

## SCS ENGINEERS

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

**Subject: First Quarter 2012 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017**

Dear Mr. Kourehdar:

This letter report presents the first quarter 2012 progress report for the closed Leichner Brothers Landfill (LBLF) located in Vancouver, Washington. SCS Engineers, Inc. (SCS) prepared this progress report on behalf of Clark County Environmental Services (County) and the Leichner Landfill Oversight Committee (LLOC), whose members include the City of Vancouver and Leichner Brothers Land Reclamation Corporation (LBLRC). The report is being submitted in accordance with reporting requirements specified in the July 1996 Consent Decree issued to the LBLRC by the Washington State Department of Ecology (Ecology).

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

The report (1) describes field activities performed during the first quarter 2012 at LBLF, (2) presents results of groundwater, stormwater, and LFG compliance monitoring, and the monitoring and maintenance of the facility's landfill gas collection and control system (GCCS), and (3) describes other pertinent, non-routine activities performed during the first quarter 2012. The GCCS includes a LFG extraction well field, condensate collection system, and a LFG blower and flare.

### FIRST QUARTER 2012 MAJOR ACTIVITIES

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

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

- Conducted first quarter 2012 (annual) groundwater monitoring in March 2012.
- Conducted monthly stormwater inspections in January, February, and March 2012, and first quarter 2012 stormwater monitoring in March 2012.
- Conducted quarterly monitoring of the LFG compliance monitoring probes in January 2012.
- Conducted monitoring and balancing of the LFG extraction well field at least semimonthly (twice a month).
- Monitored and maintained the performance and operation of the GCCS.
- Performed weekly greenhouse gas (GHG) monitoring per the requirements of Washington State's GHG Reporting rule.

## FIRST QUARTER 2012 PROJECT ACTIVITIES AND RESULTS

### **Project Management, Meetings, and Correspondence**

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

- Submitted January, February, and March 2012 monthly updates to the County and the LLOC.
- Submitted the Fourth Quarter 2011 and Annual Report, dated February 28, 2012, to Ecology, the County, and the LLOC.<sup>2</sup>
- Conducted the fourth quarter 2011 meeting of the LLOC on January 10, 2012 (delayed due to scheduling conflicts).

### **First Quarter 2012 Groundwater Monitoring**

#### **Groundwater Monitoring Network and Schedule**

The current groundwater monitoring network consists of 20 monitoring wells screened in the alluvium (alluvial water-bearing zone [WBZ]) or the Troutdale Formation aquifer. The 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).

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<sup>2</sup> SCS Engineers. 2012. Fourth Quarter 2011 and Annual Report, Closed Lechner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, February 28.

- 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 2005 CMP (EMCON, 2005<sup>1</sup>). During the annual event, typically performed during the first quarterly monitoring period in late winter-early spring (usually in March), groundwater samples are collected from the following 20 monitoring wells: LB-1S, LB-1D, LB-3S, LB-3D, LB-4SR, LB-4D, LB-5S, LB-5D, LB-6S, LB-10SR, LB-10DR, LB-13I, LB-13D, LB-17I, LB-17D, LB-20S, LB-26I, LB-26D, LB-27I, and LB-27D. During the semiannual monitoring event, typically performed during the third quarterly period in late summer-early fall (usually September), groundwater samples are collected from the following 7 monitoring wells: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-26I, and LB-27I.

The first quarter 2012 (annual) groundwater monitoring event was performed from March 12 through March 22, 2012.

### **Resurveying of Reference Elevations for Site Groundwater Monitoring Wells**

As reported in the 2011 annual report<sup>2</sup>, there was a discrepancy between the monitoring well top-of-casing (TOC) reference elevations provided in the event-specific groundwater elevation tables historically presented in the first and third quarter monitoring reports for LBLF and in the historical summary table included in the annual reports. The difference in reference elevations did not affect the overall interpretation of groundwater flow as presented in previous reports. Consistent with the recommendation in the 2011 annual report (see footnote 4 in the report<sup>2</sup>), TOC reference elevations were resurveyed in May 2012 so that consistent survey data can be used for data interpretation and future reporting. The surveying was performed by a state of Washington registered land surveyor (from Olsen Engineering) and the elevations were referenced to the Clark County vertical datum. The resurveyed reference elevations are provided in Table 1 and were used to calculate groundwater elevations based on first quarter 2012 groundwater levels measured in the site monitoring wells on March 12, 2012.

### **Sampling Procedures and Laboratory Methods**

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

Groundwater sampling of the semiannual groundwater monitoring network wells was performed (1) in general accordance with the procedures described in the 2005 CMP, and (2) using low-flow purge sampling procedures as described in SCS’s July 14, 2011, letter to Ecology requesting approval to conduct low-flow purge sampling<sup>3</sup> (approved by Ecology on July 19, 2011). A non-

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<sup>3</sup> 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 Lechner Brothers Landfill, Vancouver, Washington, Facility ID No. 1017. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, July 14.

dedicated, portable, stainless steel bladder pump (QED Sample Pro portable micropurge pump) was used to purge and sample the monitoring wells. A new, disposable, polyethylene bladder was used for each well. New, dedicated, polyethylene discharge tubing was used for each well that is kept inside the well casings for use during groundwater monitoring events.

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

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

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

The analytical test methods were consistent with those described in the 2005 CMP, except that a low-level procedure for VOCs analysis by U.S. Environmental Protection (EPA) Method 8260B was used to obtain method reporting limits (MRL) that meet the compliance level of 0.1 micrograms per liter ( $\mu\text{g/L}$ ) for vinyl chloride (VC) and 1,1-dichloroethene (1,1-DCE), as



requested by Ecology.<sup>4,5</sup> The MRLs reported by TAL were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE.

### **Quality Assurance and Quality Control Methods and Results**

Field quality assurance/quality control (QA/QC) procedures used for the first quarter 2012 monitoring event included collecting and submitting for analyses two duplicate samples (samples LB-032212-20 and LB-032212-22 collected at wells LB-13I and LB-6S, respectively), one field blank sample (sample LB-031212-06), and one trip blank. Laboratory QA/QC procedures included analyzing surrogate spikes, method blanks, matrix spikes, and matrix spike duplicates. The laboratory QA/QC results are included with the laboratory analytical reports provided by TAL (see Attachment 2). TAL incorporated its laboratory data quality review comments in the QA/QC narrative of the laboratory reports. Copies of the laboratory analytical reports (along with copies of the COC forms) are provided in Attachment 2.

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

### **First Quarter 2012 Groundwater Monitoring Results**

The first quarter 2012 groundwater levels (based on resurveyed reference elevations) and corresponding groundwater elevations are summarized in Table 1. The groundwater elevations are consistent with historical groundwater elevation data. Groundwater potentiometric surface contour maps for the first quarter (March) 2012 monitoring event are provided in Figures 2 and 3 for the alluvial WBZ and Troutdale Formation aquifer, respectively. Consistent with previous interpretations, groundwater in the alluvial WBZ flows towards the west to southwest, and groundwater in the Troutdale Formation aquifer flows towards the south to southeast.

The field-measured water quality parameter concentrations in groundwater samples measured during purging were generally within the range of concentrations from the last five years (since 2007). Field parameter concentrations were within available regulatory or compliance levels, except for pH in groundwater samples from monitoring wells LB-3S, LB-3D, LB-4SR, LB-5S, LB-13D, and LB-26D. The pH concentrations in samples from these wells (from 6.2 to 6.4 standard units [S.U.]) were slightly below the lower regulatory limit of 6.5 S.U. (see Table 2). Historical pH measurements in samples from all of these wells have intermittently been below the regulatory limit, including at least once within the last 5 years (since 2007). The historical pH

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

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

values for these wells have previously been reported to Ecology and are likely reflective of naturally occurring groundwater conditions.

The first quarter 2012 laboratory analytical data are summarized in Table 3 for inorganic parameters (Cl, nitrate, and TDS) and dissolved metals (Fe and Mn), and in Table 4 for VOCs. The groundwater analytical results for inorganic parameters and dissolved metals are generally consistent with results obtained from the last five years of groundwater monitoring (since 2007). The concentrations of inorganic parameters and dissolved metals did not exceed compliance levels specified in the 1996 Consent Decree for LBLF, except for the following:

- The dissolved Fe concentration (6.8 milligrams per liter [mg/L]) in the sample from well LB-17I exceeded the compliance level of 0.3 mg/L.
- Dissolved Mn concentrations in samples from wells LB-17I (0.98 mg/L), LB-17D (4.6 mg/L), LB-20S (2.4 mg/L), and LB-27I (0.38 mg/L) exceeded the compliance level of 0.05 mg/L.

The dissolved Fe and Mn concentrations described above are consistent with historical results collected since 2007 and are likely attributed in part to natural groundwater conditions, as previously reported to Ecology. Historical data indicate that background levels for Fe and Mn exhibit natural variability and fluctuate above and below the compliance levels at several well locations, including upgradient well LB-4SR and crossgradient well LB-3S.

VOCs for which compliance levels have been established for LBLF (i.e., 1,4-dichlorobenzene, 1,1-DCE, tetrachloroethene, trichlorethene, and VC) were not detected in groundwater samples collected during the first quarter 2012 monitoring event, except for 1,4-dichlorobenzene (1,4-DCB). 1,4-DCB was detected in the sample from well MW-20S only at a concentration of 0.2 µg/L (equivalent to the MRL), well below the compliance level of 1.8 µg/L. 1,1-dichloroethane (1,1-DCA) was the only other VOC detected at a very low concentration of 0.12 µg/L in the sample from well LB-10DR, slightly above the MRL of 0.1 µg/L. The detected concentration for 1,1-DCA is well below the recently updated regional screening level (RSL) of 2.4 µg/L for the ingestion exposure pathway (EPA Region 9 RSLs, April 2012).<sup>6</sup>

Chloroform (0.34 µg/L), a common laboratory contaminant, was also detected slightly above the MRL of 0.1 µg/L in an equipment blank sample.

The first quarter 2012 VOC analytical data demonstrate that the post-closure, remedial action measures implemented at LBLF (i.e., maintenance of the engineered landfill cap, operation of the GCCS, and surface water controls) continue to be effective at maintaining VOC concentrations substantially below compliance levels.

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<sup>6</sup> A screening level for 1,1-DCA is not available from Ecology under the Model Toxics Control Act (MTCA) regulations.

## **First Quarter 2012 Stormwater Monitoring**

Quarterly compliance stormwater monitoring was performed during the first quarter 2012 on March 29, 2011, in accordance with LBLF's Industrial Stormwater General Permit, effective January 1, 2010. The stormwater sample was collected at Outfall 1 (see Figure 4) in accordance with the procedures described in LBLF's Stormwater Pollution Prevention Plan,<sup>7</sup> and was submitted to TAL for permit-required laboratory analyses. Analytical results of this stormwater sample indicated that water quality benchmarks specified in the LBLF's General Permit were not exceeded. A discharge monitoring report (DMR) summarizing the first quarter 2012 stormwater monitoring results were submitted to Ecology electronically via its web-based (on-line) WAWebDMR utility on May 8, 2012.

Consistent with requirements of LBLF's General Permit, monthly stormwater inspections were performed during the third quarter 2011 period on January 19, February 28, and March 13, 2012. No problems or concerns were noted during the monthly inspections.

## **First Quarter 2012 LFG System Monitoring and Results**

### **Compliance LFG Migration Monitoring**

The schedule for performing LFG monitoring of the perimeter, compliance LFG probes was modified from monthly to quarterly beginning in the third quarter 2011 period, as approved by Ecology.<sup>4</sup> The first quarter 2012 compliance LFG monitoring event was performed on January 9, 2012. Methane concentrations were below the MFS compliance level of 5 percent methane by volume in all LFG monitoring probes. A summary of the January 9, 2012, compliance LFG monitoring probe data is provided in Attachment 4. The LFG monitoring probe locations are shown in Figure 5.

### **LFG Extraction System**

The LFG extraction wells (north and south LFG extraction wells; shown on Figure 4) were monitored and adjusted (balanced) at least semi-monthly (twice a month) during the first quarter 2012. There were no problems or concerns noted during the monitoring and adjustment of the LFG extraction wells.

### **Greenhouse Gas Monitoring**

SCS submitted to the County/LLOC, Ecology, and CCPH a report dated June 29, 2011, presenting the results of a GHG applicability and emissions modeling study. The results of the study indicated that GHG emissions at the LBLF do not exceed the federal threshold limit for annual GHG emissions reporting; however, the emissions do exceed the threshold limit for the State of Washington, which requires GHG emissions reporting for calendar year 2012. As a result, the LFG flare system was monitored on a weekly basis during the first quarter 2012 period for criteria required for evaluating GHG emissions per the requirements of Washington State's GHG

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<sup>7</sup> SCS Engineers (SCS). 2011. Stormwater Pollution Prevention Plan, Plan Date: May 2011, State of Washington, Industrial Stormwater General Permit, Permit Number: WAR005572B, Leichner Brothers Landfill. Prepared by SCS, Portland, Oregon, for Clark County, Vancouver, Washington, May.

Reporting rule. It should be noted that routine monitoring of the LFG flare system was also performed for optimizing the performance and efficiency of the LFG blowers and flare.

### **GCCS Operations and Maintenance**

Routine operations, maintenance, and repair of the GCCS performed during the first quarter 2012 generally included the following:

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

Other non-routine maintenance and repair activities performed during each month of the first quarter 2012 are described below.

#### **January 2012**

- Tested refurbished pump controller and flow meter installed in condensate sump CS-S4.
- Repaired the flow meter conduit seal.
- Evaluated and repaired airline leaks in the GCCS piping to prevent temporary flare shut downs.
- Evaluated cost estimate from QED Environmental Systems to purchase controllerless pumps for the condensate sumps.
- Evaluated LFG Specialties (flare manufacturer) remote monitoring device (FT Connect) for potential use for LFG data telemetry system.
- Met with Nutter Corporation (contractor) and Clark County to evaluate repair of dirt access road to the South Detention Pond.

#### **February 2012**

- Repaired or replaced inlet piping and other appurtenances for the air compressor.
- Refilled the flare system propane tank and purchased a backup tank.
- Checked condensate tank levels.
- Repaired condensate sump CS-N2.
- Relabeled the flare station blowers.
- Minor repairs were made to the North Detention Pond pumps.

- Performed routine inspections and maintenance of the flare station blowers and air compressor (including adding oil to pumps and air compressor, and greasing the blowers).
- Made minor repairs to the main entrance gate.
- Successfully installed new QED controller-less pumps in condensate sumps CS-N4 and CS-N8, and incorporated the new pumps into the condensate removal system.
- Had road constructed (by Nutter Corp.) to provide access to the South Detention Pond pumping station to accommodate removal/repair of pump.
- Cleaned out the drain line from sedimentation basin to North Detention Pond to prevent overflow of storm water into the north field area.

### **March 2012**

- Greased LFG blower No. 1 and rotated LFG blower operation.
- Drained the air compressor drain tank.
- Filled the flare ignition propane tank.
- Troubleshoot Yokogawa data output with technical support representative (flow data output was not being read).
- Replaced blown fuses at the North Detention Pond electrical box.
- Responded to a call from the County related to an alarm condition of the pumping system at the South Detention Basin. Coordinated and performed a site visit to observe water level conditions (observed to be normal) in the South Detention Basin and reset alarm.
- Removed and cleaned the flare tower's flame safeguard and combustion control system (manufactured by Fireye).
- Installed new ¼-inch airline valve on the air dryer effluent line.

### **REPAIR/REPLACEMENT/RENOVATION ACTIVITIES**

The following repair, replacement, and/or renovation activities were performed during the first quarter 2012:

- SCS met with Grundfos CBS on January 20, 2012, to evaluate and test the South Detention Pond pumping system due to high water accumulation in the basin. Subsequently, SCS coordinated with Grundfos CBS to remove and inspect for possible repair the primary South Detention Pond large capacity, 6-inch submersible pump that was not operating. SCS rented and operated a temporary diesel-powered trash pump to supplement the other two pumps during February and March 2012. Grundfos CBS repaired the pump and it was reinstalled on March 29, 2012.

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

Sincerely,



David Lamadrid, LG  
Project Geologist  
**SCS ENGINEERS**



**David Lamadrid**



Louis Caruso, LG, LHG  
Project Manager  
**SCS ENGINEERS**

- Attachments:
- Table 1 – Groundwater Elevation Data
  - Table 2 – Field Water Quality Parameters Measurements
  - Table 3 – Inorganic Parameters Concentrations
  - Table 4 – Volatile Organic Compounds Concentrations
  - Figure 1 – Groundwater Monitoring Locations
  - Figure 2 – Groundwater Potentiometric Surface Contours, Alluvial Water Bearing Zone (March 12, 2012)
  - Figure 3 – Groundwater Potentiometric Surface Contours, Troutdale Formation Aquifer (March 12, 2012)
  - Figure 4 – Site Map and Stormwater System
  - Figure 5 – Landfill Gas Probe and Extraction Well Locations
  - Attachment 1 – Field Sampling Data Sheets (FSDSs)
  - Attachment 2 – Groundwater Laboratory Analytical Reports
  - Attachment 3 – Results of Laboratory QA/QC Reviews
  - Attachment 4 – Quarterly Compliance LFG Monitoring Probe Data

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

## **T A B L E S**



**Table 1**  
**Groundwater Elevation Data**  
**First Quarter (March) 2012**  
**Lechner Brothers Landfill**

Monitoring Well	Reference Elevation (Clark Co. Datum) <sup>a</sup>	Depth to Groundwater (feet, BTOC) <sup>b</sup>	Groundwater Elevation
LB-R2	222.27	44.05	178.22
LB-1S	210.12	32.17	177.95
LB-1D	209.74	34.16	175.58
LB-3S	218.25	37.51	180.74
LB-3D	219.29	38.50	180.79
LB-4S(R)	226.46	22.70	203.76
LB-4C	228.08	45.12	182.96
LB-4D	228.00	52.65	175.35
LB-5S	206.89	15.50	191.39
LB-5C	206.70	30.83	175.87
LB-5D	207.56	35.31	172.25
LB-6S	202.80	25.91	176.89
LB-9S(R)	217.94	33.82	184.12
LB-10SR	204.04	29.26	174.78
LB-10CR	203.05	28.20	174.85
LB-10DR	203.36	40.00	163.36
LB-13I	202.36	26.50	175.86
LB-13C	202.68	26.91	175.77
LB-13D	202.96	27.21	175.75
LB-17S	208.18	29.82	178.36
LB-17I	213.14	35.05	178.09
LB-17C	206.55	28.61	177.94
LB-17D	213.17	35.82	177.35
LB-20S	221.22	39.17	182.05
LB-21S	223.35	36.14	187.21
LB-21C	223.32	36.60	186.72
LB-21D	223.63	39.31	184.32
LB-22S	208.42	5.75	202.67
LB-23S	229.19	30.60	198.59
LB-24S	235.13	38.51	196.62
LB-26I	200.22	23.80	176.42
LB-26D	200.75	23.58	177.17
LB-27I	205.35	29.74	175.61
LB-27D	204.63	35.18	169.45
MW-1 N	216.58	Dry	NA
MW-1 S	216.13	36.55	179.58
MW-1 E	216.45	Dry	NA
MW-NE	220.06	13.30	206.76

Notes:

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

<sup>a</sup> Monitoring wells and piezometers were resurveyed May 30 and 31, 2012.

<sup>b</sup> Measured on March 12, 2012

**Table 2**  
**Field Water Quality Parameters Measurements**  
**First Quarter (March) 2012**  
**Lechner Brothers Landfill**

Monitoring Well	Sample Blind ID	Sample Date	pH (S.U.)	Specific Conductance (μS/cm)	Temperature (°C)	ORP (mv)	Dissolved Oxygen (mg/L)
Regulatory Limit or Compliance Level			6.5 - 8.5 <sup>a</sup>	700 <sup>b</sup>	NA	NA	NA
LB-1S	LB-031312-14	3/12/2012	6.50	335	12.5	83.5	4.44
LB-1D	LB-031312-13	3/12/2012	6.67	249	11.5	84.5	7.55
LB-3S	LB-031312-10	3/13/2012	<b>6.44</b>	239	11.1	78.2	4.57
LB-3D	LB031312-09	3/13/2012	<b>6.48</b>	231	10.3	81.6	5.38
LB-4S(R)	LB-031312-12	3/13/2012	<b>6.24</b>	204	12.0	92.2	8.96
LB-4D	LB-031312-11	3/12/2012	7.33	211	10.9	75.6	4.89
LB-5S	LB-032212-17	3/22/2012	<b>6.16</b>	204	10.9	104.8	9.22
LB-5D	LB-031212-03	3/12/2012	6.60	363	11.4	67.0	0.33
LB-6S	LB-032212-23	3/22/2012	6.54	240	11.7	91.6	6.65
LB-10SR	LB-031312-08	3/13/2012	6.62	550	11.8	80.4	0.26
LB-10DR	LB-031312-07	3/13/2012	6.70	463	11.7	77.2	1.42
LB-13I	LB-032212-19	3/22/2012	6.58	255	11.7	87.2	2.40
LB-13D	LB-031212-01	3/12/2012	<b>6.27</b>	235	11.5	120.0	5.32
LB-17I	LB-031312-16	3/13/2012	6.85	414	12.9	-69.0	0.15
LB-17D	LB-131212-04	3/12/2012	6.68	388	13.1	45.2	0.20
LB-20S	LB-031312-15	3/13/2012	6.78	385	11.6	36.6	0.17
LB-26I	LB-032212-21	3/22/2012	6.57	274	11.5	89.8	4.96
LB-26D	LB-131212-05	3/12/2012	<b>6.39</b>	234	11.6	93.5	4.92
LB-27I	LB-032212-18	3/22/2012	6.82	643	11.7	88.2	0.32
LB-27D	LB-031212-02	3/12/2012	6.60	338	12.1	64.900	3.32
Notes: S.U. = standard units μS = microSiemens per centimeter (equivalent to micro mho per centimeter [μmho/cm]) °C = degrees celsius mV = millivolts mg/L = milligrams per liter <b>Bold</b> = concentration exceeds the regulatory limit or compliance level <sup>a</sup> Regulatory limit specified in Washington Administrative Code, secondary maximum contaminant level (SMCL). <sup>b</sup> Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.							

**Table 3**  
**Inorganic Parameters and Dissolved Metals Concentrations**  
**First Quarter (March) 2012**  
**Lechner Brothers Landfill**

Location Identification	Sample Blind ID	Unit Screened	Sample Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Iron (mg/L)	Manganese (mg/L)
Compliance Levels (mg/L) <sup>a</sup>				250	10	500	0.3	0.05
LB-1S	LB-031312-14	Alluvium	3/12/2012	5.2	6.0	210	0.025 U	0.0020 U
LB-1D	LB-031312-13	Troutdale	3/12/2012	7.4	6.0	190	0.025 U	0.0020 U
LB-3S	LB-031312-10	Troutdale	3/13/2012	3.7	3.8	170	0.025 U	0.0020 U
LB-3D	LB031312-09	Troutdale	3/13/2012	4.1	4.6	180	0.025 U	0.0020 U
LB-4S(R)	LB-031312-12	Alluvium	3/13/2012	3.3	2.8	150	0.025 U	0.0020 U
LB-4D	LB-031312-11	Troutdale	3/12/2012	3.6	7.1	140	0.025 U	0.0020 U
LB-5S	LB-032212-17	Alluvium	3/22/2012	4.1	3.7	160	0.025 U	0.0020 U
LB-5D	LB-031212-03	Troutdale	3/12/2012	11	1.2	240	0.025 U	0.0020 U
LB-6S	LB-032212-23	Alluvium	3/22/2012	5.5	1.7	180	0.025 U	0.0020 U
LB-6S (Dup)	LB-032212-22	Alluvium	3/22/2012	5.6	1.7	180	0.025 U	0.0020 U
LB-10SR	LB-031312-08	Alluvium	3/13/2012	26	1.8	330	0.025 U	0.0023
LB-10DR	LB-031312-07	Troutdale	3/13/2012	20	1.8	280	0.025 U	0.0020 U
LB-13I	LB-032212-19	Alluvium	3/22/2012	6.1	4.1	200	0.025 U	0.0020 U
LB-13I (Dup)	LB-032212-20	Alluvium	3/22/2012	6.1	4.0	190	0.025 U	0.0020 U
LB-13D	LB-031212-01	Troutdale	3/12/2012	4.4	5.3	190	0.025 U	0.0020 U
LB-17I	LB-031312-16	Alluvium	3/13/2012	12	0.1 U	240	<b>6.8</b>	<b>0.98</b>
LB-17D	LB-131212-04	Troutdale	3/12/2012	19	0.1 U	230	0.12	<b>4.6</b>
LB-20S	LB-031312-15	Alluvium	3/13/2012	6.2	0.1 U	210	0.076	<b>2.4</b>
LB-26I	LB-032212-21	Alluvium	3/22/2012	8.4	4.8	200	0.037	0.0026
LB-26D	LB-131212-05	Troutdale	3/12/2012	4.8	5.9	190	0.025 U	0.0034
LB-27I	LB-032212-18	Alluvium	3/22/2012	23	0.2	370	0.025 U	<b>0.38</b>
LB-27D	LB-031212-02	Troutdale	3/12/2012	10	4.0	220	0.033	0.0054
Field Blank	LB-031212-06	NA	03/12/12	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 <b>Bold</b> = concentration exceeds the compliance level								
<sup>a</sup> Compliance levels specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.								

**Table 4  
Volatile Organic Compounds Concentrations  
First Quarter (March) 2012  
Leichner Brothers Landfill**

Location Identification	Sample Blind ID	Unit Screened	Sample Date	1,1-Dichloroethene	1,4-Dichlorobenzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl chloride	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	
Compliance Level <sup>a</sup>				0.1	1.8	5.0	5.0	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-031312-14	Alluvium	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-1D	LB-031312-13	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-3S	LB-031312-10	Troutdale	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-3D	LB031312-09	Troutdale	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-4S(R)	LB-031312-12	Alluvium	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-4D	LB-031312-11	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-5S	LB-032212-17	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-5D	LB-031212-03	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-6S	LB-032212-23	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-6S (Dup)	LB-032212-22	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-10SR	LB-031312-08	Alluvium	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-10DR	LB-031312-07	Troutdale	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	<b>0.12</b>	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-13I	LB-032212-19	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-13I (Dup)	LB-032212-20	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-13D	LB-031212-01	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-17I	LB-031312-16	Alluvium	3/13/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-17D	LB-131212-04	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-20S	LB-031312-15	Alluvium	3/13/2012	0.1 U	<b>0.2</b>	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-26I	LB-032212-21	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-26D	LB-131212-05	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-27I	LB-032212-18	Alluvium	3/22/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
LB-27D	LB-031212-02	Troutdale	3/12/2012	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
Equipment Blank	LB-031212-06	NA	03/12/12	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	
Trip Blank	NA	NA	NA	0.1 U	0.2 U	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.2 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	

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

<sup>a</sup> Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Action Plan.

**Table 4  
Volatile Organic Compounds Concentrations  
First Quarter (March) 2012  
Leichner Brothers Landfill**

Location Identification	Sample Blind ID	Unit Screened	Sample Date	2,2-Dichloropropane ug/L	2-Butanone (MEK) ug/L	2-Chlorotoluene ug/L	2-Hexanone ug/L	4-Chlorotoluene ug/L	4-Isopropyltoluene ug/L	4-Methyl-2-pentanone (MIBK) ug/L	Acetone ug/L	Benzene ug/L	Bromobenzene ug/L	Bromoform ug/L	Bromomethane ug/L	Carbon disulfide ug/L	Carbon tetrachloride ug/L	Chlorobenzene ug/L	Chlorobromomethane ug/L	Chlorodibromomethane ug/L	Chloroethane ug/L	Chloroform ug/L	Chloromethane ug/L	cis-1,2-Dichloroethene ug/L	cis-1,3-Dichloropropene ug/L	Dibromomethane ug/L
Compliance Level <sup>a</sup>				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LB-1S	LB-031312-14	Alluvium	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-1D	LB-031312-13	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-3S	LB-031312-10	Troutdale	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-3D	LB031312-09	Troutdale	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-4S(R)	LB-031312-12	Alluvium	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-4D	LB-031312-11	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5S	LB-032212-17	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5D	LB-031212-03	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S	LB-032212-23	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S (Dup)	LB-032212-22	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10SR	LB-031312-08	Alluvium	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10DR	LB-031312-07	Troutdale	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I	LB-032212-19	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I (Dup)	LB-032212-20	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13D	LB-031212-01	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-17I	LB-031312-16	Alluvium	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-17D	LB-131212-04	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-20S	LB-031312-15	Alluvium	3/13/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26I	LB-032212-21	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26D	LB-131212-05	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27I	LB-032212-18	Alluvium	3/22/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27D	LB-031212-02	Troutdale	3/12/2012	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Equipment Blank	LB-031212-06	NA	03/12/12	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	<b>0.34</b>	0.1 U	0.1 U	0.1 U	0.1 U
Trip Blank	NA	NA	NA	0.1 U	2.0 U	0.1 U	1.0 U	0.2 U	0.2 U	0.5 U	2.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

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

<sup>a</sup> Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Actio

**Table 4  
Volatile Organic Compounds Concentrations  
First Quarter (March) 2012  
Lechner Brothers Landfill**

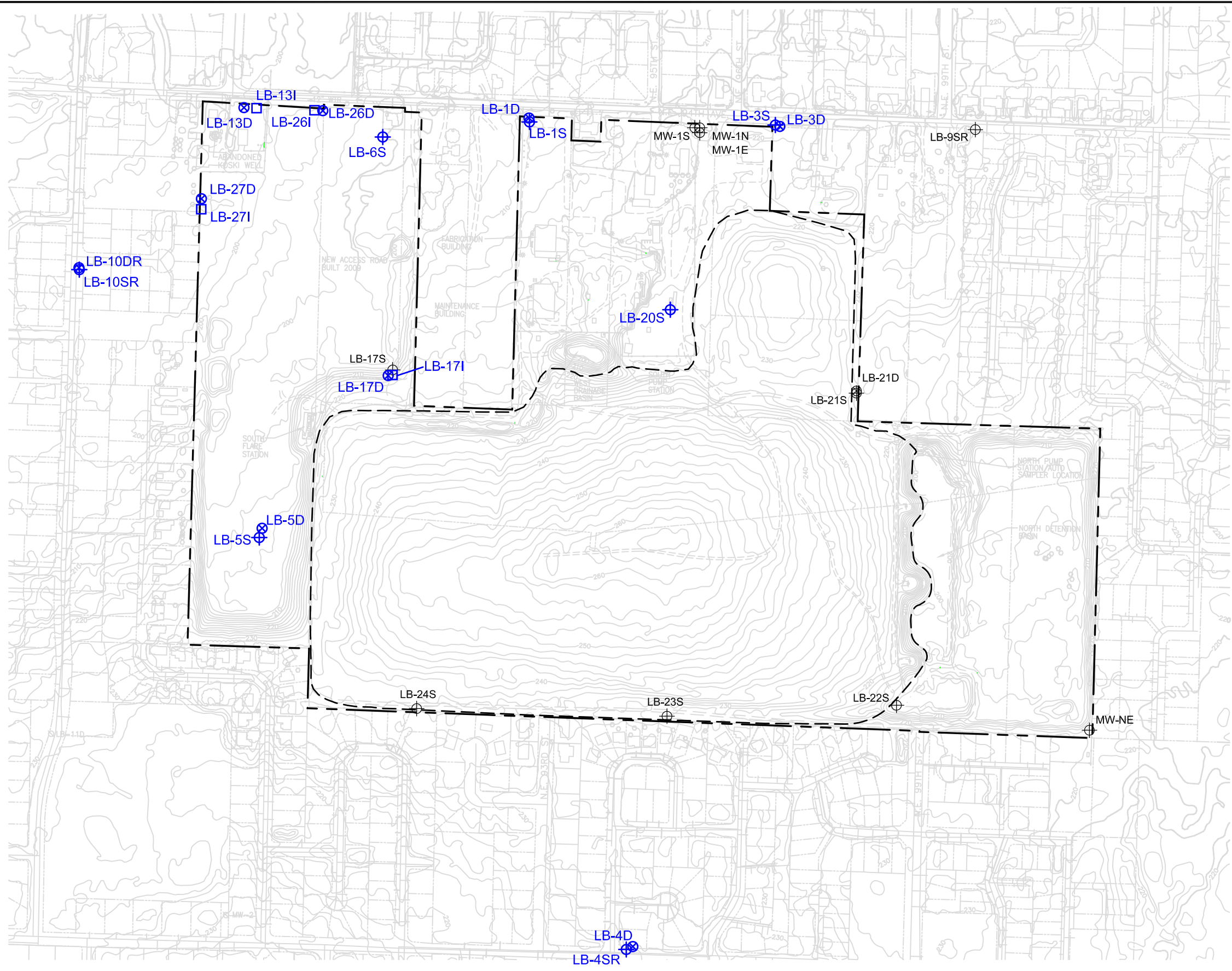
Location Identification	Sample Blind ID	Unit Screened	Sample Date	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene chloride	m,p-Xylene (Sum of Isomers)	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichlorofluoromethane
Compliance Level <sup>a</sup>				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
LB-1S	LB-031312-14	Alluvium	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-1D	LB-031312-13	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-3S	LB-031312-10	Troutdale	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-3D	LB031312-09	Troutdale	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-4S(R)	LB-031312-12	Alluvium	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-4D	LB-031312-11	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5S	LB-032212-17	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-5D	LB-031212-03	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S	LB-032212-23	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-6S (Dup)	LB-032212-22	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10SR	LB-031312-08	Alluvium	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-10DR	LB-031312-07	Troutdale	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I	LB-032212-19	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13I (Dup)	LB-032212-20	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-13D	LB-031212-01	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-17I	LB-031312-16	Alluvium	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-17D	LB-131212-04	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-20S	LB-031312-15	Alluvium	3/13/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26I	LB-032212-21	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-26D	LB-131212-05	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27I	LB-032212-18	Alluvium	3/22/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LB-27D	LB-031212-02	Troutdale	3/12/2012	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Equipment Blank	LB-031212-06	NA	03/12/12	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trip Blank	NA	NA	NA	0.1 U	0.4 U	0.1 U	0.2 U	0.1 U	0.1 U	0.5 U	0.2 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

