

SCS ENGINEERS



2016 Annual Report

Closed Leichner Landfill Vancouver, Washington Consent Decree 96-2-03081-7 Facility ID No. 1017

Prepared for:



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February 27, 2017
File No. 04217030.14

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1.0 INTRODUCTION

This report presents and evaluates the results of groundwater, stormwater, and landfill gas (LFG) compliance monitoring performed during 2016 at the closed Leichner Landfill located in Vancouver, Washington (Figure 1-1). The report also summarizes landfill maintenance, repair, and construction activities performed during 2016. SCS Engineers (SCS) performed the monitoring, maintenance, and repair activities and prepared this report on behalf of Clark County Public Health (County) and the Leichner Landfill Oversight Committee (LLOC), whose members include the County and City of Vancouver.

Compliance monitoring of groundwater, stormwater (i.e., surface water), and LFG is performed at Leichner Landfill to fulfill certain requirements of the 1996 Consent Decree and associated Cleanup Action Plan (CAP), as well as to concurrently fulfill the requirements of Leichner Landfill's post-closure monitoring under Minimum Functional Standards (MFS), Chapter 173-304 of the Washington Administrative Code (WAC).

Compliance monitoring is performed in accordance with the methods and procedures described in the site's Compliance Monitoring Plan (CMP) submitted to the Washington Department of Ecology (Ecology) and Clark County Public Health (CCPH) in July 2013 (SCS, 2013). The July 2013 CMP includes modifications to Leichner Landfill's monitoring programs approved by Ecology, as described in the 2013 annual report (SCS, 2014).

1.1 SITE DESCRIPTION

The Leichner Landfill is a closed, 70-acre municipal solid waste landfill located in Clark County, Washington, about 5 miles northeast of downtown Vancouver (see Figure 1-1). The landfill operated from the late 1930s until 1991. Landfill closure occurred in phases during the summer seasons of 1989, 1990, 1991, and 1992, and included an engineered composite cap, a landfill gas collection and control system (GCCS), and a stormwater collection and control system.

1.2 SITE HYDROGEOLOGY

The geology beneath the landfill site includes about 70 to 100 feet of alluvium, underlain by the upper member of the Troutdale Formation. The site hydrogeology consists of an approximately 10- to 40-foot thick unsaturated (vadose) zone, and an unconfined alluvial water-bearing zone (WBZ) which ranges in thickness from 35 to 45 feet. The alluvium generally consists of sand, and gravelly to silty sand. Underlying the alluvial WBZ is the upper member of the Troutdale Formation aquifer. The Troutdale Formation aquifer generally consists of sandy to cobbly gravel with minor amounts of silt and clay. The alluvial WBZ and Troutdale Formation aquifer are separated by a silt aquitard (sandy silt and clayey silt) east and south of the landfill. Southwest of the landfill, the silt aquitard is absent and the two aquifers are locally in hydraulic communication.

2.0 GROUNDWATER MONITORING

2.1 GROUNDWATER MONITORING NETWORK AND SCHEDULE

The groundwater monitoring network at the Leichner Landfill is comprised of monitoring wells screened in different depth-discrete zones in the alluvial WBZ and in the Troutdale Formation aquifer. The monitoring well locations are shown in Figure 2-1. The following describes the nomenclature used for monitoring well network components:

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

The site groundwater monitoring wells were sampled annually or semiannually in 2016. Groundwater samples were collected from the following 18 wells during the annual monitoring event conducted in February 2016: LB-1S, LB-1D, LB-3S, LB-3D, 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. Groundwater samples were collected from the following seven wells during the semiannual monitoring event conducted in August 2016: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-26I, and LB-27I.

Field water-quality parameters (temperature, pH, specific conductance, dissolved oxygen) were monitored during sampling and recorded on field sampling data sheets (FSDSs) provided in Appendix A. Historical field parameter monitoring results are provided in Appendix B (see Table B-1).

Groundwater samples collected from the site monitoring wells were analyzed by TestAmerica Laboratories, Inc., (TAL) in Tacoma, Washington, for nitrate as nitrogen (nitrate), total dissolved solids (TDS), chloride (Cl), dissolved iron (Fe), dissolved manganese (Mn), and volatile organic compounds (VOCs), consistent with methods specified in the CMP (SCS, 2013). Laboratory analytical data reports are provided in Appendix C (included on the attached compact disk [CD]).

2.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

Static depth-to-groundwater levels were measured on February 17 and August 10, 2016, and converted to groundwater elevations for interpreting groundwater potentiometric surface contours and groundwater flow in the alluvial WBZ and the Troutdale Formation water-bearing zones (see Figures 2-2 through 2-5). Groundwater elevation data are summarized in Appendix D, along with historical elevations. Groundwater flow in the alluvial WBZ was generally towards the west to southwest (see Figures 2-2 and 2-4). Groundwater flow in the Troutdale Formation aquifer was generally towards the

south to southeast (see Figures 2-3 and 2-5). The 2016 groundwater flow directions are consistent with historical interpretations of groundwater flow at Leichner Landfill.

Groundwater elevation hydrographs are provided in Appendix D. The 2016 groundwater elevation data are generally within the range of elevations measured historically and continued to show minor seasonal variations in some site wells. Differences in groundwater elevations in adjacent well pairs screened in the alluvial WBZ and Troutdale Formation aquifer (see groundwater elevation data in Appendix D) appear to be influenced by the presence of the silt aquitard (sandy silt and clayey silt). Where the silt aquitard is present east and south of the landfill (e.g., at existing well pair LB-5S/LB-5D south of the landfill, and former well pair LB-4S/LB-4D east of the landfill), groundwater elevations are about 20 to 30 feet higher in the alluvial WBZ indicating hydraulic separation exists between the two groundwater zones. Monitoring well pairs located southwest of the landfill (i.e., at wells LB-1S/LB-1D, LB-13I/LB-13D, and LB-26I/LB-26D), where the silt aquitard is thin or absent, exhibited much smaller differences in groundwater elevations indicating that the two groundwater zones exhibit some degree of hydraulic connection.

2.3 DATA QUALITY REVIEW

Groundwater monitoring field quality control/quality assurance (QA/QC) procedures included collecting field duplicate samples, field blanks, equipment blanks, and carrying trip blanks into the field. 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 reports. TAL incorporated its laboratory data quality review comments in the QA/QC narrative of each laboratory report (see Appendix C).

SCS reviewed field and laboratory data and QA/QC procedures to evaluate whether the data met U.S. Environmental Protection Agency (EPA) quality control requirements (see Appendix E). The QA/QC reviews indicated that the groundwater analytical data were acceptable for their intended use.

2.4 GROUNDWATER QUALITY RESULTS

Laboratory analytical results of groundwater samples collected from site monitoring wells in 2016 continue to indicate that there are little or no adverse effects on groundwater quality from the closed Leichner Landfill. Groundwater monitoring results supporting this conclusion are discussed in this section of the report and include the following:

- Laboratory results did not detect VOCs at concentrations above method reporting limits (or above compliance levels).
- The concentrations of most inorganic indicator parameters in groundwater samples collected from monitoring wells located downgradient of the former waste cells are below regulatory compliance levels, with only a few exceptions, and have either remained generally stable or showed decreasing trends.

2.4.1 Volatile Organic Compounds

No VOCs were detected above the laboratory method reporting limits (MRLs) in the groundwater samples collected in the first and third quarter 2016, including VOCs for which compliance levels were established in the 1996 Consent Decree and that are currently tested for (i.e., 1,4-dichlorobenzene, tetrachloroethene, and trichloroethene) (see Appendix B, Table B-2).¹

The 2016 VOC analytical results continued to demonstrate that the post-closure measures implemented at the closed Leichner Landfill (i.e., maintenance of the engineered landfill cap, operation of the GCCS, and stormwater controls) are effective at decreasing VOC concentrations to levels below the MRLs.

2.4.2 Inorganic Parameters and Dissolved Metals

The 2016 and historical analytical data for the inorganic parameters (nitrate, Cl, and TDS) and dissolved metals (Mn and Fe) are summarized in Appendix B (see Table B-3), and time-concentration diagrams for these parameters are provided in Appendix F. In general, the 2016 groundwater analytical results for inorganic parameters and dissolved metals were consistent with historical data.

The 2016 laboratory analytical results indicated that Fe and/or Mn concentrations were above their respective compliance levels in groundwater collected from a few wells located downgradient and in close proximity to the landfill (i.e., LB-17I, LB-17D, and LB-20S), and also Fe at well LB-27I. However, the Fe and/or Mn concentrations detected in may be attributed, in part, to localized variations in natural groundwater chemistry, as previously reported to Ecology, based on the following:

- Fe and Mn have occasionally been detected at concentrations above the compliance levels in groundwater samples collected from cross-gradient wells LB-3S, LB-5S, and LB-10SR (see Figures 2-2 and 2-4) screened in the shallow alluvium WBZ (see time-concentration diagrams in Appendix F).
- Fe concentrations in groundwater samples collected from well LB-20S since 2006 have shown significant variability and have typically been below the compliance level, with occasional concentrations above the compliance level.
- Concentrations of Fe and/or Mn in monitoring wells located hydraulically downgradient of LB-17I/17D (i.e., LB-6S, LB-13I/13D, and LB-26I/26) and well LB-20S (i.e., LB-1S/1D) are either below laboratory MRLs or significantly lower than concentrations detected in groundwater samples collected from LB-17I/17D and LB-20S. Additionally, Fe and Mn concentrations in these downgradient compliance wells have remained stable throughout most of their extensive monitoring history.

¹ Laboratory analysis of two additional VOCs with established compliance levels, vinyl chloride and 1,1-dichloroethene, was discontinued in 2013 as approved by Ecology (Ecology, 2013) because after two years of testing for these two VOCs using a low-level EPA Method 8260B, these compounds were not detected above their respective compliance levels.

It should be noted that Fe concentrations in samples collected from well LB-27I have been historically above the compliance level but very stable since monitoring began at this well in 1996, ranging from approximately 0.1 to 0.5 milligrams per liter (mg/L).

2.4.2.1 Statistical Analysis of Groundwater Analytical Data

Leichner Landfill groundwater quality data from 2012 to 2016 for inorganic parameters (nitrate, Cl, and TDS) and dissolved metals (Mn and Fe) were statistically evaluated using the MTCA Stat 97 program.² The program identifies if the data show a normal, lognormal, or non-parametric distribution. For normally and lognormally distributed data, the 95th percent upper confidence limit (UCL-95) of the mean was calculated. For distributions that were non-parametric (i.e., data not distributed normally or lognormally), data values were ranked and an estimate of the UCL-95 was determined using the Van der Parren method, as described in Statistical Guidance for Ecology Site Managers (Ecology, 1992). For non-parametric data, the Van der Parren method defaults to the highest reported value.

The MTCA Stat97 program utilizes the Land Method for calculating the UCL-95 of the mean for lognormally distributed data. The Land Method is sensitive to data distributions that deviate from lognormal. If variance or skewness is large (U.S. Environmental Protection Agency [EPA], 2002), the method may commonly yield estimated UCL-95 values that are greater than predicted for data distributions are not truly lognormal,. When sample sizes are small and the variance is large, the method can be impractical. This resulted in UCL-95 values that exceeded the range of concentrations for the following inorganic parameters and monitoring wells: (1) Cl data for well LB-20S, (2) nitrate data for well LB-10DR, and (3) TDS data for wells LB-1D and LB-3D. In these cases, the highest reported values from the last 5 monitoring years (2012 to 2016) were selected (see Table 2-1).

Table 2-1 provides a summary of calculated UCL-95 of the mean values, along with groundwater compliance levels established in the Consent Decree and CAP. The following summarizes the results of the statistical evaluation:

- The calculated UCL-95 values for nitrate, Cl, and TDS were below their respective compliance levels.
- The calculated UCL-95 values for dissolved Fe were below the compliance of 0.3 mg/L, except the values for groundwater from well LB-17I (9.9 mg/L).
- The calculated UCL-95 values for dissolved Mn were below the compliance level of 0.05 mg/L, except the values for groundwater from wells LB-17I (1.5 mg/L), LB-27D (4.3 mg/L), LB-20S (3.5 mg/L), LB-27I (0.5 mg/L), and LB-27D (0.1 mg/L).

2.4.2.2 Trend Analysis of Groundwater Data

In addition to the statistical evaluation described in Section 2.4.2.1, time-series concentration plots were generated for each of the inorganic parameters tested (see Appendix F). The time-concentration plots were evaluated visually to assess whether groundwater parameter concentrations have increased,

² MTCA Stat97 was obtained from Ecology's website: <http://www.ecy.wa.gov/programs/tcp/tools/Mtca.exe>.

decreased or remained stable. Inorganic parameter concentrations in groundwater samples collected from alluvial WBZ wells and Troutdale Formation wells show either generally stable or decreasing trends, except for nitrate concentrations in samples collected from wells LB-10DR, LB-13I, LB-26I, and LB-27D. Changes in nitrate concentrations detected in these wells are believed to be reflective of natural (i.e., non-landfill-impacted) groundwater conditions.

It is also noteworthy that Cl, TDS, Fe, and Mn in groundwater collected from wells LB-17I, LB-17D, and LB-20S located downgradient and in close proximity to the former landfilling areas exhibit pronounced decreasing concentration trends generally from about 1991 and 2001 (see time-concentration plots in Appendix F). These decreasing concentration trends were likely in response to the construction, operation, and maintenance of Leichner Landfill's post-closure systems, including the landfill cover system and the stormwater control and collection system, which significantly reduced the potential for leachate to be generated. The concentrations of these inorganic parameters in groundwater samples collected from these wells have remained relatively constant since about 2001 (except for Cl in well LB-20S as noted above). Additionally, as was previously discussed, the concentrations of these inorganic parameters in groundwater collected from monitoring wells downgradient of LB-17I/17D and LB-20S are substantially lower, and have remained stable throughout their extensive monitoring history (see time-concentration diagrams in Appendix F)

3.0 STORMWATER MONITORING

Ecology issued a renewed General Permit (No. WAR005572B) for industrial facilities, which became effective January 1, 2010, and allowed Leichner Landfill to continue to discharge stormwater from the facility to nearby Curtin Creek. Ecology issued a modified Industrial Stormwater General Permit (ISGP) that became effective date of January 2, 2015. In accordance with the ISGP and on behalf of the County, SCS prepared an updated Storm Water Pollution and Prevention Plan (SWPPP) in January 2015 (SCS, 2015). Stormwater monitoring activities at the facility are performed consistent with the methods and schedule described in the ISGP and SWPPP.

3.1 STORMWATER MONITORING NETWORK AND SCHEDULE

3.1.1 Quarterly Stormwater Monitoring Station

One stormwater discharge location (designated Outfall 1) has been established for the Leichner Landfill. Outfall 1 is located at the pump station at the northern end of the North Detention Pond (see Figure 3-1) and receives stormwater runoff from the closed landfill surfaces. Stormwater discharge at the North Detention Pond pumps (i.e., Outfall 1) are water-level float activated or can be manually activated at the pump control box. If the Outfall 1 pumps are not activated by the water-level in the North Detention Pond during quarterly monitoring, then SCS manually turns on the pumps to collect a stormwater discharge sample.

Quarterly stormwater samples were collected for laboratory analyses at Outfall 1 in January, April, and October 2016. A stormwater sample was not collected in the third quarter monitoring period (July 1 to September 30) because no discharge was observed at the facility during this period. The stormwater samples were analyzed by TAL for permit-required parameters including turbidity, pH, total copper and zinc.

3.1.2 Monthly Visual Inspection

SCS performed monthly visual inspections in 2016 during storm events, if any occurred in a given month that could result in stormwater being potentially discharged at Outfall 1. The inspections included examining stormwater discharge at Outfall 1 (if observed) and inspecting the stormwater conveyance system (drainage ditches and culverts) and areas where equipment and materials are stored (primarily the blower-flare station [BFS]). Observations were documented on a SWPPP monthly inspection form.

