250-13704-10) Samples LB-082213-08 and LB-082213-09 were brought in and later added to job. Samples were received at the lab 8/22/13@1230 on ice at 5.9 C.

GC/MS VOA
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 250-19476. (LCS 250-19476/4), (LCSD 250-19476/5)

Method 8260B: The laboratory control sample duplicate (LCSD) for batch 250-19524 was double spiked for bromoform. The RPD failure is due to this double spike, however both LCS and LCSD are within limits, data not impacted. (LCSD 250-19524/6)

No other analytical or quality issues were noted.

Metals
Method 6020: The continuing calibration verification (CCV) for Mn associated with batch 250-19422 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. (LCS 250-19422/2-A)

No other 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.

VOA Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

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
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

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

Client Sample ID: LB-082113-01
Date Collected: 08/21/13 10:25
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 15:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 15:40	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 15:40	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 15:40	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 15:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 15:40	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 15:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 15:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 15:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 15:40	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 15:40	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 15:40	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 15:40	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 15:40	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 15:40	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 15:40	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 15:40	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 15:40	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 15:40	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 15:40	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 15:40	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 15:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 15:40	1
Acetone	ND		25	5.0	ug/L			08/22/13 15:40	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 15:40	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 15:40	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 15:40	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 15:40	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 15:40	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 15:40	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 15:40	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 15:40	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 15:40	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 15:40	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 15:40	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 15:40	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 15:40	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 15:40	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 15:40	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 15:40	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 15:40	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 15:40	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 15:40	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 15:40	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 15:40	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 15:40	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 15:40	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 15:40	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 15:40	1

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

Client Sample ID: LB-082113-01
Date Collected: 08/21/13 10:25
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 15:40	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 15:40	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 15:40	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 15:40	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 15:40	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 15:40	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 15:40	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 15:40	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 15:40	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 15:40	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 15:40	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 15:40	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 15:40	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/22/13 15:40*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/22/13 15:40*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/22/13 15:40*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/22/13 15:40*	*1*

Client Sample ID: LB-082113-02
Date Collected: 08/21/13 11:00
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 16:03	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 16:03	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:03	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 16:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 16:03	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 16:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 16:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 16:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 16:03	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 16:03	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 16:03	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:03	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 16:03	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 16:03	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 16:03	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 16:03	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:03	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 16:03	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:03	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 16:03	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 16:03	1
Acetone	ND		25	5.0	ug/L			08/22/13 16:03	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 16:03	1

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

Client Sample ID: LB-082113-02
Date Collected: 08/21/13 11:00
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 16:03	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 16:03	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 16:03	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 16:03	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 16:03	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 16:03	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 16:03	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 16:03	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 16:03	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 16:03	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 16:03	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 16:03	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 16:03	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 16:03	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 16:03	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 16:03	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 16:03	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 16:03	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 16:03	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 16:03	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 16:03	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 16:03	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 16:03	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 16:03	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 16:03	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 16:03	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 16:03	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 16:03	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 16:03	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 16:03	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 16:03	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 16:03	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 16:03	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 16:03	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 16:03	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 16:03	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 16:03	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*08/22/13 16:03*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*08/22/13 16:03*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/22/13 16:03*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*08/22/13 16:03*	*1*

Client Sample ID: LB-082113-03
Date Collected: 08/21/13 11:55
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:25	1

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

Client Sample ID: LB-082113-03
Date Collected: 08/21/13 11:55
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 16:25	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 16:25	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:25	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 16:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 16:25	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 16:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 16:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 16:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 16:25	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 16:25	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 16:25	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:25	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 16:25	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 16:25	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 16:25	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 16:25	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:25	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 16:25	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:25	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 16:25	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 16:25	1
Acetone	ND		25	5.0	ug/L			08/22/13 16:25	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 16:25	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 16:25	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 16:25	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 16:25	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 16:25	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 16:25	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 16:25	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 16:25	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 16:25	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 16:25	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 16:25	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 16:25	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 16:25	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 16:25	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 16:25	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 16:25	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 16:25	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 16:25	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 16:25	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 16:25	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 16:25	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 16:25	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 16:25	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 16:25	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 16:25	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 16:25	1

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

Client Sample ID: LB-082113-03
Date Collected: 08/21/13 11:55
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 16:25	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 16:25	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 16:25	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 16:25	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 16:25	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 16:25	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 16:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 16:25	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 16:25	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 16:25	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 16:25	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 16:25	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*08/22/13 16:25*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/22/13 16:25*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/22/13 16:25*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/22/13 16:25*	*1*

Client Sample ID: LB-082113-04
Date Collected: 08/21/13 11:50
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 16:48	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 16:48	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 16:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 16:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 16:48	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 16:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 16:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 16:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 16:48	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 16:48	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 16:48	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 16:48	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 16:48	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 16:48	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 16:48	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 16:48	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 16:48	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:48	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 16:48	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 16:48	1
Acetone	ND		25	5.0	ug/L			08/22/13 16:48	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 16:48	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 16:48	1

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

Client Sample ID: LB-082113-04
Date Collected: 08/21/13 11:50
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 16:48	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 16:48	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 16:48	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 16:48	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 16:48	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 16:48	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 16:48	1
Chloroethane	**0.18**	**J**	0.50	0.17	ug/L			08/22/13 16:48	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 16:48	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 16:48	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 16:48	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 16:48	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 16:48	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 16:48	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 16:48	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 16:48	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 16:48	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 16:48	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 16:48	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 16:48	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 16:48	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 16:48	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 16:48	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 16:48	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 16:48	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 16:48	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 16:48	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 16:48	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 16:48	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 16:48	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 16:48	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 16:48	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 16:48	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 16:48	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 16:48	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 16:48	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*08/22/13 16:48*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/22/13 16:48*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/22/13 16:48*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/22/13 16:48*	*1*

Client Sample ID: LB-082113-05
Date Collected: 08/21/13 13:15
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 17:11	1

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

Client Sample ID: LB-082113-05
Date Collected: 08/21/13 13:15
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 17:11	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:11	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 17:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 17:11	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 17:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 17:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 17:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 17:11	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 17:11	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 17:11	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 17:11	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 17:11	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 17:11	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 17:11	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:11	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 17:11	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:11	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 17:11	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 17:11	1
Acetone	ND		25	5.0	ug/L			08/22/13 17:11	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 17:11	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 17:11	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 17:11	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 17:11	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 17:11	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 17:11	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 17:11	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 17:11	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 17:11	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 17:11	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 17:11	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 17:11	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 17:11	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 17:11	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 17:11	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 17:11	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 17:11	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 17:11	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 17:11	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 17:11	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 17:11	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 17:11	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 17:11	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 17:11	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 17:11	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 17:11	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 17:11	1

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

Client Sample ID: LB-082113-05
Date Collected: 08/21/13 13:15
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 17:11	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 17:11	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 17:11	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 17:11	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 17:11	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 17:11	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 17:11	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 17:11	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 17:11	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 17:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 17:11	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*08/22/13 17:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/22/13 17:11*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/22/13 17:11*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/22/13 17:11*	*1*

Client Sample ID: LB-082113-06
Date Collected: 08/21/13 14:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 17:33	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 17:33	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:33	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 17:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 17:33	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 17:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 17:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 17:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 17:33	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 17:33	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 17:33	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:33	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 17:33	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 17:33	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 17:33	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 17:33	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:33	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 17:33	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:33	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 17:33	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 17:33	1
Acetone	ND		25	5.0	ug/L			08/22/13 17:33	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 17:33	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 17:33	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 17:33	1

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

Client Sample ID: LB-082113-06
Date Collected: 08/21/13 14:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 17:33	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 17:33	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 17:33	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 17:33	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 17:33	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 17:33	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 17:33	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 17:33	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 17:33	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 17:33	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 17:33	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 17:33	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 17:33	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 17:33	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 17:33	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 17:33	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 17:33	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 17:33	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 17:33	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 17:33	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 17:33	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 17:33	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 17:33	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 17:33	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 17:33	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 17:33	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 17:33	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 17:33	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 17:33	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 17:33	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 17:33	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 17:33	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 17:33	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 17:33	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 17:33	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*08/22/13 17:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/22/13 17:33*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/22/13 17:33*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/22/13 17:33*	*1*

Client Sample ID: LB-082113-07
Date Collected: 08/21/13 15:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 17:56	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 17:56	1

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

Client Sample ID: LB-082113-07
Date Collected: 08/21/13 15:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 17:56	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 17:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 17:56	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 17:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 17:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 17:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 17:56	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 17:56	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 17:56	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:56	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 17:56	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 17:56	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 17:56	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 17:56	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 17:56	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 17:56	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:56	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 17:56	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 17:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 17:56	1
Acetone	ND		25	5.0	ug/L			08/22/13 17:56	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 17:56	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 17:56	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 17:56	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 17:56	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 17:56	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 17:56	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 17:56	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 17:56	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 17:56	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 17:56	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 17:56	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 17:56	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 17:56	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 17:56	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 17:56	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 17:56	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 17:56	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 17:56	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 17:56	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 17:56	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 17:56	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 17:56	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 17:56	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 17:56	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 17:56	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 17:56	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 17:56	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 17:56	1