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

<sup>a</sup> Compliance level specified in the 1996 Consent Decree and accompanying Cleanup Actio

## FIGURES



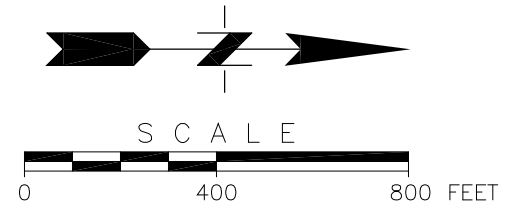


**LEGEND:**

- LB-5S ⊕ Monitoring Well Location, Alluvial Water-Bearing Zone
- LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
- LB-171 □ Monitoring Well Location, Middle of Alluvial Water-Bearing Zone
- Property Boundary
- - - - - Limit of Landfill Cover and Approximate Edge of Waste

**NOTES:**

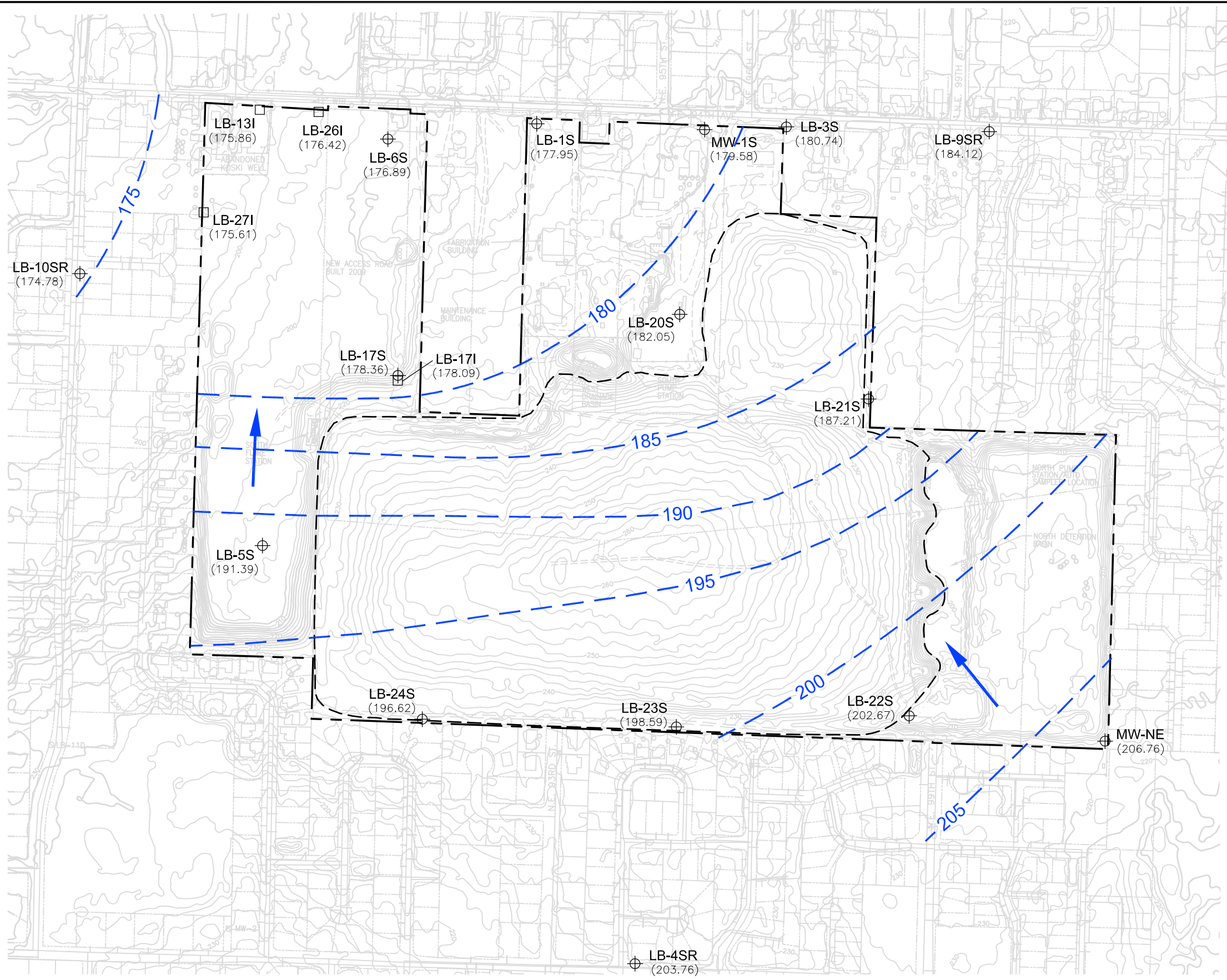
1. Monitoring wells designated by blue color are compliance monitoring wells.
2. Topography taken from Clark County GIS, December 2008.



File: G:\04212030\06 - Lechner Landfill\Figures\2012-05-06\Figure 1.dwg Layout: Layout1 User: 1171ml Jun 06, 2012 - 3:00pm

<b>SCS ENGINEERS</b> Environmental Consultants and Contractors 14945 SW Sequoia Parkway, Suite 180 Portland, Oregon 97224 (503) 639-9201 FAX: (503) 684-6948			PROJECT NO. 04212030.06/18	DES BY D.L.	<b>GROUNDWATER MONITORING LOCATIONS</b>  LEICHER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE MAY 2012
			SCALE AS SHOWN	CHK BY D.L.		FIGURE 1
			CAD FILE FIGURE 1	APP BY L.C.		

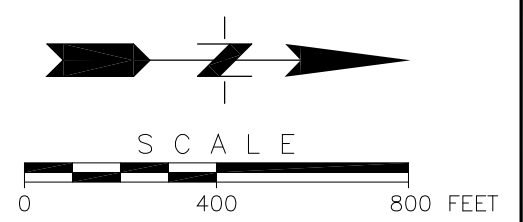




**LEGEND:**

- LB-5S ⊕ Monitoring Well Location, Alluvial Water-Bearing Zone
- LB-17I □ Monitoring Well Location, Middle of Alluvial Water-Bearing Zone
- Property Boundary
- - - - - Limit of Landfill Cover and Approximate Edge of Waste
- - - - -205- - - - - Groundwater Potentiometric Surface Contour
- (206.76) Groundwater Elevation Measured on March 12, 2012
- ➔ Inferred Groundwater Flow Direction

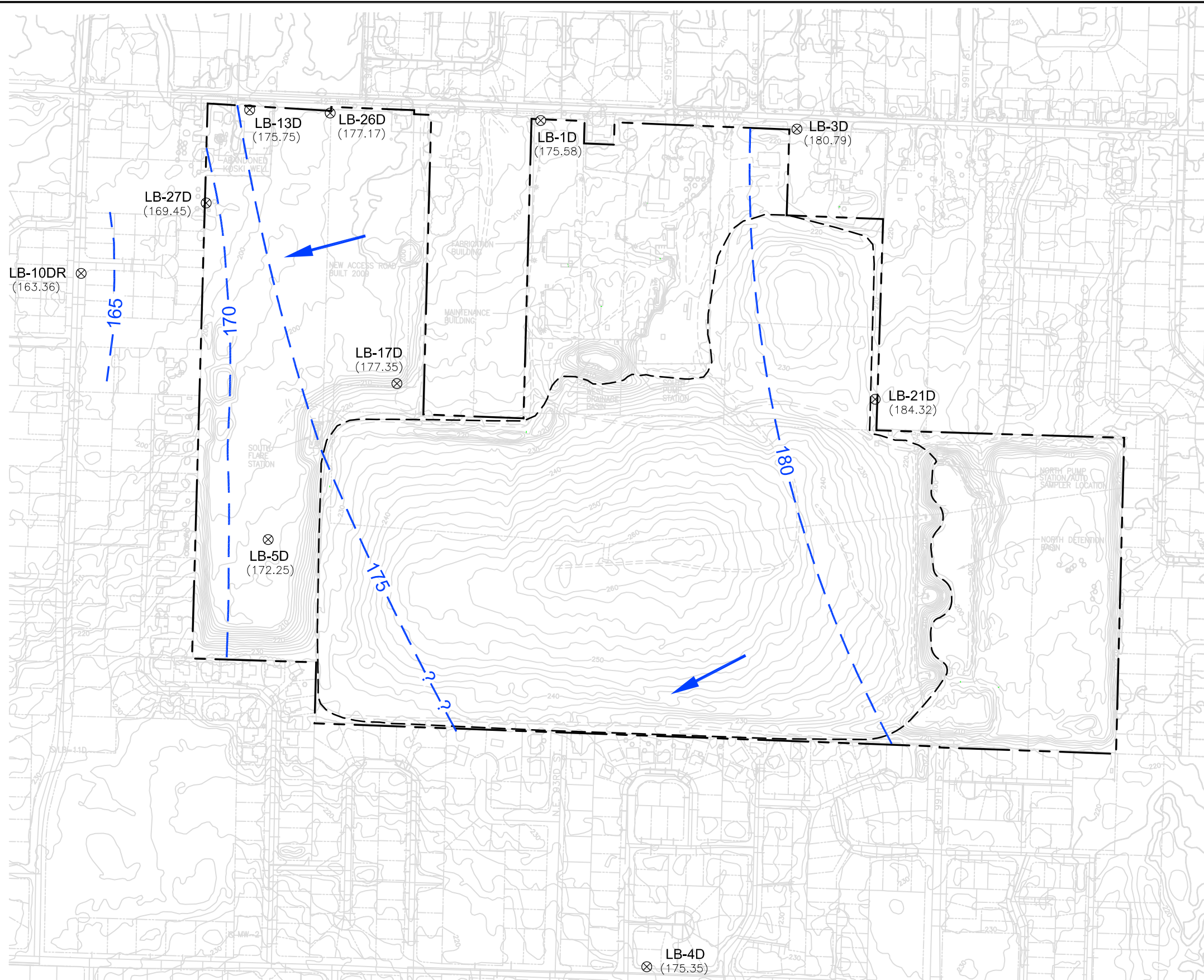
**NOTE:**  
 Topography Taken From Clark County GIS, December 2008



File: G:\04212030\06 - Leichter Landfill\Figures\2012-03-06\Figure 2.dwg Layout: Layout1 User: 1171ml Jun 06, 2012 - 3:04pm

<b>SCS ENGINEERS</b> Environmental Consultants and Contractors 14945 SW Sequoia Parkway, Suite 180 Portland, Oregon 97224 (503) 639-9201 FAX: (503) 684-6948		PROJECT NO. 04212030.06/18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE MARCH 12, 2012 LEICHTER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE MAY 2012
		SCALE AS SHOWN	CHK BY D.L.		FIGURE 2
		CAD FILE FIGURE 2	APP BY L.C.		

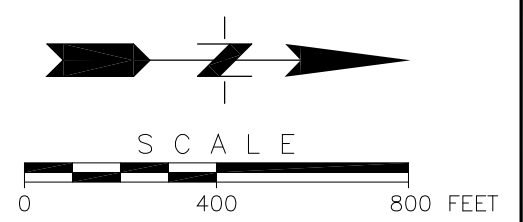




**LEGEND:**

- LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
- Property Boundary
- - - - - Limit of Landfill Cover and Approximate Edge of Waste
- - - 180 - - - Groundwater Potentiometric Surface Contour
- (184.32) Groundwater Elevation Measured on March 12, 2012
- ➔ Inferred Groundwater Flow Direction

**NOTE:**  
Topography Taken From Clark County GIS, December 2008



File: G:\04212030\06 - Lechner Landfill\Figures\2012-03-12-06\Figure 3.dwg Layout: Layout1 User: 1171ml Jun 07, 2012 - 10:10am

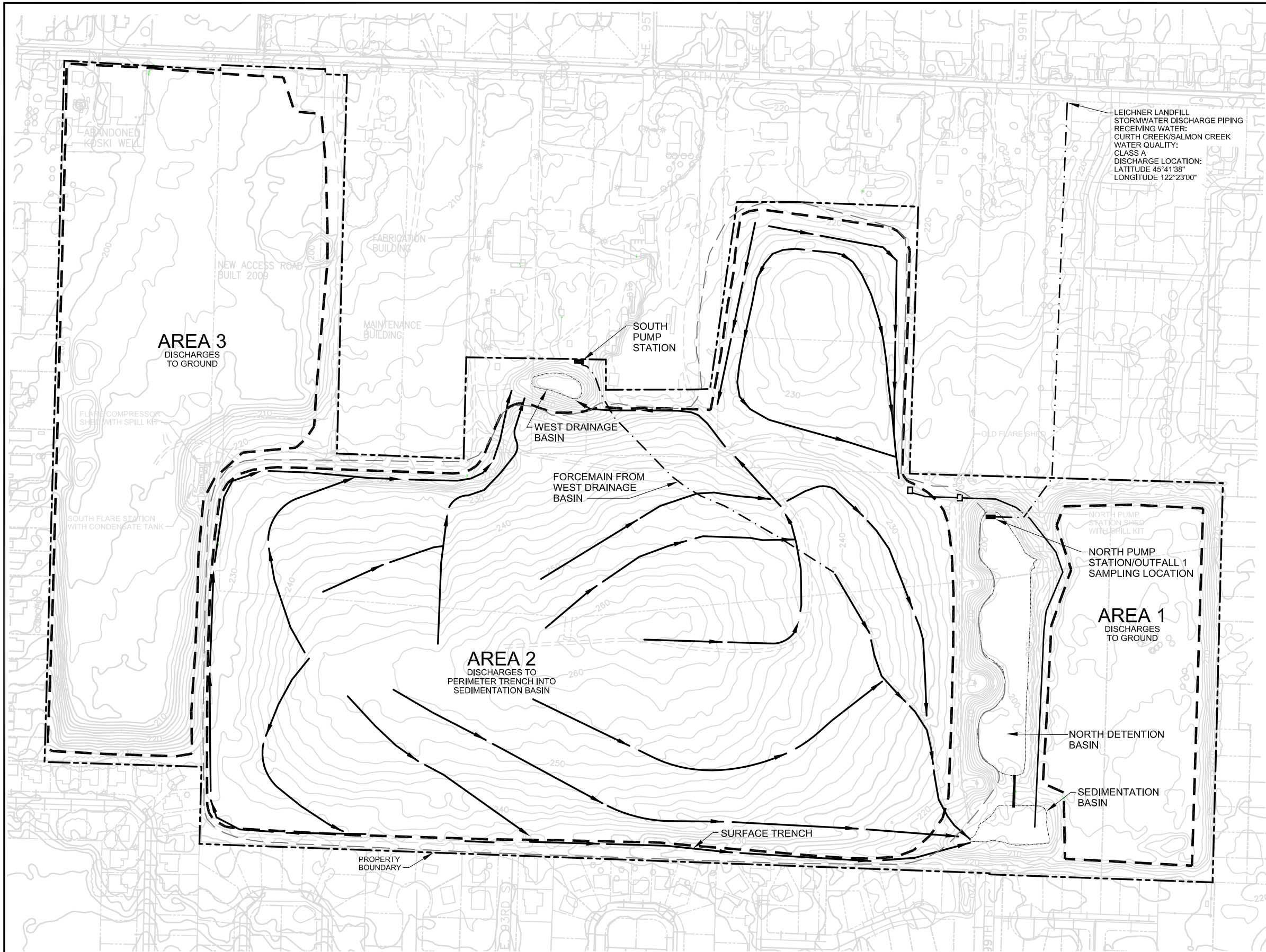
**SCS ENGINEERS**  
Environmental Consultants and Contractors  
14945 SW Sequoia Parkway, Suite 180  
Portland, Oregon 97224  
(503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04212030.06/18	DES BY D.L.
SCALE AS SHOWN	CHK BY D.L.
CAD FILE FIGURE 3	APP BY L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS  
TROUTDALE FORMATION AQUIFER  
MARCH 12, 2012  
LEICHER BROTHERS LANDFILL  
VANCOUVER, WASHINGTON

DATE MAY 2012
FIGURE <b>3</b>



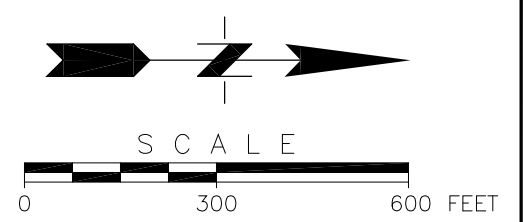


LEICHER LANDFILL  
 STORMWATER DISCHARGE PIPING  
 RECEIVING WATER:  
 CURTH CREEK/SALMON CREEK  
 WATER QUALITY:  
 CLASS A  
 DISCHARGE LOCATION:  
 LATITUDE 45°41'38"  
 LONGITUDE 122°23'00"

**LEGEND:**

- Property Boundary
- Drainage Path
- Underground Stormwater Collection Piping
- Stormwater Forcemain
- Drainage Area Boundary
- Catch Basin
- Pump Station

**NOTE:**  
 Topography Taken From Clark  
 County GIS, December 2008



File: G:\04212030.06 - Leichner Landfill\Figures\2012-01-06\Figure 4.dwg Layout: Layout1 User: 1171ml Jun 06, 2012 - 3:12pm

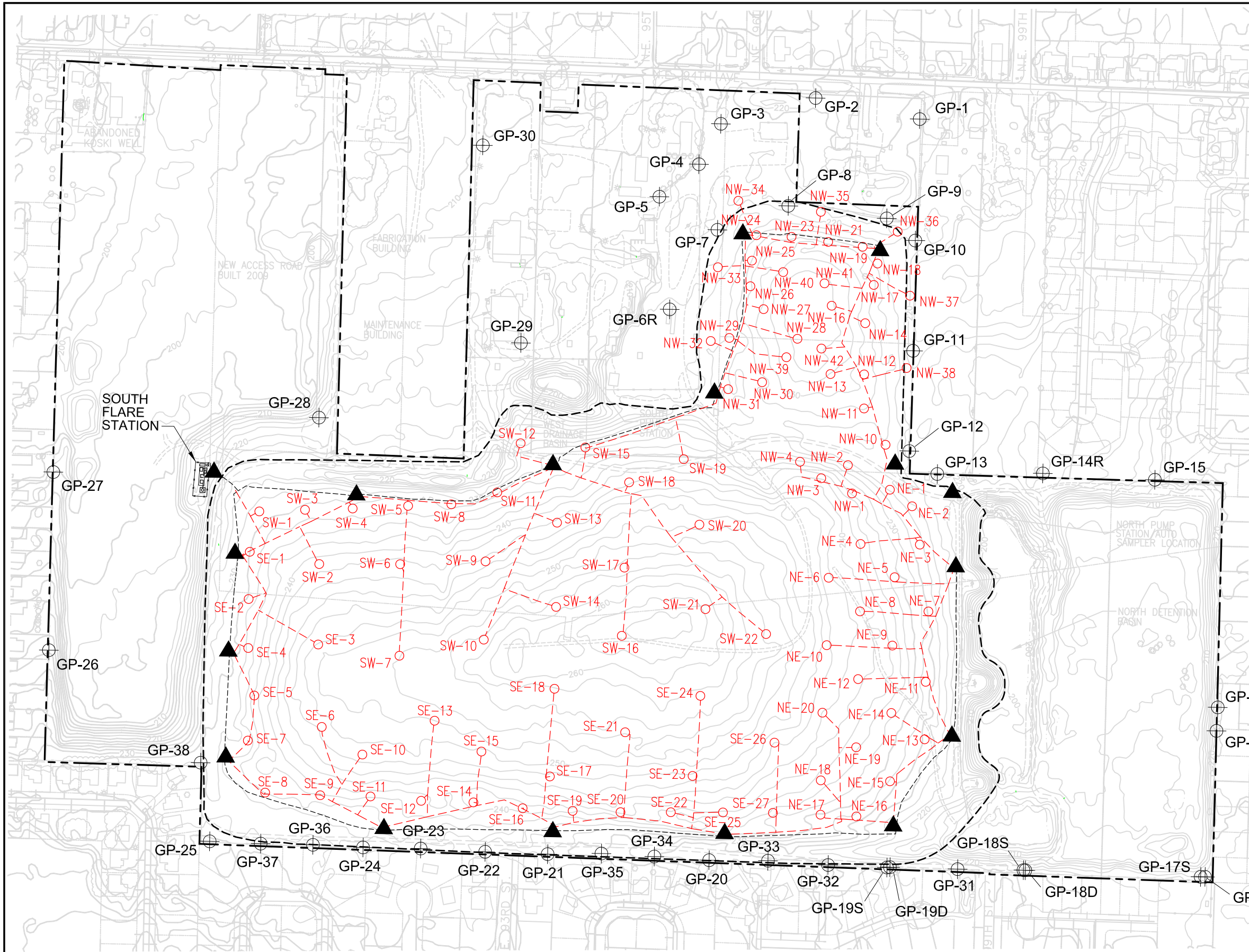
**SCS ENGINEERS**  
 Environmental Consultants and Contractors  
 14945 SW Sequoia Parkway, Suite 180  
 Portland, Oregon 97224  
 (503) 639-9201 FAX: (503) 684-6948

PROJECT NO. 04212030.06/18	DES BY D.L.
SCALE AS SHOWN	CHK BY J.D.
CAD FILE FIGURE 4	APP BY L.C.

**SITE MAP AND STORMWATER SYSTEM**  
 LEICHER BROTHERS LANDFILL  
 VANCOUVER COUNTY, WASHINGTON

DATE MAY 2012
FIGURE <b>4</b>

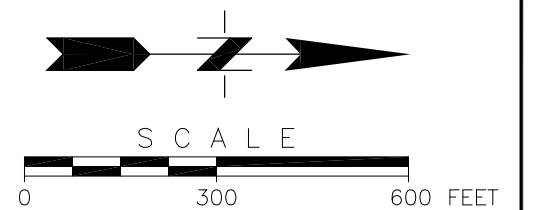




**LEGEND:**

- ⊕ 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



File: G:\04212030\06 - Lechner Landfill\Figures\2012-05-06\Figure 5.dwg Layout: Layout1 User: 1171ml Jun 07, 2012 - 10:04am

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

PROJECT NO. 04212030.06/18	DES BY D.L.
SCALE AS SHOWN	CHK BY D.L.
CAD FILE FIGURE 5	APP BY L.C.

**LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS**  
LEICHER BROTHERS LANDFILL  
VANCOUVER, WASHINGTON

DATE MAY 2012
FIGURE <b>5</b>

**ATTACHMENT 1**

**Field Sampling Data Sheets  
First Quarter 2012**

**Lechner Brothers Landfill  
Groundwater Elevation Survey**

Project #: 04212030.01 / 17

Sampler: T Andrews

Quarter: 1 2 3 4

Date: 3/12/12

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
<b>Monitoring Wells</b>					
MW-1 N	216.52	15.00	UR	1540	
MW-1 S	216.07	44.50	36.55	1545	
MW-1 E	216.38	29.05	NR	1550	
MW-NE	219.8	50.34	13.30	1222	
LB-R2	219.09	77.36	44.05	1410	
LB-1S	210.11	45.00	32.17	1555	
LB-1D	209.71	137.45	34.16	1557	
LB-3S	219.19	52.50	37.51	1610	
LB-3D	219.27	117.28	38.50	1615	
LB-4SR	226.47	40.00	22.70	1670	
LB-4C	227.58	77.25	45.12	1645	
LB-4D	227.27	133.75	52.65	1650	
LB-5S	206.85	30.32	15.50	1315	
LB-5C	206.64	74.71	30.83	1313	
LB-5D	207.60	122.40	35.31	1251	
LB-6S	202.86	39.07	25.91	1207	
LB-9SR	218.44	49.60	33.82	1535	
LB-10SR	202.96	42.35	29.26	1515	
LB-10CR	202.97	71.95	28.20	1512	
LB-10DR	203.24	121.10	40.00	1516	
LB-13I	202.30	55.03	26.50	1155	
LB-13C	202.63	66.00	26.91	1152	
LB-13D	202.90	88.88	27.21	1050	
LB-17S	207.92	34.38	24.82	1405	
LB-17I	213.20	51.95	35.05	1408	
LB-17C	214.10	72.35	29.61	1407	
LB-17D	213.11	100.91	35.82	1351	
LB-20S	221.22	61.50	29.17	1505	
LB-21S	223.43	54.24	36.14	1212	
LB-21C	223.38	79.10	36.60	1210	
LB-21D	223.69	110.73	39.31	1215	
LB-22S	208.46	36.97	5.75	1225	
LB-23S	229.27	45.40	30.60	1415	
LB-24S	235.21	54.16	38.51	1412	
LB-26I	200.17	58.30	23.80	1455	
LB-26D	200.70	101.78	23.58	1750	
LB-27I	205.28	57.15	29.74	1201	
LB-27D	204.61	115.10	35.18	1157	

Notes:

Rain ~ 50°F Wind South @ 15 mph

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# 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:** Lechner Brothers Landfill **WELL ID:** LB-15  
**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031312-14

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 6F 45. °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/13/12	13:55	45.00	.	32.17	.	.	X 1 .
1/1	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)<sup>2</sup> 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	3/13/12	14:15	A	3 <u>40 ml</u>	HCl	<u>YES</u>	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	14:15	A	1      250, <u>500</u> , 1L	None	<u>YES</u>	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	14:15	A	1 <u>250</u> , 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>      Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE
	VOA - Glass	<u>8260</u> (8011)
AMBER - Glass	(8080) (8150) (TOX)	OR [ ]      WA [ ]
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>	
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)	
GREEN - Poly	(Cyanide)	
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)	
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) <u>(Mn)</u> (K) (Na)	

**WATER QUALITY DATA**      Purge Start Time: 13:55      Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>C</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A(1358)	0.00	6.55	84.0	353	12.04	32.17	4.72	clear/colorless
1	A(1401)	0.5	6.50	84.0	348	12.21	32.17	4.58	clear/colorless
2	A(1404)	1.0	6.50	83.5	342	12.37	32.17	4.51	clear/colorless
3	A(1407)	1.5	6.50	83.6	339	12.35	32.17	4.49	clear/colorless
4	A(1410)	1.75	6.50	83.5	335	12.53	32.17	4.44	clear/colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

Low Flow Purge Method ~ 400 mL/min

**SAMPLER:** T Andrews      Tom Andrews  
 (PRINTED NAME)      (SIGNATURE)

10/15    45ps.

# 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:** Lechner Brothers Landfill

**WELL ID:** LB-10

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662

**BLIND ID:** LB-031312-13

**DUP ID:**

**NA**

<b>WIND FROM:</b>	N	NE	E	SE	<u>(S)</u>	SW	W	NW	LIGHT	<u>(MEDIUM)</u>	HEAVY	
	<b>WEATHER:</b>											
	SUNNY	<u>(CLOUDY)</u>	RAIN							<b>TEMPERATURE:</b> <u>(40)</u> °C		

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/13/12	13:15	137.45	.	34.16	.	.	X 1
/ /	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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	3/13/12	13:35	A	3 <u>(40 ml)</u>	<u>(HCl)</u>	<u>(YES)</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	13:35	A	1      250, <u>(500)</u> , 1L	<u>(None)</u>	<u>(YES)</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	13:35	A	1 <u>(250)</u> , 500, 1L	<u>(HNO<sub>3</sub>)</u>	<u>(YES)</u>	<u>(YES)</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>      Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE	OR [ ]	WA [ ]
	VOA - Glass	<u>(8260)</u> (8011)	Low Level	
AMBER - Glass	(8080) (8150) (TOX)			<input type="checkbox"/>
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>			<input type="checkbox"/>
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)			<input type="checkbox"/>
GREEN - Poly	(Cyanide)			<input type="checkbox"/>
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			<input type="checkbox"/>
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)			<input type="checkbox"/>

**WATER QUALITY DATA**      Purge Start Time: 13:25      Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>(40)</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	1326	0.00	6.75	90.2	248	11.60	34.14	7.43	
1	1329	0.4	6.71	86.7	249	11.58	34.14	7.51	
2	1332	0.8	6.68	84.5	249	11.49	34.14	7.53	
3	1335	1.25	6.67	84.5	249	11.49	34.14	7.55	Clear / colorless
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method ~ 400 mL/min      8/7/90/400

**SAMPLER:** SAM ADUNGTON  
(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:** Lechner Brothers Landfill **WELL ID:** LB-35

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031212-10

**DUP ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	(S)	SW	W	NW	LIGHT	MEDIUM	HEAVY
	<b>WEATHER:</b>			SUNNY	CLOUDY	RAIN	(Snow) ?		<b>TEMPERATURE:</b> (°F) 38 °C		

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)
3/13/12	10:20	52.50	.	37.51	.	.			X 1
1/1	:	.	.	.	.	.			X 3
Gal/ft = (dia./2) <sup>2</sup> 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	3/13/12	10:40	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	10:40	A	1 (250, 500) 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	10:40	A	1 (250, 500) 1L	(HNO <sub>3</sub> )	(YES)	(YES)		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub> 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)		OR [ ]	WA [ ]
	VOA - Glass	(826) (8011)	Low Level		WA [ ]
	AMBER - Glass	(8080) (8150) (TOX)			WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )			
	YELLOW - Poly	(COD) (TOC) (NH <sub>4</sub> ) (NO <sub>2</sub> /NO <sub>3</sub> ) (Tannin/Lignin)			
	GREEN - Poly	(Cyanide)			
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)			

WATER QUALITY DATA							Purge Start Time: 10:22	Pump/Bailer Inlet Depth:	
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (1025)	0.00	6.49	816	234	10.50	37.51	5.27	10.95 NTU
1	A (1025)	0.50	6.41	730	239	11.02	37.51	4.62	clear/colorless
2	A (1031)	0.90	6.42	742	238	11.14	37.51	4.52	clear/colorless
3	A (1034)	1.20	6.43	760	239	11.14	37.51	4.59	clear/colorless
4	A (1037)	1.50	6.44	78.2	239	11.10	37.51	4.57	clear/colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

Low Flow Purge Method ~ 360 mL/min

**SAMPLER:** T Andrews (PRINTED NAME)

(SIGNATURE) *T Andrews*

817 40psi

# 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:** Lechner Brothers Landfill **WELL ID:** LR-30

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-031312-09

**DUP ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	<u>(S)</u>	SW	W	NW	<u>(LIGHT)</u>	MEDIUM	HEAVY
	<b>WEATHER:</b>			SUNNY	CLOUDY	<u>(RAIN)</u>	Snow	?	<b>TEMPERATURE:</b> <u>38</u> °C		

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)
<u>3/13/12</u>	:	.	.	.	.	.			X 1
<u>1/1</u>	:	.	.	.	.	.			X 3

Gal/ft = (dia./2)<sup>2</sup> 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	<u>3/13/12</u>	<u>9:49</u>	<u>A</u>	<u>3</u> <u>40 ml</u>	<u>(HCl)</u>	<u>(YES)</u>	NO		✓
Amber Glass	<u>1/1</u>	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	<u>3/13/12</u>	<u>9:49</u>	<u>A</u>	<u>1</u> <u>250 (500) 1L</u>	<u>(None)</u>	<u>(YES)</u>	NO	NA	✓
Yellow Poly	<u>1/1</u>	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	<u>1/1</u>	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	<u>1/1</u>	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	<u>3/13/12</u>	<u>9:49</u>	<u>A</u>	<u>1</u> <u>250, 500, 1L</u>	<u>(HNO<sub>3</sub>)</u>	<u>(YES)</u>	<u>(YES)</u>		
	<u>1/1</u>	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>      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)							OR [ ]	WA [ ]	
	VOA - Glass	<u>(8280)</u> (8011)	<u>Low levels</u>							OR [ ]	WA [ ]
	AMBER - Glass	(8080) (8150)	<u>(TOX)</u>							OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>									
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)									
	GREEN - Poly	(Cyanide)									
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)									
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)									

WATER QUALITY DATA			Purge Start Time: <u>09:37</u>				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>(C)</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	<u>0940</u>	<u>0.00</u>	<u>6.69</u>	<u>79.2</u>	<u>234</u>	<u>9.13</u>	<u>38.50</u>	<u>5.60</u>	
1	<u>0943</u>	<u>0.5</u>	<u>6.50</u>	<u>79.7</u>	<u>232</u>	<u>10.06</u>	<u>38.50</u>	<u>5.34</u>	
2	<u>0946</u>	<u>1.0</u>	<u>6.49</u>	<u>80.3</u>	<u>232</u>	<u>10.15</u>	<u>38.50</u>	<u>5.37</u>	
3	<u>0949</u>	<u>1.5</u>	<u>6.48</u>	<u>81.6</u>	<u>231</u>	<u>10.30</u>	<u>38.50</u>	<u>5.38</u>	<u>clear/colorless</u>
4									
5									
6									

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

Low Flow Purge Method - 8/7/75/300  
300 mL/min

**SAMPLER:** SAM ADLINGTON  
(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:** Lechner Brothers Landfill **WELL ID:** LB-4SR

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-051312-12

**DUP ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	(S)	SW	W	NW	(LIGHT)	MEDIUM	HEAVY						
	<b>WEATHER:</b> SUNNY									(CLOUDY)			RAIN			?	
<b>TEMPERATURE:</b> °F 45 °C																	

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)
3/13/12	12:10	40.00	.	22.70	.	.			X 1
1/1	:	.	.	.	.	.			X 3
Gal/ft = (dia./2) <sup>2</sup> 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	3/13/12	12:45	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	12:45	A	1 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	12:45	A	1 (250, 500, 1L)	(HNO <sub>3</sub> )	(YES)	(YES)		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    Total Bottles (include duplicate count): 5