3.2 STORMWATER MONITORING RESULTS

Stormwater discharge monitoring reports (DMRs) presenting the analytical results of quarterly stormwater samples collected in 2016 were submitted to Ecology on a quarterly basis using the Ecology WebDMR submittal system. The quarterly DMRs were submitted via WebDMR on February 18, May 4, October 6, and October 27, 2016. The analytical results of stormwater samples collected in 2016 showed that stormwater quality benchmark concentrations specified in the ISGP were not

exceeded. The DMR submitted on October 6, 2016, indicated that no discharge occurred during the third quarter monitoring period.

3.3 STORMWATER CONTROL AND COLLECTION SYSTEM MODIFICATIONS

An eroded section of drainage ditch that conveys stormwater into the South Detention Pond was repaired by SCS Field Services from August 29 through September 9, 2016. The erosion occurred following a series of high precipitation storm events in December 2015 that caused severe erosion of the stormwater ditch. The eroded area consisted of an approximately 30-foot wide by 50-foot long section of the drainage ditch adjacent to the South Detention Pond (referred to as the “lower repair area” for the purposes of this report). The erosion extended to the underlying geotextile, and washed a section of the ditch lining and surrounding cover material into the South Detention Pond creating an approximately 18-inch-deep gully. Additionally, an approximately 110-foot-long section of the drainage ditch that extended from the eroded section upstream to the outlet of a road-crossing culvert (referred to as the “upper repair area” for the purposes of this report) was heavily in-filled with soil; short grass and small brush was also growing between the larger stones.

The drainage ditch repair area is located on top of the final landfill closure area and directly over the waste footprint. As such, repair of the affected area required maintaining the cover thickness specifications in accordance with the approved closure design specifications and requirements in the 1996 Consent Decree and Minimum Functional Standards (MFS) covered under WAC 173-304. To meet these requirements, SCS proposed reconstructing the eroded area to the 1992 as-constructed conditions.

A construction quality assurance (CQA) report was submitted to the County (SCS, 2016b) that described the repair methods and activities and CQA observations. As described in the CQA report, the following summarizes key aspects of the drainage ditch repair based on the CQA monitoring and observations:

- The existing geotextile fabric in the upper repair area was not removed before placement of overlying layers. The remaining repair of this segment was performed in general conformance with the Construction Drawings.
- It was discovered during the excavation of the lower repair area along the lower segment of the drainage ditch that the existing conditions did not conform to the original construction drawings, principally because the drainage layer did not meet the required gradation size and thickness. A repair strategy was implemented for this segment of the drainage ditch, after it was approved by the County, which avoided the potential to excavate waste material below the geomembrane but still met the intent of the original ditch design. Additionally, the western side slope adjacent to the drainage ditch was covered with gravel to minimize or prevent potential impacts if stormwater overflowed the drainage ditch.

4.0 LANDFILL GAS MONITORING

A GCCS was initially installed at the Leichner Landfill in 1978 in response to offsite migration of LFG. The system has been modified several times over the years, including installation of a single, smaller enclosed flare station in 2007 in response to decreasing methane production. The current GCCS includes a LFG extraction well field with 102 gas extraction wells, a condensate collection system, a LFG blower and flare station (BFS), and an integrated remote monitoring and control (RMC) system that monitors the operation and performance of the BFS and other components of the GCCS and stormwater collection system. The GCCS components are shown in Figure 4-1.

Compliance LFG monitoring at Leichner Landfill is performed to (1) fulfill compliance monitoring requirements in LFG monitoring probes along the perimeter of the landfill, (2) evaluate and adjust (i.e., balance) the LFG extraction well network, and (3) assess the performance and efficiency of the GCCS, including the LFG flare and blower.

4.1 COMPLIANCE LFG MONITORING PROBE NETWORK AND SCHEDULE

The LFG compliance monitoring network is comprised of 50 probes located along the perimeter of the landfill property boundary to monitor subsurface LFG migration, and in areas within the property, to more closely monitor the performance of the GCCS (see Figure 4-1). Compliance LFG monitoring probes constructed as dual-completion probes (i.e., a shallow and deep probe constructed within the same borehole) are designated with an “A” for the shallow probe and “B” for the deep probe. Compliance LFG monitoring probes with the same probe number but constructed in different boreholes are designated with an “S” for the shallow probe and “D” for the deep probe.

Compliance LFG monitoring was performed quarterly in 2016 (March, June, September, and December), as approved by Ecology (Ecology, 2011).

4.2 COMPLIANCE LFG MONITORING RESULTS

The compliance LFG monitoring probe data for 2016 are provided in Appendix H (Table H-1). The data indicated that methane concentrations were below the MFS (Chapter 173-304 WAC) regulatory limit of 5 percent methane (by volume) in the site perimeter compliance probes, except for initial measurements in LFG probe GP-7 during each quarterly monitoring event, and initial measurements in LFG probe GP-9 in March and December. In response to these exceedances, adjustments to the GCCS LFG extractions wells in the vicinity of these probes were performed and the probes were re-monitored. The re-monitoring data showed that methane concentrations were below the regulatory limit in both probes typically within a few days of the initial measurements (see Table H-1).

4.3 LFG EXTRACTION WELLS

The LFG extraction wells (see Figure 4-1) were monitored and adjusted (balanced) semi-monthly (twice a month) during 2016 to maintain balanced and efficient LFG extraction rates. There were no significant problems or concerns noted during monitoring and adjustment of the LFG extraction wells.

4.4 LFG FLARE MONITORING

The LFG flare system is operated pursuant to Air Discharge Permit (ADP) 07-2714 issued by the Southwest Clean Air Agency (SWCAA) on February 15, 2007. The LFG flare system was monitored regularly (typically on a weekly basis) in 2016 and continuous through the facility's RMC. The monitored parameters include LFG composition, static pressure, flow rate, and temperature measured at the flare inlet. In addition, the flare operating temperature was also measured and recorded. The flare system is equipped with a continuous monitoring system, which measures and records the flare operating temperature, inlet LFG flow rate, and inlet LFG oxygen concentration. The data are stored and periodically downloaded for permanent recordkeeping.

In accordance with the ADP, a separate 2016 annual flare emissions estimate report will be submitted to the SWCAA by March 15, 2017. The report will present flare monitoring data and evaluate flare performance in 2016.

In accordance with the ADP, an initial emissions source test was conducted on May 15, 2007, and is required to be re-tested every 5 years. Accordingly, the flare was source tested again on April 24, 2012. A next source test is schedule to be performed by April 24, 2017.

4.5 GREENHOUSE GAS MONITORING

In November 2013, SCS completed an evaluation to determine if the Leichner Landfill is required to report greenhouse gas (GHG) monitoring results (and perform future weekly GHG monitoring) pursuant to the state of Washington GHG rule based on emissions data collected in 2013. The evaluation showed that the Leichner Landfill is exempt from GHG reporting (and from future weekly monitoring) per the Washington State's GHG Rule. Consequently, weekly GHG monitoring was suspended beginning in January 2014.

4.6 EVALUATION OF GCCS PERFORMANCE AND CONCEPTUAL REDESIGN OF GCCS

The GCCS at the Leichner Landfill will require future upgrades to operate efficiently. To that end, a project was initiated in 2015 (conducted by SCS) focused on collecting performance data of the LFG extraction wells and BFS to support developing options for redesigning and upgrading the GCCS. The scope of work included reviewing and understanding the existing GCCS well field system and BFS and assessing whether additional monitoring and performance data needed to be collected to facilitate a redesign of the system. In general, whenever an existing system is upgraded, retrofitted, and/or replaced, the level of effort for the design is much greater than if a system is designed from scratch because of the coordination/tie-ins to the existing infrastructure.

The 2015 Annual Report (SCS, 2016a) described significant activities performed in 2015 to evaluate the existing GCCS well field system and BGS. The scope of this effort involved collecting LFG flow data from 50 of the site's 102 LFG extraction wells. Deeper gas wells located in the interior of the landfill were targeted for flow monitoring because they are expected to collect more gas and have higher flow rates. The perimeter gas wells, in general, are shallower, and will not collect as much landfill gas (i.e., lower flow rates) due to their proximity to native soil and potential to facilitate air intrusion. This work was ongoing in 2016.

Additional activities performed by SCS in 2016 related to assessing the performance of the GCCS included the following:

- Continued to collect and evaluate LFG monitoring data obtained from January through April 2016.
- Performed site-specific modeling to estimate LFG generation and recovery projections. The purpose of the LFG generation and recovery modeling was to identify whether the GCCS is recovering as much LFG as practical. The modeling results were compared with the LFG monitoring data collected in 2015 and 2016, and with the total amount of gas measured at the BFS to evaluate the effectiveness of the existing GCCS. The comparison of LFG generation with individual well performance data identified areas of underperforming LFG extraction wells and/or areas absent of effective coverage within the well field.
- Prepared and submitted to the County a preliminary engineering design report dated December 5, 2016 (SCS, 2016c) presenting design options for upgrading the GCCS, including preliminary engineering design drawings and construction cost estimates. Based on discussion with the County, SCS also prepared revised engineering design drawings and cost estimates for an additional GCCS design upgrade scenario that involved modifications to the LFG collection well network and replacing the above ground PVC piping and well heads. The County is in the process of reviewing the preliminary redesign upgrades for the GCCS.

5.0 OPERATIONAL SYSTEMS MAINTENANCE AND REPAIR

5.1 ROUTINE ACTIVITIES

Routine operations, maintenance, and repair of the GCCS and stormwater collection and control system performed in 2016 included the following:

- Performing checks and making adjustments to the operational settings of the LFG flare system as necessary.
- Performing maintenance and repairs (as needed) of the LFG flare system, condensate collection system, including the condensate sumps, airlines, discharge lines, and compressors.
- Performing minor maintenance and repairs (as needed) of the LFG extraction wells and conveyance piping (e.g., repair of hoses, fittings, and valves).
- Conducting semi-monthly adjustments (i.e., balancing) to the north and south LFG extraction wells field.
- Performing general maintenance of the (1) North and South Detention Pond pumps, (2) air compressor for the condensate collection and Module 2 stormwater pumping systems, and (3) Module 2 stormwater recovery system.
- Coordinating periodic pumping and disposal of condensate from the site condensate tank.
- Reviewing and uploading the LFG extraction well monitoring data and compliance probe monitoring data into SCS's site-specific eTools database for the Leichner Landfill project.

Other noteworthy non-routine maintenance, repair, and replacement activities related to the Leichner Landfill's post-closure systems and equipment performed in 2016 are described below.

5.2 NON-ROUTINE ACTIVITIES

5.2.1 First Quarter 2016

- Installed a capsuhelic (differential pressure) gauge on the flare inlet line.
- Coordinated analytical testing of LFG condensate for disposal characterization.
- Evaluated possible source(s) causing flare vibrations in response to a complaint. Discussed approach with the County for additional flare monitoring and identifying and resolving the source of the vibration.
- Installed a pulse pump controller in condensate trap S-3.

- Installed an AP-4 pneumatic pump in condensate trap N-7.
- Further evaluated the flare to address noise/vibration issues.
- Identified that there was no power to the site on March 18, 2016. The power was restored with the assistance of an electrical contractor on March 19, 2016.
- Performed troubleshooting of problems with flare station RMC system (likely due to power outage). The following work was performed as a follow-up to the troubleshooting activities in late March 2016: (1) installed a new modem, (2) performed cell modem setup, and (3) repaired and reconfigured the RMC system/flare controls.
- Installed a new flare stack louver motor.

5.2.2 Second Quarter 2016

- Remove QED well heads from eight LFG extraction wells (SW-2, SW-6, SW-9, SW-14, SW-15, SW-18, SW-19, and SE-6) from the south well field. Plumbed each well head with 2-inch gate valves and connected to the lateral line.
- Installed eight QED well heads in the north well field at LFG extraction wells NE-4, NE-6, NE-19, NE-20, NW-14, NW-17, NW-24, and NW-26.
- Installed system sample ports in 39 LFG extraction wells.
- Performed certification of the three on-site compressor tanks. Certification was performed by Washington State Department of Labor and Industries Boiler Pressure Vessel Inspector, with oversight by SCS.
- Installed pressure ports in the LFG well extraction system.
- Installed a motorized (middle) louver system in the LFG flare.
- Installed a flare purge blower.

5.2.3 Third Quarter 2016

- Wired and programmed the recently installed motorized (middle) LFG flare louver to operate using the RMC system.
- Installed a new Quantum automation/programmable logic control (PLC) analog card, and programmed upgrades for the RMC system.
- Installed a 6-inch shut-off valve on the inlet pipe to the Module 2 stormwater collection vault.
- Continued evaluating whether a vibration sensor should be installed on the LFG flare, and programmed into the RMC system.

- Coordinated disposal of soil generated during the South Detention Pond drainage ditch repair project.
- Performed prefield planning and coordination for upgrading the RMC system and installing a new weather station and water-level transducer in the Module 2 stormwater collection vault that will be linked to the RMC.

5.2.4 Fourth Quarter 2016

- Evaluated and repaired the diaphragm pump in the Phase 2 stormwater collection vault.
- Installed upgrades to the RMC system, and linked to the RMC a newly installed weather station and water-level transducer in the Module 2 stormwater collection vault.
- Seeded areas around the South Detention Pond for erosion control.
- Replaced the diaphragm pump in the Module 2 stormwater collection vault with a new diaphragm pump. The old pump was shipped to the manufacturer to assess damage and obtain a cost estimate to replace or repair.