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

Client Sample ID: LB-082113-07
Date Collected: 08/21/13 15:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 17:56	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 17:56	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 17:56	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 17:56	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 17:56	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 17:56	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 17:56	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 17:56	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 17:56	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 17:56	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/22/13 17:56*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/22/13 17:56*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/22/13 17:56*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/22/13 17:56*	*1*

Client Sample ID: Trip Blank
Date Collected: 08/21/13 10:00
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/23/13 12:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/23/13 12:48	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/23/13 12:48	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/23/13 12:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/23/13 12:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/23/13 12:48	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/23/13 12:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/23/13 12:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/23/13 12:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/23/13 12:48	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/23/13 12:48	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/23/13 12:48	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 12:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/23/13 12:48	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/23/13 12:48	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/23/13 12:48	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/23/13 12:48	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 12:48	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/23/13 12:48	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 12:48	1
2-Hexanone	ND		10	2.0	ug/L			08/23/13 12:48	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/23/13 12:48	1
Acetone	ND		25	5.0	ug/L			08/23/13 12:48	1
Benzene	ND		0.20	0.060	ug/L			08/23/13 12:48	1
Bromobenzene	ND		0.50	0.16	ug/L			08/23/13 12:48	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/23/13 12:48	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/23/13 12:48	1

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

Client Sample ID: Trip Blank — **Lab Sample ID: 250-13704-8**
Date Collected: 08/21/13 10:00 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND	*	1.0	0.44	ug/L			08/23/13 12:48	1
Bromomethane	ND		5.0	1.0	ug/L			08/23/13 12:48	1
Carbon disulfide	ND		10	2.0	ug/L			08/23/13 12:48	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/23/13 12:48	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/23/13 12:48	1
Chloroethane	ND		0.50	0.17	ug/L			08/23/13 12:48	1
Chloroform	ND		0.50	0.10	ug/L			08/23/13 12:48	1
Chloromethane	ND		5.0	1.0	ug/L			08/23/13 12:48	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/23/13 12:48	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/23/13 12:48	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/23/13 12:48	1
Dibromomethane	ND		0.50	0.17	ug/L			08/23/13 12:48	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/23/13 12:48	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/13 12:48	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/23/13 12:48	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/23/13 12:48	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/23/13 12:48	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/23/13 12:48	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/23/13 12:48	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/23/13 12:48	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/23/13 12:48	1
Naphthalene	ND		2.0	0.20	ug/L			08/23/13 12:48	1
o-Xylene	ND		0.50	0.13	ug/L			08/23/13 12:48	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/23/13 12:48	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/23/13 12:48	1
Styrene	ND		0.50	0.10	ug/L			08/23/13 12:48	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/23/13 12:48	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/23/13 12:48	1
Toluene	ND		0.50	0.11	ug/L			08/23/13 12:48	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/13 12:48	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/23/13 12:48	1
Trichloroethene	ND		0.50	0.13	ug/L			08/23/13 12:48	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/23/13 12:48	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/23/13 12:48	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/23/13 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*08/23/13 12:48*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/23/13 12:48*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*08/23/13 12:48*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/23/13 12:48*	*1*

Client Sample ID: LB-082213-08 — **Lab Sample ID: 250-13704-9**
Date Collected: 08/22/13 10:05 — **Matrix: Water**
Date Received: 08/22/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/23/13 13:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/23/13 13:11	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/23/13 13:11	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/23/13 13:11	1

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

Client Sample ID: LB-082213-08
Date Collected: 08/22/13 10:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/23/13 13:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/23/13 13:11	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/23/13 13:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/23/13 13:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/23/13 13:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/23/13 13:11	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/23/13 13:11	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/23/13 13:11	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 13:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/23/13 13:11	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/23/13 13:11	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/23/13 13:11	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/23/13 13:11	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 13:11	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/23/13 13:11	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 13:11	1
2-Hexanone	ND		10	2.0	ug/L			08/23/13 13:11	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/23/13 13:11	1
Acetone	ND		25	5.0	ug/L			08/23/13 13:11	1
Benzene	ND		0.20	0.060	ug/L			08/23/13 13:11	1
Bromobenzene	ND		0.50	0.16	ug/L			08/23/13 13:11	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/23/13 13:11	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/23/13 13:11	1
Bromoform	ND	*	1.0	0.44	ug/L			08/23/13 13:11	1
Bromomethane	ND		5.0	1.0	ug/L			08/23/13 13:11	1
Carbon disulfide	ND		10	2.0	ug/L			08/23/13 13:11	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/23/13 13:11	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/23/13 13:11	1
Chloroethane	ND		0.50	0.17	ug/L			08/23/13 13:11	1
Chloroform	ND		0.50	0.10	ug/L			08/23/13 13:11	1
Chloromethane	ND		5.0	1.0	ug/L			08/23/13 13:11	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/23/13 13:11	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/23/13 13:11	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/23/13 13:11	1
Dibromomethane	ND		0.50	0.17	ug/L			08/23/13 13:11	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/23/13 13:11	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/13 13:11	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/23/13 13:11	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/23/13 13:11	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/23/13 13:11	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/23/13 13:11	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/23/13 13:11	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/23/13 13:11	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/23/13 13:11	1
Naphthalene	ND		2.0	0.20	ug/L			08/23/13 13:11	1
o-Xylene	ND		0.50	0.13	ug/L			08/23/13 13:11	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/23/13 13:11	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/23/13 13:11	1

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

Client Sample ID: LB-082213-08
Date Collected: 08/22/13 10:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.10	ug/L			08/23/13 13:11	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/23/13 13:11	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/23/13 13:11	1
Toluene	ND		0.50	0.11	ug/L			08/23/13 13:11	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/13 13:11	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/23/13 13:11	1
Trichloroethene	ND		0.50	0.13	ug/L			08/23/13 13:11	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/23/13 13:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/23/13 13:11	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/23/13 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*08/23/13 13:11*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/23/13 13:11*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/23/13 13:11*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/23/13 13:11*	*1*

Client Sample ID: LB-082213-09
Date Collected: 08/22/13 11:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/23/13 13:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/23/13 13:34	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/23/13 13:34	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/23/13 13:34	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/23/13 13:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/23/13 13:34	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/23/13 13:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/23/13 13:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/23/13 13:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/23/13 13:34	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/23/13 13:34	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/23/13 13:34	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 13:34	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/23/13 13:34	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/23/13 13:34	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/23/13 13:34	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/23/13 13:34	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 13:34	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/23/13 13:34	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 13:34	1
2-Hexanone	ND		10	2.0	ug/L			08/23/13 13:34	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/23/13 13:34	1
Acetone	ND		25	5.0	ug/L			08/23/13 13:34	1
Benzene	ND		0.20	0.060	ug/L			08/23/13 13:34	1
Bromobenzene	ND		0.50	0.16	ug/L			08/23/13 13:34	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/23/13 13:34	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/23/13 13:34	1
Bromoform	ND	*	1.0	0.44	ug/L			08/23/13 13:34	1

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

Client Sample ID: LB-082213-09
Date Collected: 08/22/13 11:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.0	1.0	ug/L			08/23/13 13:34	1
Carbon disulfide	ND		10	2.0	ug/L			08/23/13 13:34	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/23/13 13:34	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/23/13 13:34	1
Chloroethane	ND		0.50	0.17	ug/L			08/23/13 13:34	1
Chloroform	ND		0.50	0.10	ug/L			08/23/13 13:34	1
Chloromethane	ND		5.0	1.0	ug/L			08/23/13 13:34	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/23/13 13:34	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/23/13 13:34	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/23/13 13:34	1
Dibromomethane	ND		0.50	0.17	ug/L			08/23/13 13:34	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/23/13 13:34	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/13 13:34	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/23/13 13:34	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/23/13 13:34	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/23/13 13:34	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/23/13 13:34	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/23/13 13:34	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/23/13 13:34	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/23/13 13:34	1
Naphthalene	ND		2.0	0.20	ug/L			08/23/13 13:34	1
o-Xylene	ND		0.50	0.13	ug/L			08/23/13 13:34	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/23/13 13:34	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/23/13 13:34	1
Styrene	ND		0.50	0.10	ug/L			08/23/13 13:34	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/23/13 13:34	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/23/13 13:34	1
Toluene	ND		0.50	0.11	ug/L			08/23/13 13:34	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/13 13:34	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/23/13 13:34	1
Trichloroethene	ND		0.50	0.13	ug/L			08/23/13 13:34	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/23/13 13:34	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/23/13 13:34	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/23/13 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*08/23/13 13:34*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/23/13 13:34*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/23/13 13:34*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/23/13 13:34*	*1*