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 <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )								
	YELLOW - Poly	(COD) (TOC) (NH <sub>4</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)								
	GREEN - Poly	(Cyanide)								
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)								
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)								

**WATER QUALITY DATA**    Purge Start Time: 12:19    Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (1222)	0.00	6.36	91.1	188	11.78	22.70	9.13	clear/colorless
1	A (1225)	0.5	6.27	90.8	194	11.84	22.70	9.23	clear/colorless
2	A (1228)	0.75	6.25	90.8	199	11.90	22.70	9.14	clear/colorless
3	A (1231)	1.0	6.25	90.8	199	11.93	22.70	8.86	clear/colorless
4	A (1234)	1.25	6.25	91.0	201	11.93	22.70	8.99	clear/colorless
5	A (1237)	1.50	6.23	91.8	204	12.01	22.70	8.98	clear/colorless
6	A (1240)	1.75	6.21	92.2	204	12.02	22.70	8.96	clear/colorless

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

Low Flow Purge Method ~ 400mL/min

**SAMPLER:** T Andrews (PRINTED NAME)

(SIGNATURE) *J. Andrews*



# 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:** Lechner Brothers Landfill **WELL ID:** LB-40

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-051312-11

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** °F 40 °C

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)		
3/13/12	11:30	133.75	.	52.65	.	.	X 1	.	.
/ /	:	.	.	.	.	.	X 3	.	.
Gal/ft = (dia./2) <sup>2</sup> x 0.163		1" = 0.041	<u>2" = 0.163</u>	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875	

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	3/13/12	11:50	A	3 40 ml	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	11:50	A	1 250, 500, 1L	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	11:50	A	1 250, 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub> 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)				OR [ ]	WA [ ]	
	VOA - Glass	<u>(828)</u> (8011)	<u>Low Level</u>				OR [ ]	WA [ ]
	AMBER - Glass	(8080) (8150) (TOX)					OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>						
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)						
	GREEN - Poly	(Cyanide)						
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)						
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)						

WATER QUALITY DATA			Purge Start Time: <u>11:31</u>				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	<u>A(1137)</u>	<u>0.00</u>	<u>7.13</u>	<u>819</u>	<u>203</u>	<u>10.50</u>	<u>52.10</u>	<u>4.85</u>	<u>&lt;10 NTU</u>
1	<u>A(1140)</u>	<u>0.75</u>	<u>7.26</u>	<u>77.2</u>	<u>209</u>	<u>10.77</u>	<u>52.90</u>	<u>4.92</u>	<u>clear/colorless</u>
2	<u>A(1143)</u>	<u>1.0</u>	<u>7.31</u>	<u>75.9</u>	<u>211</u>	<u>10.81</u>	<u>52.90</u>	<u>4.88</u>	<u>clear/colorless</u>
3	<u>A(1146)</u>	<u>1.25</u>	<u>7.32</u>	<u>75.8</u>	<u>212</u>	<u>10.78</u>	<u>52.90</u>	<u>4.83</u>	<u>clear/colorless</u>
4	<u>A(1149)</u>	<u>1.50</u>	<u>7.33</u>	<u>75.6</u>	<u>211</u>	<u>10.86</u>	<u>52.90</u>	<u>4.89</u>	<u>clear/colorless</u>
5									
6									

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

Low Flow Purge Method ~ 350 mL

**SAMPLER:** T Andrews  
 (PRINTED NAME)

[Signature]  
 (SIGNATURE)

7/8 80psi

# 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:** Lechner Brothers Landfill

**WELL ID:** LB-55

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662

**BLIND ID:** LB-032212-17

**DUP ID:**

**NA**

<b>WIND FROM:</b>	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
<b>WEATHER:</b>	SUNNY		CLOUDY		RAIN		?		<b>TEMPERATURE:</b> 63.2 °C		

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/22/12	9:30	30.32	.	15.11	.	.	X 1
1/1	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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	✓
VOA Glass	3/22/12	9:55	A	3 40 ml	HCl	YES	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	9:55	A	1 250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	9:55	A	1 250, 500, 1L	HNO <sub>3</sub>	YES	YES		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>

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)	OR [ ]	WA [ ]
	VOA - Glass	(8260) (8011)	Low Level	
AMBER - Glass	(8080) (8150) (TOX)		OR [ ]	WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )			
YELLOW - Poly	(COD) (TOC) (NH <sub>4</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)			
GREEN - Poly	(Cyanide)			
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)			

**WATER QUALITY DATA**

Purge Start Time: 9:35

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (938)	0.00	5.97	108.1	194	10.60	15.11	9.74	Clear/Colorless
1	A (941)	0.5	6.09	106.3	200	10.89	15.11	9.51	Clear/Colorless
2	A (944)	0.75	6.12	105.5	200	10.88	15.11	9.41	Clear/Colorless
3	A (947)	1.0	6.15	105.0	200	10.88	15.11	9.49	Clear/Colorless
4	A (950)	1.25	6.15	105.2	203	10.90	15.11	9.18	Clear/Colorless
5	A (953)	1.5	6.15	105.0	204	10.89	15.11	9.19	Clear/Colorless
6	A (955)	1.7	6.16	104.8	204	10.88	15.11	9.22	Clear/Colorless

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

Low Flow Purge Method ~ 380 mL/min

**SAMPLER:**

(PRINTED NAME)

T Andrews

(SIGNATURE)

*T Andrews*

8/7 20ps:



# 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:** Lechner Brothers Landfill **WELL ID:** LR-50

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-031212-03

**DUP ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	<u>S</u>	SW	W	NW	LIGHT	MEDIUM	<u>HEAVY</u>
	<b>WEATHER:</b> SUNNY			CLOUDY			<u>RAIN</u>			<b>TEMPERATURE:</b> <u>50</u> °C	

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)
<u>3/12/12</u>	<u>13:00</u>	<u>122.40</u>	.	<u>35.31</u>	.	.			X 1
/ /	:	.	.	.	.	.			X 3
Gal/ft = (dia./2) <sup>2</sup> x 0.163		1" = 0.041	<u>2" = 0.163</u>	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	<u>3/12/12</u>	<u>13:21</u>	<u>A</u>	<u>3</u> <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	<u>3/12/12</u>	<u>13:21</u>	<u>A</u>	<u>1</u> <u>250, 500, 1L</u>	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	<u>3/12/12</u>	<u>13:21</u>	<u>A</u>	<u>1</u> <u>250, 500, 1L</u>	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub> 3 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)							OR [ ]	WA [ ]	
	VOA - Glass	<u>(8260)</u> (8011)	<u>low level</u>								<u>X</u>
	AMBER - Glass	(8080) (8150) (TOX)								OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>									
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)									
	GREEN - Poly	(Cyanide)									
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)									
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)									

WATER QUALITY DATA							Purge Start Time: <u>13:06</u>	Pump/Bailer Inlet Depth:	
Meas.	Method	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>(C)</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	<u>A(1309)</u>	<u>0.00</u>	<u>6.61</u>	<u>57.6</u>	<u>353</u>	<u>11.13</u>	<u>35.34</u>	<u>2.27</u>	
1	<u>A(1312)</u>	<u>0.5</u>	<u>6.60</u>	<u>57.0</u>	<u>366</u>	<u>11.72</u>	<u>35.34</u>	<u>0.72</u>	<u>18.03 NTU</u>
2	<u>A(1315)</u>	<u>0.75</u>	<u>6.62</u>	<u>60.2</u>	<u>367</u>	<u>11.37</u>	<u>35.34</u>	<u>0.49</u>	
3	<u>A(1318)</u>	<u>1.0</u>	<u>6.63</u>	<u>64.7</u>	<u>364</u>	<u>11.38</u>	<u>35.34</u>	<u>0.37</u>	
4	<u>A(1321)</u>	<u>1.25</u>	<u>6.63</u>	<u>67.0</u>	<u>363</u>	<u>11.39</u>	<u>35.34</u>	<u>0.33</u>	<u>clear/colorless</u>
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

*Low Flow Purge Method w 350 ml/min  
8/17/60/1550*

**SAMPLER:** Sam Adlington  
(PRINTED NAME) T. F. Fony Andrews

(SIGNATURE) [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:** Lechner Brothers Landfill **WELL ID:** LB-65  
**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-032212-23

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 67.37 °C

**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)
3/22/12	15:05	39.07	.	25.15	.	.	X 1
1/1	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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	3/22/12	15:30	A	3 <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	15:30	A	1    250, <u>500</u> , 1L	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	15:30	A	1 <u>250</u> , 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)	OR [ ]	WA [ ]
	VOA - Glass	<u>(8260)</u> (8011)	<u>Low Level</u>	OR [ ]
AMBER - Glass	(8080) (8150) (TOX)		OR [ ]	WA [ ]
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>			
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)			
GREEN - Poly	(Cyanide)			
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)			

**WATER QUALITY DATA**    Purge Start Time: 15:09    Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (1512)	0.00	6.53	91.7	226	11.63	25.15	7.40	clear/colorless
1	A (1515)	0.3	6.54	91.0	233	11.63	25.15	6.97	clear/colorless
2	A (1518)	0.6	6.54	91.2	236	11.62	25.15	6.82	clear/colorless
3	A (1521)	0.9	6.54	91.4	237	11.64	25.15	6.71	clear/colorless
4	A (1524)	1.2	6.54	91.2	239	11.64	25.15	6.62	clear/colorless
5	A (1527)	1.5	6.54	91.6	270	11.65	25.15	6.65	clear/colorless
6									

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

Low Flow Purge Method ~ 330 mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

ymablr  
(SIGNATURE)

817 30ps:

# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

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

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** 28-032212-22

**DUP ID:** **NA**

<b>WIND FROM:</b>	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY	
<b>WEATHER:</b>	SUNNY	CLOUDY			RAIN				?	<b>TEMPERATURE:</b> °F <u>34</u> °C		

**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)<sup>2</sup> 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: [v if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	3/22/12	14:00	A	3 <b>40 ml</b>	<b>HCl</b>	<b>YES</b>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	14:00	A	1    250, <b>500</b> , 1L	<b>None</b>	<b>YES</b>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	14:00	A	1 <b>250</b> , 500, 1L	<b>HNO<sub>3</sub></b>	<b>YES</b>	<b>YES</b>		✓
	/ /	:		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)		OR [ ]	WA [ ]	
	VOA - Glass	<b>(8260)</b> (8011)	<i>Low Level</i>			<del>WA [ ]</del>
	AMBER - Glass	(8080) (8150) (TOX)			OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) <b>(TDS)</b> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <b>(Cl)</b> (SO <sub>4</sub> ) (Silica, T.) <b>(NO<sub>3</sub>)</b>				
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)				
	GREEN - Poly	(Cyanide)				
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (TI) (V) (Zn) (Hardness)				
	RED DISSOLVED - Poly	(Ca) <b>(Fe)</b> (Mg) <b>(Mn)</b> (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 <sub>2</sub> (mg/l)	Water Quality
0		<b>0.00</b>	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected at LB-65

**SAMPLER:** T Andrews  
(PRINTED NAME)

  
(SIGNATURE)

# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Leichner Brothers Landfill **WELL ID:** LB-105R  
**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031312-08

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 63.8 °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft) [Circle appropriate units]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/13/12	:	42.35	.	29.26	.	.	X 1
/ /	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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 Bailor (D) PVC/Teflon Bailor (E) Dedicated Bailor (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	3/13/12	09:00	A	3 <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	09:00	A	1 <u>250, 500, 1L</u>	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	09:00	A	1 <u>250, 500, 1L</u>	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)		OR [ ]	WA [ ]	
	VOA - Glass	<u>(8260)</u> (8011)	<u>Low Level</u>			<u>X</u>
	AMBER - Glass	(8080) (8150)	<u>(TOX)</u>			
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>				
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)				
	GREEN - Poly	(Cyanide)				
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (TI) (V) (Zn) (Hardness)				
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)				

**WATER QUALITY DATA**    Purge Start Time: 8:48    Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>°C</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	<u>0851</u>	0.00	<u>6.62</u>	<u>81.7</u>	<u>549</u>	<u>11.41</u>	<u>42.35</u>	<u>0.94</u>	
1	<u>0854</u>	0.4	<u>6.64</u>	<u>80.0</u>	<u>558</u>	<u>11.62</u>	<u>42.35</u>	<u>0.35</u>	
2	<u>0857</u>	<u>0.80</u>	<u>6.63</u>	<u>79.8</u>	<u>551</u>	<u>11.75</u>	<u>42.35</u>	<u>0.26</u>	
3	<u>0901</u>	<u>1.25</u>	<u>6.62</u>	<u>80.4</u>	<u>550</u>	<u>11.82</u>	<u>42.35</u>	<u>0.26</u>	<u>clear/colorless</u>
4		.	.	.	.	.	.	.	
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

*Low Flow Purge Method - 11/4/50/100*

**SAMPLER:** TAMMOLIN/STON  
(PRINTED NAME)

[Signature]  
(SIGNATURE)

# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Leichner Brothers Landfill **WELL ID:** LR-10DR

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-03112-07

**DUP ID:** \_\_\_\_\_ **NA**

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 37 °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/13/12	7:50	12:10	.	40.00	.	.	X 1
1/1	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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 Bailor (D) PVC/Teflon Bailor (E) Dedicated Bailor (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	3/13/12	8:07	A	3 40 ml	HCl	<u>YES</u>	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/13/12	8:27	A	1 250, 500, 1L	None	YES	NO	NA	
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/13/12	8:27	A	1 <u>250</u> , 500, 1L	HNO <sub>3</sub>	YES	YES		
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)		OR [ ]	WA [ ]
	VOA - Glass	<u>(8260)</u> (8011)	<u>Low Level</u>		
AMBER - Glass	(8080) (8150) (TOX)			OR [ ]	WA [ ]
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>				
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)				
GREEN - Poly	(Cyanide)				
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)				
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)				

**WATER QUALITY DATA**    Purge Start Time: 8:04    Pump/Bailer Inlet Depth: \_\_\_\_\_

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	<u>0809</u>	0.00	6.60	133.4	411	11.73	40.02	2.49	
1	<u>0812</u>	0.3	6.67	89.8	413	11.82	40.03	2.15	64.60 NTU
2	<u>0815</u>	0.6	6.70	81.2	427	11.49	40.02	1.82	
3	<u>0818</u>	0.9	6.70	78.4	440	11.90	40.02	1.66	
4	<u>0821</u>	1.2	6.70	78.2	450	11.87	40.02	1.54	
5	<u>0824</u>	1.5	6.70	77.7	459	11.77	40.02	1.40	
6	<u>0827</u>	1.8	6.70	77.2	463	11.70	40.02	1.42	clear/colorless

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

Low Flow Purge Method  
9/7/80/320

**SAMPLER:** T Andrew  
(PRINTED NAME)

[Signature]  
(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:** Lechner Brothers Landfill **WELL ID:** LR-13E

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-0322 12-19

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 63.4 °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/22/12	12:45	55.03	.	25.70	.	.	X 1
1/1	:	.	.	.	.	.	X 3

Gal/ft = (dia./2)<sup>2</sup> 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	3/22/12	13:15	A	3 <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	<u>NO</u>	.	✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO	.	
White Poly	3/22/12	13:15	A	1    250, <u>500</u> , 1L	<u>None</u>	<u>YES</u>	<u>NO</u>	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO	.	
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO	.	
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO	.	
Red Diss. Poly	3/22/12	13:15	A	1 <u>250</u> , 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>	.	✓
	1/1	:		250, 500, 1L		YES		.	

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>      5 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE	OR [ ]	WA [ ]
	VOA - Glass	(8260) (8011)	Low Level	
AMBER - Glass	(8080) (8150)	(TOX)		
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>			
YELLOW - Poly	(COD) (TOC) (NH <sub>4</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)			
GREEN - Poly	(Cyanide)			
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)			

**WATER QUALITY DATA**      Purge Start Time: 12:56      Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A(1259)	0.00	6.75	88.3	258	11.38	25.70	3.06	clear/colorless
1	A(1302)	0.4	6.66	88.2	255	11.59	25.70	2.67	clear/colorless
2	A(1305)	0.65	6.59	87.5	254	11.63	25.70	2.40	clear/colorless
3	A(1308)	0.85	6.59	87.4	255	11.65	25.70	2.41	clear/colorless
4	A(1311)	1.0	6.58	87.2	255	11.65	25.70	2.40	clear/colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

Low Flow Purge Method ~ 300 mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

Mark  
(SIGNATURE)

817 35psi

# 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:** Lechner Brothers Landfill **WELL ID:** J0P1

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-032212-20

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 59 °C

**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)<sup>2</sup> 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	3/22/12	12:00	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	12:00	A	1 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	12:00	A	1 (250, 500, 1L)	HNO <sub>3</sub>	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)	OR [ ]	WA [ ]
	VOA - Glass	(8201) (8011) <u>Low Level</u>		WA [ ]
	AMBER - Glass	(8080) (8150) (TOX)		WA [ ]
	WHITE - Poly	(pH) (Conductivity) <u>TDS</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>		
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (TI) (V) (Zn) (Hardness)		
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (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 <sub>2</sub> (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-13I

**SAMPLER:** T Andrews  
(PRINTED NAME)

[Signature]  
(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:** Lechner Brothers Landfill **WELL ID:** LB-130

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031212-01

**DUP ID:** NA

**WIND FROM:** N NE E SE **S** SW W NW LIGHT **MEDIUM** HEAVY  
**WEATHER:** SUNNY CLOUDY **RAIN** ? **TEMPERATURE:** **58** °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)	
3/12/12	10:50	88.88	.	27.21	.	.	X 1	
/ /	:	.	.	.	.	.	X 3	
Gal/ft = (dia./2) <sup>2</sup> 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	3/12/12	11:20	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/12/12	11:20	A	1 (250, 500) 1L	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/12/12	11:20	A	1 (250, 500) 1L	HNO <sub>3</sub>	YES	YES		✓
/ /	:			250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub> **S** 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)				OR [ ]	WA [ ]	
	VOA - Glass	(8260) (8011)	Low Level				OR [ ]	WA [ ]
	AMBER - Glass	(8080) (8150) (TOX)					OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T) (NO <sub>3</sub> )						
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)						
	GREEN - Poly	(Cyanide)						
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)						
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)						

**WATER QUALITY DATA** Purge Start Time: 11:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A(1103)	0.00	6.21	140.0	238	11.22	27.21	5.22	clear/colorless
1	A(1110)	0.75	6.24	137.1	236	11.43	27.21	4.85	clear/colorless
2	A(1113)	1.25	6.25	121.2	236	11.41	27.21	5.33	3.17 UTU
3	A(1116)	1.5	6.27	120.4	236	11.43	27.21	5.29	clear/colorless
4	A(1119)	1.75	6.27	120.0	235	11.45	27.21	5.32	clear/colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

Low Flow Purge Method ~ 400 mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

*Ma*  
(SIGNATURE)

8/7/Cops:



# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Leichner Brothers Landfill

**WELL ID:** LB-17E

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662

**BLIND ID:** LB-031312-16

**DUP ID:**

**NA**

<b>WIND FROM:</b>	N	NE	E	SE	(S)	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
	<b>WEATHER:</b> SUNNY CLOUDY RAIN ?										
										<b>TEMPERATURE:</b> 53.8 °C	

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)
3/13/12	15:20	51.95	.	35.07	.	.			X 1
/ /	:	.	.	.	.	.			X 3
Gal/ft = (dia./2) <sup>2</sup> x 0.163    1" = 0.041    2" = 0.168    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:			[V if used]
Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓	
VOA Glass	3/13/12	15:48	A	3 (40 ml)	(HCl)	YES	NO		✓	
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO			
White Poly	3/13/12	15:48	A	1 (500) 1L	(None)	YES	NO	NA	✓	
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO			
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO			
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO			
Red Diss. Poly	3/13/12	15:48	A	1 (250) 500, 1L	(HNO <sub>3</sub> )	YES	YES		✓	
	/ /	:		250, 500, 1L		YES				

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>

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)							OR [ ]	WA [ ]	
	VOA - Glass	(8250) (8011)	Low level								✓
	AMBER - Glass	(8080) (8150) (TOX)								OR [ ]	WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T) (NO <sub>3</sub> )									
	YELLOW - Poly	(COD) (TOC) (NH <sub>4</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)									
	GREEN - Poly	(Cyanide)									
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)									
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)									

WATER QUALITY DATA							Purge Start Time: 15:30	Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality	
0	A (1533)	0.00	6.78	-93.2	399	12.46	35.07	0.91	clear/colorless	
1	A (1536)	0.25	6.83	-62.3	413	12.72	35.07	0.36	clear/colorless	
2	A (1539)	0.5	6.83	-63.3	414	12.70	35.07	0.22	clear/colorless	
3	A (1542)	0.75	6.87	-66.6	414	12.82	35.07	0.18	clear/colorless	
4	A (1545)	1.0	6.87	-68.4	414	12.87	35.07	0.19	clear/colorless	
5	A (1548)	1.25	6.85	-69.0	414	12.91	35.07	0.15	clear/colorless	
6										

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

Low Flow Purge Method - 360 mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

*T Andrews*  
(SIGNATURE)

817 40psi

# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Leichner Brothers Landfill **WELL ID:** LB-170

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031212-04

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 50 °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/12/12	13:51	100.91	.	35.82	.	.	X 1
/ /	:	.	.	.	.	.	X 3
Gal/ft = (dia./2) <sup>2</sup> x 0.163		1" = 0.041	<u>2" = 0.163</u>	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)

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/12/12	14:11	A	3, <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/12/12	14:11	A	1, 250, <u>500</u> , 1L	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/12/12	14:11	A	1, <u>250</u> , 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)		OR [ ]	WA [ ]
	VOA - Glass	(8280)	(8011)	<u>Low Level</u>	
AMBER - Glass	(8080)	(8150)	(TOX)	OR [ ]	WA [ ]
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u>	(TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u>	(SO <sub>4</sub> ) (Silica, T) <u>(NO<sub>3</sub>)</u>		
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)				
GREEN - Poly	(Cyanide)				
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)				
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)				

WATER QUALITY DATA		Purge Start Time: 13:56					Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>°C</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0		0.00	6.62	55.7	361	12.75	35.84	1.01	
1		0.4	6.65	50.9	381	12.98	35.84	0.49	
2		0.8	6.66	49.1	386	13.07	35.84	0.35	
3		1.2	6.67	46.6	388	13.15	35.84	0.26	
4		1.6	6.68	45.2	388	13.12	35.84	0.20	clear / colorless
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

[Casing] [Select A-G] [Cumulative Totals]

[Circle units]

[Clarity, Color]

Low Flow Purge Method ~350 mL/min

**SAMPLER:** Sam Adlington  
(PRINTED NAME)  
T. Andrews

[Signature]  
(SIGNATURE)

8/7/6SPS:

# FIELD SAMPLING DATA SHEET

## SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Leichner Brothers Landfill

**WELL ID:** LB-205

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662

**BLIND ID:** LB-031312-15

**DUP ID:**

**NA**

<b>WIND FROM:</b>	N	NE	E	SE	(S)	SW	W	NW	(LIGHT)	MEDIUM	HEAVY	
<b>WEATHER:</b>	SUNNY		CLOUDY		RAIN			?		<b>TEMPERATURE:</b> 54.5 °C		

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)
3/13/12	14:30	61.50	.	39.17	.	.			X 1
1/1	:	.	.	.	.	.			X 3
Gal/ft = (dia./2) <sup>2</sup> 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	3/13/12	15:00	A	3 (40 ml)	(HCl)	(YES)	NO		✓	
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO			
White Poly	3/13/12	15:00	A	1 (250/500) 1L	(None)	(YES)	NO	NA	✓	
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO			
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO			
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO			
Red Diss. Poly	3/13/12	15:00	A	1 (250) 500, 1L	(HNO <sub>3</sub> )	(YES)	(YES)		✓	
	1/1	:		250, 500, 1L		YES				

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>      5      Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)								
	VOA - Glass	(8260) (8011)	Low Level							
	AMBER - Glass	(8080) (8150) (TOX)								
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )								
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)								
	GREEN - Poly	(Cyanide)								
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)								
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)								

WATER QUALITY DATA			Purge Start Time: 14:37				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (1442)	0.00	6.77	36.7	394	11.69	39.17	0.39	orange/turbid
1	A (1443)	0.75	6.77	35.5	395	11.72	39.17	0.28	orange/less turbid
2	A (1448)	1.0	6.78	31.2	394	11.55	39.17	0.22	pink orange
3	A (1451)	1.25	6.78	31.4	389	11.54	39.17	0.20	
4	A (1454)	1.50	6.78	32.5	387	11.54	39.17	0.19	clear/colorless
5	A (1457)	1.75	6.78	36.6	385	11.57	39.17	0.17	clear/colorless
6									

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

Low Flow Purge Method ~ 400 mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

J Andrews  
(SIGNATURE)

8/7 55ps:

# 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:** Lechner Brothers Landfill

**WELL ID:** LB-26I

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662

**BLIND ID:** LB-032212-21

**DUP-ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
	<b>WEATHER:</b>									TEMPERATURE: 35 °C	
	SUNNY	CLOUDY			RAIN	?					

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/22/12	13:40	58.30		23.07			X 1
1/1	:						X 3

Gal/ft = (dia./2)<sup>2</sup> 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 Bailor (D) PVC/Teflon Bailor (E) Dedicated Bailor (F) Dedicated Pump (G) Other =

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

Sample Depth: [V if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	3/22/12	14:05	A	3	40 ml	HCl	YES	NO	✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	14:05	A	1	250, 500, 1L	None	YES	NO	NA ✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	14:05	A	1	250, 500, 1L	HNO <sub>3</sub>	YES	YES	✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)	OR [ ]	WA [ ]
	VOA - Glass	(8260) (8011) <i>Low Level</i>		
	AMBER - Glass	(8080) (8150) (TOX)		
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )		
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)		
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)		

**WATER QUALITY DATA**

Purge Start Time: 13:41

Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A(1344)	0.00	6.71	920	268	11.21	23.07	5.99	clear/colorless
1	A(1347)	0.3	6.57	89.9	272	11.51	23.07	5.17	clear/colorless
2	A(1350)	0.6	6.57	89.6	272	11.50	23.07	5.04	clear/colorless
3	A(1353)	0.9	6.57	89.5	273	11.50	23.07	4.97	clear/colorless
4	A(1356)	1.2	6.57	89.9	277	11.51	23.07	4.95	clear/colorless
5	A(1359)	1.5	6.57	89.8	274	11.53	23.07	4.96	clear/colorless
6									

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

*Low Flow Purge Method ~ 350 mL/min*

**SAMPLER:**

(PRINTED NAME)

*T Andrews*

(SIGNATURE)

*T Andrews*

*8/7 4ops:*

# FIELD SAMPLING DATA SHEET

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

## SCS ENGINEERS

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Lechner Brothers Landfill **WELL ID:** LB-260  
**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031212-05

**DUP ID:** NA

**WIND FROM:** N NE E SE (S) SW W NW LIGHT (MEDIUM) HEAVY  
**WEATHER:** SUNNY CLOUDY (RAIN) ? **TEMPERATURE:** °F 50 °C

**HYDROLOGY/LEVEL MEASUREMENTS** (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
3/12/12	14:50	101.78	.	23.58	.	.	X 1
/ /	:						X 3

Gal/ft = (dia./2)<sup>2</sup> 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	3/12/12	15:06	A	3 <u>40 ml</u>	HCl	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/12/12	15:06	A	1    250 <u>(500)</u> 1L	None	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/12/12	15:06	A	1 <u>250</u> 500, 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)	OR [ ]	WA [ ]
	VOA - Glass	<u>(8260)</u> (8011)	<u>Low Level</u>	OR [ ]
AMBER - Glass	(8080) (8150) (TOX)		OR [ ]	WA [ ]
WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>			
YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>2</sub> /NO <sub>3</sub> ) (Tannin/Lignin)			
GREEN - Poly	(Cyanide)			
RED TOTAL - Poly	(As) <u>(Sb)</u> (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)			
RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)			

**WATER QUALITY DATA** Purge Start Time: 14:54    Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>(C)</u>	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A <u>(149)</u>	0.00	<u>6.58</u>	<u>77.7</u>	<u>233</u>	<u>11.52</u>	<u>23.58</u>	<u>5.40</u>	
1	A <u>(150)</u>	0.4	<u>6.43</u>	<u>87.2</u>	<u>230</u>	<u>11.58</u>	<u>23.78</u>	<u>5.00</u>	
2	A <u>(150)</u>	0.8	<u>6.40</u>	<u>96.0</u>	<u>232</u>	<u>11.58</u>	<u>23.98</u>	<u>4.99</u>	
3	A <u>(150)</u>	1.2	<u>6.38</u>	<u>93.5</u>	<u>234</u>	<u>11.58</u>	<u>24.0</u>	<u>4.92</u>	clear/colorless
4		.	.	.	.	.	.	.	
5		.	.	.	.	.	.	.	
6		.	.	.	.	.	.	.	

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

8/7/60/400  
Low Flow Purge Method @ 400 mL/min

**SAMPLER:** Sigma Analytical  
(PRINTED NAME)

[Signature]  
(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:** Lechner Brothers Landfill **WELL ID:** F81

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-03/12/12-0C

**DUP ID:** NA

<b>WIND FROM:</b>	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
	<b>WEATHER:</b> SUNNY		CLOUDY		RAIN		?		<b>TEMPERATURE:</b> °F 50 °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)<sup>2</sup> 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	3/12/12	14:40	A	3    40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/12/12	14:40	A	1    250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/12/12	14:40	A	1    250, 500, 1L	HNO <sub>3</sub>	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    Total Bottles (include duplicate count): 5

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) <span style="float: right;">OR [ ] WA [✓]</span>
	AMBER - Glass	(8080) (8150) (TOX) <span style="float: right;">OR [ ] WA [ ]</span>
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) (Cl) (SO <sub>4</sub> ) (Silica, T.) (NO <sub>3</sub> )
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (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 <sub>2</sub> (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-260

**SAMPLER:** T Andrews JMA

(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:** Lechner Brothers Landfill **WELL ID:** LB-27I

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-032212-18

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY  
**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 33 °C

**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)
3/22/12	10:15	57.15	28.95	.	.	.	X 1 .
1/1	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)<sup>2</sup> 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 Bailor (D) PVC/Teflon Bailor (E) Dedicated Bailor (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	3/22/12	10:50	A	3 40 ml	HCl	YES	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/22/12	10:50	A	1 250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/22/12	10:50	A	1 250, 500, 1L	HNO <sub>3</sub>	YES	YES		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub>    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)	OR [ ]	WA [ ]
	VOA - Glass	<u>(8260)</u> (8011)		WA [ ]
	AMBER - Glass	(8080) (8150) (TOX)		WA [ ]
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>		
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (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) <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)		

**WATER QUALITY DATA** Purge Start Time: 10:25 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A (1028)	0.00	6.87	109.6	556	9.53	28.95	5.82	clear/colorless
1	A (1031)	0.4	6.81	92.0	626	11.39	28.95	0.91	clear/colorless
2	A (1034)	0.8	6.91	93.8	634	11.55	28.95	0.50	clear/colorless
3	A (1037)	1.2	6.81	89.5	640	11.64	28.95	0.39	clear/colorless
4	A (1040)	1.6	6.82	88.5	641	11.70	28.95	0.35	clear/colorless
5	A (1043)	2.0	6.82	88.5	642	11.70	28.95	0.35	clear/colorless
6	A (1046)	2.25	6.82	88.2	643	11.70	28.95	0.32	clear/colorless

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

Low Flow Purge Method ~ 350mL/min

**SAMPLER:** T Andrews  
(PRINTED NAME)

*[Signature]*  
(SIGNATURE)

7.018.0 35ps:

# FIELD SAMPLING DATA SHEET

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

## SCS ENGINEERS

Office: 503.639.9201

Fax: 503.684.6984

**PROJECT NAME:** Lechner Brothers Landfill **WELL ID:** LB-270

**SITE ADDRESS:** 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-031212-02

**DUP ID:** NA

**WIND FROM:** N NE E SE S SW W NW LIGHT MEDIUM HEAVY

**WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** 50 °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)	
3/12/12	11:57	115.10	.	35.18	.	.	X 1	
/ /	:						X 3	
Gal/ft = (dia./2) <sup>2</sup> x 0.163		1" = 0.041	<u>2" = 0.163</u>	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	3/12/12	12:15	A	3 (40 ml)	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H <sub>2</sub> SO <sub>4</sub> )	YES	NO		
White Poly	3/12/12	12:15	A	250, <u>600</u> 1L	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H <sub>2</sub> SO <sub>4</sub>	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO <sub>3</sub>	YES	NO		
Red Diss. Poly	3/12/12	12:15	A	250, <u>600</u> 1L	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H<sub>2</sub>SO<sub>4</sub>, Red HNO<sub>3</sub> 5 Total Bottles (include duplicate count):

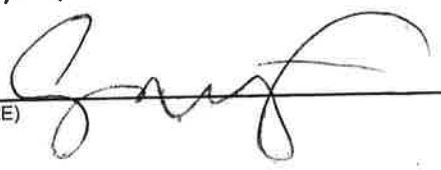
Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)				OR [ ]	WA [ ]
	VOA - Glass	(8260) (8011)	Low Level				
	AMBER - Glass	(8080) (8150) (TOX)					
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO <sub>3</sub> /CO <sub>3</sub> ) <u>(Cl)</u> (SO <sub>4</sub> ) (Silica, T.) <u>(NO<sub>3</sub>)</u>					
	YELLOW - Poly	(COD) (TOC) (NH <sub>3</sub> ) (NO <sub>3</sub> /NO <sub>2</sub> ) (Tannin/Lignin)					
	GREEN - Poly	(Cyanide)					
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)					
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)					

WATER QUALITY DATA			Purge Start Time: 12:00				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O <sub>2</sub> (mg/l)	Water Quality
0	A(1203)	0.00	6.49	38.5	347	12.06	35.30	3.30	Clear / color: less
1	A(1206)	0.5	6.55	51.3	342	12.13	35.34	3.39	167 NTU
2	A(1207)	~1.0	6.58	59.0	340	12.12	35.36	3.28	
3	A(1212)	1.5	6.59	61.4	339	12.12	35.37	3.29	74.06 NTU
4	A(1215)	1.8	6.60	64.9	338	12.11	35.37	3.32	51.40 NTU
5									
6									

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

8/7/00/400 Low Flow Purge Method ~ 400 mL/min

**SAMPLER:** SAM ADUNERSON  
(PRINTED NAME)

  
(SIGNATURE)



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: 250-6608

CLIENT:	INVOICE TO:		PRESERVATIVE	P.O. NUMBER:	REQUESTED ANALYSES		MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
	SCS Engineers Portland, OR	SCS Engineers Portland, OR			TOB	TOB				
REPORT TO: Dev. Lomadi ADDRESS: 19945 SW Sequoia Pkwy, Ste 190 Portland, OR 97224 PHONE: 503-639-9315 FAX: PROJECT NAME: Lechner Brothers Landfill PROJECT NUMBER: 04310030.01.17										
SAMPLED BY: T Andrews										
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOCs	TOB	TOB	TOB	TOB				
1 LB-031212-01	3/12/12 @ 1120	X	X	X	X	X	W	5	low level VOCs	
2 LB-031212-02	3/12/12 @ 1215	X	X	X	X	X	W	5	samples were field filtered	
3 LB-031212-03	3/12/12 @ 1321	X	X	X	X	X	W	5		
4 LB-031212-04	3/12/12 @ 1411	X	X	X	X	X	W	5		
5 LB-031212-05	3/12/12 @ 1506	X	X	X	X	X	W	5		
6 LB-031212-06	3/12/12 @ 1440	X	X	X	X	X	W	5		
7 Trip Blank	2/17/12	X								
8										
9										
10										

### TURNAROUND REQUEST

in Business Days \*  
 Organic & Inorganic Analyses  
 Petroleum Hydrocarbon Analyses  
 STD. 7 5 4 3 2 1 <1  
 STD. 5 4 3 2 1 <1

OTHER Specify:

\* Turnaround Requests less than standard may incur Rush Charges.