6.0 REFERENCES

- SCS Engineers (SCS), 2013, Compliance Monitoring Plan, Leichner Landfill, Clark County, Washington, prepared by SCS, Inc., Portland, Oregon, for Clark County Department of Environmental Services, July 30.
- SCS Engineers, 2014a, 2013 Fourth Quarter and Annual Monitoring Report, Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared by SCS, Inc., Portland, Oregon, for Clark County Department of Environmental Services, February 27.
- SCS Engineers, 2015, Stormwater Pollution Prevention Plan, Plan Date: January 2015, State of Washington, Industrial Stormwater General Permit, Permit Number: WAR005572B, Leichner Landfill, prepared by SCS, Portland, Oregon, for Clark County, Vancouver, WA, January.
- SCS Engineers, 2016a, 2015 Annual Report, Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared by SCS, Inc., Portland, Oregon, for Clark County Department of Environmental Services, February 19.
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- Washington State Department of Ecology (Ecology), 1992, Statistical Guidance for Ecology Site Managers, Publication No. 19-54, August.
- Washington State Department of Ecology, 2011, Periodic Review under Model Toxics Control Act (MTCA), Leichner Brothers Landfill, prepared by Ecology, Southwest Region Office, Toxics Cleanup Program, April 27.
- Washington State Department of Ecology, 2013, Email (re: Letter to WDOE requesting to Discontinue GW Sampling for VC and DCE) to M. Davis, Clark County Environmental Services, and L. Caruso, SCS Engineers, from M. Kourehdar, Ecology, Toxics Cleanup Program, February 12.
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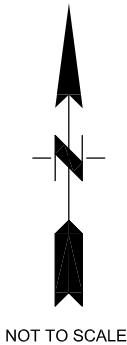
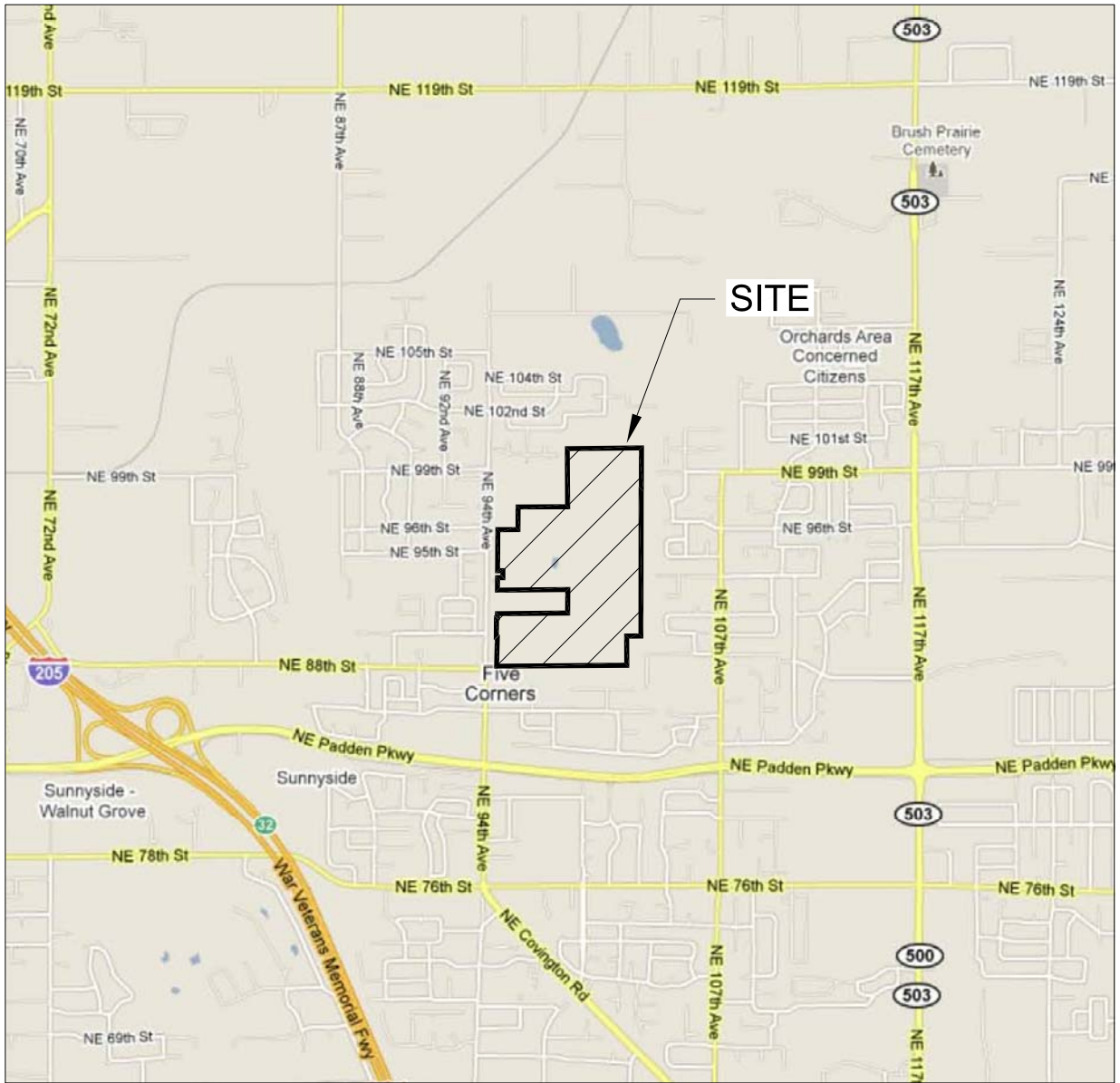
TABLE

Table 2-1
Statistical Summary of Groundwater Quality Data From 2012 to 2016
95 Percent Upper Confidence Limit of the Mean^a
Leichner Landfill

Parameter	Compliance Level	Units	LB-1S	LB-1D	LB-3S	LB-3D	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	LB-27D
<i>Inorganic Parameters</i>																				
Chloride	250	mg/L	14.4	7.7	4.1	M(5.32)	4.4	M(11.0)	6.6	30.2	21.8	10.0	M(5.03)	12.1 ^b	M(19.0)	151 ^b	8.3	M(5.88)	41.6	M(13.0)
Nitrate	10	mg/L	6.8	M(7.09)	4.2	4.8	M(6.6)	M(1.2)	M(2.65)	3.2	2.5	M(4.50)	5.3	All ND	All ND	M(0.40)	4.9	M(5.90)	M(0.91)	4.2
Total Dissolved Solids	500	mg/L	M(260.0)	209.9	189.2	197.5	M(179.0)	237.8	169.7	292.2	M(290.0)	M(220.0)	190.1 ^b	M(250.0)	M(230.0)	M(340.0)	M(210.0)	189.9	393.2	M(265.0)
<i>Metals</i>																				
Iron (dissolved)	0.3	mg/L	All ND	M(0.036)	All ND	All ND	All ND	All ND	M(0.028)	All ND	All ND	All ND	All ND	9.9^b	0.1	0.9 ^b	M(0.064)	All ND	M(0.032)	0.7
Manganese (dissolved)	0.05	mg/L	M(0.002)	M(0.0058)	All ND	All ND	All ND	M(0.0026)	M(0.0022)	M(0.0059)	M(0.002)	M(0.005)	All ND	1.5	4.3	M(3.50)	M(0.004)	M(0.0034)	0.5	0.1^b
<i>Volatile Organic Compounds</i>																				
1,4-Dichlorobenzene	1.8	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	M(0.23)	All ND	All ND	All ND	All ND
Tetrachloroethene	5	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND
Trichloroethene	5	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND

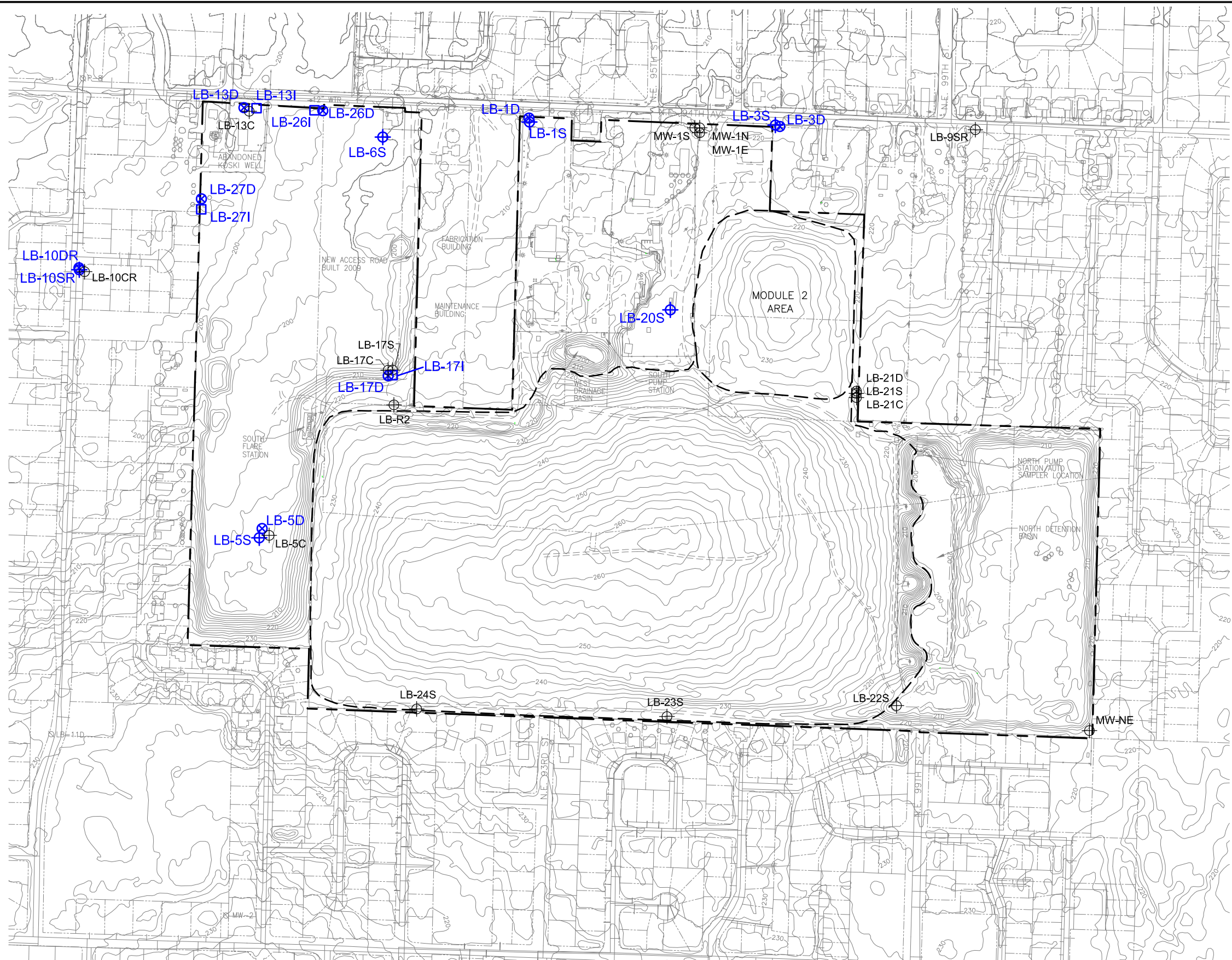
NOTE:
mg/L = milligrams per liter; µg/L = micrograms per liter; ND = indicates not detected at any sampling event; M = maximum value detected in last five years shown in parenthesis.
Values shown in **bold** are greater than the specified compliance level.
^a Values shown are the 95 percent upper confidence limit on the mean (UCL-95) calculated using MTCA Stat 97 program and Statistical Guidance for Ecology Site Managers.
^b Calculated UCL-95 value of lognormally distributed data exceeded the range of concentrations from 2012 to 2016 using Land's method; value shown represents the maximum value detected in the last five years.

FIGURES



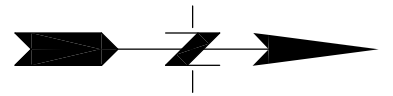
SOURCE: GOOGLE MAPS

SCS ENGINEERS Environmental Consultants and Contractors 15940 S.W. 72nd Avenue Portland, Oregon 97224 (503) 639-9201 FAX: (503) 684-6948	PROJECT NO. 04217030.14	DES BY B.M.	SITE LOCATION MAP LEICHER LANDFILL CLARK COUNTY, WASHINGTON	DATE FEBRUARY 2017
	SCALE AS SHOWN	CHK BY D.L.		FIGURE
	CAD FILE FIGURE 1-1	APP BY L.C.		1-1



- LEGEND:**
- LB-5S ⊕ Monitoring Well Location, Alluvial Water-Bearing Zone
 - LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
 - LB-17I □ Monitoring Well Location, Middle of Alluvial Water-Bearing Zone
 - — — — — Property Boundary
 - - - - - Limit of Landfill Cover and Approximate Edge of Waste

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



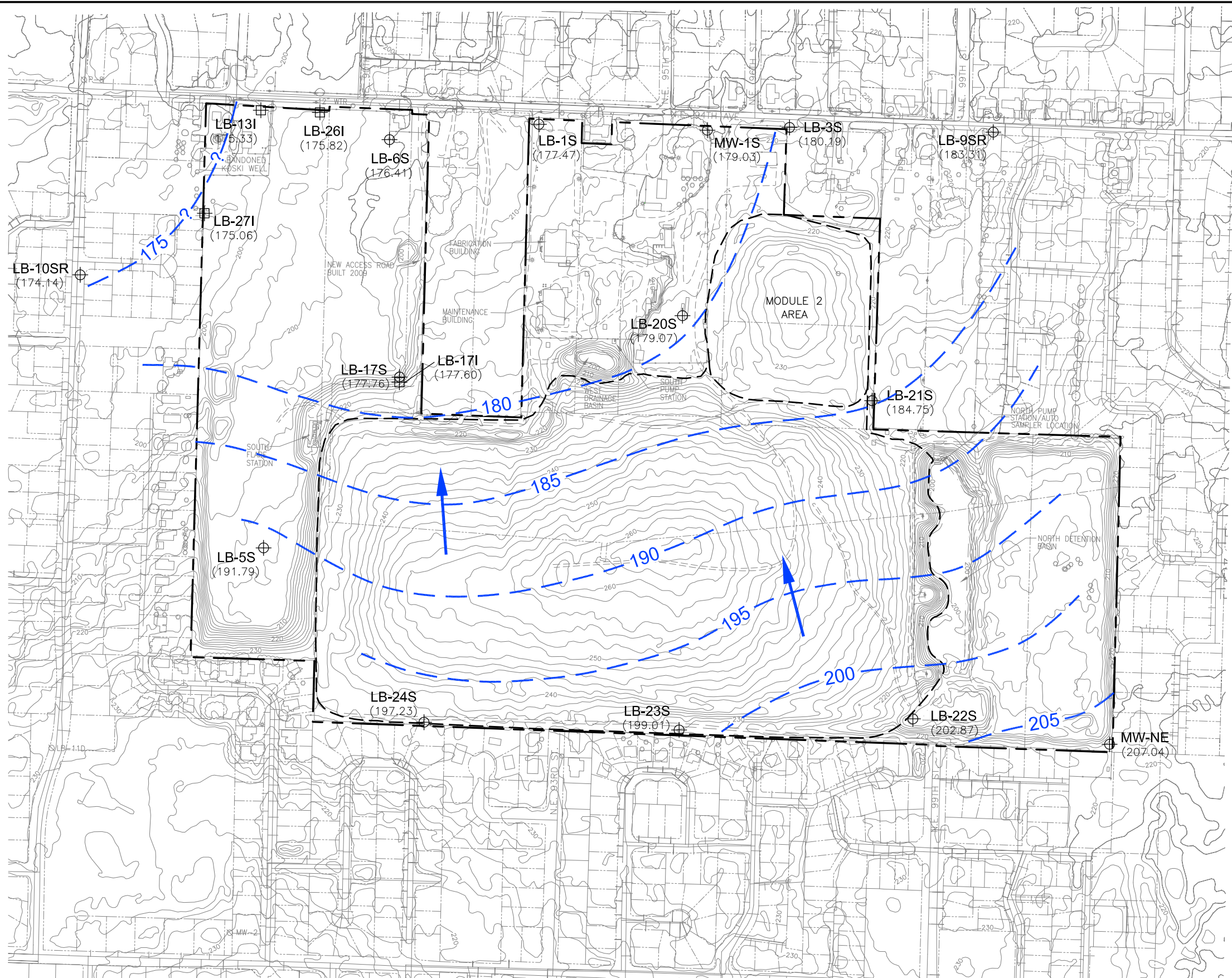
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PROJECT NO.	04217030.14	DES BY	B.M.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 2-1	APP BY	L.C.