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

Client Sample ID: LB-082113-01 — **Lab Sample ID: 250-13704-1**
Date Collected: 08/21/13 10:25 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:10	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:10	1

Client Sample ID: LB-082113-02 — **Lab Sample ID: 250-13704-2**
Date Collected: 08/21/13 11:00 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:20	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:20	1

Client Sample ID: LB-082113-03 — **Lab Sample ID: 250-13704-3**
Date Collected: 08/21/13 11:55 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:27	1
Manganese	**0.41**		0.0020	0.0020	mg/L		08/22/13 06:53	08/23/13 01:12	1

Client Sample ID: LB-082113-04 — **Lab Sample ID: 250-13704-4**
Date Collected: 08/21/13 11:50 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:30	1
Manganese	**0.42**		0.0020	0.0020	mg/L		08/22/13 06:53	08/23/13 01:16	1

Client Sample ID: LB-082113-05 — **Lab Sample ID: 250-13704-5**
Date Collected: 08/21/13 13:15 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:33	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:33	1

Client Sample ID: LB-082113-06 — **Lab Sample ID: 250-13704-6**
Date Collected: 08/21/13 14:30 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:47	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:47	1

Client Sample ID: LB-082113-07 — **Lab Sample ID: 250-13704-7**
Date Collected: 08/21/13 15:30 — **Matrix: Water**
Date Received: 08/21/13 17:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:50	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:50	1

Client Sample ID: LB-082213-08 — **Lab Sample ID: 250-13704-9**
Date Collected: 08/22/13 10:05 — **Matrix: Water**
Date Received: 08/22/13 12:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/24/13 10:03	08/26/13 18:52	1
Manganese	ND		0.0020	0.0020	mg/L		08/24/13 10:03	08/26/13 18:52	1

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

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

Client Sample ID: LB-082213-09
Date Collected: 08/22/13 11:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-10
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/24/13 10:03	08/26/13 19:03	1
Manganese	**0.0025**		0.0020	0.0020	mg/L		08/24/13 10:03	08/26/13 19:03	1

General Chemistry

Client Sample ID: LB-082113-01
Date Collected: 08/21/13 10:25
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10	10	mg/L			08/26/13 12:55	1
Chloride	3.9		0.50	0.50	mg/L			08/22/13 16:02	1
Nitrogen, Nitrate	4.8		0.10	0.10	mg/L			08/22/13 16:02	1

Client Sample ID: LB-082113-02
Date Collected: 08/21/13 11:00
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			08/26/13 12:55	1
Chloride	ND		0.50	0.50	mg/L			08/22/13 16:18	1
Nitrogen, Nitrate	ND		0.10	0.10	mg/L			08/22/13 16:18	1

Client Sample ID: LB-082113-03
Date Collected: 08/21/13 11:55
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10	10	mg/L			08/26/13 12:55	1
Chloride	51		5.0	5.0	mg/L			08/22/13 18:07	10
Nitrogen, Nitrate	ND		0.10	0.10	mg/L			08/22/13 16:33	1

Client Sample ID: LB-082113-04
Date Collected: 08/21/13 11:50
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10	10	mg/L			08/26/13 12:55	1
Chloride	51		5.0	5.0	mg/L			08/22/13 18:53	10
Nitrogen, Nitrate	ND		0.10	0.10	mg/L			08/22/13 16:49	1

Client Sample ID: LB-082113-05
Date Collected: 08/21/13 13:15
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	210		10	10	mg/L			08/26/13 12:55	1
Chloride	11		0.50	0.50	mg/L			08/22/13 17:04	1
Nitrogen, Nitrate	4.3		0.10	0.10	mg/L			08/22/13 17:04	1

Client Sample ID: LB-082113-06
Date Collected: 08/21/13 14:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10	10	mg/L			08/26/13 12:55	1
Chloride	7.5		0.50	0.50	mg/L			08/22/13 17:20	1
Nitrogen, Nitrate	5.0		0.10	0.10	mg/L			08/22/13 17:20	1

Client Sample ID: LB-082113-07
Date Collected: 08/21/13 15:30
Date Received: 08/21/13 17:30

Lab Sample ID: 250-13704-7
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10	10	mg/L			08/26/13 12:55	1
Chloride	3.7		0.50	0.50	mg/L			08/22/13 17:35	1
Nitrogen, Nitrate	1.5		0.10	0.10	mg/L			08/22/13 17:35	1

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

General Chemistry

Client Sample ID: LB-082213-08
Date Collected: 08/22/13 10:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-9
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	250		10	10	mg/L			08/26/13 12:55	1
Chloride	13		0.50	0.50	mg/L			08/22/13 19:09	1
Nitrogen, Nitrate	8.7		0.10	0.10	mg/L			08/22/13 19:09	1

Client Sample ID: LB-082213-09
Date Collected: 08/22/13 11:05
Date Received: 08/22/13 12:30

Lab Sample ID: 250-13704-10
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		10	10	mg/L			08/26/13 12:55	1
Chloride	18		0.50	0.50	mg/L			08/22/13 19:25	1
Nitrogen, Nitrate	0.80		0.10	0.10	mg/L			08/22/13 19:25	1

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

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

Lab Sample ID: MB 250-19476/7
Matrix: Water
Analysis Batch: 19476

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/22/13 12:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/22/13 12:39	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/22/13 12:39	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/22/13 12:39	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/22/13 12:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/22/13 12:39	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/22/13 12:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/22/13 12:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/22/13 12:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/22/13 12:39	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/22/13 12:39	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/22/13 12:39	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 12:39	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/22/13 12:39	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/22/13 12:39	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/22/13 12:39	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/22/13 12:39	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/22/13 12:39	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/22/13 12:39	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 12:39	1
2-Hexanone	ND		10	2.0	ug/L			08/22/13 12:39	1
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/22/13 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/22/13 12:39	1
Acetone	ND		25	5.0	ug/L			08/22/13 12:39	1
Benzene	ND		0.20	0.060	ug/L			08/22/13 12:39	1
Bromobenzene	ND		0.50	0.16	ug/L			08/22/13 12:39	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/22/13 12:39	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/22/13 12:39	1
Bromoform	ND		1.0	0.44	ug/L			08/22/13 12:39	1
Bromomethane	ND		5.0	1.0	ug/L			08/22/13 12:39	1
Carbon disulfide	ND		10	2.0	ug/L			08/22/13 12:39	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/22/13 12:39	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/22/13 12:39	1
Chloroethane	ND		0.50	0.17	ug/L			08/22/13 12:39	1
Chloroform	ND		0.50	0.10	ug/L			08/22/13 12:39	1
Chloromethane	ND		5.0	1.0	ug/L			08/22/13 12:39	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/22/13 12:39	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/22/13 12:39	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/22/13 12:39	1
Dibromomethane	ND		0.50	0.17	ug/L			08/22/13 12:39	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/22/13 12:39	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/22/13 12:39	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/22/13 12:39	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/22/13 12:39	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/22/13 12:39	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/22/13 12:39	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/22/13 12:39	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/22/13 12:39	1

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

Lab Sample ID: MB 250-19476/7
Matrix: Water
Analysis Batch: 19476

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		0.50	0.20	ug/L			08/22/13 12:39	1
Naphthalene	ND		2.0	0.20	ug/L			08/22/13 12:39	1
o-Xylene	ND		0.50	0.13	ug/L			08/22/13 12:39	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/22/13 12:39	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/22/13 12:39	1
Styrene	ND		0.50	0.10	ug/L			08/22/13 12:39	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/22/13 12:39	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/22/13 12:39	1
Toluene	ND		0.50	0.11	ug/L			08/22/13 12:39	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/22/13 12:39	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/22/13 12:39	1
Trichloroethene	ND		0.50	0.13	ug/L			08/22/13 12:39	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/22/13 12:39	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/22/13 12:39	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/22/13 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/22/13 12:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/22/13 12:39*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/22/13 12:39*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/22/13 12:39*	*1*

Lab Sample ID: LCS 250-19476/4
Matrix: Water
Analysis Batch: 19476

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.2		ug/L		101	75 - 135
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/L		107	75 - 130
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	80 - 125
1,1-Dichloroethane	20.0	19.3		ug/L		96	80 - 120
1,1-Dichloropropene	20.0	18.6		ug/L		93	80 - 120
1,2,3-Trichlorobenzene	20.0	19.4		ug/L		97	65 - 140
1,2,3-Trichloropropane	20.0	21.1		ug/L		105	75 - 125
1,2,4-Trichlorobenzene	20.0	19.2		ug/L		96	75 - 130
1,2,4-Trimethylbenzene	20.0	21.4		ug/L		107	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L		95	70 - 135
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120
1,2-Dichloroethane	20.0	18.1		ug/L		90	75 - 125
1,2-Dichloropropane	20.0	19.3		ug/L		97	80 - 130
1,3,5-Trimethylbenzene	20.0	21.7		ug/L		109	75 - 135
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	75 - 125
1,3-Dichloropropane	20.0	18.8		ug/L		94	80 - 120
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	70 - 120
2,2-Dichloropropane	20.0	22.5		ug/L		113	60 - 145
2-Butanone (MEK)	100	94.0		ug/L		94	70 - 140
2-Chlorotoluene	20.0	20.9		ug/L		104	70 - 125
2-Hexanone	100	94.5		ug/L		94	70 - 140