DATE: 3/13  
 TIME: 10:40  
 DATE: 3/13  
 TIME: 10:40

FIRM: SCS Engineers  
 FIRM: SCS Engineers

RECEIVED BY: Peter Cook  
 PRINT NAME: Peter Cook  
 RECEIVED BY: Jim Andrews  
 PRINT NAME: Jim Andrews

DATE: 3/13/12  
 TIME: 8:00  
 DATE: 3/13  
 TIME: 10:40

ADDITIONAL REMARKS: T Andrews@scsengineers.com / Diamadr.d@scsengineers.com

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
509-924-9200 FAX 924-9290  
503-906-9200 FAX 906-9210  
907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: SCS Engineers		INVOICE TO: SCS Engineers Portland, OR		TURNAROUND REQUEST in Business Days * Organic & Inorganic Analyses Petroleum Hydrocarbon Analyses			
REPORT TO: David Lomadrud ADDRESS: 11945 SW Soyuzo Pkwy, Ste 180 Portland, OR 97224 PHONE: 503.639-9315 FAX:		PRESERVATIVE		STD. <input checked="" type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1		STD. <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1	
PROJECT NAME: Lechner Brothers Landfill		PO. NUMBER:		OTHER <input type="checkbox"/>		Specify: * Turnaround Requests less than standard may incur Rush Charges.	
PROJECT NUMBER: 071212030.01.17		REQUESTED ANALYSES		MATRIX (W, S, O)		LOCATION/ COMMENTS	
SAMPLED BY: J Andrews		HCL		HMO		TA WO ID	
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		# OF CONT.			
1 LB-031312-07	3/13/12 @ 827	X		5		low level VOCs	
2 LB-031312-08	3/13/12 @ 900	X		5		Samples were Grab & Flow for B.S.S Metals	
3 LB-031312-09	3/13/12 @ 949	X		5			
4 LB-031312-10	3/13/12 @ 1090	X		5			
5 LB-031312-11	3/13/12 @ 1150	X		5			
6 LB-031312-12	3/13/12 @ 1245	X		5			
7 LB-031312-13	3/13/12 @ 1335	X		5			
8 LB-031312-14	3/13/12 @ 1415	X		5			
9 LB-031312-15	3/13/12 @ 1500	X		5			
10 LB-031312-16	3/13/12 @ 1548	X		5			
RELEASED BY: J Andrews		DATE: 3/14/12		FIRM: SCS Engineers		RECEIVED BY: [Signature]	
PRINT NAME: J Andrews		TIME: 800		FIRM: SCS Engineers		PRINT NAME: Bob E	
RELEASED BY: [Signature]		DATE: 3/14/12		FIRM: TAP		RECEIVED BY: [Signature]	
PRINT NAME: Bob E		TIME: [Signature]		FIRM: TAP		PRINT NAME: [Signature]	
ADDITIONAL REMARKS:		DATE: 3/14/12		FIRM: TAP		DATE: 3/14/12	
		TIME: 11:17		FIRM: TAP		TIME: 11:17	
		FIRM: TAP		FIRM: TAP		FIRM: TAP	
		FIRM: TAP		FIRM: TAP		FIRM: TAP	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: SCS Engineers		INVOICE TO: SCS Engineers Portland, OR		TURNAROUND REQUEST in Business Days *	
REPORT TO: David Lomada		P.O. NUMBER:		<input checked="" type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1	
ADDRESS: 1445 SW Sequoia Pkwy, 510180 Portland, OR 97224		PRESERVATIVE		Organic & Inorganic Analyses Petroleum Hydrocarbon Analyses STD.	
PHONE: 503.639.9315 FAX:		REQUESTED ANALYSES		STD.	
PROJECT NAME: Lechner Brothers Landfill		HPLC		OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.	
PROJECT NUMBER: 0421030301/17		DIS Met		MATRIX (W, S, O)	
SAMPLED BY: T Andrews		TOS		# OF CONT.	
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Volts	F/M	LOCATION/ COMMENTS	TA WO ID
1 LB-032212-17	3/22/12 @ 955	X	X	low level VOCs	
2 LB-032212-18	3/22/12 @ 1050	X	X	Samples were field filtered	
3 LB-032212-19	3/22/12 @ 1315	X	X	for dissolved metals.	
4 LB-032212-20	3/22/12 @ 1200	X	X		
5 LB-032212-21	3/22/12 @ 1405	X	X		
6 LB-032212-22	3/22/12 @ 1400	X	X		
7 LB-032212-23	3/22/12 @ 1530	X	X		
8					
9					
10					
RELEASED BY: [Signature]	DATE: 3/23/12	RECEIVED BY: [Signature]	DATE: 3/23/12	FIRM: TAP	DATE: 3/23/12
PRINT NAME: T Andrews	TIME: 800	PRINT NAME: Bob Lee	TIME: 800	FIRM: TAP	TIME: 10:08
RELEASED BY: [Signature]	DATE: 3/23/12	RECEIVED BY: [Signature]	DATE: 3/23/12	FIRM: TAP	DATE: 3/23/12
PRINT NAME: Bob Lee	TIME: 800	PRINT NAME: Bob Lee	TIME: 800	FIRM: TAP	TIME: 10:08
ADDITIONAL REMARKS:				TEMP:	PAGE OF

**ATTACHMENT 2**

**Groundwater Laboratory Analytical Reports  
First Quarter 2012**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Portland  
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Tel: (503)906-9200

TestAmerica Job ID: 250-668-1

Client Project/Site: Leichner Brothers Landfill - Wash.  
Revision: 2

For:

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

Attn: Mr. David Lamadrid



Authorized for release by:  
6/11/2012 6:19:36 PM

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### LINKS

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

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

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

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# Sample Summary

Client: SCS Engineers

TestAmerica Job ID: 250-668-1

Project/Site: Leichner Brothers Landfill - Wash.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-668-1	LB-031212-01	Water	03/12/12 11:20	03/13/12 10:40
250-668-2	LB-031212-02	Water	03/12/12 12:15	03/13/12 10:40
250-668-3	LB-031212-03	Water	03/12/12 13:21	03/13/12 10:40
250-668-4	LB-031212-04	Water	03/12/12 14:11	03/13/12 10:40
250-668-5	LB-031212-05	Water	03/12/12 15:06	03/13/12 10:40
250-668-6	LB-031212-06	Water	03/12/12 14:40	03/13/12 10:40
250-668-7	Trip Blank	Water	03/12/12 00:00	03/13/12 10:40

# Case Narrative

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

TestAmerica Job ID: 250-668-1

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**Job ID: 250-668-1**

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**Laboratory: TestAmerica Portland**

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**Narrative**

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**Job Narrative**  
**250-668-1**

**Comment**

Revised Report - This includes 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, and carbon disulfide in the 8260 Volatiles list.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

**Method(s) 8260B:** The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 580-107764 exceeded control limits for the following analyte: Bromomethane. As all individual recoveries were within QC control limits, the data were flagged as appropriate and reported.

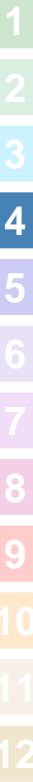
No other analytical or quality issues were noted.

**Metals**

No analytical or quality issues were noted.

**General Chemistry**

The Matrix Spike (MS) or Matrix Spike Duplicate (MSD) exceeds the control limits in batch 250-2226 for nitrate.





# Definitions/Glossary

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

TestAmerica Job ID: 250-668-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

### General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

## Glossary

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

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-01**

**Date Collected: 03/12/12 11:20**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 17:20	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 17:20	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 17:20	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 17:20	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 17:20	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 17:20	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 17:20	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 17:20	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 17:20	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 17:20	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 17:20	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 17:20	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 17:20	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 17:20	1
2-Butanone	ND		2.0		ug/L			03/22/12 17:20	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 17:20	1
2-Hexanone	ND		1.0		ug/L			03/22/12 17:20	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 17:20	1
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 17:20	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 17:20	1
Acetone	ND		2.0		ug/L			03/22/12 17:20	1
Benzene	ND		0.10		ug/L			03/22/12 17:20	1
Bromobenzene	ND		0.10		ug/L			03/22/12 17:20	1
Bromoform	ND		0.10		ug/L			03/22/12 17:20	1
Bromomethane	ND *		0.10		ug/L			03/22/12 17:20	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 17:20	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 17:20	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 17:20	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 17:20	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 17:20	1
Chloroethane	ND		0.25		ug/L			03/22/12 17:20	1
Chloroform	ND		0.10		ug/L			03/22/12 17:20	1
Chloromethane	ND		0.10		ug/L			03/22/12 17:20	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 17:20	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 17:20	1
Dibromomethane	ND		0.10		ug/L			03/22/12 17:20	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 17:20	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 17:20	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 17:20	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 17:20	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 17:20	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 17:20	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-01**  
**Date Collected: 03/12/12 11:20**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/22/12 17:20	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
o-Xylene	ND		0.10		ug/L			03/22/12 17:20	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
Styrene	ND		0.10		ug/L			03/22/12 17:20	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 17:20	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 17:20	1
Toluene	ND		0.10		ug/L			03/22/12 17:20	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 17:20	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 17:20	1
Trichloroethene	ND		0.10		ug/L			03/22/12 17:20	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 17:20	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/22/12 17:20	1
Ethylbenzene-d10	97		75 - 125					03/22/12 17:20	1
Fluorobenzene (Surr)	98		70 - 130					03/22/12 17:20	1
Trifluorotoluene (Surr)	98		80 - 125					03/22/12 17:20	1
Toluene-d8 (Surr)	92		75 - 125					03/22/12 17:20	1

**Client Sample ID: LB-031212-02**  
**Date Collected: 03/12/12 12:15**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 16:55	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 16:55	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 16:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 16:55	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 16:55	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 16:55	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 16:55	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:55	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 16:55	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:55	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:55	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 16:55	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:55	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:55	1
2-Butanone	ND		2.0		ug/L			03/22/12 16:55	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 16:55	1
2-Hexanone	ND		1.0		ug/L			03/22/12 16:55	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 16:55	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-02**  
**Date Collected: 03/12/12 12:15**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 16:55	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 16:55	1
Acetone	ND		2.0		ug/L			03/22/12 16:55	1
Benzene	ND		0.10		ug/L			03/22/12 16:55	1
Bromobenzene	ND		0.10		ug/L			03/22/12 16:55	1
Bromoform	ND		0.10		ug/L			03/22/12 16:55	1
Bromomethane	ND	*	0.10		ug/L			03/22/12 16:55	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 16:55	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 16:55	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 16:55	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 16:55	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 16:55	1
Chloroethane	ND		0.25		ug/L			03/22/12 16:55	1
Chloroform	ND		0.10		ug/L			03/22/12 16:55	1
Chloromethane	ND		0.10		ug/L			03/22/12 16:55	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:55	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:55	1
Dibromomethane	ND		0.10		ug/L			03/22/12 16:55	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 16:55	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 16:55	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 16:55	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 16:55	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 16:55	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 16:55	1
Naphthalene	ND		0.40		ug/L			03/22/12 16:55	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
o-Xylene	ND		0.10		ug/L			03/22/12 16:55	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
Styrene	ND		0.10		ug/L			03/22/12 16:55	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 16:55	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 16:55	1
Toluene	ND		0.10		ug/L			03/22/12 16:55	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:55	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:55	1
Trichloroethene	ND		0.10		ug/L			03/22/12 16:55	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 16:55	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 120		03/22/12 16:55	1
Ethylbenzene-d10	98		75 - 125		03/22/12 16:55	1
Fluorobenzene (Surr)	97		70 - 130		03/22/12 16:55	1
Trifluorotoluene (Surr)	94		80 - 125		03/22/12 16:55	1
Toluene-d8 (Surr)	90		75 - 125		03/22/12 16:55	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-03**

**Date Collected: 03/12/12 13:21**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 16:30	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 16:30	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 16:30	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 16:30	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 16:30	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 16:30	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 16:30	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:30	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 16:30	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:30	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:30	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 16:30	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:30	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:30	1
2-Butanone	ND		2.0		ug/L			03/22/12 16:30	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 16:30	1
2-Hexanone	ND		1.0		ug/L			03/22/12 16:30	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 16:30	1
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 16:30	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 16:30	1
Acetone	ND		2.0		ug/L			03/22/12 16:30	1
Benzene	ND		0.10		ug/L			03/22/12 16:30	1
Bromobenzene	ND		0.10		ug/L			03/22/12 16:30	1
Bromoform	ND		0.10		ug/L			03/22/12 16:30	1
Bromomethane	ND	*	0.10		ug/L			03/22/12 16:30	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 16:30	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 16:30	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 16:30	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 16:30	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 16:30	1
Chloroethane	ND		0.25		ug/L			03/22/12 16:30	1
Chloroform	ND		0.10		ug/L			03/22/12 16:30	1
Chloromethane	ND		0.10		ug/L			03/22/12 16:30	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:30	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:30	1
Dibromomethane	ND		0.10		ug/L			03/22/12 16:30	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 16:30	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 16:30	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 16:30	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 16:30	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 16:30	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 16:30	1



# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-03**

**Date Collected: 03/12/12 13:21**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/22/12 16:30	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
o-Xylene	ND		0.10		ug/L			03/22/12 16:30	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
Styrene	ND		0.10		ug/L			03/22/12 16:30	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 16:30	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 16:30	1
Toluene	ND		0.10		ug/L			03/22/12 16:30	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:30	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:30	1
Trichloroethene	ND		0.10		ug/L			03/22/12 16:30	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 16:30	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 16:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 120					03/22/12 16:30	1
Ethylbenzene-d10	95		75 - 125					03/22/12 16:30	1
Fluorobenzene (Surr)	95		70 - 130					03/22/12 16:30	1
Trifluorotoluene (Surr)	103		80 - 125					03/22/12 16:30	1
Toluene-d8 (Surr)	89		75 - 125					03/22/12 16:30	1

**Client Sample ID: LB-031212-04**

**Date Collected: 03/12/12 14:11**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 16:05	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 16:05	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 16:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 16:05	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 16:05	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 16:05	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 16:05	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:05	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 16:05	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:05	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:05	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 16:05	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 16:05	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 16:05	1
2-Butanone	ND		2.0		ug/L			03/22/12 16:05	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 16:05	1
2-Hexanone	ND		1.0		ug/L			03/22/12 16:05	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 16:05	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-04**  
**Date Collected: 03/12/12 14:11**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 16:05	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 16:05	1
Acetone	ND		2.0		ug/L			03/22/12 16:05	1
Benzene	ND		0.10		ug/L			03/22/12 16:05	1
Bromobenzene	ND		0.10		ug/L			03/22/12 16:05	1
Bromoform	ND		0.10		ug/L			03/22/12 16:05	1
Bromomethane	ND	*	0.10		ug/L			03/22/12 16:05	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 16:05	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 16:05	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 16:05	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 16:05	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 16:05	1
Chloroethane	ND		0.25		ug/L			03/22/12 16:05	1
Chloroform	ND		0.10		ug/L			03/22/12 16:05	1
Chloromethane	ND		0.10		ug/L			03/22/12 16:05	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:05	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:05	1
Dibromomethane	ND		0.10		ug/L			03/22/12 16:05	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 16:05	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 16:05	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 16:05	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 16:05	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 16:05	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 16:05	1
Naphthalene	ND		0.40		ug/L			03/22/12 16:05	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
o-Xylene	ND		0.10		ug/L			03/22/12 16:05	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
Styrene	ND		0.10		ug/L			03/22/12 16:05	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 16:05	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 16:05	1
Toluene	ND		0.10		ug/L			03/22/12 16:05	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 16:05	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 16:05	1
Trichloroethene	ND		0.10		ug/L			03/22/12 16:05	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 16:05	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		75 - 120		03/22/12 16:05	1
Ethylbenzene-d10	97		75 - 125		03/22/12 16:05	1
Fluorobenzene (Surr)	96		70 - 130		03/22/12 16:05	1
Trifluorotoluene (Surr)	106		80 - 125		03/22/12 16:05	1
Toluene-d8 (Surr)	92		75 - 125		03/22/12 16:05	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-05**

**Date Collected: 03/12/12 15:06**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 15:40	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 15:40	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 15:40	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 15:40	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 15:40	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 15:40	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 15:40	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:40	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 15:40	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 15:40	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:40	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 15:40	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:40	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 15:40	1
2-Butanone	ND		2.0		ug/L			03/22/12 15:40	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 15:40	1
2-Hexanone	ND		1.0		ug/L			03/22/12 15:40	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 15:40	1
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 15:40	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 15:40	1
Acetone	ND		2.0		ug/L			03/22/12 15:40	1
Benzene	ND		0.10		ug/L			03/22/12 15:40	1
Bromobenzene	ND		0.10		ug/L			03/22/12 15:40	1
Bromoform	ND		0.10		ug/L			03/22/12 15:40	1
Bromomethane	ND	*	0.10		ug/L			03/22/12 15:40	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 15:40	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 15:40	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 15:40	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 15:40	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 15:40	1
Chloroethane	ND		0.25		ug/L			03/22/12 15:40	1
Chloroform	ND		0.10		ug/L			03/22/12 15:40	1
Chloromethane	ND		0.10		ug/L			03/22/12 15:40	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 15:40	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 15:40	1
Dibromomethane	ND		0.10		ug/L			03/22/12 15:40	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 15:40	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 15:40	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 15:40	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 15:40	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 15:40	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 15:40	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-05**  
**Date Collected: 03/12/12 15:06**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/22/12 15:40	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
o-Xylene	ND		0.10		ug/L			03/22/12 15:40	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
Styrene	ND		0.10		ug/L			03/22/12 15:40	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 15:40	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 15:40	1
Toluene	ND		0.10		ug/L			03/22/12 15:40	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 15:40	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 15:40	1
Trichloroethene	ND		0.10		ug/L			03/22/12 15:40	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 15:40	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 120					03/22/12 15:40	1
Ethylbenzene-d10	97		75 - 125					03/22/12 15:40	1
Fluorobenzene (Surr)	97		70 - 130					03/22/12 15:40	1
Trifluorotoluene (Surr)	100		80 - 125					03/22/12 15:40	1
Toluene-d8 (Surr)	92		75 - 125					03/22/12 15:40	1

**Client Sample ID: LB-031212-06**  
**Date Collected: 03/12/12 14:40**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 15:14	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 15:14	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 15:14	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 15:14	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 15:14	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 15:14	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 15:14	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:14	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 15:14	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 15:14	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:14	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 15:14	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 15:14	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 15:14	1
2-Butanone	ND		2.0		ug/L			03/22/12 15:14	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 15:14	1
2-Hexanone	ND		1.0		ug/L			03/22/12 15:14	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 15:14	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-06**

**Date Collected: 03/12/12 14:40**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 15:14	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 15:14	1
Acetone	ND		2.0		ug/L			03/22/12 15:14	1
Benzene	ND		0.10		ug/L			03/22/12 15:14	1
Bromobenzene	ND		0.10		ug/L			03/22/12 15:14	1
Bromoform	ND		0.10		ug/L			03/22/12 15:14	1
Bromomethane	ND	*	0.10		ug/L			03/22/12 15:14	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 15:14	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 15:14	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 15:14	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 15:14	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 15:14	1
Chloroethane	ND		0.25		ug/L			03/22/12 15:14	1
<b>Chloroform</b>	<b>0.34</b>		0.10		ug/L			03/22/12 15:14	1
Chloromethane	ND		0.10		ug/L			03/22/12 15:14	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 15:14	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 15:14	1
Dibromomethane	ND		0.10		ug/L			03/22/12 15:14	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 15:14	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 15:14	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 15:14	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 15:14	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 15:14	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 15:14	1
Naphthalene	ND		0.40		ug/L			03/22/12 15:14	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
o-Xylene	ND		0.10		ug/L			03/22/12 15:14	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
Styrene	ND		0.10		ug/L			03/22/12 15:14	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 15:14	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 15:14	1
Toluene	ND		0.10		ug/L			03/22/12 15:14	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 15:14	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 15:14	1
Trichloroethene	ND		0.10		ug/L			03/22/12 15:14	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 15:14	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 120		03/22/12 15:14	1
Ethylbenzene-d10	98		75 - 125		03/22/12 15:14	1
Fluorobenzene (Surr)	96		70 - 130		03/22/12 15:14	1
Trifluorotoluene (Surr)	100		80 - 125		03/22/12 15:14	1
Toluene-d8 (Surr)	91		75 - 125		03/22/12 15:14	1



# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: Trip Blank**  
**Date Collected: 03/12/12 00:00**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 14:49	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 14:49	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 14:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 14:49	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 14:49	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 14:49	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 14:49	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 14:49	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 14:49	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 14:49	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 14:49	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 14:49	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 14:49	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 14:49	1
2-Butanone	ND		2.0		ug/L			03/22/12 14:49	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 14:49	1
2-Hexanone	ND		1.0		ug/L			03/22/12 14:49	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 14:49	1
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 14:49	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 14:49	1
Acetone	ND		2.0		ug/L			03/22/12 14:49	1
Benzene	ND		0.10		ug/L			03/22/12 14:49	1
Bromobenzene	ND		0.10		ug/L			03/22/12 14:49	1
Bromoform	ND		0.10		ug/L			03/22/12 14:49	1
Bromomethane	ND *		0.10		ug/L			03/22/12 14:49	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 14:49	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 14:49	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 14:49	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 14:49	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 14:49	1
Chloroethane	ND		0.25		ug/L			03/22/12 14:49	1
Chloroform	ND		0.10		ug/L			03/22/12 14:49	1
Chloromethane	ND		0.10		ug/L			03/22/12 14:49	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 14:49	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 14:49	1
Dibromomethane	ND		0.10		ug/L			03/22/12 14:49	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 14:49	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 14:49	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 14:49	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 14:49	1
Methylene Chloride	ND		0.50		ug/L			03/22/12 14:49	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 14:49	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: Trip Blank**  
**Date Collected: 03/12/12 00:00**  
**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/22/12 14:49	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
o-Xylene	ND		0.10		ug/L			03/22/12 14:49	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
Styrene	ND		0.10		ug/L			03/22/12 14:49	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 14:49	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 14:49	1
Toluene	ND		0.10		ug/L			03/22/12 14:49	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 14:49	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 14:49	1
Trichloroethene	ND		0.10		ug/L			03/22/12 14:49	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 14:49	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 14:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	91		75 - 120					03/22/12 14:49	1
Ethylbenzene-d10	99		75 - 125					03/22/12 14:49	1
Fluorobenzene (Surr)	98		70 - 130					03/22/12 14:49	1
Trifluorotoluene (Surr)	98		80 - 125					03/22/12 14:49	1
Toluene-d8 (Surr)	92		75 - 125					03/22/12 14:49	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Client Sample ID: LB-031212-01**

**Date Collected: 03/12/12 11:20**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/29/12 10:45	03/30/12 14:07	1
Manganese	ND		0.0020		mg/L		03/29/12 10:45	03/30/12 14:07	1

**Client Sample ID: LB-031212-02**

**Date Collected: 03/12/12 12:15**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.033		0.025		mg/L		03/29/12 10:45	03/30/12 14:17	1
Manganese	0.0054		0.0020		mg/L		03/29/12 10:45	03/30/12 14:17	1

**Client Sample ID: LB-031212-03**

**Date Collected: 03/12/12 13:21**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/29/12 10:45	03/30/12 14:23	1
Manganese	ND		0.0020		mg/L		03/29/12 10:45	03/30/12 14:23	1

**Client Sample ID: LB-031212-04**

**Date Collected: 03/12/12 14:11**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.12		0.025		mg/L		03/29/12 10:45	03/30/12 14:26	1
Manganese	4.6		0.020		mg/L		03/29/12 10:45	03/31/12 03:01	10

**Client Sample ID: LB-031212-05**

**Date Collected: 03/12/12 15:06**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/29/12 10:45	03/30/12 14:30	1
Manganese	0.0034		0.0020		mg/L		03/29/12 10:45	03/30/12 14:30	1

**Client Sample ID: LB-031212-06**

**Date Collected: 03/12/12 14:40**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/29/12 10:45	03/30/12 14:40	1
Manganese	ND		0.0020		mg/L		03/29/12 10:45	03/30/12 14:40	1

# Client Sample Results

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

TestAmerica Job ID: 250-668-1

## General Chemistry

**Client Sample ID: LB-031212-01**

**Date Collected: 03/12/12 11:20**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			03/15/12 16:51	1
Chloride	4.4		0.50		mg/L			03/13/12 15:58	1
Nitrogen, Nitrate	5.3		0.10		mg/L			03/13/12 15:58	1

**Client Sample ID: LB-031212-02**

**Date Collected: 03/12/12 12:15**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		10		mg/L			03/15/12 16:51	1
Chloride	10		0.50		mg/L			03/13/12 17:31	1
Nitrogen, Nitrate	4.0		0.10		mg/L			03/13/12 17:31	1

**Client Sample ID: LB-031212-03**

**Date Collected: 03/12/12 13:21**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		10		mg/L			03/15/12 16:51	1
Chloride	11		0.50		mg/L			03/13/12 17:46	1
Nitrogen, Nitrate	1.2		0.10		mg/L			03/13/12 17:46	1

**Client Sample ID: LB-031212-04**

**Date Collected: 03/12/12 14:11**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	230		10		mg/L			03/15/12 16:51	1
Chloride	19		0.50		mg/L			03/13/12 18:02	1
Nitrogen, Nitrate	ND		0.10		mg/L			03/13/12 18:02	1

**Client Sample ID: LB-031212-05**

**Date Collected: 03/12/12 15:06**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			03/15/12 16:51	1
Chloride	4.8		0.50		mg/L			03/13/12 18:18	1
Nitrogen, Nitrate	5.9		0.10		mg/L			03/13/12 18:18	1

**Client Sample ID: LB-031212-06**

**Date Collected: 03/12/12 14:40**

**Date Received: 03/13/12 10:40**

**Lab Sample ID: 250-668-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			03/15/12 16:51	1
Chloride	ND		0.50		mg/L			03/13/12 18:49	1
Nitrogen, Nitrate	ND		0.10		mg/L			03/13/12 18:49	1

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Lab Sample ID: MB 580-107764/5**

**Matrix: Water**

**Analysis Batch: 107764**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,1-Dichloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,1-Dichloroethene	ND		0.10		ug/L			03/22/12 12:42	1
1,1-Dichloropropene	ND		0.10		ug/L			03/22/12 12:42	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/22/12 12:42	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/22/12 12:42	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/22/12 12:42	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/22/12 12:42	1
1,2-Dibromoethane	ND		0.10		ug/L			03/22/12 12:42	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/22/12 12:42	1
1,2-Dichloroethane	ND		0.10		ug/L			03/22/12 12:42	1
1,2-Dichloropropane	ND		0.10		ug/L			03/22/12 12:42	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/22/12 12:42	1
1,3-Dichloropropane	ND		0.10		ug/L			03/22/12 12:42	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/22/12 12:42	1
2,2-Dichloropropane	ND		0.10		ug/L			03/22/12 12:42	1
2-Butanone	ND		2.0		ug/L			03/22/12 12:42	1
2-Chlorotoluene	ND		0.10		ug/L			03/22/12 12:42	1
2-Hexanone	ND		1.0		ug/L			03/22/12 12:42	1
4-Chlorotoluene	ND		0.20		ug/L			03/22/12 12:42	1
4-Isopropyltoluene	ND		0.20		ug/L			03/22/12 12:42	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/22/12 12:42	1
Acetone	ND		2.0		ug/L			03/22/12 12:42	1
Benzene	ND		0.10		ug/L			03/22/12 12:42	1
Bromobenzene	ND		0.10		ug/L			03/22/12 12:42	1
Bromoform	ND		0.10		ug/L			03/22/12 12:42	1
Bromomethane	ND		0.10		ug/L			03/22/12 12:42	1
Carbon disulfide	ND		0.10		ug/L			03/22/12 12:42	1
Carbon tetrachloride	ND		0.10		ug/L			03/22/12 12:42	1
Chlorobenzene	ND		0.10		ug/L			03/22/12 12:42	1
Chlorobromomethane	ND		0.10		ug/L			03/22/12 12:42	1
Chlorodibromomethane	ND		0.10		ug/L			03/22/12 12:42	1
Chloroethane	ND		0.25		ug/L			03/22/12 12:42	1
Chloroform	ND		0.10		ug/L			03/22/12 12:42	1
Chloromethane	ND		0.10		ug/L			03/22/12 12:42	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 12:42	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 12:42	1
Dibromomethane	ND		0.10		ug/L			03/22/12 12:42	1
Dichlorobromomethane	ND		0.10		ug/L			03/22/12 12:42	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/22/12 12:42	1
Ethylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
Hexachlorobutadiene	ND		0.20		ug/L			03/22/12 12:42	1
Isopropylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/22/12 12:42	1



# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Lab Sample ID: MB 580-107764/5**

**Matrix: Water**

**Analysis Batch: 107764**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.50		ug/L			03/22/12 12:42	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/22/12 12:42	1
Naphthalene	ND		0.40		ug/L			03/22/12 12:42	1
n-Butylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
N-Propylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
o-Xylene	ND		0.10		ug/L			03/22/12 12:42	1
sec-Butylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
Styrene	ND		0.10		ug/L			03/22/12 12:42	1
tert-Butylbenzene	ND		0.10		ug/L			03/22/12 12:42	1
Tetrachloroethene	ND		0.10		ug/L			03/22/12 12:42	1
Toluene	ND		0.10		ug/L			03/22/12 12:42	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/22/12 12:42	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/22/12 12:42	1
Trichloroethene	ND		0.10		ug/L			03/22/12 12:42	1
Trichlorofluoromethane	ND		0.10		ug/L			03/22/12 12:42	1
Vinyl chloride	ND		0.020		ug/L			03/22/12 12:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 120		03/22/12 12:42	1
Ethylbenzene-d10	98		75 - 125		03/22/12 12:42	1
Fluorobenzene (Surr)	97		70 - 130		03/22/12 12:42	1
Trifluorotoluene (Surr)	106		80 - 125		03/22/12 12:42	1
Toluene-d8 (Surr)	89		75 - 125		03/22/12 12:42	1

**Lab Sample ID: LCS 580-107764/6**

**Matrix: Water**

**Analysis Batch: 107764**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.93	4.54		ug/L		92	75 - 125
1,1,1-Trichloroethane	5.00	5.81		ug/L		116	80 - 140
1,1,2,2-Tetrachloroethane	5.00	4.84		ug/L		97	75 - 125
1,1,2-Trichloroethane	4.94	4.80		ug/L		97	80 - 130
1,1-Dichloroethane	4.95	5.84		ug/L		118	75 - 135
1,1-Dichloroethene	4.95	5.27		ug/L		106	70 - 150
1,1-Dichloropropene	4.96	5.27		ug/L		106	80 - 130
1,2,3-Trichlorobenzene	5.00	3.88		ug/L		78	60 - 125
1,2,3-Trichloropropane	4.93	4.42		ug/L		90	75 - 120
1,2,4-Trichlorobenzene	4.97	3.79		ug/L		76	60 - 125
1,2,4-Trimethylbenzene	5.01	4.88		ug/L		98	80 - 125
1,2-Dibromo-3-Chloropropane	5.00	3.38		ug/L		68	55 - 120
1,2-Dibromoethane	5.00	4.61		ug/L		92	70 - 130
1,2-Dichlorobenzene	4.91	5.14		ug/L		105	80 - 130
1,2-Dichloroethane	4.96	5.34		ug/L		108	80 - 140
1,2-Dichloropropane	5.00	4.71		ug/L		94	80 - 120
1,3,5-Trimethylbenzene	5.00	4.79		ug/L		96	80 - 125
1,3-Dichlorobenzene	4.99	5.08		ug/L		102	80 - 120
1,3-Dichloropropane	5.00	4.77		ug/L		95	80 - 130
1,4-Dichlorobenzene	5.00	5.13		ug/L		103	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