GROUNDWATER MONITORING WELL LOCATIONS
 LEICHER LANDFILL
 VANCOUVER, WASHINGTON

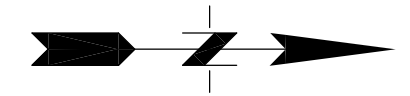
DATE
FEBRUARY 2017
 FIGURE
2-1



LEGEND:

- LB-5S ⊕ Monitoring Well Location, Alluvial Water-Bearing Zone
- LB-17I ⊕ Monitoring Well Location, Middle of Alluvial Water-Bearing Zone
- Property Boundary
- - - Limit of Landfill Cover and Approximate Edge of Waste
- - -200- - - Groundwater Potentiometric Surface Contour, queried where uncertain
- (207.04) Groundwater Elevation Measured on February 15, 2016
- ➔ Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008



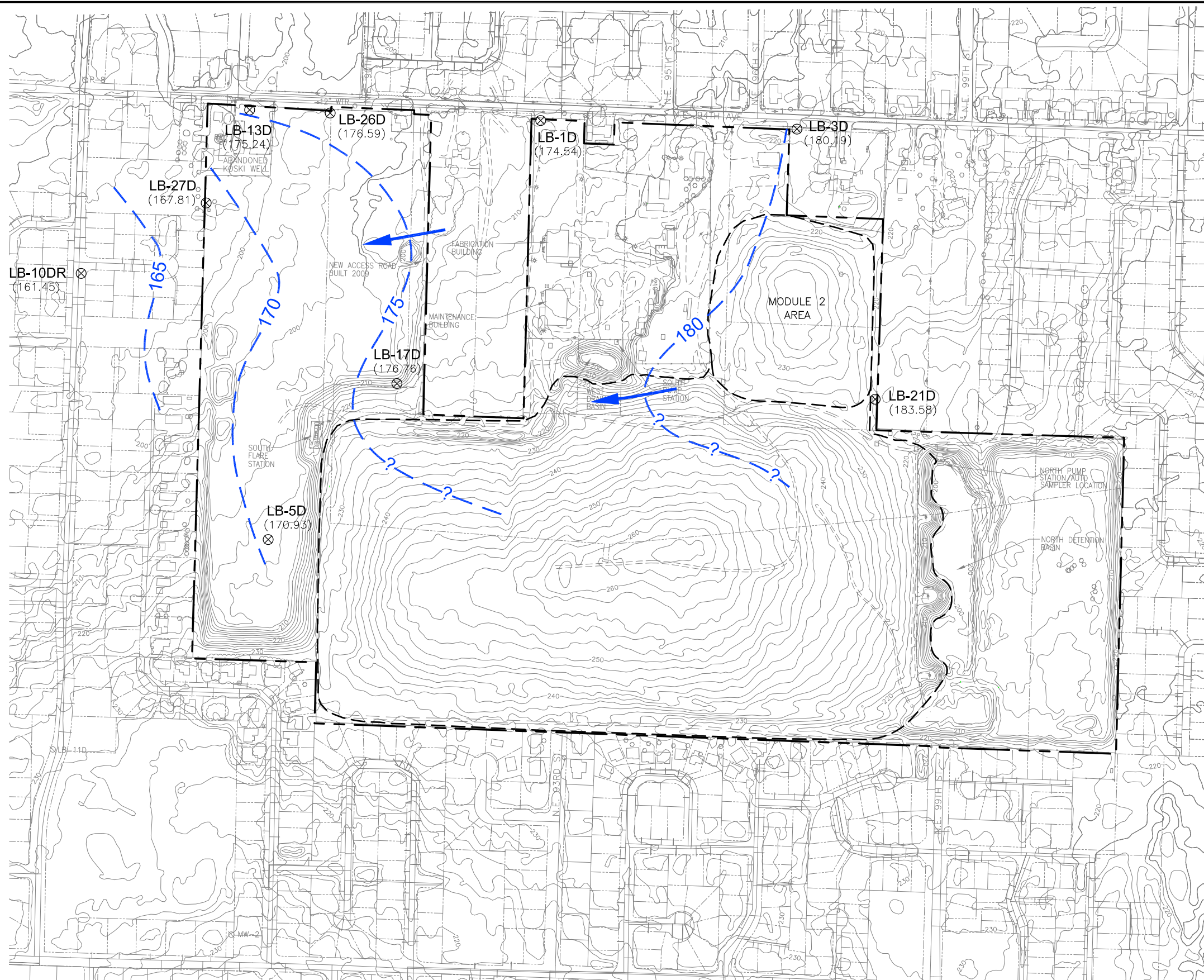
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Portland, Oregon 97224
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PROJECT NO.	04217030.14	DES BY	B.M.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 2-2	APP BY	L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
ALLUVIAL WATER BEARING ZONE
FEBRUARY 15, 2016
LEICHTNER LANDFILL
VANCOUVER, WASHINGTON

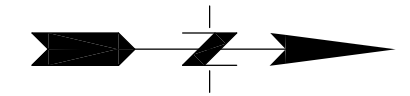
DATE
FEBRUARY 2017
FIGURE
2-2



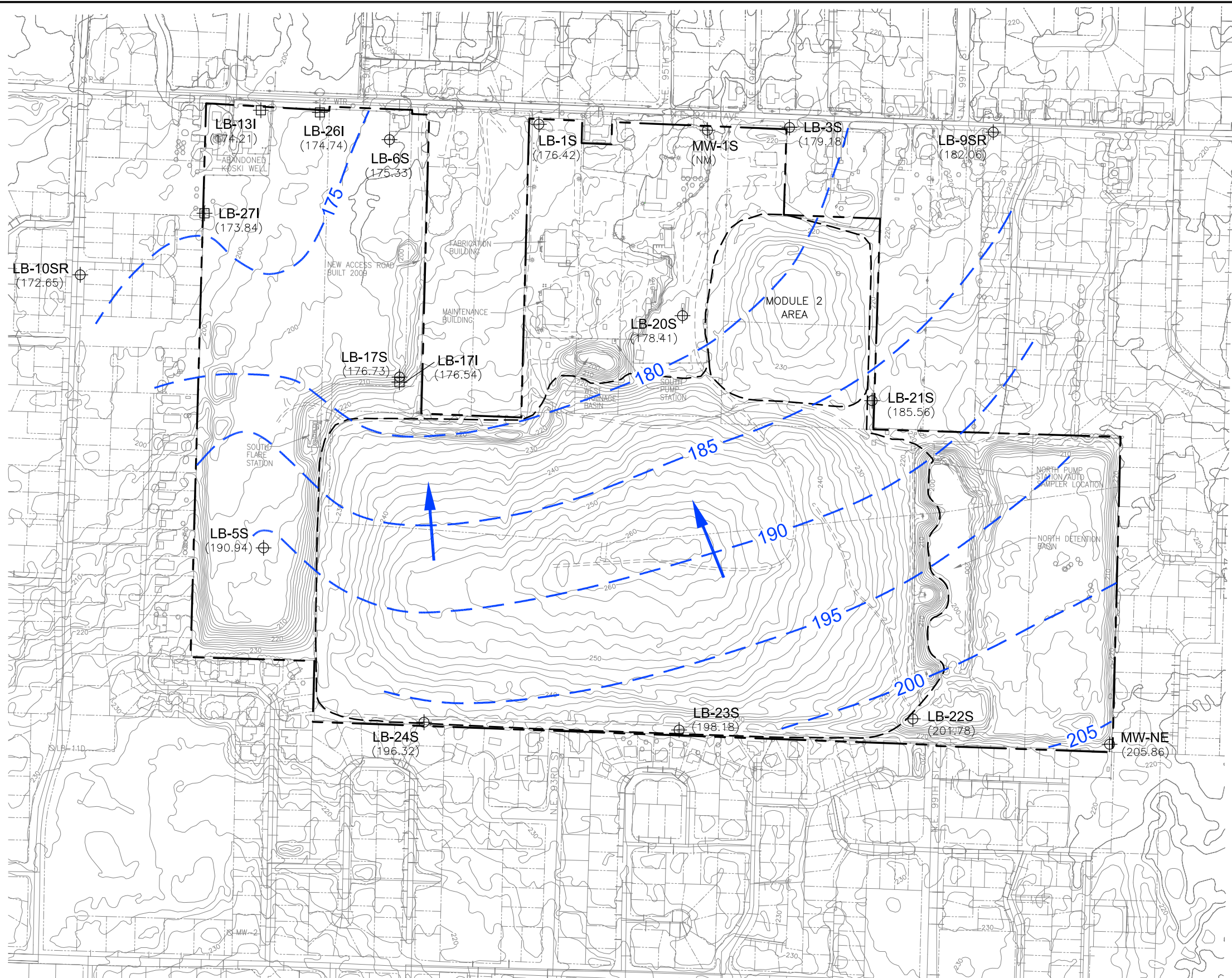
LEGEND:

- LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
- Property Boundary
- · - · - Limit of Landfill Cover and Approximate Edge of Waste
- -180- - Groundwater Potentiometric Surface Contour, queried where uncertain
- (183.58) Groundwater Elevation Measured on February 15, 2016
- ➔ Inferred Groundwater Flow Direction

NOTE:
 Topography Taken From Clark County GIS, December 2008



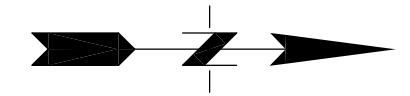
PROJECT NO.	04217030.14	DES BY	B.M.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 2-3	APP BY	L.C.



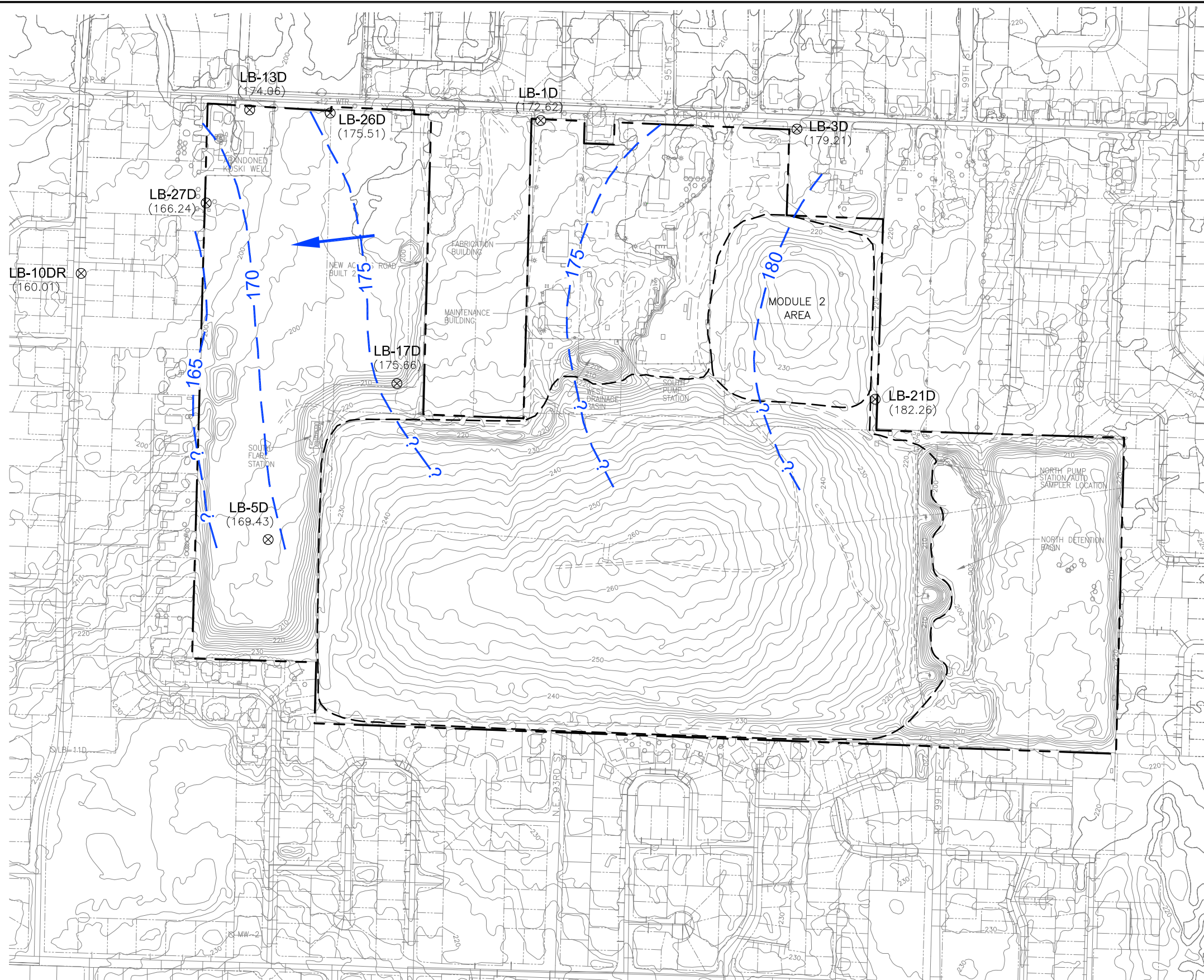
LEGEND:

- 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
- - - - -195- - - - Groundwater Potentiometric Surface Contour, queried where uncertain
- (205.86) Groundwater Elevation Measured on August 22, 2016
- ➔ Inferred Groundwater Flow Direction
- (NM) Groundwater Elevation not Measured due to Inaccessibility to Well

NOTE:
 Topography Taken From Clark County GIS, December 2008



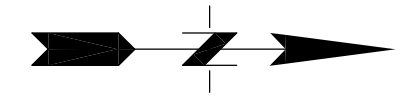
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SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 2-4	APP BY	L.C.



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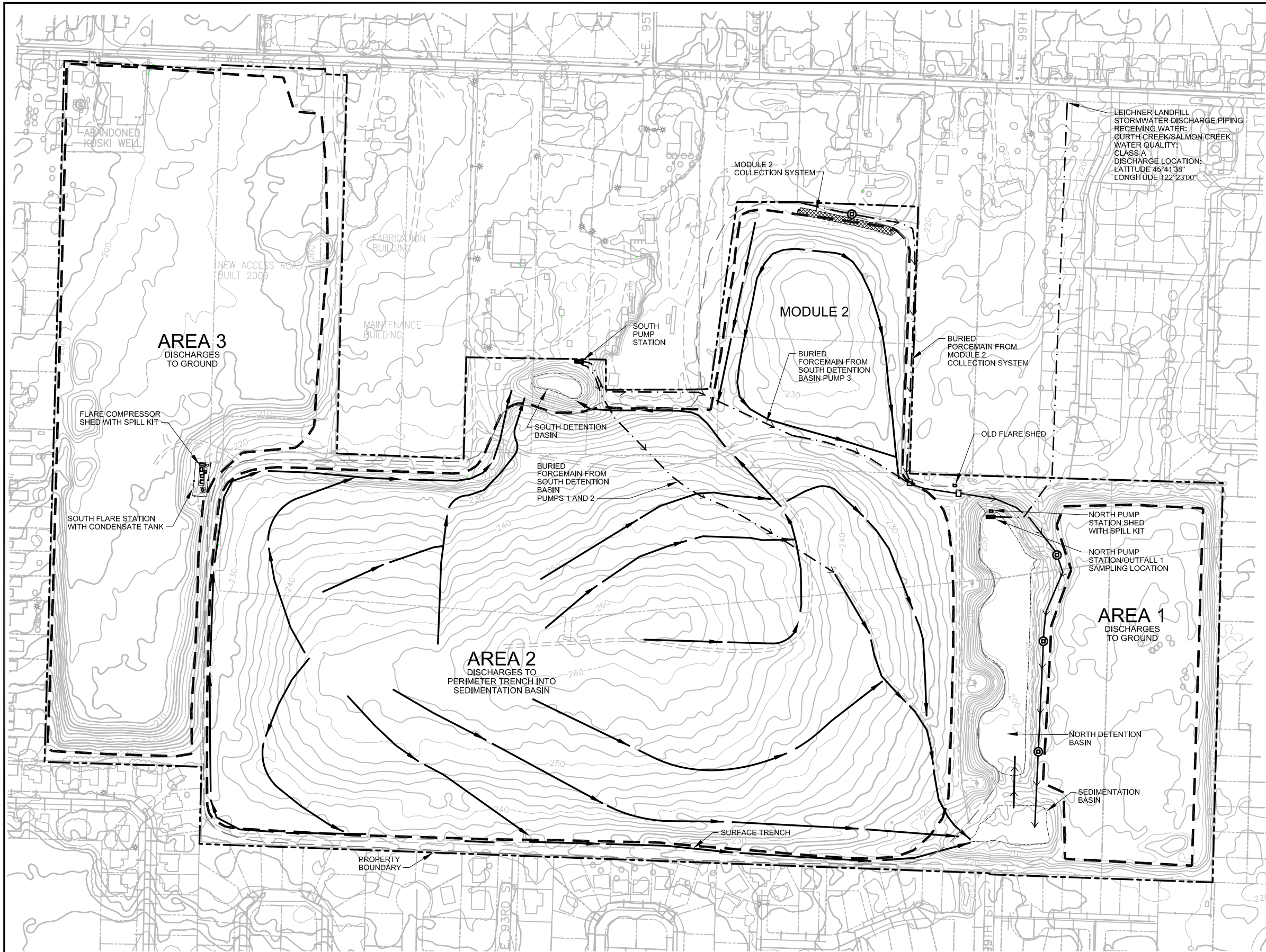
- LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
- Property Boundary
- - - - - Limit of Landfill Cover and Approximate Edge of Waste
- - 175 - - - Groundwater Potentiometric Surface Contour, queried where uncertain
- (182.26) Groundwater Elevation Measured on August 22, 2016
- ➔ Inferred Groundwater Flow Direction