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

Lab Sample ID: LCS 250-19476/4
Matrix: Water
Analysis Batch: 19476

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	20.0	20.9		ug/L		105	75 - 125
4-Methyl-2-pentanone (MIBK)	100	97.8		ug/L		98	70 - 135
Acetone	100	108		ug/L		108	55 - 145
Benzene	20.0	19.1		ug/L		95	80 - 120
Bromobenzene	20.0	20.7		ug/L		104	75 - 120
Bromochloromethane	20.0	19.6		ug/L		98	75 - 125
Bromodichloromethane	20.0	18.8		ug/L		94	80 - 130
Bromoform	20.0	19.3		ug/L		97	55 - 135
Bromomethane	20.0	17.0		ug/L		85	35 - 150
Carbon disulfide	40.0	37.2		ug/L		93	60 - 120
Carbon tetrachloride	20.0	19.7		ug/L		99	70 - 135
Chlorobenzene	20.0	18.3		ug/L		92	80 - 125
Chloroethane	20.0	16.8		ug/L		84	75 - 125
Chloroform	20.0	18.6		ug/L		93	80 - 120
Chloromethane	20.0	17.7		ug/L		88	45 - 150
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	80 - 120
cis-1,3-Dichloropropene	20.0	18.3		ug/L		91	80 - 125
Dibromochloromethane	20.0	19.3		ug/L		96	65 - 140
Dibromomethane	20.0	18.6		ug/L		93	80 - 120
Dichlorodifluoromethane	20.0	16.3		ug/L		81	45 - 140
Ethylbenzene	20.0	21.3		ug/L		107	80 - 120
Hexachlorobutadiene	20.0	20.1		ug/L		100	60 - 150
Isopropylbenzene	20.0	21.0		ug/L		105	75 - 125
m,p-Xylene	40.0	43.1		ug/L		108	70 - 130
Methyl tert-butyl ether	20.0	21.6		ug/L		108	80 - 130
Methylene Chloride	20.0	19.3		ug/L		97	80 - 120
n-Butylbenzene	20.0	19.6		ug/L		98	75 - 130
N-Propylbenzene	20.0	21.1		ug/L		106	75 - 130
Naphthalene	20.0	20.8		ug/L		104	70 - 150
o-Xylene	20.0	21.5		ug/L		108	75 - 125
p-Isopropyltoluene	20.0	20.6		ug/L		103	65 - 130
sec-Butylbenzene	20.0	20.9		ug/L		104	60 - 130
Styrene	20.0	22.2		ug/L		111	70 - 130
tert-Butylbenzene	20.0	19.9		ug/L		99	70 - 130
Tetrachloroethene	20.0	18.1		ug/L		91	80 - 125
Toluene	20.0	18.5		ug/L		92	80 - 125
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
trans-1,3-Dichloropropene	20.0	18.3		ug/L		92	80 - 130
Trichloroethene	20.0	18.2		ug/L		91	80 - 135
Trichlorofluoromethane	20.0	17.1		ug/L		85	75 - 140
1,1,1,2-Tetrachloroethane	20.0	20.3		ug/L		101	65 - 140
1,2-Dibromoethane	20.0	19.0		ug/L		95	80 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: LCSD 250-19476/5
Matrix: Water
Analysis Batch: 19476

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.7		ug/L		103	75 - 135	2	25
1,1,2,2-Tetrachloroethane	20.0	21.0		ug/L		105	75 - 130	2	25
1,1,2-Trichloroethane	20.0	18.7		ug/L		93	80 - 125	3	25
1,1-Dichloroethane	20.0	19.3		ug/L		97	80 - 120	0	25
1,1-Dichloropropene	20.0	19.0		ug/L		95	80 - 120	2	25
1,2,3-Trichlorobenzene	20.0	19.5		ug/L		98	65 - 140	0	25
1,2,3-Trichloropropane	20.0	20.2		ug/L		101	75 - 125	4	25
1,2,4-Trichlorobenzene	20.0	19.5		ug/L		98	75 - 130	2	25
1,2,4-Trimethylbenzene	20.0	21.4		ug/L		107	70 - 130	0	25
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L		92	70 - 135	3	25
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	1	25
1,2-Dichloroethane	20.0	18.3		ug/L		91	75 - 125	1	25
1,2-Dichloropropane	20.0	19.5		ug/L		98	80 - 130	1	25
1,3,5-Trimethylbenzene	20.0	22.0		ug/L		110	75 - 135	1	25
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	75 - 125	1	25
1,3-Dichloropropane	20.0	19.2		ug/L		96	80 - 120	2	25
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	70 - 120	0	25
2,2-Dichloropropane	20.0	23.4		ug/L		117	60 - 145	4	25
2-Butanone (MEK)	100	91.3		ug/L		91	70 - 140	3	25
2-Chlorotoluene	20.0	20.9		ug/L		104	70 - 125	0	25
2-Hexanone	100	92.7		ug/L		93	70 - 140	2	25
4-Chlorotoluene	20.0	21.0		ug/L		105	75 - 125	0	25
4-Methyl-2-pentanone (MIBK)	100	94.8		ug/L		95	70 - 135	3	25
Acetone	100	94.6		ug/L		95	55 - 145	14	25
Benzene	20.0	19.2		ug/L		96	80 - 120	1	25
Bromobenzene	20.0	20.6		ug/L		103	75 - 120	1	25
Bromochloromethane	20.0	19.7		ug/L		98	75 - 125	0	25
Bromodichloromethane	20.0	19.0		ug/L		95	80 - 130	1	25
Bromoform	20.0	18.8		ug/L		94	55 - 135	3	25
Bromomethane	20.0	17.1		ug/L		85	35 - 150	0	25
Carbon disulfide	40.0	37.0		ug/L		92	60 - 120	1	25
Carbon tetrachloride	20.0	19.8		ug/L		99	70 - 135	1	25
Chlorobenzene	20.0	18.6		ug/L		93	80 - 125	1	25
Chloroethane	20.0	17.1		ug/L		86	75 - 125	2	25
Chloroform	20.0	18.7		ug/L		94	80 - 120	1	25
Chloromethane	20.0	17.5		ug/L		87	45 - 150	1	25
cis-1,2-Dichloroethene	20.0	19.1		ug/L		95	80 - 120	0	25
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	80 - 125	2	25
Dibromochloromethane	20.0	19.5		ug/L		98	65 - 140	1	25
Dibromomethane	20.0	18.9		ug/L		95	80 - 120	2	25
Dichlorodifluoromethane	20.0	16.0		ug/L		80	45 - 140	2	25
Ethylbenzene	20.0	21.4		ug/L		107	80 - 120	0	25
Hexachlorobutadiene	20.0	22.1		ug/L		110	60 - 150	10	25
Isopropylbenzene	20.0	21.0		ug/L		105	75 - 125	0	25
m,p-Xylene	40.0	43.1		ug/L		108	70 - 130	0	25
Methyl tert-butyl ether	20.0	21.4		ug/L		107	80 - 130	1	25
Methylene Chloride	20.0	19.4		ug/L		97	80 - 120	0	25
n-Butylbenzene	20.0	20.2		ug/L		101	75 - 130	3	25