Lab Sample ID: LCS 580-107764/6

Matrix: Water

Analysis Batch: 107764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	5.01	5.66		ug/L		113	60 - 150
2-Butanone	10.0	10.3		ug/L		103	20 - 200
2-Chlorotoluene	4.95	4.85		ug/L		98	75 - 130
2-Hexanone	9.83	7.13		ug/L		73	52 - 160
4-Chlorotoluene	4.93	5.12		ug/L		104	75 - 130
4-Isopropyltoluene	5.00	4.50		ug/L		90	80 - 120
4-Methyl-2-pentanone	9.97	7.46		ug/L		75	55 - 135
Acetone	10.0	10.9		ug/L		109	30 - 200
Benzene	4.98	5.41		ug/L		109	80 - 120
Bromobenzene	4.98	4.86		ug/L		98	80 - 130
Bromoform	4.98	4.06		ug/L		81	65 - 130
Bromomethane	5.02	4.98		ug/L		99	70 - 135
Carbon disulfide	10.0	9.06		ug/L		90	65 - 160
Carbon tetrachloride	5.01	5.07		ug/L		101	75 - 140
Chlorobenzene	5.00	5.04		ug/L		101	80 - 120
Chlorobromomethane	4.96	5.05		ug/L		102	80 - 125
Chlorodibromomethane	4.96	3.93		ug/L		79	70 - 120
Chloroethane	5.00	6.09		ug/L		122	75 - 140
Chloroform	5.00	5.52		ug/L		110	80 - 130
Chloromethane	5.02	4.98		ug/L		99	50 - 140
cis-1,2-Dichloroethene	5.00	4.90		ug/L		98	80 - 130
cis-1,3-Dichloropropene	5.25	3.99		ug/L		76	70 - 120
Dibromomethane	4.93	4.94		ug/L		100	80 - 130
Dichlorobromomethane	4.94	4.52		ug/L		92	80 - 125
Dichlorodifluoromethane	5.00	5.59		ug/L		112	30 - 180
Ethylbenzene	4.96	4.91		ug/L		99	80 - 125
Hexachlorobutadiene	5.00	4.88		ug/L		98	75 - 135
Isopropylbenzene	5.00	3.96		ug/L		79	75 - 120
Methyl tert-butyl ether	5.00	4.61		ug/L		92	75 - 120
Methylene Chloride	5.00	5.63		ug/L		113	60 - 145
m-Xylene & p-Xylene	9.99	10.3		ug/L		103	80 - 130
Naphthalene	5.00	2.98		ug/L		60	45 - 130
n-Butylbenzene	4.95	4.95		ug/L		100	75 - 125
N-Propylbenzene	5.00	4.31		ug/L		86	80 - 120
o-Xylene	4.95	4.53		ug/L		92	80 - 120
sec-Butylbenzene	5.00	4.83		ug/L		97	80 - 125
Styrene	4.99	4.47		ug/L		90	75 - 130
tert-Butylbenzene	4.98	4.57		ug/L		92	80 - 130
Tetrachloroethene	5.01	3.40		ug/L		68	40 - 180
Toluene	5.00	5.31		ug/L		106	80 - 120
trans-1,2-Dichloroethene	5.01	5.43		ug/L		108	80 - 140
trans-1,3-Dichloropropene	4.75	3.70		ug/L		78	60 - 140
Trichloroethene	5.00	5.44		ug/L		109	80 - 130
Trichlorofluoromethane	5.00	6.36		ug/L		127	30 - 180
Vinyl chloride	5.01	6.32		ug/L		126	65 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		75 - 120
Ethylbenzene-d10	101		75 - 125

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Lab Sample ID: LCS 580-107764/6**

**Matrix: Water**

**Analysis Batch: 107764**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Fluorobenzene (Surr)	102		70 - 130
Trifluorotoluene (Surr)	114		80 - 125
Toluene-d8 (Surr)	105		75 - 125

**Lab Sample ID: LCSD 580-107764/7**

**Matrix: Water**

**Analysis Batch: 107764**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
							Limits		
1,1,1,2-Tetrachloroethane	4.93	4.63		ug/L		94	75 - 125	2	20
1,1,1-Trichloroethane	5.00	5.85		ug/L		117	80 - 140	1	20
1,1,2,2-Tetrachloroethane	5.00	5.01		ug/L		100	75 - 125	3	20
1,1,2-Trichloroethane	4.94	5.03		ug/L		102	80 - 130	5	20
1,1-Dichloroethane	4.95	5.97		ug/L		121	75 - 135	2	20
1,1-Dichloroethene	4.95	5.21		ug/L		105	70 - 150	1	20
1,1-Dichloropropene	4.96	5.22		ug/L		105	80 - 130	1	20
1,2,3-Trichlorobenzene	5.00	4.38		ug/L		88	60 - 125	12	20
1,2,3-Trichloropropane	4.93	4.42		ug/L		90	75 - 120	0	20
1,2,4-Trichlorobenzene	4.97	4.02		ug/L		81	60 - 125	6	20
1,2,4-Trimethylbenzene	5.01	4.89		ug/L		98	80 - 125	0	20
1,2-Dibromo-3-Chloropropane	5.00	3.40		ug/L		68	55 - 120	1	20
1,2-Dibromoethane	5.00	4.73		ug/L		95	70 - 130	3	20
1,2-Dichlorobenzene	4.91	5.10		ug/L		104	80 - 130	1	20
1,2-Dichloroethane	4.96	5.44		ug/L		110	80 - 140	2	20
1,2-Dichloropropane	5.00	4.80		ug/L		96	80 - 120	2	20
1,3,5-Trimethylbenzene	5.00	4.75		ug/L		95	80 - 125	1	20
1,3-Dichlorobenzene	4.99	5.07		ug/L		102	80 - 120	0	20
1,3-Dichloropropane	5.00	4.80		ug/L		96	80 - 130	1	20
1,4-Dichlorobenzene	5.00	5.14		ug/L		103	80 - 120	0	20
2,2-Dichloropropane	5.01	5.75		ug/L		115	60 - 150	2	20
2-Butanone	10.0	11.0		ug/L		110	20 - 200	7	20
2-Chlorotoluene	4.95	5.03		ug/L		102	75 - 130	4	20
2-Hexanone	9.83	7.76		ug/L		79	52 - 160	8	20
4-Chlorotoluene	4.93	5.20		ug/L		106	75 - 130	2	20
4-Isopropyltoluene	5.00	4.52		ug/L		90	80 - 120	0	20
4-Methyl-2-pentanone	9.97	8.23		ug/L		83	55 - 135	10	20
Acetone	10.0	11.3		ug/L		113	30 - 200	4	20
Benzene	4.98	5.35		ug/L		107	80 - 120	1	20
Bromobenzene	4.98	4.92		ug/L		99	80 - 130	1	20
Bromoform	4.98	3.85		ug/L		77	65 - 130	5	20
Bromomethane	5.02	6.12	*	ug/L		122	70 - 135	21	20
Carbon disulfide	10.0	10.0		ug/L		100	65 - 160	10	20
Carbon tetrachloride	5.01	4.95		ug/L		99	75 - 140	2	20
Chlorobenzene	5.00	4.95		ug/L		99	80 - 120	2	20
Chlorobromomethane	4.96	5.19		ug/L		105	80 - 125	3	20
Chlorodibromomethane	4.96	4.08		ug/L		82	70 - 120	4	20
Chloroethane	5.00	6.90		ug/L		138	75 - 140	12	20
Chloroform	5.00	5.38		ug/L		108	80 - 130	3	20
Chloromethane	5.02	5.30		ug/L		106	50 - 140	6	20

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Lab Sample ID: LCSD 580-107764/7**

**Matrix: Water**

**Analysis Batch: 107764**

**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
cis-1,2-Dichloroethene	5.00	4.94		ug/L		99	80 - 130	1	20
cis-1,3-Dichloropropene	5.25	4.12		ug/L		78	70 - 120	3	20
Dibromomethane	4.93	5.07		ug/L		103	80 - 130	3	20
Dichlorobromomethane	4.94	4.43		ug/L		90	80 - 125	2	20
Dichlorodifluoromethane	5.00	5.89		ug/L		118	30 - 180	5	20
Ethylbenzene	4.96	4.89		ug/L		99	80 - 125	0	20
Hexachlorobutadiene	5.00	5.42		ug/L		108	75 - 135	10	20
Isopropylbenzene	5.00	3.98		ug/L		80	75 - 120	1	20
Methyl tert-butyl ether	5.00	4.78		ug/L		96	75 - 120	4	20
Methylene Chloride	5.00	5.75		ug/L		115	60 - 145	2	20
m-Xylene & p-Xylene	9.99	10.4		ug/L		104	80 - 130	1	20
Naphthalene	5.00	3.40		ug/L		68	45 - 130	13	20
n-Butylbenzene	4.95	4.82		ug/L		97	75 - 125	3	20
N-Propylbenzene	5.00	4.42		ug/L		88	80 - 120	3	20
o-Xylene	4.95	4.51		ug/L		91	80 - 120	0	20
sec-Butylbenzene	5.00	4.87		ug/L		97	80 - 125	1	20
Styrene	4.99	4.53		ug/L		91	75 - 130	1	20
tert-Butylbenzene	4.98	4.59		ug/L		92	80 - 130	0	20
Tetrachloroethene	5.01	3.28		ug/L		66	40 - 180	4	20
Toluene	5.00	5.25		ug/L		105	80 - 120	1	20
trans-1,2-Dichloroethene	5.01	5.34		ug/L		107	80 - 140	2	20
trans-1,3-Dichloropropene	4.75	3.75		ug/L		79	60 - 140	1	20
Trichloroethene	5.00	5.49		ug/L		110	80 - 130	1	20
Trichlorofluoromethane	5.00	6.57		ug/L		131	30 - 180	3	20
Vinyl chloride	5.01	6.81		ug/L		136	65 - 140	7	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		75 - 120
Ethylbenzene-d10	98		75 - 125
Fluorobenzene (Surr)	101		70 - 130
Trifluorotoluene (Surr)	111		80 - 125
Toluene-d8 (Surr)	105		75 - 125

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

**Lab Sample ID: MB 250-2910/1-A**

**Matrix: Water**

**Analysis Batch: 2998**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 2910**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.025		mg/L		03/29/12 10:45	03/30/12 14:00	1
Manganese	ND		0.0020		mg/L		03/29/12 10:45	03/30/12 14:00	1

**Lab Sample ID: LCS 250-2910/2-A**

**Matrix: Water**

**Analysis Batch: 2998**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 2910**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.95		mg/L		97	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

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

**Lab Sample ID: LCS 250-2910/2-A**  
**Matrix: Water**  
**Analysis Batch: 2998**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 2910**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.0970		mg/L		97	80 - 120

**Lab Sample ID: 250-668-2 MS**  
**Matrix: Water**  
**Analysis Batch: 2998**

**Client Sample ID: LB-031212-02**  
**Prep Type: Dissolved**  
**Prep Batch: 2910**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.033		2.00	1.93		mg/L		95	75 - 125
Manganese	0.0054		0.100	0.100		mg/L		95	75 - 125

**Lab Sample ID: 250-668-1 DU**  
**Matrix: Water**  
**Analysis Batch: 2998**

**Client Sample ID: LB-031212-01**  
**Prep Type: Dissolved**  
**Prep Batch: 2910**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	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 250-2334/1**  
**Matrix: Water**  
**Analysis Batch: 2334**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	mg/L			03/15/12 16:51	1

**Lab Sample ID: LCS 250-2334/2**  
**Matrix: Water**  
**Analysis Batch: 2334**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	99.0	101		mg/L		102	80 - 120

**Lab Sample ID: 250-563-B-4 DU**  
**Matrix: Water**  
**Analysis Batch: 2334**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	40		41.0		mg/L		NC	20

## Method: 300.0 - Nitrate

**Lab Sample ID: MB 250-2226/3**  
**Matrix: Water**  
**Analysis Batch: 2226**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10	mg/L			03/13/12 13:53	1



# QC Sample Results

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

TestAmerica Job ID: 250-668-1

## Method: 300.0 - Nitrate (Continued)

**Lab Sample ID: LCS 250-2226/4**

**Matrix: Water**

**Analysis Batch: 2226**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.00	4.95		mg/L		99	90 - 110

**Lab Sample ID: 250-668-1 MS**

**Matrix: Water**

**Analysis Batch: 2226**

**Client Sample ID: LB-031212-01**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.3		2.00	6.76	F	mg/L		72	80 - 120

**Lab Sample ID: 250-668-1 MSD**

**Matrix: Water**

**Analysis Batch: 2226**

**Client Sample ID: LB-031212-01**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	5.3		2.00	6.76	F	mg/L		72	80 - 120	0	20

**Lab Sample ID: 250-668-1 DU**

**Matrix: Water**

**Analysis Batch: 2226**

**Client Sample ID: LB-031212-01**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	5.3		2.00	5.31		mg/L				0.2	20

## Method: 300.0 - Chloride

**Lab Sample ID: MB 250-2225/3**

**Matrix: Water**

**Analysis Batch: 2225**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			03/13/12 13:53	1

**Lab Sample ID: LCS 250-2225/4**

**Matrix: Water**

**Analysis Batch: 2225**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110

**Lab Sample ID: 250-668-1 MS**

**Matrix: Water**

**Analysis Batch: 2225**

**Client Sample ID: LB-031212-01**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.4		2.00	5.90	F	mg/L		74	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-668-1

## Method: 300.0 - Chloride (Continued)

Lab Sample ID: 250-668-1 MSD

Matrix: Water

Analysis Batch: 2225

Client Sample ID: LB-031212-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.4		2.00	5.89	F	mg/L		74	80 - 120	0	20

Lab Sample ID: 250-668-5 MS

Matrix: Water

Analysis Batch: 2225

Client Sample ID: LB-031212-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.8		2.00	6.24	F	mg/L		74	80 - 120		

Lab Sample ID: 250-668-1 DU

Matrix: Water

Analysis Batch: 2225

Client Sample ID: LB-031212-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.4			4.40		mg/L				0.2	20

# QC Association Summary

Client: SCS Engineers  
 Project/Site: Lechner Brothers Landfill - Wash.

TestAmerica Job ID: 250-668-1

## GC/MS VOA

### Analysis Batch: 107764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-1	LB-031212-01	Total/NA	Water	8260B	
250-668-2	LB-031212-02	Total/NA	Water	8260B	
250-668-3	LB-031212-03	Total/NA	Water	8260B	
250-668-4	LB-031212-04	Total/NA	Water	8260B	
250-668-5	LB-031212-05	Total/NA	Water	8260B	
250-668-6	LB-031212-06	Total/NA	Water	8260B	
250-668-7	Trip Blank	Total/NA	Water	8260B	
LCS 580-107764/6	Lab Control Sample	Total/NA	Water	8260B	
LCS D 580-107764/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 580-107764/5	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 2910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-1	LB-031212-01	Dissolved	Water	3005A	
250-668-1 DU	LB-031212-01	Dissolved	Water	3005A	
250-668-2	LB-031212-02	Dissolved	Water	3005A	
250-668-2 MS	LB-031212-02	Dissolved	Water	3005A	
250-668-3	LB-031212-03	Dissolved	Water	3005A	
250-668-4	LB-031212-04	Dissolved	Water	3005A	
250-668-5	LB-031212-05	Dissolved	Water	3005A	
250-668-6	LB-031212-06	Dissolved	Water	3005A	
LCS 250-2910/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 250-2910/1-A	Method Blank	Total/NA	Water	3005A	

### Analysis Batch: 2998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-1	LB-031212-01	Dissolved	Water	6020	2910
250-668-1 DU	LB-031212-01	Dissolved	Water	6020	2910
250-668-2	LB-031212-02	Dissolved	Water	6020	2910
250-668-2 MS	LB-031212-02	Dissolved	Water	6020	2910
250-668-3	LB-031212-03	Dissolved	Water	6020	2910
250-668-4	LB-031212-04	Dissolved	Water	6020	2910
250-668-5	LB-031212-05	Dissolved	Water	6020	2910
250-668-6	LB-031212-06	Dissolved	Water	6020	2910
LCS 250-2910/2-A	Lab Control Sample	Total/NA	Water	6020	2910
MB 250-2910/1-A	Method Blank	Total/NA	Water	6020	2910

### Analysis Batch: 2999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-4	LB-031212-04	Dissolved	Water	6020	2910

## General Chemistry

### Analysis Batch: 2225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-1	LB-031212-01	Total/NA	Water	300.0	
250-668-1 DU	LB-031212-01	Total/NA	Water	300.0	
250-668-1 MS	LB-031212-01	Total/NA	Water	300.0	
250-668-1 MSD	LB-031212-01	Total/NA	Water	300.0	
250-668-2	LB-031212-02	Total/NA	Water	300.0	

# QC Association Summary

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

TestAmerica Job ID: 250-668-1

## General Chemistry (Continued)

### Analysis Batch: 2225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-3	LB-031212-03	Total/NA	Water	300.0	
250-668-4	LB-031212-04	Total/NA	Water	300.0	
250-668-5	LB-031212-05	Total/NA	Water	300.0	
250-668-5 MS	LB-031212-05	Total/NA	Water	300.0	
250-668-6	LB-031212-06	Total/NA	Water	300.0	
LCS 250-2225/4	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2225/3	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-668-1	LB-031212-01	Total/NA	Water	300.0	
250-668-1 DU	LB-031212-01	Total/NA	Water	300.0	
250-668-1 MS	LB-031212-01	Total/NA	Water	300.0	
250-668-1 MSD	LB-031212-01	Total/NA	Water	300.0	
250-668-2	LB-031212-02	Total/NA	Water	300.0	
250-668-3	LB-031212-03	Total/NA	Water	300.0	
250-668-4	LB-031212-04	Total/NA	Water	300.0	
250-668-5	LB-031212-05	Total/NA	Water	300.0	
250-668-5 MS	LB-031212-05	Total/NA	Water	300.0	
250-668-6	LB-031212-06	Total/NA	Water	300.0	
LCS 250-2226/4	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2226/3	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-563-B-4 DU	Duplicate	Total/NA	Water	160.1	
250-668-1	LB-031212-01	Total/NA	Water	160.1	
250-668-2	LB-031212-02	Total/NA	Water	160.1	
250-668-3	LB-031212-03	Total/NA	Water	160.1	
250-668-4	LB-031212-04	Total/NA	Water	160.1	
250-668-5	LB-031212-05	Total/NA	Water	160.1	
250-668-6	LB-031212-06	Total/NA	Water	160.1	
LCS 250-2334/2	Lab Control Sample	Total/NA	Water	160.1	
MB 250-2334/1	Method Blank	Total/NA	Water	160.1	

# Certification Summary

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

TestAmerica Job ID: 250-668-1

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

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





# Method Summary

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

TestAmerica Job ID: 250-668-1

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

**Protocol References:**

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

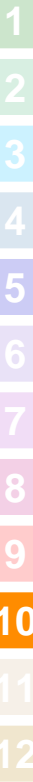
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

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

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: 250-608

CLIENT: SCS Engineers  
 REPORT TO: David Lamadrid  
 ADDRESS: 1995 SW Squaw Pkwy, Ste 180  
 Portland, OR 97227  
 PHONE: 503 639-9315 FAX:  
 PROJECT NAME: Lechner Brothers Landfill  
 PROJECT NUMBER: 0421030001.17  
 SAMPLED BY: T Andrews

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

TURNAROUND REQUEST  
 in Business Days \*  
 Organic & Inorganic Analyses  
 Petroleum Hydrocarbon Analyses  
 37D: 7 5 4 3 2 1 <1  
 5 4 3 2 1 <1  
 OTHER Specify:

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	HCl	H2O2	PRESERVATIVE				REQUESTED ANALYSES	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA W/O ID
				—	—	—	—					
1 LB-031212-01	3/12/12 @ 1120	X	X	X	X	X	X	W	5	low level VOCs		
2 LB-031212-02	3/12/12 @ 1215	X	X	X	X	X	X	W	5	Samples were field filtered		
3 LB-031212-03	3/12/12 @ 1321	X	X	X	X	X	X	W	5			
4 LB-031212-04	3/12/12 @ 1411	X	X	X	X	X	X	W	5			
5 LB-031212-05	3/12/12 @ 1506	X	X	X	X	X	X	W	5			
6 LB-031212-06	3/12/12 @ 1440	X	X	X	X	X	X	W	5			
7 Trip Blank	2/27/12	X										
8												
9												
10												

\* Turnaround Requests less than standard may incur Rush Charges.

RELEASED BY: Jm Andrews  
 PRINT NAME: T Andrews  
 RELEASED BY: Peter Cook  
 PRINT NAME: Peter Cook

DATE: 3/13/12  
 TIME: 8:00  
 DATE: 3/13  
 TIME: 10:40

FIRM: SCS Engineers  
 FIRM: SCS Engineers

RECEIVED BY: Peter Cook  
 PRINT NAME: P  
 RECEIVED BY: Jm Andrews  
 PRINT NAME: Jm Andrews

DATE: 3/13  
 TIME: 10:40  
 DATE: 3/13/12  
 TIME: 10:40

TEMP: 5.7

ADDITIONAL REMARKS:  
 T Andrews@scsengineers.com / Diamad@d@scsengineers.com

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-668-1

**Login Number: 668**

**List Number: 1**

**Creator: Morgan, Jessica**

**List Source: TestAmerica Portland**

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



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-668-1

**Login Number: 668**  
**List Number: 1**  
**Creator: Presley, Kim**

**List Source: TestAmerica Seattle**  
**List Creation: 03/14/12 04:32 PM**

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



# 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: 250-743-1

Client Project/Site: Leichner Landfill - Wash.  
Revision: 3

For:

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

Attn: Mr. David Lamadrid



Authorized for release by:  
6/11/2012 6:38:46 PM

Vanessa Frahs  
Project Manager I  
[vanessa.frahs@testamericainc.com](mailto:vanessa.frahs@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

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

TestAmerica Job ID: 250-743-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-743-1	LB-031312-07	Water	03/13/12 08:27	03/14/12 11:33
250-743-2	LB-031312-08	Water	03/13/12 09:00	03/14/12 11:33
250-743-3	LB-031312-09	Water	03/13/12 09:49	03/14/12 11:33
250-743-4	LB-031312-10	Water	03/13/12 10:40	03/14/12 11:33
250-743-5	LB-031312-11	Water	03/13/12 11:50	03/14/12 11:33
250-743-6	LB-031312-12	Water	03/13/12 12:45	03/14/12 11:33
250-743-7	LB-031312-13	Water	03/13/12 13:35	03/14/12 11:33
250-743-8	LB-031312-14	Water	03/13/12 14:15	03/14/12 11:33
250-743-9	LB-031312-15	Water	03/13/12 15:00	03/14/12 11:33
250-743-10	LB-031312-16	Water	03/13/12 15:48	03/14/12 11:33

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# Case Narrative

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

TestAmerica Job ID: 250-743-1

**Job ID: 250-743-1**

**Laboratory: TestAmerica Portland**

## Narrative

### Job Narrative 250-743-1

#### Comment

Revised Report - This includes 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, and carbon disulfide in the 8260 Volatiles list.

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

##### Method(s) 8260B:

The laboratory control sample duplicate (LCSD) for batch 580-107852 exceeded control limits for the following analyte: Chloroethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been flagged as appropriate and reported.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 580-107852 exceeded control limits for the following analytes: Bromomethane and Iodomethane. As all individual recoveries met QC limits, the data has been flagged as appropriate and reported.

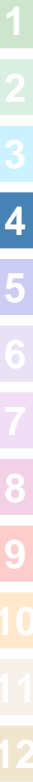
No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

The Matrix Spike (MS) or Matrix Spike Duplicate (MSD) exceeds the control limits in batch 250-2323 for nitrate.



# Definitions/Glossary

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

TestAmerica Job ID: 250-743-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

### General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

## Glossary

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

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-07**

**Date Collected: 03/13/12 08:27**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 15:57	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 15:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 15:57	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 15:57	1
<b>1,1-Dichloroethane</b>	<b>0.12</b>		0.10		ug/L			03/23/12 15:57	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 15:57	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 15:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 15:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 15:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 15:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 15:57	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 15:57	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 15:57	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 15:57	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 15:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 15:57	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 15:57	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 15:57	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 15:57	1
2-Butanone	ND		2.0		ug/L			03/23/12 15:57	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 15:57	1
2-Hexanone	ND		1.0		ug/L			03/23/12 15:57	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 15:57	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 15:57	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 15:57	1
Acetone	ND		2.0		ug/L			03/23/12 15:57	1
Benzene	ND		0.10		ug/L			03/23/12 15:57	1
Bromobenzene	ND		0.10		ug/L			03/23/12 15:57	1
Bromoform	ND		0.10		ug/L			03/23/12 15:57	1
Bromomethane	ND *		0.10		ug/L			03/23/12 15:57	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 15:57	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 15:57	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 15:57	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 15:57	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 15:57	1
Chloroethane	ND *		0.25		ug/L			03/23/12 15:57	1
Chloroform	ND		0.10		ug/L			03/23/12 15:57	1
Chloromethane	ND		0.10		ug/L			03/23/12 15:57	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 15:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 15:57	1
Dibromomethane	ND		0.10		ug/L			03/23/12 15:57	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 15:57	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 15:57	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 15:57	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 15:57	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 15:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 15:57	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-07**

**Date Collected: 03/13/12 08:27**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/23/12 15:57	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
o-Xylene	ND		0.10		ug/L			03/23/12 15:57	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
Styrene	ND		0.10		ug/L			03/23/12 15:57	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 15:57	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 15:57	1
Toluene	ND		0.10		ug/L			03/23/12 15:57	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 15:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 15:57	1
Trichloroethene	ND		0.10		ug/L			03/23/12 15:57	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 15:57	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/23/12 15:57	1
Ethylbenzene-d10	97		75 - 125					03/23/12 15:57	1
Fluorobenzene (Surr)	99		70 - 130					03/23/12 15:57	1
Trifluorotoluene (Surr)	102		80 - 125					03/23/12 15:57	1
Toluene-d8 (Surr)	90		75 - 125					03/23/12 15:57	1

**Client Sample ID: LB-031312-08**

**Date Collected: 03/13/12 09:00**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 16:22	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 16:22	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 16:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 16:22	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 16:22	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 16:22	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 16:22	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:22	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 16:22	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 16:22	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:22	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 16:22	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:22	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 16:22	1
2-Butanone	ND		2.0		ug/L			03/23/12 16:22	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 16:22	1
2-Hexanone	ND		1.0		ug/L			03/23/12 16:22	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 16:22	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-08**  
**Date Collected: 03/13/12 09:00**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 16:22	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 16:22	1
Acetone	ND		2.0		ug/L			03/23/12 16:22	1
Benzene	ND		0.10		ug/L			03/23/12 16:22	1
Bromobenzene	ND		0.10		ug/L			03/23/12 16:22	1
Bromoform	ND		0.10		ug/L			03/23/12 16:22	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 16:22	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 16:22	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 16:22	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 16:22	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 16:22	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 16:22	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 16:22	1
Chloroform	ND		0.10		ug/L			03/23/12 16:22	1
Chloromethane	ND		0.10		ug/L			03/23/12 16:22	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 16:22	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 16:22	1
Dibromomethane	ND		0.10		ug/L			03/23/12 16:22	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 16:22	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 16:22	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 16:22	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 16:22	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 16:22	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 16:22	1
Naphthalene	ND		0.40		ug/L			03/23/12 16:22	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
o-Xylene	ND		0.10		ug/L			03/23/12 16:22	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
Styrene	ND		0.10		ug/L			03/23/12 16:22	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 16:22	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 16:22	1
Toluene	ND		0.10		ug/L			03/23/12 16:22	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 16:22	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 16:22	1
Trichloroethene	ND		0.10		ug/L			03/23/12 16:22	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 16:22	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 120		03/23/12 16:22	1
Ethylbenzene-d10	97		75 - 125		03/23/12 16:22	1
Fluorobenzene (Surr)	100		70 - 130		03/23/12 16:22	1
Trifluorotoluene (Surr)	101		80 - 125		03/23/12 16:22	1
Toluene-d8 (Surr)	88		75 - 125		03/23/12 16:22	1



# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-09**

**Lab Sample ID: 250-743-3**

**Date Collected: 03/13/12 09:49**

**Matrix: Water**

**Date Received: 03/14/12 11:33**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 16:47	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 16:47	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 16:47	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 16:47	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 16:47	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 16:47	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 16:47	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:47	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 16:47	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 16:47	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:47	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 16:47	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 16:47	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 16:47	1
2-Butanone	ND		2.0		ug/L			03/23/12 16:47	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 16:47	1
2-Hexanone	ND		1.0		ug/L			03/23/12 16:47	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 16:47	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 16:47	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 16:47	1
Acetone	ND		2.0		ug/L			03/23/12 16:47	1
Benzene	ND		0.10		ug/L			03/23/12 16:47	1
Bromobenzene	ND		0.10		ug/L			03/23/12 16:47	1
Bromoform	ND		0.10		ug/L			03/23/12 16:47	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 16:47	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 16:47	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 16:47	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 16:47	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 16:47	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 16:47	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 16:47	1
Chloroform	ND		0.10		ug/L			03/23/12 16:47	1
Chloromethane	ND		0.10		ug/L			03/23/12 16:47	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 16:47	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 16:47	1
Dibromomethane	ND		0.10		ug/L			03/23/12 16:47	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 16:47	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 16:47	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 16:47	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 16:47	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 16:47	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 16:47	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-09**

**Date Collected: 03/13/12 09:49**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/23/12 16:47	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
o-Xylene	ND		0.10		ug/L			03/23/12 16:47	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
Styrene	ND		0.10		ug/L			03/23/12 16:47	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 16:47	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 16:47	1
Toluene	ND		0.10		ug/L			03/23/12 16:47	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 16:47	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 16:47	1
Trichloroethene	ND		0.10		ug/L			03/23/12 16:47	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 16:47	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 16:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/23/12 16:47	1
Ethylbenzene-d10	97		75 - 125					03/23/12 16:47	1
Fluorobenzene (Surr)	97		70 - 130					03/23/12 16:47	1
Trifluorotoluene (Surr)	101		80 - 125					03/23/12 16:47	1
Toluene-d8 (Surr)	88		75 - 125					03/23/12 16:47	1

**Client Sample ID: LB-031312-10**

**Date Collected: 03/13/12 10:40**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 17:12	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 17:12	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 17:12	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 17:12	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 17:12	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 17:12	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 17:12	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:12	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 17:12	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 17:12	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:12	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 17:12	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:12	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 17:12	1
2-Butanone	ND		2.0		ug/L			03/23/12 17:12	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 17:12	1
2-Hexanone	ND		1.0		ug/L			03/23/12 17:12	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 17:12	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-10**

**Date Collected: 03/13/12 10:40**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 17:12	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 17:12	1
Acetone	ND		2.0		ug/L			03/23/12 17:12	1
Benzene	ND		0.10		ug/L			03/23/12 17:12	1
Bromobenzene	ND		0.10		ug/L			03/23/12 17:12	1
Bromoform	ND		0.10		ug/L			03/23/12 17:12	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 17:12	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 17:12	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 17:12	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 17:12	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 17:12	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 17:12	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 17:12	1
Chloroform	ND		0.10		ug/L			03/23/12 17:12	1
Chloromethane	ND		0.10		ug/L			03/23/12 17:12	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 17:12	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 17:12	1
Dibromomethane	ND		0.10		ug/L			03/23/12 17:12	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 17:12	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 17:12	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 17:12	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 17:12	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 17:12	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 17:12	1
Naphthalene	ND		0.40		ug/L			03/23/12 17:12	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
o-Xylene	ND		0.10		ug/L			03/23/12 17:12	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
Styrene	ND		0.10		ug/L			03/23/12 17:12	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 17:12	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 17:12	1
Toluene	ND		0.10		ug/L			03/23/12 17:12	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 17:12	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 17:12	1
Trichloroethene	ND		0.10		ug/L			03/23/12 17:12	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 17:12	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 120		03/23/12 17:12	1
Ethylbenzene-d10	97		75 - 125		03/23/12 17:12	1
Fluorobenzene (Surr)	97		70 - 130		03/23/12 17:12	1
Trifluorotoluene (Surr)	99		80 - 125		03/23/12 17:12	1
Toluene-d8 (Surr)	93		75 - 125		03/23/12 17:12	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-11**  
**Date Collected: 03/13/12 11:50**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 17:38	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 17:38	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 17:38	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 17:38	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 17:38	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 17:38	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 17:38	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:38	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 17:38	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 17:38	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:38	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 17:38	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 17:38	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 17:38	1
2-Butanone	ND		2.0		ug/L			03/23/12 17:38	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 17:38	1
2-Hexanone	ND		1.0		ug/L			03/23/12 17:38	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 17:38	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 17:38	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 17:38	1
Acetone	ND		2.0		ug/L			03/23/12 17:38	1
Benzene	ND		0.10		ug/L			03/23/12 17:38	1
Bromobenzene	ND		0.10		ug/L			03/23/12 17:38	1
Bromoform	ND		0.10		ug/L			03/23/12 17:38	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 17:38	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 17:38	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 17:38	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 17:38	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 17:38	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 17:38	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 17:38	1
Chloroform	ND		0.10		ug/L			03/23/12 17:38	1
Chloromethane	ND		0.10		ug/L			03/23/12 17:38	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 17:38	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 17:38	1
Dibromomethane	ND		0.10		ug/L			03/23/12 17:38	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 17:38	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 17:38	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 17:38	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 17:38	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 17:38	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 17:38	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-11**  
**Date Collected: 03/13/12 11:50**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/23/12 17:38	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
o-Xylene	ND		0.10		ug/L			03/23/12 17:38	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
Styrene	ND		0.10		ug/L			03/23/12 17:38	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 17:38	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 17:38	1
Toluene	ND		0.10		ug/L			03/23/12 17:38	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 17:38	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 17:38	1
Trichloroethene	ND		0.10		ug/L			03/23/12 17:38	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 17:38	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/23/12 17:38	1
Ethylbenzene-d10	97		75 - 125					03/23/12 17:38	1
Fluorobenzene (Surr)	96		70 - 130					03/23/12 17:38	1
Trifluorotoluene (Surr)	96		80 - 125					03/23/12 17:38	1
Toluene-d8 (Surr)	90		75 - 125					03/23/12 17:38	1