NOTE:
 Topography Taken From Clark County GIS, December 2008



PROJECT NO.	04217030.14	DES BY	B.M.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 2-5	APP BY	L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
 TROUTDALE FORMATION AQUIFER
 AUGUST 22, 2016
 LEICHTNER LANDFILL
 VANCOUVER, WASHINGTON

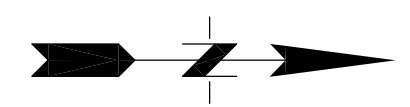


LEICHER LANDFILL
 STORMWATER DISCHARGE PIPING
 RECEIVING WATER:
 CURTH CREEK/SALMON CREEK
 WATER QUALITY:
 CLASS A
 DISCHARGE LOCATION:
 LATITUDE 45°41'38"
 LONGITUDE 122°23'00"

LEGEND:

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

NOTE:
 Topography Taken From Clark
 County GIS, December 2008



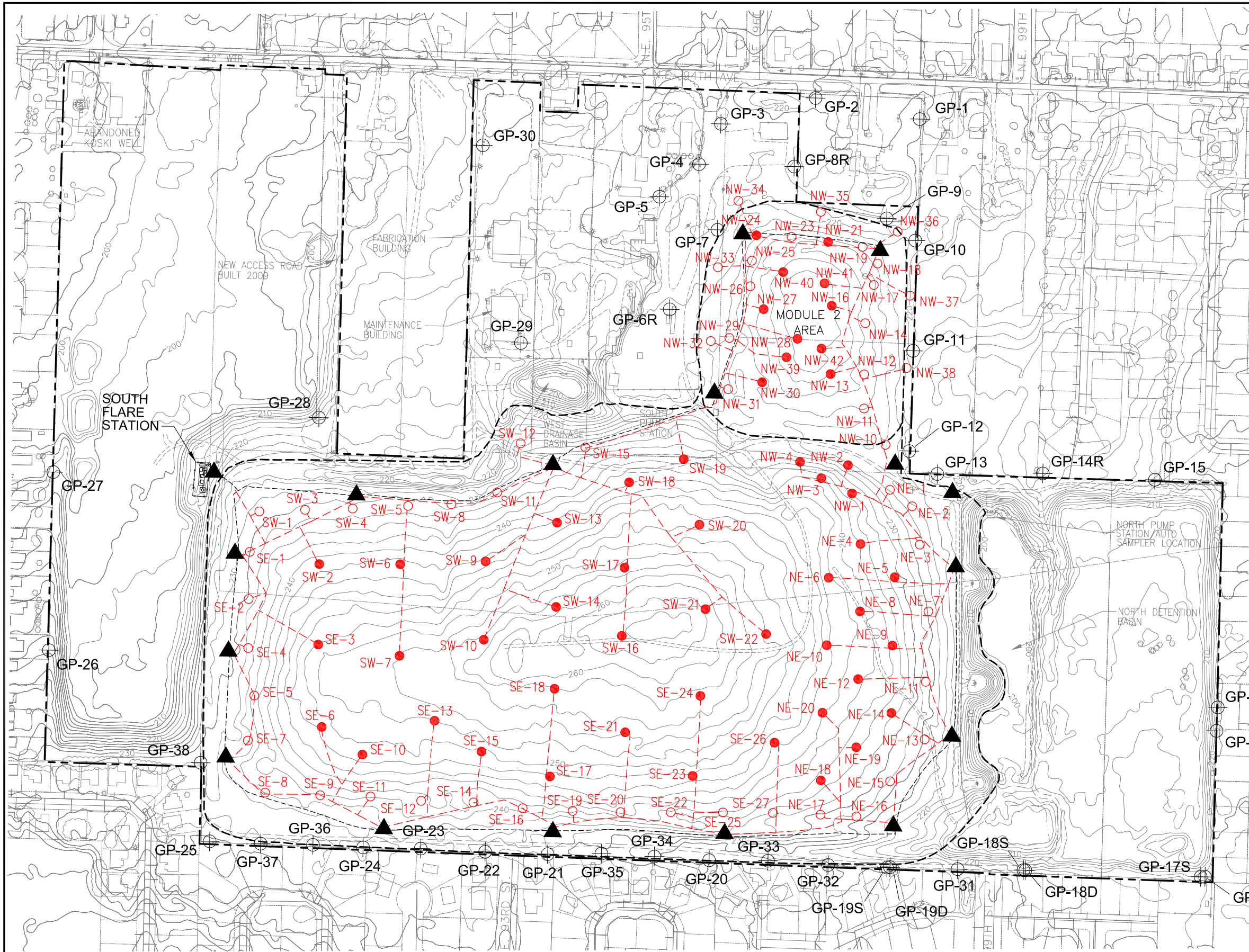
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 Portland, Oregon 97224
 (503) 639-9201 FAX: (503) 684-6948



PROJECT NO.	04217030.14	DES BY	J.D.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 3-1	APP BY	L.C.

SITE MAP AND STORMWATER SYSTEM
 LEICHER LANDFILL
 VANCOUVER, WASHINGTON

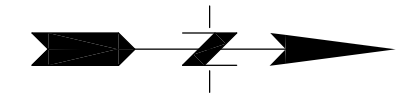
DATE
 FEBRUARY 2017
 FIGURE
3-1



LEGEND:

- ⊕ GP-30 Compliance Landfill Gas Monitoring Probe Location
- SW-1 Vertical Landfill Gas Extraction Well
- SW-2 Extraction Wells Proposed for Additional Data Collection
- ▲ 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



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PROJECT NO.	04217030.14	DES BY	B.M.
SCALE	AS SHOWN	CHK BY	D.L.
CAD FILE	FIGURE 4-1	APP BY	L.C.

**LANDFILL GAS PROBE AND
EXTRACTION WELL LOCATIONS**

LEICHTER LANDFILL
VANCOUVER, WASHINGTON

DATE
FEBRUARY 2017

FIGURE
4-1

APPENDIX A
2016 Field Sampling Data Sheets (FSDSs)

First Quarter (February) 2016 FSDSs

**Leichner Landfill
Groundwater Elevation Survey**

Project #: 04216030.13

Sampler: B McMullen

Quarter: 1 2 3 4

Date: 2/15/16

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1 N	216.58	15.00	NA	1223	Dry @ 15.00'
MW-1 S	216.13	44.50	37.10	1324	
MW-1 E	216.45	29.05	NA	1322	Dry @ 29.05'
MW-NE	219.83	50.34	13.02	1145	
LB-R2	222.27	77.36	44.61	1243	
LB-1S	210.12	45.00	32.65	1311	
LB-1D	209.74	137.45	35.20	1314	
LB-3S	218.25	52.50	38.06	1344	
LB-3D	219.29	117.28	39.10	1350	
LB-5S	206.89	30.32	15.10	1216	
LB-5C	206.70	74.71	31.91	1218	
LB-5D	207.56	122.40	26.63	1214	
LB-6S	202.80	39.07	26.39	1238	
LB-9SR	217.94	49.60	34.63	1354	
LB-10SR	204.04	42.35	29.90	1405	
LB-10CR	203.05	71.95	28.82	1400	
LB-10DR	203.36	121.10	41.91	1402	
LB-13I	202.36	55.03	27.03	1233	
LB-13C	202.68	66.00	27.42	1231	
LB-13D	202.96	88.88	27.72	1230	
LB-17S	208.18	34.38	30.42	1250	
LB-17I	213.14	51.95	35.54	1248	
LB-17C	206.55	72.35	29.21	1252	
LB-17D	213.17	100.91	36.41	1246	
LB-20S	221.22	61.50	29.55	1339	
LB-21S	223.35	54.24	26.80	1134	
LB-21C	223.32	79.10	37.25	1132	
LB-21D	223.63	110.73	40.05	1138	
LB-22S	208.42	36.97	5.55	1291	
LB-23S	229.19	45.40	30.18	1205	
LB-24S	235.13	54.16	37.90	1208	
LB-26I	200.22	58.30	24.40	1303	
LB-26D	200.75	101.78	24.16	1259	
LB-27I	205.35	57.15	30.29	1224	
LB-27D	204.65	115.10	36.82	1226	

Notes:

Cloudy 57°F
probe deconed between each location

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 Landfill **WELL ID:** LB-15

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021216-14

DUP ID: NA

WIND FROM: N NE E SE S SW W NW NIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** °F 62 °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)
2/17/16	14:11	45.00	-	32.51	-	12.49	X 1 2.03
/ /	:						X 3 .

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

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

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

Bottle Type	Date	Time	Method ^s	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/17/16	14:30	A	3 40 ml	<u>NO</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	14:30	A	3 <u>250, 500, 1L</u>	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	14:30	A	1 <u>250, 500, 1L</u>	<u>HNO₃</u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 7 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 [X]	
	VOA - Glass	<u>8250</u> (8011)		/	X
	AMBER - Glass	(8080) (8150) (TOX)			
	WHITE - Poly	(pH) (Conductivity) <u>TDS</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T) <u>(NO₃)</u>			
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)			
	GREEN - Poly	(Cyanide)			
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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: 14:12 Pump/Bailer Inlet Depth:

Meas.	Method ^s	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>°C</u>	DTW	Diss O ₂ (mg/l)	Water Quality
0	<u>A(1415)</u>	0.00	7.06	230.1	271	13.12	32.51	6.43	Clear/Colorless
1	<u>A(1418)</u>	0.35	6.83	238.9	274	13.97	32.51	5.89	Clear/Colorless
2	<u>A(1421)</u>	0.75	6.75	242.6	264	12.62	32.51	5.45	Clear/Colorless
3	<u>A(1424)</u>	1.00	6.72	289.0	263	12.54	32.51	5.39	Clear/Colorless
4	<u>A(1427)</u>	1.25	6.71	269.2	262	12.50	32.51	5.34	Clear/Colorless
5									
6									

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

Low flow purge method ~ 9/6/30psi 100ml/pulse

SAMPLER: B. Mammellen
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: LB-02RM LB-1D

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

BLIND ID: LB-021716-08

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)

[Product Thickness]

[Water Column]

[Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/17/16	09:04	137.45	-	34.89	-	102.56	X 1 16.71
/ /	:	.	.	.	.	.	X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/17/16	09:35	A	3 (40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	09:35	A	3 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	09:35	A	1 (250, 500, 1L)	(HNO ₃)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7

Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [] WA [X]
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T.) (NO ₃)
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₂ /NO ₃) (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: 09:07

Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(0909)	0.00	6.98	-283.4	219	11.57	34.65	7.65	clear/colorless
1	A(0912)	0.35	7.01	-286.2	240	11.69	31.70	8.15	clear/colorless
2	A(0915)	0.75	7.05	-307.8	233	11.76	31.43	6.35	clear/colorless
3	A(0918)	1.00	7.09	-305.2	229	11.78	31.50	5.00	clear/colorless
4	A(0927)	1.40	7.17	-345.6	231	11.76	31.59	3.56	clear/colorless
5	A(0930)	1.75	7.16	-344.6	231	11.77	31.60	3.54	clear/colorless
6	A(0933)	1.90	7.14	-341.6	231	11.77	31.60	3.53	clear/colorless

[Casing]

[Select A-G]

[Cumulative Totals]

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/90 psi 100 ml/pulse
0920- Recalibrated ORP to check if it was reading correctly

SAMPLER:

B. McMullen
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill **WELL ID:** FB1
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021716-07

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

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
/ /	:	X 1
/ /	:	X 3
Gal/ft = (dia./2) ² x 0.163		1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080
		12" = 5.875					

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

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

Bottle Type	Date	Time	Method	Amount & Volume mL	Preservative	Ice	Filter	pH	✓
VOA Glass	2/17/16	08:40	G	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		3m 250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	08:40	G	3 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	08:40	G	1 (250, 500, 1L)	HNO ₃	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8250) (8011) OR [] WA [X]
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T) (NO ₃)
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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 ₂ (mg/l)	Water Quality
0		0.00	.			.	.	.
1		
2		
3		
4		
5		
6		

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

Sample Collected near LB-1D

SAMPLER: B Menden
 (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 Landfill **WELL ID:** LB-35
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021716-12

DUP ID: NA

WIND FROM: N NE E SE S SW W NW **WEATHER:** SUNNY CLOUDY RAIN ? **TEMPERATURE:** °F 55. °C

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/17/16	12:14	52.50	-	37.95	-	14.55	X 1 = 2.37
/ /	:	.	.	.	.	.	X 3 = .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/17/16	12:40	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	12:40	A	3 (250) 500, 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	12:40	A	1 (250) 500, 1L	(HNO ₃)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

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

WATER QUALITY DATA

Purge Start Time: 12:14

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1218)	0.00	7.34	-275.9	216	12.41	37.95	8.09	clear/Colorless
1	A(1221)	0.30	6.93	-298.3	208	12.09	37.95	5.72	clear/Colorless
2	A(1224)	0.70	6.83	-308.7	207	11.86	37.95	5.20	clear/Colorless
3	A(1227)	1.00	6.77	-315.6	206	11.84	37.95	5.09	clear/Colorless
4	A(1230)	1.30	6.65	-318.7	206	11.80	37.95	5.05	clear/Colorless
5	A(1233)	1.60	6.65	-318.4	206	11.79	37.95	5.03	clear/Colorless
6	A(1236)	1.90	6.64	-319.6	206	11.79	37.95	5.00	clear/Colorless

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/30psi 100ml/pulse.

SAMPLER: B. M. Mullen

(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LB-3D
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021616-6

DUP ID: NA
WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 49 °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)
2/16/16	13:39	117.28	-	39.05	-	78.23	X 1 12.75
/ /	:	.	.	.	.	.	X 3 .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/16/16	14:00	A	3 (40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/16/16	14:00	A	3 (250, 500, 1L)	(None)	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/16/16	14:00	A	1 (250, 500, 1L)	(HNO ₃)	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 7 Total Bottles (include duplicate count):

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


WATER QUALITY DATA Purge Start Time: 13:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1342)	0.00	6.99	94.6	213	11.76	39.11	3.92	clear/colorless
1	A(1345)	0.25	6.80	83.3	217	11.73	39.11	5.30	cloudy/colorless
2	A(1348)	0.60	6.71	80.8	219	11.71	39.11	5.60	clear/colorless
3	A(1351)	0.85	6.67	81.3	220	11.70	39.11	5.58	clear/colorless
4	A(1354)	1.20	6.65	79.6	220	11.69	39.11	5.52	clear/colorless
5	A(1357)	1.40	6.65	79.5	220	11.69	39.11	5.49	clear/colorless
6									

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

Low flow purge method ~ 8/7/75psi 100ml/pulse

SAMPLER: B McMullen
(PRINTED NAME)


(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill

WELL ID: LB-55

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

BLIND ID: LB-021816-17

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE: °F 48. °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/18/16	10:00	30.32	—	15.05	—	15.27	X 1 2.48
/ /	:	.	.	.	.	.	X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/18/16	10:20	A	3 (40 mL)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	10:20	A	3 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	10:20	A	1 (250, 500, 1L)	(HNO ₃)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7

Total Bottles (include duplicate count):

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

WATER QUALITY DATA

Purge Start Time: 10:00

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1002)	0.00	7.05	120.1	200	11.56	15.05	9.46	clear/colorless
1	A(1005)	0.40	6.55	123.2	207	12.00	15.05	8.34	clear/colorless
2	A(1008)	0.70	6.45	52.5	207	12.17	15.05	7.60	clear/colorless
3	A(1011)	1.20	6.43	80.9	207	12.22	15.05	6.43	clear/colorless
4	A(1014)	1.50	6.42	78.1	207	12.22	15.05	6.81	clear/colorless
5	A(1017)	1.75	6.42	78.9	207	12.23	15.05	6.91	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/00 100ml/pulse

SAMPLER: B membran
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LB-SD
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021816-16

DUP ID: NA

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 48 °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)
2/18/16	09:05	122.40	---	36.21	---	86.19	X 1 14.04
/ /	:						X 3 .