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

Lab Sample ID: LCSD 250-19476/5
Matrix: Water
Analysis Batch: 19476

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
N-Propylbenzene			20.0	21.5		ug/L		108	75 - 130	2	25
Naphthalene			20.0	20.3		ug/L		102	70 - 150	2	25
o-Xylene			20.0	21.6		ug/L		108	75 - 125	0	25
p-Isopropyltoluene			20.0	21.0		ug/L		105	65 - 130	2	25
sec-Butylbenzene			20.0	21.3		ug/L		107	60 - 130	2	25
Styrene			20.0	22.3		ug/L		112	70 - 130	0	25
tert-Butylbenzene			20.0	20.2		ug/L		101	70 - 130	2	25
Tetrachloroethene			20.0	18.3		ug/L		91	80 - 125	1	25
Toluene			20.0	18.9		ug/L		94	80 - 125	2	25
trans-1,2-Dichloroethene			20.0	19.3		ug/L		96	80 - 120	1	25
trans-1,3-Dichloropropene			20.0	18.4		ug/L		92	80 - 130	0	25
Trichloroethene			20.0	18.4		ug/L		92	80 - 135	1	25
Trichlorofluoromethane			20.0	16.8		ug/L		84	75 - 140	1	25
1,1,1,2-Tetrachloroethane			20.0	20.1		ug/L		101	65 - 140	1	25
1,2-Dibromoethane			20.0	19.5		ug/L		98	80 - 125	2	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 250-19524/8
Matrix: Water
Analysis Batch: 19524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.14	ug/L			08/23/13 12:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.13	ug/L			08/23/13 12:25	1
1,1,2-Trichloroethane	ND		0.50	0.17	ug/L			08/23/13 12:25	1
1,1-Dichloroethane	ND		0.50	0.14	ug/L			08/23/13 12:25	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			08/23/13 12:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.27	ug/L			08/23/13 12:25	1
1,2,3-Trichloropropane	ND		0.50	0.18	ug/L			08/23/13 12:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.17	ug/L			08/23/13 12:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.16	ug/L			08/23/13 12:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			08/23/13 12:25	1
1,2-Dichlorobenzene	ND		0.50	0.15	ug/L			08/23/13 12:25	1
1,2-Dichloroethane	ND		0.50	0.13	ug/L			08/23/13 12:25	1
1,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 12:25	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			08/23/13 12:25	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/23/13 12:25	1
1,3-Dichloropropane	ND		0.50	0.16	ug/L			08/23/13 12:25	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/23/13 12:25	1
2,2-Dichloropropane	ND		0.50	0.14	ug/L			08/23/13 12:25	1
2-Butanone (MEK)	ND		10	3.0	ug/L			08/23/13 12:25	1
2-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 12:25	1
2-Hexanone	ND		10	2.0	ug/L			08/23/13 12:25	1

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

Lab Sample ID: MB 250-19524/8
Matrix: Water
Analysis Batch: 19524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.50	0.14	ug/L			08/23/13 12:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			08/23/13 12:25	1
Acetone	ND		25	5.0	ug/L			08/23/13 12:25	1
Benzene	ND		0.20	0.060	ug/L			08/23/13 12:25	1
Bromobenzene	ND		0.50	0.16	ug/L			08/23/13 12:25	1
Bromochloromethane	ND		0.50	0.18	ug/L			08/23/13 12:25	1
Bromodichloromethane	ND		0.50	0.14	ug/L			08/23/13 12:25	1
Bromoform	ND		1.0	0.44	ug/L			08/23/13 12:25	1
Bromomethane	ND		5.0	1.0	ug/L			08/23/13 12:25	1
Carbon disulfide	ND		10	2.0	ug/L			08/23/13 12:25	1
Carbon tetrachloride	ND		0.50	0.17	ug/L			08/23/13 12:25	1
Chlorobenzene	ND		0.50	0.11	ug/L			08/23/13 12:25	1
Chloroethane	ND		0.50	0.17	ug/L			08/23/13 12:25	1
Chloroform	ND		0.50	0.10	ug/L			08/23/13 12:25	1
Chloromethane	ND		5.0	1.0	ug/L			08/23/13 12:25	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			08/23/13 12:25	1
cis-1,3-Dichloropropene	ND		0.50	0.14	ug/L			08/23/13 12:25	1
Dibromochloromethane	ND		1.0	0.21	ug/L			08/23/13 12:25	1
Dibromomethane	ND		0.50	0.17	ug/L			08/23/13 12:25	1
Dichlorodifluoromethane	ND		5.0	1.0	ug/L			08/23/13 12:25	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/13 12:25	1
Hexachlorobutadiene	ND		4.0	1.0	ug/L			08/23/13 12:25	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/23/13 12:25	1
m,p-Xylene	ND		1.0	0.25	ug/L			08/23/13 12:25	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			08/23/13 12:25	1
Methylene Chloride	ND		5.0	1.0	ug/L			08/23/13 12:25	1
n-Butylbenzene	ND		5.0	1.0	ug/L			08/23/13 12:25	1
N-Propylbenzene	ND		0.50	0.20	ug/L			08/23/13 12:25	1
Naphthalene	ND		2.0	0.20	ug/L			08/23/13 12:25	1
o-Xylene	ND		0.50	0.13	ug/L			08/23/13 12:25	1
p-Isopropyltoluene	ND		2.0	0.16	ug/L			08/23/13 12:25	1
sec-Butylbenzene	ND		0.50	0.14	ug/L			08/23/13 12:25	1
Styrene	ND		0.50	0.10	ug/L			08/23/13 12:25	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/23/13 12:25	1
Tetrachloroethene	ND		0.50	0.15	ug/L			08/23/13 12:25	1
Toluene	ND		0.50	0.11	ug/L			08/23/13 12:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/13 12:25	1
trans-1,3-Dichloropropene	ND		0.50	0.20	ug/L			08/23/13 12:25	1
Trichloroethene	ND		0.50	0.13	ug/L			08/23/13 12:25	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/23/13 12:25	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.18	ug/L			08/23/13 12:25	1
1,2-Dibromoethane	ND		0.50	0.14	ug/L			08/23/13 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*08/23/13 12:25*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/23/13 12:25*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*08/23/13 12:25*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/23/13 12:25*	*1*

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

Lab Sample ID: LCS 250-19524/5
Matrix: Water
Analysis Batch: 19524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.9		ug/L		105	75 - 135
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	75 - 130
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	80 - 125
1,1-Dichloroethane	20.0	19.9		ug/L		100	80 - 120
1,1-Dichloropropene	20.0	19.4		ug/L		97	80 - 120
1,2,3-Trichlorobenzene	20.0	20.3		ug/L		101	65 - 140
1,2,3-Trichloropropane	20.0	20.0		ug/L		100	75 - 125
1,2,4-Trichlorobenzene	20.0	20.2		ug/L		101	75 - 130
1,2,4-Trimethylbenzene	20.0	21.6		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	70 - 135
1,2-Dichlorobenzene	20.0	19.9		ug/L		100	80 - 120
1,2-Dichloroethane	20.0	18.6		ug/L		93	75 - 125
1,2-Dichloropropane	20.0	19.5		ug/L		98	80 - 130
1,3,5-Trimethylbenzene	20.0	22.4		ug/L		112	75 - 135
1,3-Dichlorobenzene	20.0	20.5		ug/L		103	75 - 125
1,3-Dichloropropane	20.0	19.0		ug/L		95	80 - 120
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	70 - 120
2,2-Dichloropropane	20.0	23.8		ug/L		119	60 - 145
2-Butanone (MEK)	100	86.3		ug/L		86	70 - 140
2-Chlorotoluene	20.0	21.1		ug/L		105	70 - 125
2-Hexanone	100	90.9		ug/L		91	70 - 140
4-Chlorotoluene	20.0	21.3		ug/L		107	75 - 125
4-Methyl-2-pentanone (MIBK)	100	93.0		ug/L		93	70 - 135
Acetone	100	90.7		ug/L		91	55 - 145
Benzene	20.0	19.9		ug/L		99	80 - 120
Bromobenzene	20.0	20.8		ug/L		104	75 - 120
Bromochloromethane	20.0	20.0		ug/L		100	75 - 125
Bromodichloromethane	20.0	19.4		ug/L		97	80 - 130
Bromoform	20.0	18.5		ug/L		93	55 - 135
Bromomethane	20.0	17.6		ug/L		88	35 - 150
Carbon disulfide	40.0	38.5		ug/L		96	60 - 120
Carbon tetrachloride	20.0	20.6		ug/L		103	70 - 135
Chlorobenzene	20.0	19.3		ug/L		96	80 - 125
Chloroethane	20.0	17.8		ug/L		89	75 - 125
Chloroform	20.0	19.3		ug/L		97	80 - 120
Chloromethane	20.0	18.0		ug/L		90	45 - 150
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	18.4		ug/L		92	80 - 125
Dibromochloromethane	20.0	19.5		ug/L		98	65 - 140
Dibromomethane	20.0	19.1		ug/L		96	80 - 120
Dichlorodifluoromethane	20.0	16.7		ug/L		84	45 - 140
Ethylbenzene	20.0	21.5		ug/L		108	80 - 120
Hexachlorobutadiene	20.0	22.1		ug/L		111	60 - 150
Isopropylbenzene	20.0	21.2		ug/L		106	75 - 125
m,p-Xylene	40.0	43.5		ug/L		109	70 - 130
Methyl tert-butyl ether	20.0	21.6		ug/L		108	80 - 130
Methylene Chloride	20.0	20.0		ug/L		100	80 - 120
n-Butylbenzene	20.0	20.0		ug/L		100	75 - 130