**Client Sample ID: LB-031312-12**  
**Date Collected: 03/13/12 12:45**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 18:03	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 18:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 18:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 18:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 18:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 18:03	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 18:03	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:03	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 18:03	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:03	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 18:03	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:03	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:03	1
2-Butanone	ND		2.0		ug/L			03/23/12 18:03	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 18:03	1
2-Hexanone	ND		1.0		ug/L			03/23/12 18:03	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 18:03	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-12**  
**Date Collected: 03/13/12 12:45**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 18:03	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 18:03	1
Acetone	ND		2.0		ug/L			03/23/12 18:03	1
Benzene	ND		0.10		ug/L			03/23/12 18:03	1
Bromobenzene	ND		0.10		ug/L			03/23/12 18:03	1
Bromoform	ND		0.10		ug/L			03/23/12 18:03	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 18:03	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 18:03	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 18:03	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 18:03	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 18:03	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 18:03	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 18:03	1
Chloroform	ND		0.10		ug/L			03/23/12 18:03	1
Chloromethane	ND		0.10		ug/L			03/23/12 18:03	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:03	1
Dibromomethane	ND		0.10		ug/L			03/23/12 18:03	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 18:03	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 18:03	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 18:03	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 18:03	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 18:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 18:03	1
Naphthalene	ND		0.40		ug/L			03/23/12 18:03	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
o-Xylene	ND		0.10		ug/L			03/23/12 18:03	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
Styrene	ND		0.10		ug/L			03/23/12 18:03	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 18:03	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 18:03	1
Toluene	ND		0.10		ug/L			03/23/12 18:03	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:03	1
Trichloroethene	ND		0.10		ug/L			03/23/12 18:03	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 18:03	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 120		03/23/12 18:03	1
Ethylbenzene-d10	99		75 - 125		03/23/12 18:03	1
Fluorobenzene (Surr)	96		70 - 130		03/23/12 18:03	1
Trifluorotoluene (Surr)	103		80 - 125		03/23/12 18:03	1
Toluene-d8 (Surr)	88		75 - 125		03/23/12 18:03	1



# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-13**

**Date Collected: 03/13/12 13:35**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 18:28	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 18:28	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 18:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 18:28	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 18:28	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 18:28	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 18:28	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:28	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 18:28	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:28	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:28	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 18:28	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:28	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:28	1
2-Butanone	ND		2.0		ug/L			03/23/12 18:28	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 18:28	1
2-Hexanone	ND		1.0		ug/L			03/23/12 18:28	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 18:28	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 18:28	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 18:28	1
Acetone	ND		2.0		ug/L			03/23/12 18:28	1
Benzene	ND		0.10		ug/L			03/23/12 18:28	1
Bromobenzene	ND		0.10		ug/L			03/23/12 18:28	1
Bromoform	ND		0.10		ug/L			03/23/12 18:28	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 18:28	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 18:28	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 18:28	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 18:28	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 18:28	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 18:28	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 18:28	1
Chloroform	ND		0.10		ug/L			03/23/12 18:28	1
Chloromethane	ND		0.10		ug/L			03/23/12 18:28	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:28	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:28	1
Dibromomethane	ND		0.10		ug/L			03/23/12 18:28	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 18:28	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 18:28	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 18:28	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 18:28	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 18:28	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 18:28	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-13**

**Date Collected: 03/13/12 13:35**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/23/12 18:28	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
o-Xylene	ND		0.10		ug/L			03/23/12 18:28	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
Styrene	ND		0.10		ug/L			03/23/12 18:28	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 18:28	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 18:28	1
Toluene	ND		0.10		ug/L			03/23/12 18:28	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:28	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:28	1
Trichloroethene	ND		0.10		ug/L			03/23/12 18:28	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 18:28	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/23/12 18:28	1
Ethylbenzene-d10	94		75 - 125					03/23/12 18:28	1
Fluorobenzene (Surr)	99		70 - 130					03/23/12 18:28	1
Trifluorotoluene (Surr)	95		80 - 125					03/23/12 18:28	1
Toluene-d8 (Surr)	88		75 - 125					03/23/12 18:28	1

**Client Sample ID: LB-031312-14**

**Date Collected: 03/13/12 14:15**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 18:53	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 18:53	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 18:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 18:53	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 18:53	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 18:53	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 18:53	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:53	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 18:53	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:53	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:53	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 18:53	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 18:53	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 18:53	1
2-Butanone	ND		2.0		ug/L			03/23/12 18:53	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 18:53	1
2-Hexanone	ND		1.0		ug/L			03/23/12 18:53	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 18:53	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-14**  
**Date Collected: 03/13/12 14:15**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 18:53	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 18:53	1
Acetone	ND		2.0		ug/L			03/23/12 18:53	1
Benzene	ND		0.10		ug/L			03/23/12 18:53	1
Bromobenzene	ND		0.10		ug/L			03/23/12 18:53	1
Bromoform	ND		0.10		ug/L			03/23/12 18:53	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 18:53	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 18:53	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 18:53	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 18:53	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 18:53	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 18:53	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 18:53	1
Chloroform	ND		0.10		ug/L			03/23/12 18:53	1
Chloromethane	ND		0.10		ug/L			03/23/12 18:53	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:53	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:53	1
Dibromomethane	ND		0.10		ug/L			03/23/12 18:53	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 18:53	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 18:53	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 18:53	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 18:53	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 18:53	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 18:53	1
Naphthalene	ND		0.40		ug/L			03/23/12 18:53	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
o-Xylene	ND		0.10		ug/L			03/23/12 18:53	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
Styrene	ND		0.10		ug/L			03/23/12 18:53	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 18:53	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 18:53	1
Toluene	ND		0.10		ug/L			03/23/12 18:53	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 18:53	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 18:53	1
Trichloroethene	ND		0.10		ug/L			03/23/12 18:53	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 18:53	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 120		03/23/12 18:53	1
Ethylbenzene-d10	93		75 - 125		03/23/12 18:53	1
Fluorobenzene (Surr)	98		70 - 130		03/23/12 18:53	1
Trifluorotoluene (Surr)	100		80 - 125		03/23/12 18:53	1
Toluene-d8 (Surr)	91		75 - 125		03/23/12 18:53	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-15**

**Date Collected: 03/13/12 15:00**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 19:18	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 19:18	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 19:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 19:18	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 19:18	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 19:18	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 19:18	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 19:18	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 19:18	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 19:18	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 19:18	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 19:18	1
<b>1,4-Dichlorobenzene</b>	<b>0.20</b>		0.20		ug/L			03/23/12 19:18	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 19:18	1
2-Butanone	ND		2.0		ug/L			03/23/12 19:18	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 19:18	1
2-Hexanone	ND		1.0		ug/L			03/23/12 19:18	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 19:18	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 19:18	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 19:18	1
Acetone	ND		2.0		ug/L			03/23/12 19:18	1
Benzene	ND		0.10		ug/L			03/23/12 19:18	1
Bromobenzene	ND		0.10		ug/L			03/23/12 19:18	1
Bromoform	ND		0.10		ug/L			03/23/12 19:18	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 19:18	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 19:18	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 19:18	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 19:18	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 19:18	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 19:18	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 19:18	1
Chloroform	ND		0.10		ug/L			03/23/12 19:18	1
Chloromethane	ND		0.10		ug/L			03/23/12 19:18	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 19:18	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 19:18	1
Dibromomethane	ND		0.10		ug/L			03/23/12 19:18	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 19:18	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 19:18	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 19:18	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 19:18	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 19:18	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 19:18	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-15**

**Date Collected: 03/13/12 15:00**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/23/12 19:18	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
o-Xylene	ND		0.10		ug/L			03/23/12 19:18	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
Styrene	ND		0.10		ug/L			03/23/12 19:18	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 19:18	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 19:18	1
Toluene	ND		0.10		ug/L			03/23/12 19:18	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 19:18	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 19:18	1
Trichloroethene	ND		0.10		ug/L			03/23/12 19:18	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 19:18	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 120					03/23/12 19:18	1
Ethylbenzene-d10	95		75 - 125					03/23/12 19:18	1
Fluorobenzene (Surr)	101		70 - 130					03/23/12 19:18	1
Trifluorotoluene (Surr)	108		80 - 125					03/23/12 19:18	1
Toluene-d8 (Surr)	91		75 - 125					03/23/12 19:18	1

**Client Sample ID: LB-031312-16**

**Date Collected: 03/13/12 15:48**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 19:44	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 19:44	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 19:44	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 19:44	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 19:44	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 19:44	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 19:44	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 19:44	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 19:44	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 19:44	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 19:44	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 19:44	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 19:44	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 19:44	1
2-Butanone	ND		2.0		ug/L			03/23/12 19:44	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 19:44	1
2-Hexanone	ND		1.0		ug/L			03/23/12 19:44	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 19:44	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-16**

**Date Collected: 03/13/12 15:48**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 19:44	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 19:44	1
Acetone	ND		2.0		ug/L			03/23/12 19:44	1
Benzene	ND		0.10		ug/L			03/23/12 19:44	1
Bromobenzene	ND		0.10		ug/L			03/23/12 19:44	1
Bromoform	ND		0.10		ug/L			03/23/12 19:44	1
Bromomethane	ND	*	0.10		ug/L			03/23/12 19:44	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 19:44	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 19:44	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 19:44	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 19:44	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 19:44	1
Chloroethane	ND	*	0.25		ug/L			03/23/12 19:44	1
Chloroform	ND		0.10		ug/L			03/23/12 19:44	1
Chloromethane	ND		0.10		ug/L			03/23/12 19:44	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 19:44	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 19:44	1
Dibromomethane	ND		0.10		ug/L			03/23/12 19:44	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 19:44	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 19:44	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 19:44	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 19:44	1
Methylene Chloride	ND		0.50		ug/L			03/23/12 19:44	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 19:44	1
Naphthalene	ND		0.40		ug/L			03/23/12 19:44	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
o-Xylene	ND		0.10		ug/L			03/23/12 19:44	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
Styrene	ND		0.10		ug/L			03/23/12 19:44	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 19:44	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 19:44	1
Toluene	ND		0.10		ug/L			03/23/12 19:44	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 19:44	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 19:44	1
Trichloroethene	ND		0.10		ug/L			03/23/12 19:44	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 19:44	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120		03/23/12 19:44	1
Ethylbenzene-d10	95		75 - 125		03/23/12 19:44	1
Fluorobenzene (Surr)	98		70 - 130		03/23/12 19:44	1
Trifluorotoluene (Surr)	100		80 - 125		03/23/12 19:44	1
Toluene-d8 (Surr)	90		75 - 125		03/23/12 19:44	1



# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Client Sample ID: LB-031312-07**

**Date Collected: 03/13/12 08:27**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 15:55	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 15:55	1

**Client Sample ID: LB-031312-08**

**Date Collected: 03/13/12 09:00**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:13	1
Manganese	<b>0.0023</b>		0.0020		mg/L		03/19/12 11:07	03/20/12 16:13	1

**Client Sample ID: LB-031312-09**

**Date Collected: 03/13/12 09:49**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:21	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:21	1

**Client Sample ID: LB-031312-10**

**Date Collected: 03/13/12 10:40**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:24	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:24	1

**Client Sample ID: LB-031312-11**

**Date Collected: 03/13/12 11:50**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:28	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:28	1

**Client Sample ID: LB-031312-12**

**Date Collected: 03/13/12 12:45**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:31	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:31	1

**Client Sample ID: LB-031312-13**

**Date Collected: 03/13/12 13:35**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:35	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:35	1

**Client Sample ID: LB-031312-14**

**Date Collected: 03/13/12 14:15**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 16:38	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 16:38	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

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

Client Sample ID: LB-031312-15

Date Collected: 03/13/12 15:00

Date Received: 03/14/12 11:33

Lab Sample ID: 250-743-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.076		0.025		mg/L		03/19/12 11:07	03/20/12 16:50	1
Manganese	2.4		0.020		mg/L		03/19/12 11:07	03/20/12 19:44	10

Client Sample ID: LB-031312-16

Date Collected: 03/13/12 15:48

Date Received: 03/14/12 11:33

Lab Sample ID: 250-743-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	6.8		0.25		mg/L		03/19/12 11:07	03/20/12 19:47	10
Manganese	0.98		0.020		mg/L		03/19/12 11:07	03/20/12 19:47	10

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

## General Chemistry

**Client Sample ID: LB-031312-07**

**Date Collected: 03/13/12 08:27**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10		mg/L			03/20/12 16:01	1
Chloride	20		0.50		mg/L			03/15/12 03:41	1
Nitrogen, Nitrate	1.8		0.10		mg/L			03/15/12 03:41	1

**Client Sample ID: LB-031312-08**

**Date Collected: 03/13/12 09:00**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	330		10		mg/L			03/20/12 16:01	1
Chloride	26		0.50		mg/L			03/15/12 03:56	1
Nitrogen, Nitrate	0.99		0.10		mg/L			03/15/12 03:56	1

**Client Sample ID: LB-031312-09**

**Date Collected: 03/13/12 09:49**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10		mg/L			03/20/12 16:01	1
Chloride	4.1		0.50		mg/L			03/15/12 04:43	1
Nitrogen, Nitrate	4.6		0.10		mg/L			03/15/12 04:43	1

**Client Sample ID: LB-031312-10**

**Date Collected: 03/13/12 10:40**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10		mg/L			03/20/12 16:01	1
Chloride	3.7		0.50		mg/L			03/15/12 04:58	1
Nitrogen, Nitrate	3.8		0.10		mg/L			03/15/12 04:58	1

**Client Sample ID: LB-031312-11**

**Date Collected: 03/13/12 11:50**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		10		mg/L			03/20/12 16:01	1
Chloride	3.6		0.50		mg/L			03/15/12 05:14	1
Nitrogen, Nitrate	7.1		0.10		mg/L			03/15/12 05:14	1

**Client Sample ID: LB-031312-12**

**Date Collected: 03/13/12 12:45**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10		mg/L			03/20/12 16:01	1
Chloride	3.3		0.50		mg/L			03/15/12 05:30	1
Nitrogen, Nitrate	2.8		0.10		mg/L			03/15/12 05:30	1

**Client Sample ID: LB-031312-13**

**Date Collected: 03/13/12 13:35**

**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			03/20/12 16:01	1
Chloride	7.4		0.50		mg/L			03/15/12 05:45	1
Nitrogen, Nitrate	6.0		0.10		mg/L			03/15/12 05:45	1

# Client Sample Results

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

TestAmerica Job ID: 250-743-1

## General Chemistry

**Client Sample ID: LB-031312-14**  
**Date Collected: 03/13/12 14:15**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	210		10		mg/L			03/20/12 16:01	1
Chloride	5.2		0.50		mg/L			03/15/12 06:01	1
Nitrogen, Nitrate	6.0		0.10		mg/L			03/15/12 06:01	1

**Client Sample ID: LB-031312-15**  
**Date Collected: 03/13/12 15:00**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		10		mg/L			03/20/12 16:01	1
Chloride	6.2		0.50		mg/L			03/15/12 06:16	1
Nitrogen, Nitrate	ND		0.10		mg/L			03/15/12 06:16	1

**Client Sample ID: LB-031312-16**  
**Date Collected: 03/13/12 15:48**  
**Date Received: 03/14/12 11:33**

**Lab Sample ID: 250-743-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		10		mg/L			03/20/12 16:01	1
Chloride	12		0.50		mg/L			03/15/12 06:32	1
Nitrogen, Nitrate	ND		0.10		mg/L			03/15/12 06:32	1

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Lab Sample ID: MB 580-107852/5**

**Matrix: Water**

**Analysis Batch: 107852**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,1-Dichloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,1-Dichloroethene	ND		0.10		ug/L			03/23/12 13:00	1
1,1-Dichloropropene	ND		0.10		ug/L			03/23/12 13:00	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/23/12 13:00	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/23/12 13:00	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/23/12 13:00	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/23/12 13:00	1
1,2-Dibromoethane	ND		0.10		ug/L			03/23/12 13:00	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/23/12 13:00	1
1,2-Dichloroethane	ND		0.10		ug/L			03/23/12 13:00	1
1,2-Dichloropropane	ND		0.10		ug/L			03/23/12 13:00	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/23/12 13:00	1
1,3-Dichloropropane	ND		0.10		ug/L			03/23/12 13:00	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/23/12 13:00	1
2,2-Dichloropropane	ND		0.10		ug/L			03/23/12 13:00	1
2-Butanone	ND		2.0		ug/L			03/23/12 13:00	1
2-Chlorotoluene	ND		0.10		ug/L			03/23/12 13:00	1
2-Hexanone	ND		1.0		ug/L			03/23/12 13:00	1
4-Chlorotoluene	ND		0.20		ug/L			03/23/12 13:00	1
4-Isopropyltoluene	ND		0.20		ug/L			03/23/12 13:00	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/23/12 13:00	1
Acetone	ND		2.0		ug/L			03/23/12 13:00	1
Benzene	ND		0.10		ug/L			03/23/12 13:00	1
Bromobenzene	ND		0.10		ug/L			03/23/12 13:00	1
Bromoform	ND		0.10		ug/L			03/23/12 13:00	1
Bromomethane	ND		0.10		ug/L			03/23/12 13:00	1
Carbon disulfide	ND		0.10		ug/L			03/23/12 13:00	1
Carbon tetrachloride	ND		0.10		ug/L			03/23/12 13:00	1
Chlorobenzene	ND		0.10		ug/L			03/23/12 13:00	1
Chlorobromomethane	ND		0.10		ug/L			03/23/12 13:00	1
Chlorodibromomethane	ND		0.10		ug/L			03/23/12 13:00	1
Chloroethane	ND		0.25		ug/L			03/23/12 13:00	1
Chloroform	ND		0.10		ug/L			03/23/12 13:00	1
Chloromethane	ND		0.10		ug/L			03/23/12 13:00	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 13:00	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 13:00	1
Dibromomethane	ND		0.10		ug/L			03/23/12 13:00	1
Dichlorobromomethane	ND		0.10		ug/L			03/23/12 13:00	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/23/12 13:00	1
Ethylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
Hexachlorobutadiene	ND		0.20		ug/L			03/23/12 13:00	1
Isopropylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/23/12 13:00	1

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Lab Sample ID: MB 580-107852/5**

**Matrix: Water**

**Analysis Batch: 107852**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.50		ug/L			03/23/12 13:00	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/23/12 13:00	1
Naphthalene	ND		0.40		ug/L			03/23/12 13:00	1
n-Butylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
N-Propylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
o-Xylene	ND		0.10		ug/L			03/23/12 13:00	1
sec-Butylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
Styrene	ND		0.10		ug/L			03/23/12 13:00	1
tert-Butylbenzene	ND		0.10		ug/L			03/23/12 13:00	1
Tetrachloroethene	ND		0.10		ug/L			03/23/12 13:00	1
Toluene	ND		0.10		ug/L			03/23/12 13:00	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/23/12 13:00	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/23/12 13:00	1
Trichloroethene	ND		0.10		ug/L			03/23/12 13:00	1
Trichlorofluoromethane	ND		0.10		ug/L			03/23/12 13:00	1
Vinyl chloride	ND		0.020		ug/L			03/23/12 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		75 - 120		03/23/12 13:00	1
Ethylbenzene-d10	96		75 - 125		03/23/12 13:00	1
Fluorobenzene (Surr)	100		70 - 130		03/23/12 13:00	1
Trifluorotoluene (Surr)	97		80 - 125		03/23/12 13:00	1
Toluene-d8 (Surr)	92		75 - 125		03/23/12 13:00	1

**Lab Sample ID: LCS 580-107852/6**

**Matrix: Water**

**Analysis Batch: 107852**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.93	4.65		ug/L		94	75 - 125
1,1,1-Trichloroethane	5.00	5.78		ug/L		116	80 - 140
1,1,2,2-Tetrachloroethane	5.00	4.93		ug/L		99	75 - 125
1,1,2-Trichloroethane	4.94	4.88		ug/L		99	80 - 130
1,1-Dichloroethane	4.95	6.02		ug/L		122	75 - 135
1,1-Dichloroethene	4.95	5.19		ug/L		105	70 - 150
1,1-Dichloropropene	4.96	5.22		ug/L		105	80 - 130
1,2,3-Trichlorobenzene	5.00	3.86		ug/L		77	60 - 125
1,2,3-Trichloropropane	4.93	4.17		ug/L		85	75 - 120
1,2,4-Trichlorobenzene	4.97	3.55		ug/L		71	60 - 125
1,2,4-Trimethylbenzene	5.01	4.74		ug/L		95	80 - 125
1,2-Dibromo-3-Chloropropane	5.00	3.82		ug/L		76	55 - 120
1,2-Dibromoethane	5.00	4.82		ug/L		96	70 - 130
1,2-Dichlorobenzene	4.91	4.93		ug/L		100	80 - 130
1,2-Dichloroethane	4.96	5.20		ug/L		105	80 - 140
1,2-Dichloropropane	5.00	4.65		ug/L		93	80 - 120
1,3,5-Trimethylbenzene	5.00	4.77		ug/L		95	80 - 125
1,3-Dichlorobenzene	4.99	5.02		ug/L		101	80 - 120
1,3-Dichloropropane	5.00	4.76		ug/L		95	80 - 130
1,4-Dichlorobenzene	5.00	4.97		ug/L		99	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Lab Sample ID: LCS 580-107852/6**

**Matrix: Water**

**Analysis Batch: 107852**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	5.01	5.41		ug/L		108	60 - 150
2-Butanone	10.0	12.6		ug/L		126	20 - 200
2-Chlorotoluene	4.95	5.01		ug/L		101	75 - 130
2-Hexanone	9.83	9.31		ug/L		95	52 - 160
4-Chlorotoluene	4.93	5.11		ug/L		104	75 - 130
4-Isopropyltoluene	5.00	4.48		ug/L		90	80 - 120
4-Methyl-2-pentanone	9.97	7.85		ug/L		79	55 - 135
Acetone	10.0	19.9		ug/L		199	30 - 200
Benzene	4.98	5.18		ug/L		104	80 - 120
Bromobenzene	4.98	4.87		ug/L		98	80 - 130
Bromoform	4.98	4.13		ug/L		83	65 - 130
Bromomethane	5.02	4.19		ug/L		83	70 - 135
Carbon disulfide	10.0	8.74		ug/L		87	65 - 160
Carbon tetrachloride	5.01	5.05		ug/L		101	75 - 140
Chlorobenzene	5.00	5.14		ug/L		103	80 - 120
Chlorobromomethane	4.96	5.13		ug/L		103	80 - 125
Chlorodibromomethane	4.96	4.13		ug/L		83	70 - 120
Chloroethane	5.00	6.24		ug/L		125	75 - 140
Chloroform	5.00	5.43		ug/L		109	80 - 130
Chloromethane	5.02	4.77		ug/L		95	50 - 140
cis-1,2-Dichloroethene	5.00	4.85		ug/L		97	80 - 130
cis-1,3-Dichloropropene	5.25	4.06		ug/L		77	70 - 120
Dibromomethane	4.93	4.97		ug/L		101	80 - 130
Dichlorobromomethane	4.94	4.42		ug/L		90	80 - 125
Dichlorodifluoromethane	5.00	5.27		ug/L		105	30 - 180
Ethylbenzene	4.96	4.81		ug/L		97	80 - 125
Hexachlorobutadiene	5.00	4.60		ug/L		92	75 - 135
Isopropylbenzene	5.00	4.03		ug/L		81	75 - 120
Methyl tert-butyl ether	5.00	4.59		ug/L		92	75 - 120
Methylene Chloride	5.00	5.42		ug/L		108	60 - 145
m-Xylene & p-Xylene	9.99	10.5		ug/L		105	80 - 130
Naphthalene	5.00	3.06		ug/L		61	45 - 130
n-Butylbenzene	4.95	4.63		ug/L		94	75 - 125
N-Propylbenzene	5.00	4.47		ug/L		89	80 - 120
o-Xylene	4.95	4.63		ug/L		94	80 - 120
sec-Butylbenzene	5.00	4.83		ug/L		97	80 - 125
Styrene	4.99	4.63		ug/L		93	75 - 130
tert-Butylbenzene	4.98	4.93		ug/L		99	80 - 130
Tetrachloroethene	5.01	3.24		ug/L		65	40 - 180
Toluene	5.00	5.18		ug/L		104	80 - 120
trans-1,2-Dichloroethene	5.01	5.44		ug/L		109	80 - 140
trans-1,3-Dichloropropene	4.75	3.72		ug/L		78	60 - 140
Trichloroethene	5.00	5.36		ug/L		107	80 - 130
Trichlorofluoromethane	5.00	6.09		ug/L		122	30 - 180
Vinyl chloride	5.01	5.92		ug/L		118	65 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		75 - 120
Ethylbenzene-d10	100		75 - 125



# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Lab Sample ID: LCS 580-107852/6**

**Matrix: Water**

**Analysis Batch: 107852**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Fluorobenzene (Surr)	101		70 - 130
Trifluorotoluene (Surr)	113		80 - 125
Toluene-d8 (Surr)	106		75 - 125

**Lab Sample ID: LCSD 580-107852/7**

**Matrix: Water**

**Analysis Batch: 107852**

**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
1,1,1,2-Tetrachloroethane	4.93	4.57		ug/L		93	75 - 125	2	20
1,1,1-Trichloroethane	5.00	5.98		ug/L		120	80 - 140	3	20
1,1,2,2-Tetrachloroethane	5.00	4.69		ug/L		94	75 - 125	5	20
1,1,2-Trichloroethane	4.94	5.10		ug/L		103	80 - 130	4	20
1,1-Dichloroethane	4.95	5.88		ug/L		119	75 - 135	2	20
1,1-Dichloroethene	4.95	5.44		ug/L		110	70 - 150	5	20
1,1-Dichloropropene	4.96	5.17		ug/L		104	80 - 130	1	20
1,2,3-Trichlorobenzene	5.00	3.98		ug/L		80	60 - 125	3	20
1,2,3-Trichloropropane	4.93	4.63		ug/L		94	75 - 120	10	20
1,2,4-Trichlorobenzene	4.97	3.86		ug/L		78	60 - 125	8	20
1,2,4-Trimethylbenzene	5.01	4.77		ug/L		95	80 - 125	1	20
1,2-Dibromo-3-Chloropropane	5.00	3.94		ug/L		79	55 - 120	3	20
1,2-Dibromoethane	5.00	4.90		ug/L		98	70 - 130	2	20
1,2-Dichlorobenzene	4.91	5.13		ug/L		104	80 - 130	4	20
1,2-Dichloroethane	4.96	5.53		ug/L		112	80 - 140	6	20
1,2-Dichloropropane	5.00	4.78		ug/L		96	80 - 120	3	20
1,3,5-Trimethylbenzene	5.00	4.77		ug/L		95	80 - 125	0	20
1,3-Dichlorobenzene	4.99	5.11		ug/L		102	80 - 120	2	20
1,3-Dichloropropane	5.00	4.80		ug/L		96	80 - 130	1	20
1,4-Dichlorobenzene	5.00	5.15		ug/L		103	80 - 120	4	20
2,2-Dichloropropane	5.01	5.66		ug/L		113	60 - 150	5	20
2-Butanone	10.0	12.8		ug/L		128	20 - 200	2	20
2-Chlorotoluene	4.95	4.98		ug/L		101	75 - 130	1	20
2-Hexanone	9.83	9.70		ug/L		99	52 - 160	4	20
4-Chlorotoluene	4.93	5.10		ug/L		104	75 - 130	0	20
4-Isopropyltoluene	5.00	4.53		ug/L		91	80 - 120	1	20
4-Methyl-2-pentanone	9.97	8.34		ug/L		84	55 - 135	6	20
Acetone	10.0	16.5		ug/L		165	30 - 200	19	20
Benzene	4.98	5.45		ug/L		109	80 - 120	5	20
Bromobenzene	4.98	4.86		ug/L		98	80 - 130	0	20
Bromoform	4.98	4.07		ug/L		82	65 - 130	1	20
Bromomethane	5.02	6.27	*	ug/L		125	70 - 135	40	20
Carbon disulfide	10.0	10.1		ug/L		101	65 - 160	14	20
Carbon tetrachloride	5.01	5.25		ug/L		105	75 - 140	4	20
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120	6	20
Chlorobromomethane	4.96	5.35		ug/L		108	80 - 125	4	20
Chlorodibromomethane	4.96	4.21		ug/L		85	70 - 120	2	20
Chloroethane	5.00	7.34	*	ug/L		147	75 - 140	16	20
Chloroform	5.00	5.60		ug/L		112	80 - 130	3	20
Chloromethane	5.02	5.15		ug/L		103	50 - 140	8	20

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

**Lab Sample ID: LCSD 580-107852/7**

**Matrix: Water**

**Analysis Batch: 107852**

**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
cis-1,2-Dichloroethene	5.00	5.02		ug/L		100	80 - 130	3	20
cis-1,3-Dichloropropene	5.25	4.09		ug/L		78	70 - 120	1	20
Dibromomethane	4.93	5.25		ug/L		106	80 - 130	5	20
Dichlorobromomethane	4.94	4.52		ug/L		92	80 - 125	2	20
Dichlorodifluoromethane	5.00	6.02		ug/L		120	30 - 180	13	20
Ethylbenzene	4.96	4.73		ug/L		95	80 - 125	2	20
Hexachlorobutadiene	5.00	5.07		ug/L		101	75 - 135	10	20
Isopropylbenzene	5.00	3.92		ug/L		78	75 - 120	3	20
Methyl tert-butyl ether	5.00	4.66		ug/L		93	75 - 120	2	20
Methylene Chloride	5.00	5.78		ug/L		116	60 - 145	6	20
m-Xylene & p-Xylene	9.99	10.1		ug/L		101	80 - 130	4	20
Naphthalene	5.00	3.17		ug/L		63	45 - 130	4	20
n-Butylbenzene	4.95	4.77		ug/L		96	75 - 125	3	20
N-Propylbenzene	5.00	4.32		ug/L		86	80 - 120	3	20
o-Xylene	4.95	4.46		ug/L		90	80 - 120	4	20
sec-Butylbenzene	5.00	4.78		ug/L		96	80 - 125	1	20
Styrene	4.99	4.39		ug/L		88	75 - 130	5	20
tert-Butylbenzene	4.98	4.56		ug/L		92	80 - 130	8	20
Tetrachloroethene	5.01	3.43		ug/L		69	40 - 180	6	20
Toluene	5.00	5.36		ug/L		107	80 - 120	3	20
trans-1,2-Dichloroethene	5.01	5.44		ug/L		109	80 - 140	0	20
trans-1,3-Dichloropropene	4.75	3.81		ug/L		80	60 - 140	2	20
Trichloroethene	5.00	5.64		ug/L		113	80 - 130	5	20
Trichlorofluoromethane	5.00	6.88		ug/L		138	30 - 180	12	20
Vinyl chloride	5.01	6.91		ug/L		138	65 - 140	15	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		75 - 120
Ethylbenzene-d10	99		75 - 125
Fluorobenzene (Surr)	104		70 - 130
Trifluorotoluene (Surr)	110		80 - 125
Toluene-d8 (Surr)	106		75 - 125

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

**Lab Sample ID: MB 250-2450/1-A**

**Matrix: Water**

**Analysis Batch: 2554**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 2450**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.025		mg/L		03/19/12 11:07	03/20/12 15:48	1
Manganese	ND		0.0020		mg/L		03/19/12 11:07	03/20/12 15:48	1

**Lab Sample ID: LCS 250-2450/2-A**

**Matrix: Water**

**Analysis Batch: 2554**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 2450**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.96		mg/L		98	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

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

Lab Sample ID: LCS 250-2450/2-A  
Matrix: Water  
Analysis Batch: 2554

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 2450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.0941		mg/L		94	80 - 120

Lab Sample ID: 250-743-2 MS  
Matrix: Water  
Analysis Batch: 2554

Client Sample ID: LB-031312-08  
Prep Type: Dissolved  
Prep Batch: 2450

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		2.00	1.96		mg/L		97	75 - 125
Manganese	0.0023		0.100	0.0974		mg/L		95	75 - 125

Lab Sample ID: 250-743-1 DU  
Matrix: Water  
Analysis Batch: 2554

Client Sample ID: LB-031312-07  
Prep Type: Dissolved  
Prep Batch: 2450

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	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 250-2531/1  
Matrix: Water  
Analysis Batch: 2531

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			03/20/12 16:01	1

Lab Sample ID: LCS 250-2531/2  
Matrix: Water  
Analysis Batch: 2531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	100	101		mg/L		101	80 - 120

Lab Sample ID: 250-743-3 DU  
Matrix: Water  
Analysis Batch: 2531

Client Sample ID: LB-031312-09  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	180		176		mg/L		NC	20

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 250-2322/44  
Matrix: Water  
Analysis Batch: 2322

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			03/15/12 00:02	1

# QC Sample Results

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

TestAmerica Job ID: 250-743-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 250-2322/45**