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

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

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

Bottle Type	Date	Time	Method [§]	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/18/16	09:30	A	3	<u>HO</u>	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	09:30	A	3	<u>None</u>	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	09:30	A	1	<u>HNO₃</u>	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 7 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)		<input checked="" type="checkbox"/>
	AMBER - Glass	(8080) (8150) (TOX)		<input type="checkbox"/>
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>		<input type="checkbox"/>
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (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> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)		<input type="checkbox"/>

WATER QUALITY DATA Purge Start Time: 09:07 Pump/Bailer Inlet Depth:

Meas.	Method [§]	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(0910)	0.00	7.14	34.1	298	11.18	36.25	3.10	clear/colorless
1	A(0913)	0.20	7.00	46.6	299	11.61	36.25	1.68	clear/colorless
2	A(0916)	0.40	6.93	56.2	298	11.88	36.25	1.04	clear/colorless
3	A(0919)	0.70	6.90	56.0	297	12.06	36.25	0.56	clear/colorless
4	A(0922)	1.00	6.90	65.7	297	12.12	36.25	0.51	clear/colorless
5	A(0925)	1.30	6.90	59.1	298	12.11	36.25	0.52	clear/colorless
6									

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

Low flow purge method ~8/7/60 psi 75ml/pulse

SAMPLER: B. McMullen
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill **WELL ID:** LB-65

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021816-21

DUP ID: NA

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** °E 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)	
2/18/16	13:56	39.07	—	26.22	—	12.85	X 1 2.09	
/ /	:	.	.	.	.	.	X 3 .
Gal/ft = (dia./2) ² x 0.163		1" = 0.041	<u>2</u> " = 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	2/18/16	14:20	A	3 <u>40 ml</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	14:20	A	3 <u>250, 500, 1L</u>	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	14:20	A	1 <u>250, 500, 1L</u>	<u>HNO₃</u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 7 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 ₃ /CO ₃) <u>Cl</u> (SO ₄) (Silica, T) <u>NO₃</u>		
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₃ /NO ₂) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)		
	RED DISSOLVED - Poly	(Ca) <u>Fe</u> , (Mg) <u>Mn</u> , (K) (Na)		

WATER QUALITY DATA Purge Start Time: 13:57 Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1359)	0.00	6.77	124.6	182	11.61	26.22	<u>8.22</u>	clear/colorless
1	A(1402)	0.40	6.73	75.7	191	11.76	26.22	7.88	clear/colorless
2	A(1405)	0.75	6.72	48.4	207	11.03	26.22	6.83	clear/colorless
3	A(1408)	1.10	6.72	99.6	215	11.85	26.22	6.59	clear/colorless
4	A(1411)	1.45	6.72	113.1	214	11.86	26.22	6.45	clear/colorless
5	A(1414)	1.75	6.72	113.1	214	11.86	26.22	6.43	clear/colorless
6									

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

Low flow purge method ~ 8/7/25 psi 100 ml/pulse

SAMPLER: B Mumen
(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 Landfill

WELL ID: LB-10SR

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

BLIND ID: LB-021716-11

DUP ID:

NA

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

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
02/17/16	11:12	42.35	-	29.76	-	12.59	X 1 = 2.95
/ /	:	.	.	.	.	.	X 3 = .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/17/16	11:35	A	3 (40 ml)	<u>(HCl)</u>	<u>(YES)</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	11:35	A	3 (250, 500, 1L)	<u>(None)</u>	<u>(YES)</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	11:35	A	1 (250, 500, 1L)	<u>(HNO₃)</u>	<u>(YES)</u>	<u>(YES)</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7 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>(X)</u>
	AMBER - Glass	(8080) (8150) (TOX)		[]	[]
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>			
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)			
	GREEN - Poly	(Cyanide)			
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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: 11:14 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1115)	0.00	7.11	-325.9	474	13.33	29.76	5.43	clear/colorless
1	A(1118)	0.35	6.97	-340.6	542	13.23	29.76	6.97	clear/colorless
2	A(1121)	0.50	6.96	-395.0	541	13.22	29.76	1.49	clear/colorless
3	A(1124)	0.80	6.86	-398.7	486	13.26	29.76	1.06	clear/colorless
4	A(1127)	1.10	6.76	-371.8	446	13.28	29.76	0.92	clear/colorless
5	A(1130)	1.25	6.75	-381.2	446	13.30	29.76	0.90	clear/colorless
6	A(1133)	1.55	6.73	-392.1	445	13.30	29.76	0.92	clear/colorless

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 9/6/27psi 100ml/pulse

SAMPLER: B. Mumukun
(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 Landfill

WELL ID: B-10DR

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

BLIND ID: LB-021716-09

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	<u>(NW)</u>	<u>(LIGHT)</u>	MEDIUM	HEAVY
WEATHER:	SUNNY		<u>(CLOUDY)</u>		RAIN		?		TEMPERATURE: <u>65.0</u> °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)
2/17/16	10:12	121.10	-	41.37	-	79.73	X 1 12.99
/ /	:	X 3 .

Gal/ft = (dia./12) ² x 0.163	1" = 0.041	<u>(2")</u> = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875
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§ 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	2/17/16	10:40	A	3	<u>(40 ml)</u>	<u>(HC)</u>	<u>(YES)</u>	NO	✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO	
White Poly	2/17/16	10:40	A	3	<u>(250, 500, 1L)</u>	<u>(None)</u>	<u>(YES)</u>	NO	NA ✓
Yellow Poly	/ /	:			250, 500, 1L	H ₂ SO ₄	YES	NO	
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO	
Red Total Poly	/ /	:			125, 250, 500	HNO ₃	YES	NO	
Red Diss. Poly	2/17/16	10:40	A	1	<u>(250, 500, 1L)</u>	<u>(HNO₃)</u>	<u>(YES)</u>	<u>(YES)</u>	✓
	/ /	:			250, 500, 1L		YES		

White no acid, Yellow H2SO4, Red HNO3

7

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>(X)</u>	<u>(X)</u>
	AMBER - Glass	(8080)	(8150)	(TOX)	[]	[]
	WHITE - Poly	(pH) (Conductivity)	<u>(TDS)</u>	(TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(C)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>		
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₂ /NO ₃) (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: 10:14

Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1015)	0.00	7.00	-334.1	310	12.61	38.45	4.82	clear/colorless
1	A(1019)	0.40	6.93	-382.5	393	12.69	37.90	1.90	clear/colorless
2	A(1022)	0.55	6.95	-398.7	400	12.69	37.90	1.49	clear/colorless
3	A(1025)	1.00	6.98	-420.8	410	12.70	37.90	1.01	clear/colorless
4	A(1028)	1.25	7.00	-445.5	413	12.69	37.90	0.93	clear/colorless
5	A(1031)	1.60	7.00	-453.1	415	12.70	37.90	0.86	clear/colorless
6									

[Casing]

[Select A-G]

[Cumulative Totals]

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/80psi 100ml/pulse

SAMPLER: B McMullen
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: Dup 2

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

BLIND ID: LB-521716-10

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY	
WEATHER:	SUNNY	CLOUDY			RAIN			?	TEMPERATURE: 75.0 °C			

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Sample Depth: [if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/17/16	10:35	A	3 (40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	10:35	A	3 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	10:35	A	1 (250, 500, 1L)	(HNO ₃)	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7 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 [X]
	VOA - Glass	(8260) (8011)		
	AMBER - Glass	(8080) (8150) (TOX)		
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T.) (NO ₃)		
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₃ /NO ₂) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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 ₂ (mg/l)	Water Quality
0		0.00	.			.	.	.
1		
2		
3		
4		
5		
6		

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

[Circle units]

[Clarity, Color]

Collected at LB-10-DR

SAMPLER: B McMillen
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LR-13J

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-021816-20

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) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/18/16	13:02	55.03	—	26.82	—	28.21	X 1 4.59
/ /	:	.	.	.	.	.	X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/18/16	13:25	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	13:25	A	3 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	13:25	A	1 (250, 500, 1L)	(HNO ₃)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 7 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)		WA []
	AMBER - Glass	(8080) (8150) (TOX)		WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T) (NO ₃)		
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)		
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)		

WATER QUALITY DATA Purge Start Time: 13:04 Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1306)	0.00	6.95	97.2	255	11.07	26.85	12.62	clear/colorless
1	A(1309)	0.35	6.89	98.6	252	11.28	26.85	6.27	clear/colorless
2	A(1312)	0.55	6.84	96.7	252	11.47	26.85	3.58	clear/colorless
3	A(1315)	0.80	6.82	97.0	253	11.45	26.85	3.41	clear/colorless
4	A(1318)	1.10	6.82	97.4	252	11.48	26.85	3.24	clear/colorless
5	A(1321)	1.40	6.81	97.3	252	11.49	26.85	3.19	clear/colorless
6									

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

low flow purge method ~ 8/7/35 psi 100ml/pulse

SAMPLER: Brian Memullin
(PRINTED NAME)

(SIGNATURE) 

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: LB-13D

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

BLIND ID: LB-021616-02

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN			?			TEMPERATURE: °F 49 °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/16/16	10:39	88.88	-	27.71	-	61.17	X 1 9.97
1/1	:	.	.	.	.	.	X 3 .

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method	Amount & Volume mL	Preservative	Ice	Filter	pH	✓
VOA Glass	2/16/16	11:05	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/16/16	11:05	A	3 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/16/16	11:05	A	1 (250, 500, 1L)	HNO ₃	YES	YES		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

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

WATER QUALITY DATA

Purge Start Time: 10:40

Pump/Bailer Inlet Depth:

Meas.	Method	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1042)	0.00	7.21	65.0	233	11.86	27.71	4.02	clear/colorless
1	A(1045)	0.50	6.84	58.3	217	11.48	27.71	4.72	clear/colorless
2	A(1048)	0.90	6.74	59.8	204	11.81	27.71	5.49	clear/colorless
3	A(1051)	1.40	6.71	61.0	206	11.81	27.71	5.71	clear/colorless
4	A(1054)	1.60	6.69	62.7	209	11.78	27.71	5.76	clear/colorless
5	A(1057)	1.85	6.68	62.9	210	11.78	27.71	5.78	clear/colorless
6									

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

Low flow purge method 8/7/6ops; 100ml/pulse

SAMPLER:

B. M. M. M. M.
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LB-17J
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021816-15

DUP ID: **NA**

WIND FROM: N NE E SE S SW W (NW) (LIGHT) MEDIUM HEAVY
WEATHER: SUNNY (CLOUDY) RAIN ? **TEMPERATURE:** °F 49 °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)
2/18/16	08:19	51.95	—	35.40	—	16.55	X 1 2.69
/ /	:	.	.	.	.	.	X 3 .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/18/16	08:40	A	3 (40 ml)	<u>(HCl)</u>	<u>(YES)</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	08:40	A	3 (250, 500, 1L)	<u>(None)</u>	<u>(YES)</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	08:40	A	1 (250, 500, 1L)	<u>(HNO₃)</u>	<u>(YES)</u>	<u>(YES)</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃ 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>(826)</u> (8011)		
	AMBER - Glass	(8080) (8150) (TOX)	OR []	WA []
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>		
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)		
	GREEN - Poly	(Cyanide)		
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)		
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)		

WATER QUALITY DATA Purge Start Time: 08:21 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(0823)	0.00	6.46	19.8	388	11.89	35.40	1.93	clear/colorless
1	A(0826)	0.40	6.98	-47.1	424	12.75	35.40	0.56	clear/colorless
2	A(0829)	0.75	7.00	-85.4	426	12.87	35.40	0.36	clear/colorless
3	A(0832)	1.20	7.00	-105.8	424	12.95	35.40	0.37	clear/colorless
4	A(0835)	1.50	7.00	-102.3	423	12.97	35.40	0.31	clear/colorless
5	A(0838)	1.75	7.00	-99.1	423	12.96	35.40	0.29	clear/colorless
6									

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

Low flow purge method ~ 8/7/40psi 100ml/pulse

SAMPLER: Brian McMullen
 (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill

WELL ID: LR-17D

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

BLIND ID: LR-021616-01

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	<u>NW</u>	<u>LIGHT</u>	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		<u>RAIN</u>		?		TEMPERATURE: <u>75.2</u> °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/16/16	09:49	100.91	-	36.40	-	64.51	X 1 10.51
/ /	:	.	.	.	.	.	X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/16/16	10:05	A	3 (40 ml)	<u>(HCl)</u>	<u>(YES)</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/16/16	10:05	A	3 (250, 500, 1L)	<u>(None)</u>	<u>(YES)</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/16/16	10:05	A	1 (250, 500, 1L)	<u>(HNO₃)</u>	<u>(YES)</u>	<u>(YES)</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7 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	<u>(8265)</u> (8011)								OR []	WA [<input checked="" type="checkbox"/>]
	AMBER - Glass	(8080) (8150) (TOX)								OR []	WA []
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>									
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)									
	GREEN - Poly	(Cyanide)									
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)									
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)									

WATER QUALITY DATA

Purge Start Time: 09:50

Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(0952)	0.00	6.44	20.0	290	12.72	36.40	2.54	clear/colorless
1	A(0954)	0.25	6.71	4.9	292	12.97	36.40	0.80	clear/colorless
2	A(0956)	0.50	6.77	8.8	291	13.02	36.40	0.61	clear/colorless
3	A(0958)	0.75	6.80	11.3	292	13.03	36.40	0.49	clear/colorless
4	A(1000)	0.90	6.82	10.7	292	13.03	36.40	0.38	clear/colorless
5	A(1002)	1.10	6.83	10.7	292	13.02	36.40	0.37	clear/colorless
6									

[Casing]

[Select A-G]

[Cumulative Totals]

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/65 psi, 100 ml/pulse

SAMPLER:

B McMullen
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill

WELL ID: LB-205

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

BLIND ID: LB-021716-13

DUP ID:

NA

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

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/17/16	13:14	61.50	-	39.34	-	22.16	X 1 = 3.61
/ /	:						X 3 = .