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

Lab Sample ID: LCS 250-19524/5
Matrix: Water
Analysis Batch: 19524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	20.0	21.5		ug/L		108	75 - 130
Naphthalene	20.0	21.1		ug/L		106	70 - 150
o-Xylene	20.0	21.9		ug/L		109	75 - 125
p-Isopropyltoluene	20.0	20.9		ug/L		105	65 - 130
sec-Butylbenzene	20.0	21.2		ug/L		106	60 - 130
Styrene	20.0	22.4		ug/L		112	70 - 130
tert-Butylbenzene	20.0	20.3		ug/L		102	70 - 130
Tetrachloroethene	20.0	18.8		ug/L		94	80 - 125
Toluene	20.0	19.2		ug/L		96	80 - 125
trans-1,2-Dichloroethene	20.0	19.7		ug/L		99	80 - 120
trans-1,3-Dichloropropene	20.0	18.6		ug/L		93	80 - 130
Trichloroethene	20.0	18.9		ug/L		95	80 - 135
Trichlorofluoromethane	20.0	17.4		ug/L		87	75 - 140
1,1,1,2-Tetrachloroethane	20.0	20.6		ug/L		103	65 - 140
1,2-Dibromoethane	20.0	19.3		ug/L		96	80 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: LCSD 250-19524/6
Matrix: Water
Analysis Batch: 19524

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.3		ug/L		102	75 - 135	3	25
1,1,2,2-Tetrachloroethane	20.0	20.8		ug/L		104	75 - 130	1	25
1,1,2-Trichloroethane	20.0	19.0		ug/L		95	80 - 125	1	25
1,1-Dichloroethane	20.0	19.1		ug/L		95	80 - 120	4	25
1,1-Dichloropropene	20.0	18.6		ug/L		93	80 - 120	5	25
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		100	65 - 140	1	25
1,2,3-Trichloropropane	20.0	20.0		ug/L		100	75 - 125	0	25
1,2,4-Trichlorobenzene	20.0	19.9		ug/L		99	75 - 130	2	25
1,2,4-Trimethylbenzene	20.0	21.1		ug/L		105	70 - 130	2	25
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	70 - 135	0	25
1,2-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120	3	25
1,2-Dichloroethane	20.0	18.0		ug/L		90	75 - 125	3	25
1,2-Dichloropropane	20.0	19.4		ug/L		97	80 - 130	1	25
1,3,5-Trimethylbenzene	20.0	21.7		ug/L		108	75 - 135	3	25
1,3-Dichlorobenzene	20.0	19.9		ug/L		99	75 - 125	3	25
1,3-Dichloropropane	20.0	18.6		ug/L		93	80 - 120	3	25
1,4-Dichlorobenzene	20.0	19.4		ug/L		97	70 - 120	3	25
2,2-Dichloropropane	20.0	23.4		ug/L		117	60 - 145	2	25
2-Butanone (MEK)	100	96.3		ug/L		96	70 - 140	11	25
2-Chlorotoluene	20.0	20.6		ug/L		103	70 - 125	2	25
2-Hexanone	100	97.2		ug/L		97	70 - 140	7	25

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

Lab Sample ID: LCSD 250-19524/6
Matrix: Water
Analysis Batch: 19524

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
4-Chlorotoluene			20.0	20.6		ug/L		103	75 - 125	3	25
4-Methyl-2-pentanone (MIBK)			100	100		ug/L		100	70 - 135	8	25
Acetone			100	108		ug/L		108	55 - 145	18	25
Benzene			20.0	19.0		ug/L		95	80 - 120	5	25
Bromobenzene			20.0	20.5		ug/L		102	75 - 120	2	25
Bromochloromethane			20.0	19.4		ug/L		97	75 - 125	3	25
Bromodichloromethane			20.0	18.6		ug/L		93	80 - 130	4	25
Bromoform			40.0	37.1	*	ug/L		93	55 - 135	67	25
Bromomethane			20.0	17.9		ug/L		89	35 - 150	1	25
Carbon disulfide			40.0	39.7		ug/L		99	60 - 120	3	25
Carbon tetrachloride			20.0	19.7		ug/L		99	70 - 135	4	25
Chlorobenzene			20.0	18.5		ug/L		92	80 - 125	4	25
Chloroethane			20.0	17.2		ug/L		86	75 - 125	4	25
Chloroform			20.0	18.4		ug/L		92	80 - 120	5	25
Chloromethane			20.0	18.3		ug/L		91	45 - 150	1	25
cis-1,2-Dichloroethene			20.0	19.1		ug/L		96	80 - 120	4	25
cis-1,3-Dichloropropene			20.0	17.5		ug/L		87	80 - 125	5	25
Dibromochloromethane			20.0	19.2		ug/L		96	65 - 140	2	25
Dibromomethane			20.0	18.1		ug/L		90	80 - 120	6	25
Dichlorodifluoromethane			20.0	16.2		ug/L		81	45 - 140	3	25
Ethylbenzene			20.0	20.7		ug/L		103	80 - 120	4	25
Hexachlorobutadiene			20.0	22.2		ug/L		111	60 - 150	1	25
Isopropylbenzene			20.0	20.6		ug/L		103	75 - 125	3	25
m,p-Xylene			40.0	41.4		ug/L		104	70 - 130	5	25
Methyl tert-butyl ether			20.0	22.4		ug/L		112	80 - 130	4	25
Methylene Chloride			20.0	19.4		ug/L		97	80 - 120	3	25
n-Butylbenzene			20.0	19.7		ug/L		98	75 - 130	1	25
N-Propylbenzene			20.0	21.0		ug/L		105	75 - 130	2	25
Naphthalene			20.0	20.7		ug/L		104	70 - 150	2	25
o-Xylene			20.0	21.1		ug/L		105	75 - 125	4	25
p-Isopropyltoluene			20.0	20.7		ug/L		103	65 - 130	1	25
sec-Butylbenzene			20.0	20.8		ug/L		104	60 - 130	2	25
Styrene			20.0	21.9		ug/L		110	70 - 130	2	25
tert-Butylbenzene			20.0	19.8		ug/L		99	70 - 130	3	25
Tetrachloroethene			20.0	18.1		ug/L		91	80 - 125	4	25
Toluene			20.0	18.5		ug/L		92	80 - 125	4	25
trans-1,2-Dichloroethene			20.0	19.0		ug/L		95	80 - 120	4	25
trans-1,3-Dichloropropene			20.0	18.1		ug/L		91	80 - 130	2	25
Trichloroethene			20.0	17.9		ug/L		90	80 - 135	5	25
Trichlorofluoromethane			20.0	17.7		ug/L		89	75 - 140	2	25
1,1,1,2-Tetrachloroethane			20.0	20.1		ug/L		101	65 - 140	2	25
1,2-Dibromoethane			20.0	18.9		ug/L		94	80 - 125	2	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 250-19422/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19470 — **Prep Batch: 19422**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/22/13 06:53	08/22/13 18:04	1
Manganese	ND	^	0.0020	0.0020	mg/L		08/22/13 06:53	08/22/13 18:04	1

Lab Sample ID: LCS 250-19422/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19470 — **Prep Batch: 19422**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.17		mg/L		108	80 - 120
Manganese	0.100	0.114	^	mg/L		114	80 - 120

Lab Sample ID: MB 250-19513/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19567 — **Prep Batch: 19513**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025	0.025	mg/L		08/24/13 10:03	08/26/13 18:46	1
Manganese	ND		0.0020	0.0020	mg/L		08/24/13 10:03	08/26/13 18:46	1

Lab Sample ID: LCS 250-19513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19567 — **Prep Batch: 19513**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.00		mg/L		100	80 - 120
Manganese	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: 250-13704-2 MS — **Client Sample ID: LB-082113-02**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 19470 — **Prep Batch: 19422**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		2.00	2.22		mg/L		111	75 - 125
Manganese	ND	^	0.100	0.116	^	mg/L		116	75 - 125

Lab Sample ID: 250-13704-1 DU — **Client Sample ID: LB-082113-01**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 19470 — **Prep Batch: 19422**

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 250-19539/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19539

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			08/26/13 12:55	1

Lab Sample ID: LCS 250-19539/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19539

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: 250-13704-1 DU — **Client Sample ID: LB-082113-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19539

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	150			157		mg/L				5	5

Method: 300.0 - Nitrate

Lab Sample ID: MB 250-19542/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19542

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10	0.10	mg/L			08/22/13 12:41	1

Lab Sample ID: LCS 250-19542/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19542

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrate			5.00	4.93		mg/L		99	90 - 110		

Lab Sample ID: 250-13690-A-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19542

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	ND		2.00	2.01		mg/L		101	80 - 120	1	20

Lab Sample ID: 250-13704-7 MS — **Client Sample ID: LB-082113-07**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19542

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrate	1.5		2.00	3.47		mg/L		100	80 - 120		

Method: 300.0 - Nitrate (Continued)

Lab Sample ID: 250-13690-A-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19542

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 250-19541/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19541

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.50	mg/L			08/22/13 12:41	1

Lab Sample ID: LCS 250-19541/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19541

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.3		mg/L		103	90 - 110		

Lab Sample ID: 250-13690-A-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19541

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15		2.00	15.6	4	mg/L		13	80 - 120	0	20

Lab Sample ID: 250-13704-7 MS — **Client Sample ID: LB-082113-07**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19541

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	3.7		2.00	5.35		mg/L		80	80 - 120		

Lab Sample ID: 250-13690-A-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 19541

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	15			15.3		mg/L				0.06	20

Certification Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

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 (UST)	State Program	10	UST-012	12-26-13
California	State Program	9	2597	09-30-13
Oregon	NELAP	10	OR100021	01-09-14
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-14

Method Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Wash.