**Matrix: Water**

**Analysis Batch: 2322**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110

**Lab Sample ID: MB 250-2323/44**

**Matrix: Water**

**Analysis Batch: 2323**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10	mg/L			03/15/12 00:02	1

**Lab Sample ID: LCS 250-2323/45**

**Matrix: Water**

**Analysis Batch: 2323**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.00	4.97		mg/L		99	90 - 110

**Lab Sample ID: 250-717-E-5 MSD**

**Matrix: Water**

**Analysis Batch: 2323**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	6.3		2.00	7.76	F	mg/L		71	80 - 120	0	20

**Lab Sample ID: 250-717-E-6 MS**

**Matrix: Water**

**Analysis Batch: 2323**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	3.8		2.00	5.56		mg/L		86	80 - 120

**Lab Sample ID: 250-717-E-5 DU**

**Matrix: Water**

**Analysis Batch: 2323**

**Client Sample ID: Duplicate**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrogen, Nitrate	6.3		6.35		mg/L		0.05	20

# QC Association Summary

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

TestAmerica Job ID: 250-743-1

## GC/MS VOA

### Analysis Batch: 107852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-743-1	LB-031312-07	Total/NA	Water	8260B	
250-743-2	LB-031312-08	Total/NA	Water	8260B	
250-743-3	LB-031312-09	Total/NA	Water	8260B	
250-743-4	LB-031312-10	Total/NA	Water	8260B	
250-743-5	LB-031312-11	Total/NA	Water	8260B	
250-743-6	LB-031312-12	Total/NA	Water	8260B	
250-743-7	LB-031312-13	Total/NA	Water	8260B	
250-743-8	LB-031312-14	Total/NA	Water	8260B	
250-743-9	LB-031312-15	Total/NA	Water	8260B	
250-743-10	LB-031312-16	Total/NA	Water	8260B	
LCS 580-107852/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 580-107852/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 580-107852/5	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 2450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-743-1	LB-031312-07	Dissolved	Water	3005A	
250-743-1 DU	LB-031312-07	Dissolved	Water	3005A	
250-743-2	LB-031312-08	Dissolved	Water	3005A	
250-743-2 MS	LB-031312-08	Dissolved	Water	3005A	
250-743-3	LB-031312-09	Dissolved	Water	3005A	
250-743-4	LB-031312-10	Dissolved	Water	3005A	
250-743-5	LB-031312-11	Dissolved	Water	3005A	
250-743-6	LB-031312-12	Dissolved	Water	3005A	
250-743-7	LB-031312-13	Dissolved	Water	3005A	
250-743-8	LB-031312-14	Dissolved	Water	3005A	
250-743-9	LB-031312-15	Dissolved	Water	3005A	
250-743-10	LB-031312-16	Dissolved	Water	3005A	
LCS 250-2450/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 250-2450/1-A	Method Blank	Total/NA	Water	3005A	

### Analysis Batch: 2554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-743-1	LB-031312-07	Dissolved	Water	6020	2450
250-743-1 DU	LB-031312-07	Dissolved	Water	6020	2450
250-743-2	LB-031312-08	Dissolved	Water	6020	2450
250-743-2 MS	LB-031312-08	Dissolved	Water	6020	2450
250-743-3	LB-031312-09	Dissolved	Water	6020	2450
250-743-4	LB-031312-10	Dissolved	Water	6020	2450
250-743-5	LB-031312-11	Dissolved	Water	6020	2450
250-743-6	LB-031312-12	Dissolved	Water	6020	2450
250-743-7	LB-031312-13	Dissolved	Water	6020	2450
250-743-8	LB-031312-14	Dissolved	Water	6020	2450
250-743-9	LB-031312-15	Dissolved	Water	6020	2450
250-743-9	LB-031312-15	Dissolved	Water	6020	2450
250-743-10	LB-031312-16	Dissolved	Water	6020	2450
LCS 250-2450/2-A	Lab Control Sample	Total/NA	Water	6020	2450
MB 250-2450/1-A	Method Blank	Total/NA	Water	6020	2450

# QC Association Summary

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

TestAmerica Job ID: 250-743-1

## General Chemistry

### Analysis Batch: 2322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-743-1	LB-031312-07	Total/NA	Water	300.0	
250-743-2	LB-031312-08	Total/NA	Water	300.0	
250-743-3	LB-031312-09	Total/NA	Water	300.0	
250-743-4	LB-031312-10	Total/NA	Water	300.0	
250-743-5	LB-031312-11	Total/NA	Water	300.0	
250-743-6	LB-031312-12	Total/NA	Water	300.0	
250-743-7	LB-031312-13	Total/NA	Water	300.0	
250-743-8	LB-031312-14	Total/NA	Water	300.0	
250-743-9	LB-031312-15	Total/NA	Water	300.0	
250-743-10	LB-031312-16	Total/NA	Water	300.0	
LCS 250-2322/45	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2322/44	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-717-E-5 DU	Duplicate	Total/NA	Water	300.0	
250-717-E-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
250-717-E-6 MS	Matrix Spike	Total/NA	Water	300.0	
250-743-1	LB-031312-07	Total/NA	Water	300.0	
250-743-2	LB-031312-08	Total/NA	Water	300.0	
250-743-3	LB-031312-09	Total/NA	Water	300.0	
250-743-4	LB-031312-10	Total/NA	Water	300.0	
250-743-5	LB-031312-11	Total/NA	Water	300.0	
250-743-6	LB-031312-12	Total/NA	Water	300.0	
250-743-7	LB-031312-13	Total/NA	Water	300.0	
250-743-8	LB-031312-14	Total/NA	Water	300.0	
250-743-9	LB-031312-15	Total/NA	Water	300.0	
250-743-10	LB-031312-16	Total/NA	Water	300.0	
LCS 250-2323/45	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2323/44	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-743-1	LB-031312-07	Total/NA	Water	160.1	
250-743-2	LB-031312-08	Total/NA	Water	160.1	
250-743-3	LB-031312-09	Total/NA	Water	160.1	
250-743-3 DU	LB-031312-09	Total/NA	Water	160.1	
250-743-4	LB-031312-10	Total/NA	Water	160.1	
250-743-5	LB-031312-11	Total/NA	Water	160.1	
250-743-6	LB-031312-12	Total/NA	Water	160.1	
250-743-7	LB-031312-13	Total/NA	Water	160.1	
250-743-8	LB-031312-14	Total/NA	Water	160.1	
250-743-9	LB-031312-15	Total/NA	Water	160.1	
250-743-10	LB-031312-16	Total/NA	Water	160.1	
LCS 250-2531/2	Lab Control Sample	Total/NA	Water	160.1	
MB 250-2531/1	Method Blank	Total/NA	Water	160.1	

# Certification Summary

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

TestAmerica Job ID: 250-743-1

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

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





# Method Summary

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

TestAmerica Job ID: 250-743-1

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

#### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

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

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

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: 250-743

CLIENT: SCS Engineers  
 REPORT TO: David Lomadrini  
 ADDRESS: 14945 SW 59000th Bldg. Ste 150  
 Portland, OR 97224  
 PHONE: 503.639-9315 FAX:  
 PROJECT NAME: Leichter Brothers Landfill  
 PROJECT NUMBER: 0412030.01.17  
 SAMPLED BY: J. Andrews

INVOICE TO: SCS Engineers  
 Portland, OR

P.O. NUMBER:

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE				REQUESTED ANALYSES				MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
		HCl	H <sub>2</sub> O <sub>2</sub>	—	—	TDS	Chloride	Metals	Organic & Inorganic				
1 LB-031312-07	3/13/12 @ 827	X	X	X	X	X	X	X	W	5	low level VOCs		
2 LB-031312-08	3/13/12 @ 900	X	X	X	X	X	X	X	W	5	Samples were for B.S. Metals		
3 LB-031312-09	3/13/12 @ 949	X	X	X	X	X	X	X	W	5			
4 LB-031312-10	3/13/12 @ 1040	X	X	X	X	X	X	X	W	5			
5 LB-031312-11	3/13/12 @ 1150	X	X	X	X	X	X	X	W	5			
6 LB-031312-12	3/13/12 @ 1245	X	X	X	X	X	X	X	W	5			
7 LB-031312-13	3/13/12 @ 1335	X	X	X	X	X	X	X	W	5			
8 LB-031312-14	3/13/12 @ 1415	X	X	X	X	X	X	X	W	5			
9 LB-031312-15	3/13/12 @ 1500	X	X	X	X	X	X	X	W	5			
10 LB-031312-16	3/13/12 @ 1548	X	X	X	X	X	X	X	W	5			

DATE: 3/14/12  
 TIME: 11:17  
 FIRM: TAP

RECEIVED BY: [Signature]  
 PRINT NAME: Bob F

DATE: 3/14/12  
 TIME: 11:33  
 FIRM: TAP

RECEIVED BY: [Signature]  
 PRINT NAME: [Signature]

DATE: 3/14/12  
 TIME: 11:33  
 FIRM: TAP

TEMP: 3.8  
 PAGE 3.8 OF 10

IR Plastic loose

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-743-1

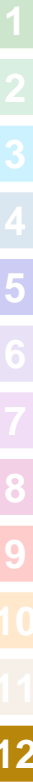
**Login Number: 743**

**List Source: TestAmerica Portland**

**List Number: 1**

**Creator: Morgan, Jessica**

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



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-743-1

**Login Number: 743**

**List Number: 1**

**Creator: Blankinship, Tom**

**List Source: TestAmerica Seattle**

**List Creation: 03/19/12 02:03 PM**

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



# 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: 250-1073-1

TestAmerica Sample Delivery Group: 04212030.01/.17  
Client Project/Site: Leichner Landfill - Wash.  
Revision: 1

For:

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

Attn: Mr. David Lamadrid



Authorized for release by:  
6/11/2012 6:45:44 PM

Vanessa Frahs  
Project Manager I  
[vanessa.frahs@testamericainc.com](mailto:vanessa.frahs@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

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# Sample Summary

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-1073-1	LB-032212-17	Water	03/22/12 09:55	03/23/12 10:55
250-1073-2	LB-032212-18	Water	03/22/12 10:50	03/23/12 10:55
250-1073-3	LB-032212-19	Water	03/22/12 13:15	03/23/12 10:55
250-1073-4	LB-032212-20	Water	03/22/12 12:00	03/23/12 10:55
250-1073-5	LB-032212-21	Water	03/22/12 14:05	03/23/12 10:55
250-1073-6	LB-032212-22	Water	03/22/12 14:00	03/23/12 10:55
250-1073-7	LB-032212-23	Water	03/22/12 15:30	03/23/12 10:55

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# Case Narrative

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

**Job ID: 250-1073-1**

**Laboratory: TestAmerica Portland**

## Narrative

### Job Narrative 250-1073-1

#### Comment

Revised Report - This includes 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, and carbon disulfide in the 8260 Volatiles list.

#### Receipt

The samples were received on 3/23/2012 10:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

#### GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) for Tetrachloroethene associated with batch 580-108189 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been flagged as appropriate and reported.

Method(s) 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 580-108189 exceeded control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and LCSD but was not detected in the associated samples at a concentration above the reporting limit; therefore, the data have been flagged as appropriate and reported.

No other analytical or quality issues were noted.

#### Metals

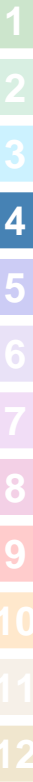
No analytical or quality issues were noted.

#### Field Service / Mobile Lab

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.



# Definitions/Glossary

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

## Qualifiers

### GC/MS VOA

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

### General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

## Glossary

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

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
 SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-17**

**Date Collected: 03/22/12 09:55**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 08:20	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 08:20	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 08:20	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 08:20	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 08:20	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 08:20	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 08:20	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:20	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 08:20	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 08:20	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:20	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 08:20	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:20	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 08:20	1
2-Butanone	ND		2.0		ug/L			03/30/12 08:20	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 08:20	1
2-Hexanone	ND		1.0		ug/L			03/30/12 08:20	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 08:20	1
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 08:20	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 08:20	1
Acetone	ND		2.0		ug/L			03/30/12 08:20	1
Benzene	ND		0.10		ug/L			03/30/12 08:20	1
Bromobenzene	ND		0.10		ug/L			03/30/12 08:20	1
Bromoform	ND		0.10		ug/L			03/30/12 08:20	1
Bromomethane	ND		0.10		ug/L			03/30/12 08:20	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 08:20	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 08:20	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 08:20	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 08:20	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 08:20	1
Chloroethane	ND *		0.25		ug/L			03/30/12 08:20	1
Chloroform	ND		0.10		ug/L			03/30/12 08:20	1
Chloromethane	ND		0.10		ug/L			03/30/12 08:20	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 08:20	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 08:20	1
Dibromomethane	ND		0.10		ug/L			03/30/12 08:20	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 08:20	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 08:20	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 08:20	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 08:20	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 08:20	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 08:20	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-17**  
**Date Collected: 03/22/12 09:55**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/30/12 08:20	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
o-Xylene	ND		0.10		ug/L			03/30/12 08:20	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
Styrene	ND		0.10		ug/L			03/30/12 08:20	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 08:20	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 08:20	1
Toluene	ND		0.10		ug/L			03/30/12 08:20	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 08:20	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 08:20	1
Trichloroethene	ND		0.10		ug/L			03/30/12 08:20	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 08:20	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 08:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 120					03/30/12 08:20	1
Ethylbenzene-d10	98		75 - 125					03/30/12 08:20	1
Fluorobenzene (Surr)	96		70 - 130					03/30/12 08:20	1
Trifluorotoluene (Surr)	100		80 - 125					03/30/12 08:20	1
Toluene-d8 (Surr)	88		75 - 125					03/30/12 08:20	1

**Client Sample ID: LB-032212-18**  
**Date Collected: 03/22/12 10:50**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 08:46	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 08:46	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 08:46	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 08:46	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 08:46	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 08:46	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 08:46	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:46	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 08:46	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 08:46	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:46	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 08:46	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 08:46	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 08:46	1
2-Butanone	ND		2.0		ug/L			03/30/12 08:46	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 08:46	1
2-Hexanone	ND		1.0		ug/L			03/30/12 08:46	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 08:46	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-18**  
**Date Collected: 03/22/12 10:50**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 08:46	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 08:46	1
Acetone	ND		2.0		ug/L			03/30/12 08:46	1
Benzene	ND		0.10		ug/L			03/30/12 08:46	1
Bromobenzene	ND		0.10		ug/L			03/30/12 08:46	1
Bromoform	ND		0.10		ug/L			03/30/12 08:46	1
Bromomethane	ND		0.10		ug/L			03/30/12 08:46	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 08:46	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 08:46	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 08:46	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 08:46	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 08:46	1
Chloroethane	ND *		0.25		ug/L			03/30/12 08:46	1
Chloroform	ND		0.10		ug/L			03/30/12 08:46	1
Chloromethane	ND		0.10		ug/L			03/30/12 08:46	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 08:46	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 08:46	1
Dibromomethane	ND		0.10		ug/L			03/30/12 08:46	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 08:46	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 08:46	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 08:46	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 08:46	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 08:46	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 08:46	1
Naphthalene	ND		0.40		ug/L			03/30/12 08:46	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
o-Xylene	ND		0.10		ug/L			03/30/12 08:46	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
Styrene	ND		0.10		ug/L			03/30/12 08:46	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 08:46	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 08:46	1
Toluene	ND		0.10		ug/L			03/30/12 08:46	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 08:46	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 08:46	1
Trichloroethene	ND		0.10		ug/L			03/30/12 08:46	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 08:46	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 08:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 120		03/30/12 08:46	1
Ethylbenzene-d10	103		75 - 125		03/30/12 08:46	1
Fluorobenzene (Surr)	97		70 - 130		03/30/12 08:46	1
Trifluorotoluene (Surr)	97		80 - 125		03/30/12 08:46	1
Toluene-d8 (Surr)	91		75 - 125		03/30/12 08:46	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-19**

**Date Collected: 03/22/12 13:15**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 09:11	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 09:11	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 09:11	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 09:11	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 09:11	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 09:11	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 09:11	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:11	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 09:11	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 09:11	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:11	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 09:11	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:11	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 09:11	1
2-Butanone	ND		2.0		ug/L			03/30/12 09:11	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 09:11	1
2-Hexanone	ND		1.0		ug/L			03/30/12 09:11	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 09:11	1
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 09:11	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 09:11	1
Acetone	ND		2.0		ug/L			03/30/12 09:11	1
Benzene	ND		0.10		ug/L			03/30/12 09:11	1
Bromobenzene	ND		0.10		ug/L			03/30/12 09:11	1
Bromoform	ND		0.10		ug/L			03/30/12 09:11	1
Bromomethane	ND		0.10		ug/L			03/30/12 09:11	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 09:11	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 09:11	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 09:11	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 09:11	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 09:11	1
Chloroethane	ND *		0.25		ug/L			03/30/12 09:11	1
Chloroform	ND		0.10		ug/L			03/30/12 09:11	1
Chloromethane	ND		0.10		ug/L			03/30/12 09:11	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 09:11	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 09:11	1
Dibromomethane	ND		0.10		ug/L			03/30/12 09:11	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 09:11	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 09:11	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 09:11	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 09:11	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 09:11	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 09:11	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-19**  
**Date Collected: 03/22/12 13:15**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/30/12 09:11	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
o-Xylene	ND		0.10		ug/L			03/30/12 09:11	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
Styrene	ND		0.10		ug/L			03/30/12 09:11	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 09:11	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 09:11	1
Toluene	ND		0.10		ug/L			03/30/12 09:11	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 09:11	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 09:11	1
Trichloroethene	ND		0.10		ug/L			03/30/12 09:11	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 09:11	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 09:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 120					03/30/12 09:11	1
Ethylbenzene-d10	98		75 - 125					03/30/12 09:11	1
Fluorobenzene (Surr)	96		70 - 130					03/30/12 09:11	1
Trifluorotoluene (Surr)	96		80 - 125					03/30/12 09:11	1
Toluene-d8 (Surr)	89		75 - 125					03/30/12 09:11	1

**Client Sample ID: LB-032212-20**  
**Date Collected: 03/22/12 12:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 09:39	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 09:39	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 09:39	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 09:39	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 09:39	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 09:39	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 09:39	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:39	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 09:39	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 09:39	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:39	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 09:39	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 09:39	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 09:39	1
2-Butanone	ND		2.0		ug/L			03/30/12 09:39	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 09:39	1
2-Hexanone	ND		1.0		ug/L			03/30/12 09:39	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 09:39	1



# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-20**  
**Date Collected: 03/22/12 12:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 09:39	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 09:39	1
Acetone	ND		2.0		ug/L			03/30/12 09:39	1
Benzene	ND		0.10		ug/L			03/30/12 09:39	1
Bromobenzene	ND		0.10		ug/L			03/30/12 09:39	1
Bromoform	ND		0.10		ug/L			03/30/12 09:39	1
Bromomethane	ND		0.10		ug/L			03/30/12 09:39	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 09:39	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 09:39	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 09:39	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 09:39	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 09:39	1
Chloroethane	ND	*	0.25		ug/L			03/30/12 09:39	1
Chloroform	ND		0.10		ug/L			03/30/12 09:39	1
Chloromethane	ND		0.10		ug/L			03/30/12 09:39	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 09:39	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 09:39	1
Dibromomethane	ND		0.10		ug/L			03/30/12 09:39	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 09:39	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 09:39	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 09:39	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 09:39	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 09:39	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 09:39	1
Naphthalene	ND		0.40		ug/L			03/30/12 09:39	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
o-Xylene	ND		0.10		ug/L			03/30/12 09:39	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
Styrene	ND		0.10		ug/L			03/30/12 09:39	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 09:39	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 09:39	1
Toluene	ND		0.10		ug/L			03/30/12 09:39	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 09:39	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 09:39	1
Trichloroethene	ND		0.10		ug/L			03/30/12 09:39	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 09:39	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 09:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 120					03/30/12 09:39	1
Ethylbenzene-d10	106		75 - 125					03/30/12 09:39	1
Fluorobenzene (Surr)	97		70 - 130					03/30/12 09:39	1
Trifluorotoluene (Surr)	99		80 - 125					03/30/12 09:39	1
Toluene-d8 (Surr)	88		75 - 125					03/30/12 09:39	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-21**

**Date Collected: 03/22/12 14:05**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 10:05	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 10:05	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 10:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 10:05	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 10:05	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 10:05	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 10:05	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:05	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 10:05	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:05	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:05	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 10:05	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:05	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:05	1
2-Butanone	ND		2.0		ug/L			03/30/12 10:05	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 10:05	1
2-Hexanone	ND		1.0		ug/L			03/30/12 10:05	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 10:05	1
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 10:05	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 10:05	1
Acetone	ND		2.0		ug/L			03/30/12 10:05	1
Benzene	ND		0.10		ug/L			03/30/12 10:05	1
Bromobenzene	ND		0.10		ug/L			03/30/12 10:05	1
Bromoform	ND		0.10		ug/L			03/30/12 10:05	1
Bromomethane	ND		0.10		ug/L			03/30/12 10:05	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 10:05	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 10:05	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 10:05	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 10:05	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 10:05	1
Chloroethane	ND *		0.25		ug/L			03/30/12 10:05	1
Chloroform	ND		0.10		ug/L			03/30/12 10:05	1
Chloromethane	ND		0.10		ug/L			03/30/12 10:05	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:05	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:05	1
Dibromomethane	ND		0.10		ug/L			03/30/12 10:05	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 10:05	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 10:05	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 10:05	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 10:05	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 10:05	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 10:05	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-21**  
**Date Collected: 03/22/12 14:05**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/30/12 10:05	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
o-Xylene	ND		0.10		ug/L			03/30/12 10:05	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
Styrene	ND		0.10		ug/L			03/30/12 10:05	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 10:05	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 10:05	1
Toluene	ND		0.10		ug/L			03/30/12 10:05	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:05	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:05	1
Trichloroethene	ND		0.10		ug/L			03/30/12 10:05	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 10:05	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 10:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 120					03/30/12 10:05	1
Ethylbenzene-d10	102		75 - 125					03/30/12 10:05	1
Fluorobenzene (Surr)	96		70 - 130					03/30/12 10:05	1
Trifluorotoluene (Surr)	100		80 - 125					03/30/12 10:05	1
Toluene-d8 (Surr)	89		75 - 125					03/30/12 10:05	1

**Client Sample ID: LB-032212-22**  
**Date Collected: 03/22/12 14:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 10:32	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 10:32	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 10:32	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 10:32	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 10:32	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 10:32	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 10:32	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:32	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 10:32	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:32	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:32	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 10:32	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:32	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:32	1
2-Butanone	ND		2.0		ug/L			03/30/12 10:32	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 10:32	1
2-Hexanone	ND		1.0		ug/L			03/30/12 10:32	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 10:32	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-22**  
**Date Collected: 03/22/12 14:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 10:32	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 10:32	1
Acetone	ND		2.0		ug/L			03/30/12 10:32	1
Benzene	ND		0.10		ug/L			03/30/12 10:32	1
Bromobenzene	ND		0.10		ug/L			03/30/12 10:32	1
Bromoform	ND		0.10		ug/L			03/30/12 10:32	1
Bromomethane	ND		0.10		ug/L			03/30/12 10:32	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 10:32	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 10:32	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 10:32	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 10:32	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 10:32	1
Chloroethane	ND *		0.25		ug/L			03/30/12 10:32	1
Chloroform	ND		0.10		ug/L			03/30/12 10:32	1
Chloromethane	ND		0.10		ug/L			03/30/12 10:32	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:32	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:32	1
Dibromomethane	ND		0.10		ug/L			03/30/12 10:32	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 10:32	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 10:32	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 10:32	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 10:32	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 10:32	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 10:32	1
Naphthalene	ND		0.40		ug/L			03/30/12 10:32	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
o-Xylene	ND		0.10		ug/L			03/30/12 10:32	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
Styrene	ND		0.10		ug/L			03/30/12 10:32	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 10:32	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 10:32	1
Toluene	ND		0.10		ug/L			03/30/12 10:32	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:32	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:32	1
Trichloroethene	ND		0.10		ug/L			03/30/12 10:32	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 10:32	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 10:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 120		03/30/12 10:32	1
Ethylbenzene-d10	103		75 - 125		03/30/12 10:32	1
Fluorobenzene (Surr)	97		70 - 130		03/30/12 10:32	1
Trifluorotoluene (Surr)	101		80 - 125		03/30/12 10:32	1
Toluene-d8 (Surr)	92		75 - 125		03/30/12 10:32	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-23**

**Date Collected: 03/22/12 15:30**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 10:57	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 10:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 10:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 10:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 10:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 10:57	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 10:57	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:57	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 10:57	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:57	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 10:57	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 10:57	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 10:57	1
2-Butanone	ND		2.0		ug/L			03/30/12 10:57	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 10:57	1
2-Hexanone	ND		1.0		ug/L			03/30/12 10:57	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 10:57	1
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 10:57	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 10:57	1
Acetone	ND		2.0		ug/L			03/30/12 10:57	1
Benzene	ND		0.10		ug/L			03/30/12 10:57	1
Bromobenzene	ND		0.10		ug/L			03/30/12 10:57	1
Bromoform	ND		0.10		ug/L			03/30/12 10:57	1
Bromomethane	ND		0.10		ug/L			03/30/12 10:57	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 10:57	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 10:57	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 10:57	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 10:57	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 10:57	1
Chloroethane	ND *		0.25		ug/L			03/30/12 10:57	1
Chloroform	ND		0.10		ug/L			03/30/12 10:57	1
Chloromethane	ND		0.10		ug/L			03/30/12 10:57	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:57	1
Dibromomethane	ND		0.10		ug/L			03/30/12 10:57	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 10:57	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 10:57	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 10:57	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 10:57	1
Methylene Chloride	ND		0.50		ug/L			03/30/12 10:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 10:57	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
 SDG: 04212030.01/.17

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

**Client Sample ID: LB-032212-23**  
**Date Collected: 03/22/12 15:30**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.40		ug/L			03/30/12 10:57	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
o-Xylene	ND		0.10		ug/L			03/30/12 10:57	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
Styrene	ND		0.10		ug/L			03/30/12 10:57	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 10:57	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 10:57	1
Toluene	ND		0.10		ug/L			03/30/12 10:57	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 10:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 10:57	1
Trichloroethene	ND		0.10		ug/L			03/30/12 10:57	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 10:57	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 10:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 120					03/30/12 10:57	1
Ethylbenzene-d10	107		75 - 125					03/30/12 10:57	1
Fluorobenzene (Surr)	95		70 - 130					03/30/12 10:57	1
Trifluorotoluene (Surr)	101		80 - 125					03/30/12 10:57	1
Toluene-d8 (Surr)	91		75 - 125					03/30/12 10:57	1

# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
 SDG: 04212030.01/17

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

**Client Sample ID: LB-032212-17**  
**Date Collected: 03/22/12 09:55**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 22:40	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 22:40	1

**Client Sample ID: LB-032212-18**  
**Date Collected: 03/22/12 10:50**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 22:44	1
Manganese	0.38		0.0020		mg/L		03/23/12 21:26	03/23/12 22:44	1

**Client Sample ID: LB-032212-19**  
**Date Collected: 03/22/12 13:15**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 22:54	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 22:54	1

**Client Sample ID: LB-032212-20**  
**Date Collected: 03/22/12 12:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 22:57	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 22:57	1

**Client Sample ID: LB-032212-21**  
**Date Collected: 03/22/12 14:05**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.037		0.025		mg/L		03/23/12 21:26	03/23/12 23:01	1
Manganese	0.0026		0.0020		mg/L		03/23/12 21:26	03/23/12 23:01	1

**Client Sample ID: LB-032212-22**  
**Date Collected: 03/22/12 14:00**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 23:06	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 23:06	1

**Client Sample ID: LB-032212-23**  
**Date Collected: 03/22/12 15:30**  
**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 23:09	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 23:09	1



# Client Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

## General Chemistry

**Client Sample ID: LB-032212-17**

**Date Collected: 03/22/12 09:55**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		10		mg/L			03/29/12 17:02	1
Chloride	4.1		0.50		mg/L			03/23/12 16:38	1
Nitrogen, Nitrate	3.7		0.10		mg/L			03/23/12 16:38	1

**Client Sample ID: LB-032212-18**

**Date Collected: 03/22/12 10:50**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10		mg/L			03/29/12 17:02	1
Chloride	23		0.50		mg/L			03/23/12 18:12	1
Nitrogen, Nitrate	0.16		0.10		mg/L			03/23/12 18:12	1

**Client Sample ID: LB-032212-19**

**Date Collected: 03/22/12 13:15**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10		mg/L			03/29/12 17:02	1
Chloride	6.1		0.50		mg/L			03/23/12 18:27	1
Nitrogen, Nitrate	4.1		0.10		mg/L			03/23/12 18:27	1

**Client Sample ID: LB-032212-20**

**Date Collected: 03/22/12 12:00**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			03/29/12 17:02	1
Chloride	6.1		0.50		mg/L			03/23/12 18:43	1
Nitrogen, Nitrate	4.0		0.10		mg/L			03/23/12 18:43	1

**Client Sample ID: LB-032212-21**

**Date Collected: 03/22/12 14:05**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10		mg/L			03/29/12 17:02	1
Chloride	8.4		0.50		mg/L			03/23/12 18:59	1
Nitrogen, Nitrate	4.8		0.10		mg/L			03/23/12 18:59	1

**Client Sample ID: LB-032212-22**

**Date Collected: 03/22/12 14:00**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10		mg/L			03/29/12 17:02	1
Chloride	5.6		0.50		mg/L			03/23/12 19:14	1
Nitrogen, Nitrate	1.7		0.10		mg/L			03/23/12 19:14	1

**Client Sample ID: LB-032212-23**

**Date Collected: 03/22/12 15:30**

**Date Received: 03/23/12 10:55**

**Lab Sample ID: 250-1073-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10		mg/L			03/29/12 17:02	1
Chloride	5.5		0.50		mg/L			03/23/12 19:30	1
Nitrogen, Nitrate	1.7		0.10		mg/L			03/23/12 19:30	1

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Lab Sample ID: MB 580-108189/4**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,1,1-Trichloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,1,2-Trichloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,1-Dichloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,1-Dichloroethene	ND		0.10		ug/L			03/30/12 01:10	1
1,1-Dichloropropene	ND		0.10		ug/L			03/30/12 01:10	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			03/30/12 01:10	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/30/12 01:10	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			03/30/12 01:10	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			03/30/12 01:10	1
1,2-Dibromoethane	ND		0.10		ug/L			03/30/12 01:10	1
1,2-Dichlorobenzene	ND		0.20		ug/L			03/30/12 01:10	1
1,2-Dichloroethane	ND		0.10		ug/L			03/30/12 01:10	1
1,2-Dichloropropane	ND		0.10		ug/L			03/30/12 01:10	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
1,3-Dichlorobenzene	ND		0.20		ug/L			03/30/12 01:10	1
1,3-Dichloropropane	ND		0.10		ug/L			03/30/12 01:10	1
1,4-Dichlorobenzene	ND		0.20		ug/L			03/30/12 01:10	1
2,2-Dichloropropane	ND		0.10		ug/L			03/30/12 01:10	1
2-Butanone	ND		2.0		ug/L			03/30/12 01:10	1
2-Chlorotoluene	ND		0.10		ug/L			03/30/12 01:10	1
2-Hexanone	ND		1.0		ug/L			03/30/12 01:10	1
4-Chlorotoluene	ND		0.20		ug/L			03/30/12 01:10	1
4-Isopropyltoluene	ND		0.20		ug/L			03/30/12 01:10	1
4-Methyl-2-pentanone	ND		0.50		ug/L			03/30/12 01:10	1
Acetone	ND		2.0		ug/L			03/30/12 01:10	1
Benzene	ND		0.10		ug/L			03/30/12 01:10	1
Bromobenzene	ND		0.10		ug/L			03/30/12 01:10	1
Bromoform	ND		0.10		ug/L			03/30/12 01:10	1
Bromomethane	ND		0.10		ug/L			03/30/12 01:10	1
Carbon disulfide	ND		0.10		ug/L			03/30/12 01:10	1
Carbon tetrachloride	ND		0.10		ug/L			03/30/12 01:10	1
Chlorobenzene	ND		0.10		ug/L			03/30/12 01:10	1
Chlorobromomethane	ND		0.10		ug/L			03/30/12 01:10	1
Chlorodibromomethane	ND		0.10		ug/L			03/30/12 01:10	1
Chloroethane	ND		0.25		ug/L			03/30/12 01:10	1
Chloroform	ND		0.10		ug/L			03/30/12 01:10	1
Chloromethane	ND		0.10		ug/L			03/30/12 01:10	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 01:10	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 01:10	1
Dibromomethane	ND		0.10		ug/L			03/30/12 01:10	1
Dichlorobromomethane	ND		0.10		ug/L			03/30/12 01:10	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/30/12 01:10	1
Ethylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
Hexachlorobutadiene	ND		0.20		ug/L			03/30/12 01:10	1
Isopropylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
Methyl tert-butyl ether	ND		0.10		ug/L			03/30/12 01:10	1

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Lab Sample ID: MB 580-108189/4**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.50		ug/L			03/30/12 01:10	1
m-Xylene & p-Xylene	ND		0.20		ug/L			03/30/12 01:10	1
Naphthalene	ND		0.40		ug/L			03/30/12 01:10	1
n-Butylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
N-Propylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
o-Xylene	ND		0.10		ug/L			03/30/12 01:10	1
sec-Butylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
Styrene	ND		0.10		ug/L			03/30/12 01:10	1
tert-Butylbenzene	ND		0.10		ug/L			03/30/12 01:10	1
Tetrachloroethene	ND		0.10		ug/L			03/30/12 01:10	1
Toluene	ND		0.10		ug/L			03/30/12 01:10	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			03/30/12 01:10	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			03/30/12 01:10	1
Trichloroethene	ND		0.10		ug/L			03/30/12 01:10	1
Trichlorofluoromethane	ND		0.10		ug/L			03/30/12 01:10	1
Vinyl chloride	ND		0.020		ug/L			03/30/12 01:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 120		03/30/12 01:10	1
Ethylbenzene-d10	101		75 - 125		03/30/12 01:10	1
Fluorobenzene (Surr)	98		70 - 130		03/30/12 01:10	1
Trifluorotoluene (Surr)	104		80 - 125		03/30/12 01:10	1
Toluene-d8 (Surr)	91		75 - 125		03/30/12 01:10	1