Gal/ft = (dia./2) ² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875
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§ 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	2/17/16	13:35	A	3 (40 ml)	HO	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/17/16	13:35	A	3 (250) 500 (1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/17/16	13:35	A	1 (250) 500, 1L	HNO ₃	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)	OR []	WA [X]
	VOA - Glass	(8260) (8011)		
	AMBER - Glass	(8080) (8150) (TOX)		
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T) (NO ₃)		
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₂ /NO ₃) (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: 13:16

Pump/Bailer Inlet Depth:

Meas.	Method [§]	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1317)	0.00	7.06	347.8	302	13.03	39.36	3.11	cloudy / orange
1	A(1320)	0.30	7.03	401.5	314	12.88	39.36	1.16	cloudy / orange
2	A(1323)	0.60	7.04	441.5	320	12.66	39.36	0.56	cloudy / orange
3	A(1326)	0.85	7.05	105.3	321	12.63	39.36	0.48	clear / light orange
4	A(1329)	1.00	7.05	107.8	320	12.64	39.36	0.49	clear / light orange
5	A(1332)	1.20	7.04	113.0	320	12.65	39.36	0.48	clear / colorless
6									

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/30psi 100ml/pulse

SAMPLER:

B McMullen
(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: LB-261

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

BLIND ID: LB-021616-05

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY	
WEATHER:	SUNNY	CLOUDY			RAIN			?	TEMPERATURE: 49 °C			

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/16/16	11:47	58.30	-	24.35	-	33.95	X 1 = 5.53
/ /	:	.	.	.	.	.	X 3 =

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/16/16	12:05	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/16/16	12:05	A	3 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/16/16	12:05	A	1 (250, 500, 1L)	(HNO ₃)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7

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 [X]
	VOA - Glass	(8260) (8011)		
	AMBER - Glass	(8080) (8150) (TOX)		
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T.) (NO ₃)		
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₂ /NO ₃) (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: 11:47

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1149)	0.00	6.91	64.0	241	11.90	24.35	5.74	clear/colorless
1	A(1152)	0.40	6.78	63.8	253	11.83	24.35	5.10	clear/colorless
2	A(1155)	0.75	6.74	63.8	246	11.79	24.35	4.93	clear/colorless
3	A(1158)	1.20	6.73	63.8	247	11.80	24.35	4.77	clear/colorless
4	A(1201)	1.50	6.72	64.2	247	11.81	24.35	4.69	clear/colorless
5	A(1204)	1.90	6.73	64.7	252	11.80	24.35	4.63	clear/colorless
6									

[Casing]

[Select A-G]

[Cumulative Totals]

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/40psi 100ml/pulse

SAMPLER:

B Mummelen
(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 Landfill

WELL ID: LB-26D

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

BLIND ID: LB-021616-04

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	<u>(NW)</u>	<u>(LIGHT)</u>	MEDIUM	HEAVY
WEATHER:	SUNNY		<u>(CLOUDY)</u>		RAIN		?		TEMPERATURE: <u>67.49</u> °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/16/16	12:31	101.78	-	24.12	-	77.66	X 1 12.65
1/1	:						X 3

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

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

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

Sample Depth:

[if used]

Bottle Type	Date	Time	Method	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	2/16/16	12:55	A	3 (40 ml)	<u>(HCl)</u>	<u>YES</u>	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/16/16	12:55	A	3 (250, 500, 1L)	<u>(None)</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/16/16	12:55	A	1 (250, 500, 1L)	<u>(HNO₃)</u>	<u>YES</u>	<u>YES</u>		✓
	1/1	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	<u>(8260)</u> (8011) OR [] WA <input checked="" type="checkbox"/>
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)

WATER QUALITY DATA

Purge Start Time: 12:36

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1237)	0.00	7.04	140.7	230	12.03	24.12	4.13	clear/colorless
1	A(1240)	0.40	6.79	100.5	229	11.94	24.12	1.98	clear/colorless
2	A(1243)	0.75	6.71	88.7	229	11.88	24.12	2.17	clear/colorless
3	A(1246)	1.10	6.67	82.3	230	11.84	24.12	2.57	clear/colorless
4	A(1249)	1.50	6.66	79.1	230	11.82	24.12	2.68	clear/colorless
5	A(1252)	1.80	6.66	77.9	231	11.81	24.12	2.71	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/60ps; 100ml/pulse

SAMPLER: Brian Marmullen
(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 Landfill

WELL ID: LB-27D

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

BLIND ID: LB-021816-18

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
	WEATHER: SUNNY			CLOUDY			RAIN			TEMPERATURE: 50.0 °C	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/18/16	10:44	115.10	-	35.29	-	79.81	X 1 13.00
/ /	:	.	.	.	.	.	X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/18/16	11:05	A	3 (40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	11:05	A	3 (250, 500, 1L)	(None)	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	11:05	A	1 (250, 500, 1L)	(HNO ₃)	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3

Total Bottles (include duplicate count): 7

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

WATER QUALITY DATA			Purge Start Time: 10:46				Pump/Bailor Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1048)	0.00	7.08	95.3	278	11.21	36.63	6.36	clear/Colorless
1	A(1051)	0.30	6.94	90.4	284	11.66	37.45	4.17	clear/Colorless
2	A(1054)	0.50	6.92	100.0	287	11.76	38.61	3.91	clear/Colorless
3	A(1057)	0.75	6.92	111.3	287	11.66	38.63	3.73	cloudy/Colorless
4	A(1060)	1.00	6.92	105.8	287	11.64	38.63	3.65	cloudy/Colorless
5	A(1103)	1.25	6.92	106.2	287	11.65	38.63	3.61	cloudy/Colorless
6									

[Casing]

[Select A-G]

[Cumulative Totals]

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/60psi

SAMPLER: B McMullen

(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

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

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: LB-271

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

BLIND ID: LB-021816-19

DUP ID:

NA

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

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
2/18/16	11:38	57.15	-	30.14	-	27.01	X 1 4.40
/ /	:						X 3 .

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable 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	2/18/16	12:00	A	3 <u>40m</u>	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	2/18/16	12:00	A	3 <u>250, 500, 1L</u>	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	2/18/16	12:00	A	1 <u>250, 500, 1L</u>	<u>HNO₃</u>	<u>YES</u>	<u>YES</u>		✓
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H₂SO₄, Red HNO₃

7

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)									OR []	WA []
	AMBER - Glass	(8080) (8150) (TOX)									OR []	WA []
	WHITE - Poly	(pH) (Conductivity) <u>TDS</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>										
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)										
	GREEN - Poly	(Cyanide)										
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)										
	RED DISSOLVED - Poly	(Ca) <u>(Fe)</u> (Mg) <u>(Mn)</u> (K) (Na)										

WATER QUALITY DATA

Purge Start Time: 11:38

Pump/Bailor Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp <u>(°C)</u>	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1141)	0.00	7.05	110.8	456	10.84	30.14	6.05	clear/colorless
1	A(1144)	0.35	6.99	108.2	501	11.46	30.14	1.90	clear/colorless
2	A(1147)	0.55	6.93	112.8	512	11.55	30.14	1.26	clear/colorless
3	A(1150)	0.75	6.93	113.1	512	11.55	30.14	1.10	clear/colorless
4	A(1153)	1.10	6.94	115.4	512	11.56	30.14	1.11	clear/colorless
5	A(1156)	1.40	6.95	116.2	512	11.57	30.14	1.10	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low flow purge method ~ 8/7/35 psi 100ml/pulse

SAMPLER: Brian McMullen
(PRINTED NAME)

(SIGNATURE)

Third Quarter 2016 (August) FSDSs

**Leichner Landfill
Groundwater Elevation Survey**

Project #: 04216030.13

Sampler: T Andrews

Quarter: 1 2 (3) 4

Date: 8/22/16

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1 N	216.58	15.00	NR	1415	Well Monument lid stuck. No Readings
MW-1 S	216.13	44.50	NR	1418	
MW-1 E	216.45	29.05	NR	1420	
MW-NE	219.83	50.34	14.20	1210	
LB-R2	222.27	77.36	45.65	1250	
LB-1S	210.12	45.00	33.70	1430	Tubing in well
LB-1D	209.74	137.45	37.12	1435	
LB-3S	218.25	52.58	39.07	1400	Tubing in well
LB-3D	219.29	117.28	40.08	1331	
LB-5S	206.89	30.32	15.95	1610	
LB-5C	206.70	74.71	33.29	1615	
LB-5D	207.56	122.40	38.13	1620	
LB-6S	202.80	39.07	27.47	1515	
LB-9SR	217.94	49.60	35.88	1320	
LB-10SR	204.04	42.35	31.39	1450	
LB-10CR	203.05	71.95	30.31	1455	
LB-10DR	203.36	121.10	43.35	1500	
LB-13I	202.36	55.03	28.15	1540	
LB-13C	202.68	66.00	28.55	1545	
LB-13D	202.96	88.88	28.90	1550	
LB-17S	208.18	34.38	31.45	1300	
LB-17I	213.14	51.95	36.60	1303	Tubing in well
LB-17C	206.55	72.35	30.27	1255	
LB-17D	213.17	100.91	37.51	1305	Tubing in well
LB-20S	221.22	61.50	40.21	1440	
LB-21S	223.35	54.24	37.79	1152	
LB-21C	223.32	79.10	38.19	1150	
LB-21D	223.63	110.73	41.37	1155	
LB-22S	208.42	36.97	6.64	1215	
LB-23S	229.19	45.40	31.01	1220	
LB-24S	235.13	54.16	38.81	1225	
LB-26I	200.22	58.30	25.48	1525	
LB-26D	200.75	101.78	25.24	1530	
LB-27I	205.35	57.15	31.51	1558	31.51
LB-27D	204.65	115.10	38.39	1600	

Notes:

Sunny ~85° F
Performed standard decan between
locations.

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill

WELL ID: LB-1S

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

BLIND ID: LB-082416-05

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: (F) 72. °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
8/24/16	9:45	45.00	---	33.70	---	11.30	X 1 1.84
1/1	:						X 3 .

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

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

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

Sample Depth:

[√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/24/16	10:10	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/24/16	10:10	A	2 (250) 500, 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/24/16	10:10	A	1 (250) 500, 1L	(HNO ₃)	(YES)	(YES)		✓
White Poly	8/24/16	10:10	A	1 250, 500, 1L	(None)	(YES)	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃

7

Total Bottles (include duplicate count):

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

WATER QUALITY DATA

Purge Start Time: 9:49

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A (951)	0.00	5.87	187.4	342	14.95	33.70	7.00	clear/colorless
1	A (954)	0.40	6.00	255.0	296	13.28	33.70	5.14	clear/colorless
2	A (957)	0.75	6.62	253.1	295	13.28	33.70	5.10	clear/colorless
3	A (1000)	1.05	6.34	251.2	295	13.31	33.70	5.11	clear/colorless
4	A (1003)	1.40	6.35	249.2	294	13.33	33.70	5.06	clear/colorless
5	A (1006)	1.75	6.37	247.0	294	13.34	33.70	5.04	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low Flow Purge Method ~ 400mL/min

(100mL/pulse)

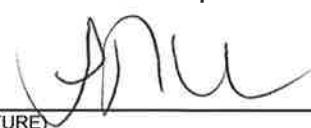
(9/6/30)

SAMPLER:

T Andrews

(PRINTED NAME)

(SIGNATURE)



FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill **WELL ID:** LB-58
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082316-01

DUP ID: NA
WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 73.0 °C

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
8/23/16	11:25	30.32	-	15.95	-	14.37	X 1: 2.34
/ /	:	.	.	.	.	.	X 3: .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/23/16	12:00	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/23/16	12:00	A	2 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/23/16	12:00	A	1 (250, 500, 1L)	HNO ₃	YES	YES		✓
White Poly	8/23/16	12:00	A	1 (250, 500, 1L)	None	YES	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

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

WATER QUALITY DATA			Purge Start Time: 11:40				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1143)	0.00	6.11	168.9	219	15.66	15.95	7.50	clear/colorless
1	A(1146)	0.40	6.24	217.0	204	15.42	15.95	7.12	clear/colorless
2	A(1149)	0.75	6.61	196.3	204	14.42	15.95	7.00	clear/colorless
3	A(1152)	1.20	6.63	189.2	204	14.40	15.95	7.02	clear/colorless
4	A(1155)	1.55	6.65	177.1	203	14.42	15.95	7.01	clear/colorless
5	A(1158)	1.90	6.64	175.7	203	14.41	15.95	6.99	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low Flow Purge Method ~ 8/17/20 → 400 mL/min 400 mL/min
100 mL/pulse

SAMPLER:

(PRINTED NAME)

T Andrews

(SIGNATURE)

[Signature]

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LR-65
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-082416-08
DUP ID: NA

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 80 °F °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)
8/24/16	11:55	39.07	-	27.47	-	11.60	X 1 1.89
/ /	:	.	.	.	.	.	X 3 .

Gal/ft = (dia./2)² x 0.163 1" = 0.041 6" = 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	8/24/16	12:15	A 3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/24/16	12:15	A 2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/24/16	12:15	A 1	250, 500, 1L	HNO ₃	YES	YES		✓
White Poly	8/24/16	12:15	A 1	250, 500, 1L	None	YES	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃ Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	8260 (8011) OR [] WA [X]
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) TDS (TSS) (Alkalinity) (HCO ₃ /CO ₃) Cl (SO ₄) (Silica, T.) NO3
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	Ca Fe Mg Mn (K) (Na)

WATER QUALITY DATA Purge Start Time: 11:56 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A(1158)	0.00	6.69	169.5	167	14.25	27.47	9.01	clear/colorless
1	A(1201)	0.35	6.62	170.8	174	14.33	27.47	8.73	clear/colorless
2	A(1204)	0.75	6.63	169.2	181	14.44	27.47	8.65	clear/colorless
3	A(1207)	1.10	6.64	168.4	181	14.38	27.47	8.61	clear/colorless
4	A(1210)	1.40	6.65	168.0	182	14.36	27.47	8.66	clear/colorless
5	A(1213)	1.70	6.65	168.2	182	14.39	27.47	8.60	clear/colorless
6									

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

Low Flow Purge Method ~ 400mL/min (100mL/pulse) (8/1/25)

SAMPLER: T And Co's (PRINTED NAME) Y Au (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** DUP1
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082416-09

WIND FROM: NE (N, NE, E, SE, S, SW, W, NW) **DUP ID:** NA
WEATHER: SUNNY (SUNNY, CLOUDY, RAIN, ?) **TEMPERATURE:** 80 °F (°F, °C)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
8/24/16	:	X 1
/ /	:	X 3

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/24/16	12:20	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/24/16	12:20	A	2 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/24/16	12:20	A	1 (250, 500, 1L)	HNO ₃	YES	YES		✓
White Poly	8/24/16	12:20	A	1 (250, 500, 1L)	None	YES	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃ Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8250) (8011) OR [] WA []
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T.) (NO ₃)
	YELLOW - Poly	(COD) (TOC) (NH ₄) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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 ₂ (mg/l)	Water Quality
0		0.00	.	.	.	.	.	.	.
1	
2	
3	
4	
5	
6	

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

Collected at LB-65

SAMPLER: T Andrews
(PRINTED NAME)

yru

(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LB-105R
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082416-07

DUP ID: NA
WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 76 °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)
8/24/16	11:00	42.35	—	31.39	—	10.96	X 1 1.79
/ /	:	.	.	.	.	.	X 3 .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	8/24/16	11:20	A	3 (40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/24/16	11:20	A	2 (250, 500, 1L)	None	YES	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/24/16	11:20	A	1 (250, 500, 1L)	HNO ₃	YES	YES		✓
White Poly	8/24/16	11:20	A	1 (250, 500, 1L)	None	YES	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃ Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260) (8011) OR [] WA []
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T) (NO ₃)
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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 ₂ (mg/l)	Water Quality
0	A (1102)	0.00	6.66	176.5	513	15.39	31.39	1.54	clear/colorless
1	A (1105)	0.35	6.46	176.3	494	14.99	31.39	1.06	clear/colorless
2	A (1108)	0.75	6.62	180.3	495	14.95	31.39	1.03	clear/colorless
3	A (1111)	1.05	6.63	185.4	496	14.97	31.39	1.04	clear/colorless
4	A (1114)	1.45	6.63	186.5	498	14.93	31.39	1.03	clear/colorless
5	A (1117)	1.80	6.64	185.1	498	14.94	31.39	1.02	clear/colorless
6									

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

Low Flow Purge Method - 400 mL/min (100 mL/pulse) (9/6/05)

SAMPLER: T Andrews (PRINTED NAME) [Signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Lechner Landfill **WELL ID:** FB1
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082416-06
DUP ID: NA

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

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
8/24/16	:	X 1
1/1	:	X 3

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/24/16	10:50	G 3	40 ml	HCl	YES	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/24/16	10:50	G 2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/24/16	10:50	G 1	250, 500, 1L	HNO ₃	YES	YES		✓
White Poly	8/24/16	10:50	G 1	250, 500, 1L	None	YES	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃ Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	8260 (8011) OR [] WA []
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (Silica, T.) (NO ₃)
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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 ₂ (mg/l)	Water Quality
0		0.00	.	.	.	.	.	.	.
1	
2	
3	
4	
5	
6	

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

Collected near LB-105R

SAMPLER: T Andrews
(PRINTED NAME)

you
(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill **WELL ID:** LB-261

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-082316-04

DUP ID: NA

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** 85.5 °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)
8/23/16	14:50	58.30	-	25.48	-	-	X 1 .
/ /	:	.	.	.	.	.	X 3 .