TestAmerica Job ID: 250-13704-1
SDG: 04213030.01 04213030.17

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
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

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

250-13704 Chain of Custody

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: J Dawn Davis	Site Contact: Brian McMullen	Date: 8/21/13	COC No:
Your Company Name here: SCS Engineers	Tel/Fax: 503 6399348	Lab Contact: Vanessa Fry	Carrier:	1 of 1 COCs
Address: 14945 SW Sequoia Pkwy, Suite 180	**Analysis Turnaround Time**			For Lab Use Only:
City/State/Zip: Portland, OR 97224	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503 716 2740	TAT if different from Below			Lab Sampling:
(xxx) xxx-xxxx FAX	☒ 2 weeks			Job / SDG No.:
Project Name: Leichner Landfill	☐ 1 week			
Site: 04213039.01 04213030.17	☐ 2 days			Sampler: B McMullen
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260 (low level)	Dissolved Metals (Fe and Mn)	TDS	Chloride	Nitrate (short hold time)	Sample Specific Notes:
LB-082113-01	8/21/13	1025	G	W	5	X	X	X	X	X	X	X	Samples were field filtered
LB-082113-02	8/21/13	1100	G	W	5	X	X	X	X	X	X	X	
LB-082113-03	8/21/13	1155	G	W	5	X	X	X	X	X	X	X	
LB-082113-04	8/21/13	1150	G	W	5	X	X	X	X	X	X	X	
LB-082113-05	8/21/13	1315	G	W	5	X	X	X	X	X	X	X	
LB-082113-06	8/21/13	1430	G	W	5	X	X	X	X	X	X	X	
LB-082113-07	8/21/13	1530	G	W	5	X	X	X	X	X	X	X	
Trip blmk	8/21/13	1000		W	1		X	X					

Preservation Used: 1=Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

IR 18/C 2.3C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: B McMullen	Company: SCS	Date/Time: 8/21/13 1730	Received by: Tom Krause	Company: TAP	Date/Time: 08/21/13 1730
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

13704-2

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: J Daventonis	Site Contact: B McMullen	Date: 8/22/13	COC No:
Your Company Name here: SCS Engineers	Tel/Fax: 503 639 4348	Lab Contact: Vanessa Frey	Carrier:	1 of 1 COCs
Address: 14945 SW Sequoia Pkwy, Suite 180	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Portland, OR 97224	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503 358-7209	TAT if different from Below _____			Lab Sampling:
(xxx) xxx-xxxx FAX	☒ 2 weeks			Job / SDG No.:
Project Name: Leichner Landfill	☐ 1 week			
Site: 04213030.01 / 04213030.17	☐ 2 days			Sampler: B McMullen
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260	Dissolved Metals (Fe and Mn)	TDS	Chloride	Nitrate	Sample Specific Notes:
LB-082213-08	8/22/13	1005	G	W	5	X	X	X	X	X	X	X	Samples were field filtered
LB-082213-09	8/22/13	1105	G	W	5	X	X	X	X	X	X	X	

Preservation Used: 1=Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

5.9 IR/p-L

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: B McMullen	Company: SCS	Date/Time: 8/22/13@1230	Received by:	Company: TA	Date/Time: 8/22/13 @ 1230
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

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 Landfill **WELL ID:** LB-GS

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-07

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	(°F) 64 .	°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)
8/21/13	14:52	39.07	.	26.17	.	.	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	8/21/13	15:30	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	15:30	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	8/21/13	15:30	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) 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 15:10 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) (1513)	0.00	6.76	90.8	174	15.49	26.17	6.27	clear/colorless
1	A (1516)	0.2	6.50	102.8	173	14.40	26.17	4.75	clear/colorless
2	A (1519)	0.4	6.15	180.5	176	13.69	26.17	4.40	clear/colorless
3	A (1522)	0.5	6.01	198.1	178	13.64	26.17	4.29	clear/colorless
4	A (1525)	0.7	6.02	194.2	179	13.76	26.17	4.48	clear/colorless
5	A (1528)	0.9	6.03	192.7	181	13.60	26.17	4.61	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 21psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** LR-26I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082113-06

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 64 .	°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)
8/21/13	14:00	58.30	.	24.21	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/21/13	14:30	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	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	8/21/13	14:30	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) 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 14:12 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1413)	0.00	7.11	54.2	246	15.08	24.21	6.50	clear/colorless
1	A(1416)	0.3	6.24	103.7	245	14.04	24.21	5.06	clear/colorless
2	A(1419)	0.5	6.01	206.6	246	14.07	24.21	4.83	clear/colorless
3	A(1422)	0.7	5.99	206.1	245	13.80	24.21	4.70	clear/colorless
4	A(1425)	0.8	6.02	210.2	245	13.76	24.21	4.39	clear/colorless
5	A(1428)	0.9	6.00	219.3	244	13.69	24.21	4.25	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 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** LR-13T

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-05

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 64.	°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)
8/21/13	12:54	55.03	.	28.86	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/21/13	13:15	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	13:15	A	1 250,(500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	8/21/13	13:15	A	1 (250) 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) 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: 12:55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1256)	0.00	7.56	122.4	282	25.16	28.86	8.28	clear/Colorless
1	A(1259)	0.3	7.17	76.0	281	14.79	28.86	4.42	clear/Colorless
2	A(1302)	0.4	6.74	88.4	280	14.61	28.87	3.33	clear/Colorless
3	A(1305)	0.5	6.12	148.6	279	14.60	28.87	2.74	clear/Colorless
4	A(1308)	0.7	6.08	164.1	279	14.62	28.87	2.43	clear/Colorless
5	A(1311)	0.9	6.01	167.1	280	14.46	28.88	2.31	clear/Colorless
6			.			.	.	.	

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

Low Flow Purge Method ~ 75ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** DUP1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-04

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 64 .	°C

[Circle appropriate units]

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

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

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/21/13	11 : 50	A	3	40 ml (HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11 : 50	A	1	250, (500), 1L (None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	8/21/13	11 : 50	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) 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-27I

SAMPLER: B Mcmullen
(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 Landfill **WELL ID:** LB- 27I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-03

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 64 .	°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)
8/21/13	11 : 25	57.15	.	30.19	.	.	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	8/21/13	11 : 55	A	3	(40 ml)	HCl	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11 : 55	A	1	(250) (500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/21/13	11 : 55	A	1	(250), 500 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) No Vinyl Ch / 1,1 DEE 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 11 : 26 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(1129)	0.00	6.81	104.7	584	15.86	30.19	7.61	clear/Colorless
1	A(1132)	0.30	6.08	137.7	711	14.65	30.19	0.68	clear/Colorless
2	A(1135)	0.50	6.01	149.7	716	14.44	30.19	0.42	clear/Colorless
3	A(1138)	0.75	6.01	149.5	716	14.46	30.19	0.42	clear/Colorless
4	A(1141)	0.9	6.00	147.2	721	14.48	30.19	0.37	clear/Colorless
5	A(1144)	1.1	6.00	145.2	720	14.53	30.19	0.38	clear/Colorless
6		.	.			.	.	.	

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

Low flow Purge Method ~ 50ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (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 Landfill **WELL ID:** LFR1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-02

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					**TEMPERATURE:**	(°F) 64 .	°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)
/ /	:	~~57.15~~ Bm .	.	.	.	.	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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/21/13	11:00	G	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	11:00	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	8/21/13	11:00	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) 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.) (NO_3)
	YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: : 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-27I using Inv Supplied DI, pumped water through bladder and filtered for D metals

SAMPLER: B McMullin
(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 Landfill **WELL ID:** LR-SS

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082113-01

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 64 .	°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)
8/21/13	09:30	30.32	.	16.03	.	.	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	8/21/13	10:25	A	3	40 ml (HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/21/13	10:25	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	8/21/13	10:25	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) 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: 09:36 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(0938)	0.00	6.88	100.7	174	15.16	16.03	11.11	Clear/Colorless
1	A(0941)	0.3	5.55	203.4	171	13.96	16.03	7.62	Clear/Colorless
2	A(0944)	0.5	4.99	228.6	171	13.82	16.03	7.46	Clear/Colorless
3	A(1009)	0.7	6.15	141.2	129	14.23	16.03	6.55	Clear/Colorless
4	A(1012)	1.0	6.11	169.7	127	13.67	16.03	5.97	Clear/Colorless
5	A(1015)	1.2	6.15	168.0	127	13.66	16.03	5.55	Clear/Colorless
6	A(1018)	1.4	6.10	166.7	127	13.67	16.03	6.01	Clear/Colorless

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 20psi
Stopped purge @ 0945 to re calibrate YSI

SAMPLER: B mcmullen (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 Landfill **WELL ID:** LR-10SR
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082213-09
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)
8/22/13	:	42.35	.	29.93	.	.	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	8/22/13	11:05	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/22/13	11:05	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	8/22/13	11:05	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) 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: 10:42 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 (1045)	0.00	6.81	155.5	325	29.98	29.93	1.43	Cloudy
1	A (1048)	0.4	6.73	110.5	322	13.93	29.93	0.44	Clear / Tan
2	A (1051)	0.6	6.72	109.0	319	13.96	29.93	0.32	Clear / Tan
3	A (1054)	1.0	6.71	107.2	317	13.91	29.93	0.28	Clear / Tan
4	A (1057)	1.25	6.70	106.1	318	13.98	29.93	0.27	Clear / Colorless.
5	A (1100)	1.40	6.70	105.4	319	14.00	29.93	0.26	Clear / Colorless
6			.			.	.	.	