**Lab Sample ID: LCS 580-108189/5**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.93	5.18		ug/L		105	75 - 125
1,1,1-Trichloroethane	5.00	5.71		ug/L		114	80 - 140
1,1,2,2-Tetrachloroethane	5.00	4.07		ug/L		81	75 - 125
1,1,2-Trichloroethane	4.94	4.96		ug/L		100	80 - 130
1,1-Dichloroethane	4.95	5.79		ug/L		117	75 - 135
1,1-Dichloroethene	4.95	4.92		ug/L		99	70 - 150
1,1-Dichloropropene	4.96	5.12		ug/L		103	80 - 130
1,2,3-Trichlorobenzene	5.00	3.89		ug/L		78	60 - 125
1,2,3-Trichloropropane	4.93	4.59		ug/L		93	75 - 120
1,2,4-Trichlorobenzene	4.97	3.62		ug/L		73	60 - 125
1,2,4-Trimethylbenzene	5.01	4.87		ug/L		97	80 - 125
1,2-Dibromo-3-Chloropropane	5.00	4.30		ug/L		86	55 - 120
1,2-Dibromoethane	5.00	5.25		ug/L		105	70 - 130
1,2-Dichlorobenzene	4.91	4.91		ug/L		100	80 - 130
1,2-Dichloroethane	4.96	5.27		ug/L		106	80 - 140
1,2-Dichloropropane	5.00	4.61		ug/L		92	80 - 120
1,3,5-Trimethylbenzene	5.00	4.83		ug/L		97	80 - 125
1,3-Dichlorobenzene	4.99	5.57		ug/L		112	80 - 120
1,3-Dichloropropane	5.00	4.93		ug/L		99	80 - 130
1,4-Dichlorobenzene	5.00	4.96		ug/L		99	80 - 120

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Lab Sample ID: LCS 580-108189/5**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	5.01	4.56		ug/L		91	60 - 150
2-Butanone	10.0	10.9		ug/L		109	20 - 200
2-Chlorotoluene	4.95	5.48		ug/L		111	75 - 130
2-Hexanone	9.83	9.90		ug/L		101	52 - 160
4-Chlorotoluene	4.93	5.19		ug/L		105	75 - 130
4-Isopropyltoluene	5.00	4.35		ug/L		87	80 - 120
4-Methyl-2-pentanone	9.97	8.70		ug/L		87	55 - 135
Acetone	10.0	18.2		ug/L		182	30 - 200
Benzene	4.98	5.29		ug/L		106	80 - 120
Bromobenzene	4.98	5.17		ug/L		104	80 - 130
Bromoform	4.98	5.01		ug/L		101	65 - 130
Bromomethane	5.02	5.39		ug/L		107	70 - 135
Carbon disulfide	10.0	9.86		ug/L		98	65 - 160
Carbon tetrachloride	5.01	5.36		ug/L		107	75 - 140
Chlorobenzene	5.00	5.45		ug/L		109	80 - 120
Chlorobromomethane	4.96	5.26		ug/L		106	80 - 125
Chlorodibromomethane	4.96	4.91		ug/L		99	70 - 120
Chloroethane	5.00	7.08	*	ug/L		142	75 - 140
Chloroform	5.00	5.26		ug/L		105	80 - 130
Chloromethane	5.02	4.83		ug/L		96	50 - 140
cis-1,2-Dichloroethene	5.00	4.87		ug/L		97	80 - 130
cis-1,3-Dichloropropene	5.25	3.90		ug/L		74	70 - 120
Dibromomethane	4.93	5.20		ug/L		105	80 - 130
Dichlorobromomethane	4.94	5.32		ug/L		108	80 - 125
Dichlorodifluoromethane	5.00	6.19		ug/L		124	30 - 180
Ethylbenzene	4.96	5.19		ug/L		105	80 - 125
Hexachlorobutadiene	5.00	4.75		ug/L		95	75 - 135
Isopropylbenzene	5.00	4.09		ug/L		82	75 - 120
Methyl tert-butyl ether	5.00	4.60		ug/L		92	75 - 120
Methylene Chloride	5.00	5.06		ug/L		101	60 - 145
m-Xylene & p-Xylene	9.99	11.4		ug/L		114	80 - 130
Naphthalene	5.00	3.03		ug/L		61	45 - 130
n-Butylbenzene	4.95	4.09		ug/L		83	75 - 125
N-Propylbenzene	5.00	4.43		ug/L		89	80 - 120
o-Xylene	4.95	4.22		ug/L		85	80 - 120
sec-Butylbenzene	5.00	4.40		ug/L		88	80 - 125
Styrene	4.99	4.67		ug/L		94	75 - 130
tert-Butylbenzene	4.98	4.54		ug/L		91	80 - 130
Tetrachloroethene	5.01	4.28	^	ug/L		86	40 - 180
Toluene	5.00	5.51		ug/L		110	80 - 120
trans-1,2-Dichloroethene	5.01	4.93		ug/L		99	80 - 140
trans-1,3-Dichloropropene	4.75	3.57		ug/L		75	60 - 140
Trichloroethene	5.00	5.68		ug/L		114	80 - 130
Trichlorofluoromethane	5.00	5.89		ug/L		118	30 - 180
Vinyl chloride	5.01	6.06		ug/L		121	65 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		75 - 120
Ethylbenzene-d10	101		75 - 125

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Lab Sample ID: LCS 580-108189/5**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Fluorobenzene (Surr)	102		70 - 130
Trifluorotoluene (Surr)	111		80 - 125
Toluene-d8 (Surr)	110		75 - 125

**Lab Sample ID: LCSD 580-108189/6**

**Matrix: Water**

**Analysis Batch: 108189**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
							Limits		
1,1,1,2-Tetrachloroethane	4.93	5.51		ug/L		112	75 - 125	6	20
1,1,1-Trichloroethane	5.00	5.58		ug/L		112	80 - 140	2	20
1,1,1,2-Tetrachloroethane	5.00	4.17		ug/L		83	75 - 125	2	20
1,1,2-Trichloroethane	4.94	5.28		ug/L		107	80 - 130	6	20
1,1-Dichloroethane	4.95	5.79		ug/L		117	75 - 135	0	20
1,1-Dichloroethene	4.95	5.02		ug/L		101	70 - 150	2	20
1,1-Dichloropropene	4.96	5.26		ug/L		106	80 - 130	3	20
1,2,3-Trichlorobenzene	5.00	4.08		ug/L		82	60 - 125	5	20
1,2,3-Trichloropropane	4.93	4.71		ug/L		96	75 - 120	3	20
1,2,4-Trichlorobenzene	4.97	3.82		ug/L		77	60 - 125	5	20
1,2,4-Trimethylbenzene	5.01	4.96		ug/L		99	80 - 125	2	20
1,2-Dibromo-3-Chloropropane	5.00	4.35		ug/L		87	55 - 120	1	20
1,2-Dibromoethane	5.00	5.49		ug/L		110	70 - 130	4	20
1,2-Dichlorobenzene	4.91	5.06		ug/L		103	80 - 130	3	20
1,2-Dichloroethane	4.96	5.16		ug/L		104	80 - 140	2	20
1,2-Dichloropropane	5.00	4.97		ug/L		99	80 - 120	8	20
1,3,5-Trimethylbenzene	5.00	4.96		ug/L		99	80 - 125	3	20
1,3-Dichlorobenzene	4.99	5.78		ug/L		116	80 - 120	4	20
1,3-Dichloropropane	5.00	5.09		ug/L		102	80 - 130	3	20
1,4-Dichlorobenzene	5.00	5.04		ug/L		101	80 - 120	2	20
2,2-Dichloropropane	5.01	4.52		ug/L		90	60 - 150	1	20
2-Butanone	10.0	10.0		ug/L		100	20 - 200	9	20
2-Chlorotoluene	4.95	5.63		ug/L		114	75 - 130	3	20
2-Hexanone	9.83	9.83		ug/L		100	52 - 160	1	20
4-Chlorotoluene	4.93	5.26		ug/L		107	75 - 130	1	20
4-Isopropyltoluene	5.00	4.41		ug/L		88	80 - 120	1	20
4-Methyl-2-pentanone	9.97	8.44		ug/L		85	55 - 135	3	20
Acetone	10.0	19.4		ug/L		194	30 - 200	6	20
Benzene	4.98	5.32		ug/L		107	80 - 120	1	20
Bromobenzene	4.98	5.34		ug/L		107	80 - 130	3	20
Bromoform	4.98	5.03		ug/L		101	65 - 130	0	20
Bromomethane	5.02	5.67		ug/L		113	70 - 135	5	20
Carbon disulfide	10.0	9.87		ug/L		99	65 - 160	0	20
Carbon tetrachloride	5.01	5.42		ug/L		108	75 - 140	1	20
Chlorobenzene	5.00	5.68		ug/L		114	80 - 120	4	20
Chlorobromomethane	4.96	5.41		ug/L		109	80 - 125	3	20
Chlorodibromomethane	4.96	5.15		ug/L		104	70 - 120	5	20
Chloroethane	5.00	7.15 *		ug/L		143	75 - 140	1	20
Chloroform	5.00	5.25		ug/L		105	80 - 130	0	20
Chloromethane	5.02	4.86		ug/L		97	50 - 140	1	20

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

**Lab Sample ID: LCSD 580-108189/6**

**Matrix: Water**

**Analysis Batch: 108189**

**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
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 130	1	20
cis-1,3-Dichloropropene	5.25	4.07		ug/L		77	70 - 120	4	20
Dibromomethane	4.93	5.29		ug/L		107	80 - 130	2	20
Dichlorobromomethane	4.94	5.46		ug/L		111	80 - 125	3	20
Dichlorodifluoromethane	5.00	6.09		ug/L		122	30 - 180	2	20
Ethylbenzene	4.96	5.38		ug/L		108	80 - 125	4	20
Hexachlorobutadiene	5.00	5.20		ug/L		104	75 - 135	9	20
Isopropylbenzene	5.00	4.24		ug/L		85	75 - 120	4	20
Methyl tert-butyl ether	5.00	4.89		ug/L		98	75 - 120	6	20
Methylene Chloride	5.00	5.02		ug/L		100	60 - 145	1	20
m-Xylene & p-Xylene	9.99	11.7		ug/L		117	80 - 130	3	20
Naphthalene	5.00	3.34		ug/L		67	45 - 130	10	20
n-Butylbenzene	4.95	4.36		ug/L		88	75 - 125	6	20
N-Propylbenzene	5.00	4.62		ug/L		92	80 - 120	4	20
o-Xylene	4.95	4.47		ug/L		90	80 - 120	6	20
sec-Butylbenzene	5.00	4.53		ug/L		91	80 - 125	3	20
Styrene	4.99	4.79		ug/L		96	75 - 130	3	20
tert-Butylbenzene	4.98	4.74		ug/L		95	80 - 130	4	20
Tetrachloroethene	5.01	4.45	^	ug/L		89	40 - 180	4	20
Toluene	5.00	5.57		ug/L		111	80 - 120	1	20
trans-1,2-Dichloroethene	5.01	5.26		ug/L		105	80 - 140	6	20
trans-1,3-Dichloropropene	4.75	3.68		ug/L		78	60 - 140	3	20
Trichloroethene	5.00	6.08		ug/L		122	80 - 130	7	20
Trichlorofluoromethane	5.00	5.74		ug/L		115	30 - 180	3	20
Vinyl chloride	5.01	6.22		ug/L		124	65 - 140	3	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		75 - 120
Ethylbenzene-d10	101		75 - 125
Fluorobenzene (Surr)	101		70 - 130
Trifluorotoluene (Surr)	120		80 - 125
Toluene-d8 (Surr)	107		75 - 125

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

**Lab Sample ID: MB 250-2726/1-A**

**Matrix: Water**

**Analysis Batch: 2727**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 2726**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.025		mg/L		03/23/12 21:26	03/23/12 22:14	1
Manganese	ND		0.0020		mg/L		03/23/12 21:26	03/23/12 22:14	1

**Lab Sample ID: LCS 250-2726/2-A**

**Matrix: Water**

**Analysis Batch: 2727**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 2726**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

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

Lab Sample ID: LCS 250-2726/2-A  
Matrix: Water  
Analysis Batch: 2727

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 2726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.0930		mg/L		93	80 - 120

Lab Sample ID: 250-1073-7 MS  
Matrix: Water  
Analysis Batch: 2727

Client Sample ID: LB-032212-23  
Prep Type: Dissolved  
Prep Batch: 2726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		2.00	1.77		mg/L		88	75 - 125
Manganese	ND		0.100	0.0921		mg/L		92	75 - 125

Lab Sample ID: 250-1003-A-1-E DU  
Matrix: Water  
Analysis Batch: 2727

Client Sample ID: Duplicate  
Prep Type: Dissolved  
Prep Batch: 2726

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 250-2911/1  
Matrix: Water  
Analysis Batch: 2911

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			03/29/12 17:02	1

Lab Sample ID: LCS 250-2911/2  
Matrix: Water  
Analysis Batch: 2911

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	100	107		mg/L		107	80 - 120

Lab Sample ID: 250-1073-1 DU  
Matrix: Water  
Analysis Batch: 2911

Client Sample ID: LB-032212-17  
Prep Type: Total/NA

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 250-2733/3  
Matrix: Water  
Analysis Batch: 2733

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			03/23/12 15:05	1



# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
 SDG: 04212030.01/17

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID:** LCS 250-2733/4  
**Matrix:** Water  
**Analysis Batch:** 2733

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110

**Lab Sample ID:** 250-1073-1 MS  
**Matrix:** Water  
**Analysis Batch:** 2733

**Client Sample ID:** LB-032212-17  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.1		2.00	5.54	F	mg/L		72	80 - 120

**Lab Sample ID:** 250-1073-1 MSD  
**Matrix:** Water  
**Analysis Batch:** 2733

**Client Sample ID:** LB-032212-17  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.1		2.00	5.51	F	mg/L		70	80 - 120	1	20

**Lab Sample ID:** 250-1073-1 DU  
**Matrix:** Water  
**Analysis Batch:** 2733

**Client Sample ID:** LB-032212-17  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.1			4.04		mg/L				2	20

**Lab Sample ID:** MB 250-2734/3  
**Matrix:** Water  
**Analysis Batch:** 2734

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.10		mg/L			03/23/12 15:05	1

**Lab Sample ID:** LCS 250-2734/4  
**Matrix:** Water  
**Analysis Batch:** 2734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.00	4.96		mg/L		99	90 - 110

**Lab Sample ID:** 250-1073-1 MS  
**Matrix:** Water  
**Analysis Batch:** 2734

**Client Sample ID:** LB-032212-17  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	3.7		2.00	5.32		mg/L		80	80 - 120

**Lab Sample ID:** 250-1073-1 MSD  
**Matrix:** Water  
**Analysis Batch:** 2734

**Client Sample ID:** LB-032212-17  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate	3.7		2.00	5.30	F	mg/L		79	80 - 120	0	20

# QC Sample Results

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 250-1073-1 DU  
Matrix: Water  
Analysis Batch: 2734

Client Sample ID: LB-032212-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrogen, Nitrate	3.7		3.71		mg/L		0.2	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

# QC Association Summary

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/17

## GC/MS VOA

### Analysis Batch: 108189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1073-1	LB-032212-17	Total/NA	Water	8260B	
250-1073-2	LB-032212-18	Total/NA	Water	8260B	
250-1073-3	LB-032212-19	Total/NA	Water	8260B	
250-1073-4	LB-032212-20	Total/NA	Water	8260B	
250-1073-5	LB-032212-21	Total/NA	Water	8260B	
250-1073-6	LB-032212-22	Total/NA	Water	8260B	
250-1073-7	LB-032212-23	Total/NA	Water	8260B	
LCS 580-108189/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 580-108189/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 580-108189/4	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 2726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1003-A-1-E DU	Duplicate	Dissolved	Water	3005A	
250-1073-1	LB-032212-17	Dissolved	Water	3005A	
250-1073-2	LB-032212-18	Dissolved	Water	3005A	
250-1073-3	LB-032212-19	Dissolved	Water	3005A	
250-1073-4	LB-032212-20	Dissolved	Water	3005A	
250-1073-5	LB-032212-21	Dissolved	Water	3005A	
250-1073-6	LB-032212-22	Dissolved	Water	3005A	
250-1073-7	LB-032212-23	Dissolved	Water	3005A	
250-1073-7 MS	LB-032212-23	Dissolved	Water	3005A	
LCS 250-2726/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 250-2726/1-A	Method Blank	Total/NA	Water	3005A	

### Analysis Batch: 2727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1003-A-1-E DU	Duplicate	Dissolved	Water	6020	2726
250-1073-1	LB-032212-17	Dissolved	Water	6020	2726
250-1073-2	LB-032212-18	Dissolved	Water	6020	2726
250-1073-3	LB-032212-19	Dissolved	Water	6020	2726
250-1073-4	LB-032212-20	Dissolved	Water	6020	2726
250-1073-5	LB-032212-21	Dissolved	Water	6020	2726
250-1073-6	LB-032212-22	Dissolved	Water	6020	2726
250-1073-7	LB-032212-23	Dissolved	Water	6020	2726
250-1073-7 MS	LB-032212-23	Dissolved	Water	6020	2726
LCS 250-2726/2-A	Lab Control Sample	Total/NA	Water	6020	2726
MB 250-2726/1-A	Method Blank	Total/NA	Water	6020	2726

## General Chemistry

### Analysis Batch: 2733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1073-1	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 DU	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 MS	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 MSD	LB-032212-17	Total/NA	Water	300.0	
250-1073-2	LB-032212-18	Total/NA	Water	300.0	
250-1073-3	LB-032212-19	Total/NA	Water	300.0	
250-1073-4	LB-032212-20	Total/NA	Water	300.0	

# QC Association Summary

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

## General Chemistry (Continued)

### Analysis Batch: 2733 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1073-5	LB-032212-21	Total/NA	Water	300.0	
250-1073-6	LB-032212-22	Total/NA	Water	300.0	
250-1073-7	LB-032212-23	Total/NA	Water	300.0	
LCS 250-2733/4	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2733/3	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1073-1	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 DU	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 MS	LB-032212-17	Total/NA	Water	300.0	
250-1073-1 MSD	LB-032212-17	Total/NA	Water	300.0	
250-1073-2	LB-032212-18	Total/NA	Water	300.0	
250-1073-3	LB-032212-19	Total/NA	Water	300.0	
250-1073-4	LB-032212-20	Total/NA	Water	300.0	
250-1073-5	LB-032212-21	Total/NA	Water	300.0	
250-1073-6	LB-032212-22	Total/NA	Water	300.0	
250-1073-7	LB-032212-23	Total/NA	Water	300.0	
LCS 250-2734/4	Lab Control Sample	Total/NA	Water	300.0	
MB 250-2734/3	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-1073-1	LB-032212-17	Total/NA	Water	160.1	
250-1073-1 DU	LB-032212-17	Total/NA	Water	160.1	
250-1073-2	LB-032212-18	Total/NA	Water	160.1	
250-1073-3	LB-032212-19	Total/NA	Water	160.1	
250-1073-4	LB-032212-20	Total/NA	Water	160.1	
250-1073-5	LB-032212-21	Total/NA	Water	160.1	
250-1073-6	LB-032212-22	Total/NA	Water	160.1	
250-1073-7	LB-032212-23	Total/NA	Water	160.1	
LCS 250-2911/2	Lab Control Sample	Total/NA	Water	160.1	
MB 250-2911/1	Method Blank	Total/NA	Water	160.1	

# Certification Summary

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

TestAmerica Job ID: 250-1073-1  
 SDG: 04212030.01/.17

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

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



# Method Summary

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

TestAmerica Job ID: 250-1073-1  
SDG: 04212030.01/.17

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

**Protocol References:**

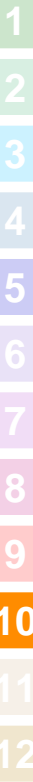
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

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

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

425-420-9200 FAX 420-9210  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order # **250-1073**

CLIENT: SCS Engineers  
 REPORT TO: David Lamada  
 ADDRESS: 14445 SW Suyouin Pkwy, Ste 180  
Portland, OR 97224  
 PHONE: 503 639 9315 FAX:  
 PROJECT NAME: Leichner Brothers Landfill  
 PROJECT NUMBER: 04010030.01/17  
 SAMPLED BY: T Andrews

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

TURNAROUND REQUEST  
 in Business Days \*  
 Organic & Inorganic Analyses  
 7  5  4  3  2  1  <1  
 STD. Petroleum Hydrocarbon Analyses  
 5  4  3  2  1  <1  
 STD.  
 OTHER Specify:  
 \* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE				REQUESTED ANALYSES				MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WQ ID
		HCl	H2O2	—	—	Vol (1000)	Dist Met	TOS (1000)	Dist Met (1000)				
1 LB-032212-17	3/22/12 @ 955	X	X	X	X	X	X	X	X	W	5	low level VOCs	
2 LB-032212-18	3/22/12 @ 1050	X	X	X	X	X	X	X	X	W	5	Samples were field filtered	
3 LB-032212-19	3/22/12 @ 1315	X	X	X	X	X	X	X	X	W	5	for d.s. filtered	
4 LB-032212-20	3/22/12 @ 1200	X	X	X	X	X	X	X	X	W	5	Metals.	
5 LB-032212-21	3/22/12 @ 1405	X	X	X	X	X	X	X	X	W	5		
6 LB-032212-22	3/22/12 @ 1400	X	X	X	X	X	X	X	X	W	5		
7 LB-032212-23	3/22/12 @ 1530	X	X	X	X	X	X	X	X	W	5		
8													
9													
10													

RELEASED BY: T Andrews PRINT NAME: T Andrews FIRM: SCS DATE: 3/23/12 TIME: 8:00  
 RECEIVED BY: Phil Swabik PRINT NAME: Phil Swabik FIRM: TAP DATE: 3/23/12 TIME: 10:55  
 RECEIVED BY: Bob F... PRINT NAME: Bob F... FIRM: TAP DATE: 3/23/12 TIME: 10:08  
 RECEIVED BY: Phil Swabik PRINT NAME: Phil Swabik FIRM: TAP DATE: 3/23/12 TIME: 10:55  
 ADDITIONAL REMARKS:  
 TEMP: 4.8 PAGE 1 OF 1  
 IAP-C





## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-1073-1  
SDG Number: 04212030.01/.17

**Login Number: 1073**

**List Number: 1**

**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

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



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 250-1073-1  
SDG Number: 04212030.01/.17

**Login Number: 1073**  
**List Number: 1**  
**Creator: Gamble, Cathy**

**List Source: TestAmerica Seattle**  
**List Creation: 03/27/12 05:13 PM**

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



**ATTACHMENT 3**

**Results of Laboratory QA/QC Reviews  
First Quarter 2012**

**SCS Engineers QA/QC Review  
Groundwater - 1Q 2012 Groundwater Monitoring Event  
Leichner Brothers Landfill  
TestAmerica-Denver Report No. 250-668-1**

Samples: LB-031212-01 (LB-13D), LB-031212-02 (LB-27D), LB-031212-03 (LB-5D), LB-031212-04 (LB-17D), LB-031212-05 (LB-26D), LB-031212-06 (field blank), and trip blank.

Sample Date: 03/12/2012

Laboratory Sample Received Date: 03/13/2012

Sample Receipt Temperature = 5.7°C

Laboratory Data Received Date: 03/27/2012, revised data received 04/17/2012

QA/QC Review Date: 04/16/2012 (TMA)

**VOCs**

Surrogates	All sample surrogates are within QC limits.
Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries were within QC limits, and all surrogates within limits.
LCS D	All RPDs within control limits except for bromomethane in batch 580-107764 (* Flag). This is noted 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 within QC limits.
Duplicates	All RPDs were within QC limits.

**General Chemistry**

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits except for nitrate in batch 250-2226 (F Flags). This is noted in the case narrative.
MSD	All % recoveries and RPDs were within QC limits except for nitrate in batch 250-2226 (F Flags). This is noted in the case narrative.
Duplicates	All RPDs within QC limits.

**Hold Times**

All analytical hold times were met.

**Reporting Limit Exceedances**

All project-specific reporting limits were met.

**Field QA/QC**

**Field Duplicate**

A field blank (FB1 [LB-031212-06]) was collected on 03/12/2012 near LB-26D. All analytes reported were all non-detect except for chloroform.

**Notes**

SCS Engineers received a revised laboratory report on 04/17/2012 with a noted added in the case narrative for bromomethane and nitrate.

**Data Validation**

*Upon final review of lab report 250-668-1 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (04/17/2012, TMA).*

**SCS Engineers QA/QC Review  
Groundwater - 1Q 2012 Groundwater Monitoring Event  
Leichner Brothers Landfill  
TestAmerica-Denver Report No. 250-743-1**

Samples: LB-031312-07 (LB-10DR), LB-031312-08 (LB-10SR), LB-031312-09 (LB-3D), LB-031312-10 (LB-3S), LB-031312-11 (LB-4D), LB-031312-12 (LB-4SR), LB-031312-13 (LB-1D), LB-031312-14 (LB-1S), LB-031312-15 (LB-20S), and LB-031312-16 (LB-17I).

Sample Date: 03/13/2012

Laboratory Sample Received Date: 03/14/2012

Sample Receipt Temperature = 3.8°C

Laboratory Data Received Date: 04/02/2012, revised data received 04/17/2012

QA/QC Review Date: 04/17/2012 (TMA)

**VOCs**

Surrogates	All sample surrogates are within QC limits.
Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries were within QC limits, and all surrogates within limits except for chloroethane in batch 580-107852 (* Flag). This is noted in the case narrative.
LCSD	All RPDs within control limits except for bromomethane and iodomethane in batch 580-107852 (* Flags). These are noted 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 within QC limits.
Duplicates	All RPDs were within QC limits.

**General Chemistry**

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All RPDs within QC limits.
MSD	All % recoveries and RPDs were within QC limits except for nitrate in batch 250-2323 (F Flag). .
Duplicates	All RPDs within QC limits.

**Hold Times**

All analytical hold times were met.

**Reporting Limit Exceedances**

All project-specific reporting limits were met.

**Notes**

SCS Engineers received a revised laboratory report on 04/17/2012 with a noted added in the case narrative for chloroethane, bromomethane, iodomethane, and nitrate.

**Data Validation**

*Upon final review of lab report 250-743-1 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (04/17/2012; TMA).*

**SCS Engineers QA/QC Review  
Groundwater - 1Q 2012 Groundwater Monitoring Event  
Leichner Brothers Landfill  
TestAmerica-Denver Report No. 250-1073-1**

Samples: LB-032212-17 (LB-5S), LB-032212-18 (LB-27I), LB-032212-19 (LB-13I), LB-032212-20 (LB-13I dup), LB-032212-21 (LB-26I), LB-032212-22 (LB-6S dup), and LB-032212-23 (LB-6S).

Sample Date: 03/22/2012

Laboratory Sample Received Date: 03/23/2012

Sample Receipt Temperature = 4.8°C

Laboratory Data Received Date: 04/09/2012

QA/QC Review Date: 04/10/2012 (DL)

**VOCs**

Surrogates	All sample surrogates are within QC limits.
Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries and surrogates were within QC limits except for chloroethane in batch 580-108189 (* Flag). The continuing calibration verification (CCV) for tetrachloroethene (TCE) associated with batch 580-108189 recovered above the upper control limit (^ Flag). These are noted in the case narrative.
LCSD	All % recoveries and RPDs were within control limits except for chloroethane in batch 580-108189 (* Flag). The continuing calibration verification (CCV) for tetrachloroethene (TCE) associated with batch 580-108189 recovered above the upper control limit (^ Flag). These are noted 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 within QC limits.
Duplicates	All RPDs were within QC limits.

**General Chemistry**

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % Recoveries and RPDs within QC limits.
MSD	All % recoveries and RPDs were within QC limits except for nitrate in batch 250-2734 (F Flag).
Duplicates	All RPDs within QC limits.

**Hold Times**

All analytical hold times were met.

**Reporting Limit Exceedances**

All project-specific reporting limits were met.

**Notes**

None.

**Data Validation**

*Upon final review of lab report 250-1073-1 for Leichner Brothers Landfill, SCS Engineers finds the data are valid for their intended use (04/10/2012; DL).*

**ATTACHMENT 4**

**Quarterly Compliance LFG Monitoring Probe Data  
First Quarter 2012**



**Compliance Landfill Gas Monitoring Probe Data  
January 9, 2012  
Lechner Brothers Landfill**

<b>Probe</b>	<b>Date / Time</b>	<b>Methane (% by vol)</b>	<b>Carbon Dioxide (% by vol)</b>	<b>Oxygen (% by vol)</b>	<b>Balance (% by vol)</b>	<b>Relative Pressure (H<sub>2</sub>O inch)</b>
LBLFGP-02	1/9/2012 11:51	0.0	2.4	19.4	78.2	0
LBLFGP-03	1/9/2012 11:43	0.0	2.6	18.3	79.1	0
LBLFGP-05	1/9/2012 11:37	0.0	3.2	17.4	79.4	0.02
LBLFGP-06	1/9/2012 11:58	0.0	5.0	13.8	81.2	0
LBLFGP-07	1/9/2012 11:55	0.0	9.2	4.2	86.6	0
LBLFGP-08	1/9/2012 13:20	0.0	7.1	6.4	86.5	0.01
LBLFGP-11	1/9/2012 13:15	0.0	0.9	20.0	79.1	-0.03
LBLFGP-12	1/9/2012 13:14	0.0	0.7	20.9	78.4	-0.02
LBLFGP-13	1/9/2012 13:12	0.0	1.5	18.8	79.7	-0.02
LBLFGP-14	1/9/2012 13:08	0.0	0.9	20.6	78.5	-0.02
LBLFGP-15	1/9/2012 13:04	0.0	1.9	20.1	78	-0.01
LBLFGP-1A	1/9/2012 11:48	0.0	1.6	20.2	78.2	-0.01
LBLFGP-1B	1/9/2012 11:47	0.0	2.0	19.7	78.3	-0.01
LBLFGP-20	1/9/2012 12:33	0.0	8.3	9.6	82.1	0
LBLFGP-22	1/9/2012 12:22	0.0	0.8	21.2	78	0
LBLFGP-23	1/9/2012 12:21	0.0	0.8	21.2	78	0.32
LBLFGP-26	1/9/2012 11:21	0.0	0.7	21.3	78	0
LBLFGP-27	1/9/2012 11:19	0.0	1.1	20.6	78.3	0
LBLFGP-28	1/9/2012 12:06	0.0	4.6	16.2	79.2	0
LBLFGP-29	1/9/2012 12:01	0.0	5.0	10.9	84.1	0.01
LBLFGP-31	1/9/2012 12:41	0.0	2.1	20.2	77.7	0
LBLFGP-32	1/9/2012 12:36	0.0	2.5	19.4	78.1	-0.01
LBLFGP-33	1/9/2012 12:34	0.0	3.1	18.1	78.8	0
LBLFGP-34	1/9/2012 12:30	0.0	2.9	18.0	79.1	0
LBLFGP-35	1/9/2012 12:28	0.0	2.0	18.9	79.1	0.02
LBLFGP-36	1/9/2012 12:15	0.0	2.2	19.4	78.4	0
LBLFGP-37	1/9/2012 12:13	0.0	2.6	18.8	78.6	-0.01
LBLFGP-38	1/9/2012 11:25	0.0	0.9	20.8	78.3	-0.01
LBLFGP-4A	1/9/2012 11:41	0.0	2.0	18.6	79.4	-0.32
LBLFGP-4B	1/9/2012 11:39	0.0	2.5	17.9	79.6	-0.01
LBLFGP-9A	1/9/2012 13:23	0.0	3.8	14.5	81.7	0.02
LBLFGP-9B	1/9/2012 13:22	0.0	12.5	3.2	84.3	0
LBLGP-10A	1/9/2012 13:18	0.0	4.1	15.4	80.5	0.01
LBLGP-10B	1/9/2012 13:17	0.0	1.3	19.1	79.6	0.02
LBLGP-16D	1/9/2012 12:53	0.0	2.5	19.8	77.7	0.01
LBLGP-16S	1/9/2012 12:52	0.0	1.5	20.7	77.8	0
LBLGP-17D	1/9/2012 12:49	0.0	3.0	19.0	78	-0.01
LBLGP-17S	1/9/2012 12:48	0.0	2.9	19.2	77.9	-0.01
LBLGP-18D	1/9/2012 12:45	0.0	3.1	19.2	77.7	0
LBLGP-18S	1/9/2012 12:43	0.0	1.7	20.4	77.9	-0.01
LBLGP-19D	1/9/2012 12:39	0.0	3.1	19.0	77.9	-0.01
LBLGP-19S	1/9/2012 12:38	0.0	2.1	19.8	78.1	-0.01
LBLGP-21A	1/9/2012 12:26	0.0	0.7	21.3	78	0
LBLGP-21B	1/9/2012 12:24	0.0	0.9	21.0	78.1	0.01
LBLGP-24A	1/9/2012 12:18	0.0	0.9	21.0	78.1	0
LBLGP-24B	1/9/2012 12:17	0.0	1.0	21.0	78	-0.01
LBLGP-25A	1/9/2012 12:10	0.0	1.9	19.7	78.4	-0.01
LBLGP-25B	1/9/2012 12:09	0.0	4.1	17.5	78.4	-0.01
LBLGP-30A	1/9/2012 11:34	0.0	4.0	16.7	79.3	0
LBLGP-30B	1/9/2012 11:32	0.0	3.1	17.8	79.1	-1.64