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

Low Flow Purge Method - 100ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (PRINTED NAME) (SIGNATURE)

Rec'd 8/22/13 @ 1230 by

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 Landfill **WELL ID:** LR-15

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082213-08

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)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
8/22/13	09 :38	45.00	.	32.38	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/22/13	10 :05	A	3	40 m)	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/22/13	10 :05	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	8/22/13	10 :05	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) 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.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 09 : 40 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(0942)	0.00	7.46	115.7	334	14 .64	32.05	7.82	clear/Colorless
1	A(0945)	0.3	6.40	192.0	340	13 .16	32.05	4.66	clear/Colorless
2	A(0948)	0.6	6.12	226.0	332	12 .98	32.05	4.45	clear/Colorless
3	A(0951)	1.0	6.01	235.6	324	13 .00	32.05	4.38	clear/Colorless
4	A(0954)	1.3	5.81	236.3	319	13 .02	32.05	4.31	clear/Colorless
5	A(0957)	1.5	5.83	230.4	313	13 .01	32.05	4.14	clear/Colorless
6	A(1000)	1.7	5.84	228.7	312	12 .99	32.05	4.12	clear/Colorless

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

Low Flow Purge Method ~ 100ml/pulse (4 pulses/min) 8/7 30psi

SAMPLER: B McMullen (PRINTED NAME) (SIGNATURE)

PH was checked by using two Calibrated YSIs
Recv'd 8/22/13 @12 by

9/9/2013

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-13704-1
SDG Number: 04213030.01 04213030.17

Login Number: 13704
List Number: 1
Creator: Krause, Thomas A

List Source: TestAmerica Portland

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	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	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

ATTACHMENT 3

SCS Engineers QA/QC Review
Groundwater - 3Q 2013 Groundwater Monitoring Event
Leichner Landfill
TestAmerica-Denver Report No. 250-13704-1

Samples: LB-082213-08 (LB-1S), 082113-01 (LB-5S), LB-082113-07 (LB-6S), LB-082213-09 (LB-10SR), LB-082113-05(LB-13I), LB-082113-06(LB-26I), LB-082113-03(LB-27I), LB-082113-02(LB-27I/DUP1), LB-082113-02 (FB1), and the trip blank.

Sample Date: 08/21-08/22/2013
Laboratory Sample Received Date: 08/21 and 8/22/2013
Sample Receipt Temperature: 2.3 and 5.9°C
Laboratory Data Received Date: 08/29/2013
QA/QC Review Date: 09/09/2013 (TMA)

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 except for bromoform in batch 250-19524 (* Flag). This is noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits, except for chloride in batch 250-13690 (4 Flag). 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.
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
A field duplicate sample LB-082113-04 (DUP1) was collected at monitoring well LB-27I on 08/21/2013. All calculated RPDs were within 20%.

Field/Equipment Blank
An equipment blank sample (LB-082113-02) was collected near monitoring well LB-27I on 08/21/2013 using lab supplied deionized water. All analytes were reported as non-detect.

Trip Blank

A laboratory supplied trip blank was carried into the field on 08/21/2013 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect, and all surrogate recoveries were within control limits.

Notes

The continuing calibration verification (CCV) for manganese Method 6020 associated with batch 250-19422 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Data Validation

Upon final review of lab report 250-13704-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (09/09/2013; TMA).

ATTACHMENT 4

Table 1
Quarterly Compliance LFG Monitoring Probe Data – September 2013
Leichner Landfill

Probe	Date Time	Methane (percent by volume)	Carbon Dioxide (percent by volume)	O2 (percent by volume)	Balance (percent by volume)	Rel Press (inches of water)
GP1A	9/3/2013 10:43	0	2.1	19.4	78.5	0
GP1B	9/3/2013 10:44	0	1.9	19.5	78.6	0
GP02	9/3/2013 10:47	0	3	18.2	78.8	0
GP03	9/3/2013 9:52	0	3.9	16.7	79.4	0
GP4A	9/3/2013 9:47	0	3.3	16.5	80.2	0
GP4B	9/3/2013 9:48	0	3.1	16.1	80.8	0
GP05	9/3/2013 9:43	0	4.7	15.5	79.8	0
GP06	9/3/2013 10:20	0	5.1	14	80.9	-0.05
GP07	9/3/2013 10:11	7.2	16.9	0	75.9	0
GP07	9/5/2013 8:26	7.6	17.3	0	75.1	0
GP07	9/6/2013 8:38	0.2	0.7	20.8	78.3	0
GP8R	9/3/2013 10:02	0	1.6	19.7	78.7	-0.01
GP9A	9/3/2013 11:09	0	8	11.3	80.7	0
GP9B	9/3/2013 11:11	0.2	12.2	1.8	85.8	0
GP10A	9/3/2013 11:06	0	4.9	12.9	82.2	0
GP10B	9/3/2013 11:07	0	2	19.1	78.9	0
GP11	9/3/2013 11:02	0	1.5	18.9	79.6	-0.61
GP12	9/3/2013 10:59	0	1.4	20.5	78.1	0
GP13	9/3/2013 11:24	0	4	17.6	78.4	-0.01
GP14	9/3/2013 11:33	0	0.8	20.5	78.7	0
GP15	9/3/2013 11:36	0	1.3	19.2	79.5	0
GP16D	9/3/2013 11:43	0	3.3	17.4	79.3	0
GP16S	9/3/2013 11:45	0	1.8	19.3	78.9	0
GP17D	9/3/2013 11:50	0	3.4	17.6	79	0
GP17S	9/3/2013 11:51	0	3.5	18.3	78.2	0
GP18D	9/3/2013 12:13	0	2.3	17.8	79.9	0
GP18S	9/3/2013 12:15	0	1.8	19.3	78.9	0
GP19D	9/3/2013 12:21	0	2.6	17.9	79.5	0
GP19S	9/3/2013 12:22	0	1.6	19.4	79	0
GP20	9/3/2013 12:30	0	7.8	9.8	82.4	0
GP21A	9/3/2013 12:39	0	1.1	20	78.9	0
GP21B	9/3/2013 12:40	0	1.1	19.5	79.4	0
GP22	9/3/2013 12:42	0	1.2	19.9	78.9	0
GP23	9/3/2013 12:44	0	1.2	19.8	79	0
GP24A	9/3/2013 12:46	0	1	20.6	78.4	0
GP24B	9/3/2013 12:47	0	0.7	20.6	78.7	0
GP25A	9/3/2013 12:54	0	1.7	19.5	78.8	0
GP25B	9/3/2013 12:58	0	3.6	16.2	80.2	0
GP26	9/3/2013 13:05	0	0.4	20.8	78.8	0
GP27	9/3/2013 13:12	0	0.7	20.4	78.9	0
GP28	9/3/2013 9:21	0	5.4	15.4	79.2	-0.01

Table 1
Quarterly Compliance LFG Monitoring Probe Data – September 2013
Leichner Landfill

Probe	Date Time	Methane (percent by volume)	Carbon Dioxide (percent by volume)	O2 (percent by volume)	Balance (percent by volume)	Rel Press (inches of water)
GP29	9/3/2013 9:31	0	5.3	10.5	84.2	-0.03
GP30A	9/3/2013 9:38	0	6.1	14.9	79	-9.24
GP30B	9/3/2013 9:40	0	5.3	15.5	79.2	-0.07
GP31	9/3/2013 12:18	0	1.1	19.9	79	0
GP32	9/3/2013 12:25	0	1.7	18.8	79.5	0
GP33	9/3/2013 12:26	0	1.8	17.3	80.9	0
GP34	9/3/2013 12:33	0	4	14.3	81.7	0
GP35	9/3/2013 12:36	0	3	16.1	80.9	0
GP36	9/3/2013 12:50	0	2.9	15.7	81.4	0
GP37	9/3/2013 12:52	0	2.3	17.2	80.5	0
GP38	9/3/2013 13:01	0	1.6	19.6	78.8	0