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	✓
VOA Glass	8/23/16	15:10	A	3 (40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/23/16	15:10	A	2 (250, 500, 1L)	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/23/16	15:10	A	1 (250, 500, 1L)	(HNO ₃)	(YES)	(YES)		✓
White Poly	8/23/16	15:10	A	1 (250, 500, 1L)	(None)	(YES)	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃ 7 Total Bottles (include duplicate count):

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

WATER QUALITY DATA Purge Start Time: 14:53 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A (1455)	0.00	7.06	196.4	251	15.78	25.48	7.66	clear/colorless
1	A (1458)	0.35	6.69	196.7	259	14.04	25.48	4.59	clear/colorless
2	A (1501)	0.80	6.68	195.9	261	14.00	25.48	4.50	clear/colorless
3	A (1504)	1.10	6.69	194.3	265	13.91	25.48	4.34	clear/colorless
4	A (1507)	1.40	6.69	193.7	265	13.90	25.48	4.32	clear/colorless
5	A (1510)	1.75	6.70	193.0	266	13.91	25.48	4.30	clear/colorless
6									

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

Low Flow Purge Method ~ 400 mL/min (100mL/pulse) (8/7/40)

SAMPLER: T Andrews
(PRINTED NAME)

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue,
Portland, OR 97224

Office: 503.639.9201

Fax: 503.684.6984

PROJECT NAME: Leichner Landfill

WELL ID: LB-27I

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

BLIND ID: LB-082316-02

DUP ID:

NA

WIND FROM:	N	NE	E	SE	S	SW	W	<u>NW</u>	<u>LIGHT</u>	MEDIUM	HEAVY
WEATHER:	<u>SUNNY</u>		CLOUDY		RAIN		?		TEMPERATURE: <u>67.6</u> °C		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW	Volume (gal)
8/23/16	12:45	57.15	-	31.51	-	25.64	X 1 4.18
1/1	:						X 3

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

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

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

Sample Depth:

[√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/23/16	13:05	A	3 (40 ml)	<u>HCl</u>	<u>YES</u>	NO		✓
Amber Glass	1/1	:		250, 500, 1L	(None) (HCl) (H ₂ SO ₄)	YES	NO		
White Poly	8/23/16	13:05	A	2 (250) 500, 1L	<u>None</u>	<u>YES</u>	NO	NA	✓
Yellow Poly	1/1	:		250, 500, 1L	H ₂ SO ₄	YES	NO		
Green Poly	1/1	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	1/1	:		125, 250, 500	HNO ₃	YES	NO		
Red Diss. Poly	8/23/16	13:05	A	1 (250) 500, 1L	<u>HNO₃</u>	<u>YES</u>	<u>YES</u>		✓
White Poly	8/23/16	13:05	A	1 250, 500, <u>1L</u>	<u>None</u>	<u>YES</u>	NO		✓

White no acid, Yellow H₂SO₄, Red HNO₃

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	<u>(8260)</u> (8011) OR [] WA []
	AMBER - Glass	(8080) (8150) (TOX) OR [] WA []
	WHITE - Poly	(pH) (Conductivity) <u>(TDS)</u> (TSS) (Alkalinity) (HCO ₃ /CO ₃) <u>(Cl)</u> (SO ₄) (Silica, T.) <u>(NO₃)</u>
	YELLOW - Poly	(COD) (TOC) (NH ₃) (NO ₃ /NO ₂) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Ti) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	<u>(Ca)</u> <u>(Fe)</u> <u>(Mg)</u> <u>(Mn)</u> (K) (Na)

WATER QUALITY DATA			Purge Start Time: 12:45				Pump/Bailer Inlet Depth:		
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O ₂ (mg/l)	Water Quality
0	A (1248)	0.00	6.83	192.6	581	14.93	31.51	2.60	clear/colorless
1	A (1251)	0.40	6.52	187.6	595	13.66	31.51	2.20	clear/colorless
2	A (1254)	0.85	6.65	189.7	592	13.60	31.51	2.28	clear/colorless
3	A (1257)	1.15	6.64	183.4	590	13.61	31.51	2.21	clear/colorless
4	A (1300)	1.35	6.62	182.5	590	13.59	31.51	2.16	clear/colorless
5	A (1303)	1.70	6.62	181.4	590	13.60	31.51	2.18	clear/colorless
6									

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

[Circle units]

[Clarity, Color]

Low Flow Purge Method - 400 mL/min (100 mL/pulse) 8/17/15

SAMPLER:

(PRINTED NAME)

T Andrews

(SIGNATURE)

[Signature]

APPENDIX B

Summary Tables of Historical Groundwater Field Parameter Measurements and Analytical Data

Field Parameters

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-1D	LB-289-W04	2/28/89	6.18	225	10.0	NT
LB-1D	LB-589-W03	5/23/89	7.01	220	11.5	NT
LB-1D	LB-1089-W01	10/17/89	6.60	213	10.5	NT
LB-1D	LB-1189-W04	11/14/89	7.25	191	10.5	NT
LB-1D	LB-1289-W22	12/19/89	7.01	190	9.0	NT
LB-1D	LB-390-W09	3/14/90	6.92	188	11.0	NT
LB-1D	LB-690-W11	6/20/90	7.11	188	13.0	NT
LB-1D	LB-990-W08	9/14/90	6.79	223	12.5	NT
LB-1D	LB-1290-W06	12/11/90	6.90	199	10.7	NT
LB-1D	LB-391-W11	3/20/91	6.95	171	13.2	NT
LB-1D	LB-691-W06	6/25/91	7.05	226	11.7	NT
LB-1D	LB-991-06	9/24/91	7.05	184	10.7	NT
LB-1D	LB-1291-14	12/23/91	7.26	202	10.3	NT
LB-1D	LB-392-14	3/23/92	7.17	200	13.0	NT
LB-1D	LB-63092-2	6/30/92	6.73	217	13.0	NT
LB-1D	LB-92292-3	9/22/92	7.09	202	12.0	NT
LB-1D	LB-121192-16	12/11/92	7.03	205	12.0	NT
LB-1D	LB-031093-4	3/10/93	7.06	202	12.0	NT
LB-1D	LB-060293-6	6/2/93	7.00	196	13.5	NT
LB-1D	LB-092393-8	9/23/93	7.21	195	13.0	8.00
LB-1D	LB-121593-2	12/15/93	7.00	206	10.0	7.40
LB-1D	LB-032494-2	3/24/94	7.11	203	14.0	7.60
LB-1D	LB-062194-1	6/21/94	7.02	206	16.0	7.70
LB-1D	LB-090694-2	9/6/94	7.01	201	14.5	NT
LB-1D	LB-121494-12	12/14/94	7.29	259	11.0	9.90
LB-1D	LB-030995-2	3/9/95	7.01	219	13.5	7.70
LB-1D	LB-062095-13	6/20/95	7.11	227	13.0	7.20
LB-1D	LB-092295-14	9/22/95	6.97	211	12.6	NT
LB-1D	LB-12995-6	12/19/95	7.21	196	8.4	NT
LB-1D	LB-032096-18	3/20/96	6.98	233	14.5	NT
LB-1D	LB-061896-10	6/18/96	7.25	188	14.0	NT
LB-1D	LB-091796-6	9/17/96	7.13	181	13.4	NT
LB-1D	LB121796-2	12/17/96	7.48	207	10.6	NT
LB-1D	LB-031997-4	3/19/97	6.90	228	12.0	NT
LB-1D	LB-061797-4	6/17/97	7.21	211	13.7	NT
LB-1D	LB-091697-1	9/16/97	6.80	118	12.3	NT
LB-1D	LB-121697-4	12/16/97	7.03	223	11.9	8.30
LB-1D	LB-031998-4	3/19/98	6.71	220	12.2	NT
LB-1D	LB-061698-6	6/16/98	7.10	198	12.5	NT
LB-1D	LB-091798-3	9/17/98	8.12	134.6	12.6	NT
LB-1D	LB-121898-10	12/18/98	7.18	231	11.3	NT
LB-1D	LB-031799-04	3/17/99	7.18	184	13.2	NT
LB-1D	LB-062399-15	6/23/99	7.08	157	13.3	NT
LB-1D	LB-091799-11	9/17/99	6.91	222	12.2	NT
LB-1D	LB-121699-12	12/16/99	7.02	170	12.2	NT
LB-1D	LB-091100-2	9/11/00	7.02	221	13.0	NT
LB-1D	LB-121500-10	12/15/00	7.06	188	11.8	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-1D	LB-031501-15	3/15/01	6.92	220	11.5	NT
LB-1D	LB-031902-2	3/19/02	7.17	216	11.8	NT
LB-1D	LB-031303-12	3/13/03	6.77	200	12.0	NT
LB-1D	LB-022404-1	2/24/04	7.54	158	52.5	NT
LB-1D	LB-030905-13	3/9/05	6.69	215	12.0	8.39
LB-1D	LB-031406-1	3/14/06	6.90	162	11.5	8.55
LB-1D	LB-030507-2	3/5/07	6.24	170	12.6	8.90
LB-1D	LB-032408-15	3/24/08	6.97	300	10.8	NT
LB-1D	LB-1D	3/17/09	6.89	221	11.4	10.18
LB-1D	LB-1D032310	3/23/10	7.15	266	11.6	NT
LB-1D	LB-1D	3/28/11	7.45	355	11.9	6.54
LB-1D	LB-031312-13	3/13/12	6.67	249	11.5	7.55
LB-1D	LB-020513-07	2/5/13	6.70	240	11.8	8.25
LB-1D	LB-021914-17	2/19/14	6.73	218	11.6	6.94
LB-1D	LB-021915-17	2/19/15	6.76	220	11.9	6.43
LB-1D	LB-021716-08	2/17/16	7.14	231	11.8	3.53
LB-1S	LB-589-W04	5/23/89	6.61	572	12.5	NT
LB-1S	LB-1289-W12	12/15/89	6.56	352	9.5	NT
LB-1S	LB-390-W10	3/14/90	6.26	367	11.5	NT
LB-1S	LB-690-W10	6/20/90	6.58	446	12.0	NT
LB-1S	LB-990-W06	9/14/90	6.40	416	13.0	NT
LB-1S	LB-1290-W05	12/11/90	6.38	554	11.2	NT
LB-1S	LB-391-W10	3/20/91	6.30	565	13.1	NT
LB-1S	LB-691-W05	6/25/91	6.63	546	12.5	NT
LB-1S	LB-991-05	9/24/91	6.67	316	11.7	NT
LB-1S	LB-1291-13	12/23/91	6.94	377	11.1	NT
LB-1S	LB-392-15	3/23/92	6.64	416	14.0	NT
LB-1S	LB-63092-1	6/30/92	6.71	414	14.0	NT
LB-1S	LB-92292-2	9/22/92	6.47	358	12.5	NT
LB-1S	LB-121192-15	12/11/92	6.51	353	12.0	NT
LB-1S	LB-031093-3	3/10/93	6.46	630	12.0	NT
LB-1S	LB-060293-5	6/2/93	6.20	565	14.5	NT
LB-1S	LB-092393-09	9/23/93	6.62	475	15.0	4.90
LB-1S	LB-121593-1	12/15/93	6.41	456	12.5	3.80
LB-1S	LB-032494-1	3/24/94	6.29	567	15.0	NT
LB-1S	LB-062194-4	6/21/94	6.30	554	16.5	4.70
LB-1S	LB-090694-1	9/6/94	6.36	516	14.5	NT
LB-1S	LB-121494-11	12/14/94	7.49	589	10.0	6.20
LB-1S	LB-030995-1	3/9/95	6.61	455	13.5	NT
LB-1S	LB-062095-12	6/20/95	6.74	553	13.5	7.30
LB-1S	LB-092295-13	9/22/95	6.98	448	13.1	NT
LB-1S	LB-121995-5	12/19/95	6.74	390	10.2	NT
LB-1S	LB-032096-17	3/20/96	6.71	496	18.0	NT
LB-1S	LB-061896-9	6/18/96	6.82	361	14.0	NT
LB-1S	LB-091796-5	9/17/96	6.73	401	12.6	NT
LB-1S	LB121796-1	12/17/96	7.40	398	11.5	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-1S	LB-031997-3	3/19/97	6.61	517	12.8	NT
LB-1S	LB-061797-3	6/17/97	6.55	350	14.7	NT
LB-1S	LB-091697-2	9/16/97	6.50	323	13.1	NT
LB-1S	LB-121697-5	12/16/97	6.52	465	13.1	6.30
LB-1S	LB-031998-3	3/19/98	6.78	538	13.0	NT
LB-1S	LB-061698-5	6/16/98	6.49	329	13.5	NT
LB-1S	LB-091798-4	9/17/98	6.76	281	13.8	NT
LB-1S	LB-121898-9	12/18/98	6.69	344	12.4	NT
LB-1S	LB-031799-3	3/17/99	6.85	327	14.6	NT
LB-1S	LB-062399-14	6/23/99	6.72	266	14.4	NT
LB-1S	LB-091799-9	9/17/99	6.57	442	13.3	NT
LB-1S	LB-121699-13	12/16/99	6.64	310	13.6	NT
LB-1S	LB-091100-1	9/11/00	6.59	371	13.9	NT
LB-1S	LB-121500-9	12/15/00	6.69	305	13.0	NT
LB-1S	LB-031401-14	3/14/01	6.58	276	13.3	NT
LB-1S	LB-092001-6	9/20/01	6.63	305	13.2	NT
LB-1S	LB-031902-1	3/19/02	7.45	288	12.7	6.89
LB-1S	LB-091802-1	9/18/02	7.20	240	14.0	5.50
LB-1S	LB-031303-10	3/13/03	6.97	230	12.0	NT
LB-1S	LB-092203-6	9/22/03	6.50	170	14.0	6.17
LB-1S	LB-022404-2	2/24/04	6.68	173	53.9	NT
LB-1S	LB-090104-1	9/1/04	6.50	225	13.2	NT
LB-1S	LB-030905-14	3/9/05	6.59	227	13.0	6.52
LB-1S	LB-091405-1	9/14/05	6.86	190	13.5	5.12
LB-1S	LB-031406-3	3/14/06	6.68	239	12.1	8.03
LB-1S	LB-091306-5	9/13/06	6.58	242	12.7	4.90
LB-1S	LB-030507-1	3/5/07	6.18	187	12.4	8.24
LB-1S	LB-091907-1	9/19/07	6.66	246	12.6	6.36
LB-1S	LB-032408-14	3/24/08	6.60	381	10.1	NT
LB-1S	LB-091608-1	9/16/08	6.79	267	12.4	NT
LB-1S	LB-1S	3/17/09	6.75	265	12.0	8.45
LB-1S	LBLF1S091109	9/11/09	7.10	261	13.1	5.86
LB-1S	LB-1S032310	3/23/10	6.89	345	12.1	NT
LB-1S	LB1S092310	9/23/10	7.20	170	11.7	NT
LB-1S	LB-1S	3/24/11	6.75	271	12.3	5.66
LB-1S	LB-090811-07	9/8/11	6.61	296	14.2	5.35
LB-1S	LB-031312-14	3/13/12	6.50	335	12.5	4.44
LB-1S	LB-091212-08	9/12/12	6.70	177	13.0	2.91
LB-1S	LB-020513-09	2/5/13	6.50	279	12.1	6.00
LB-1S	LB-082213-08	8/22/13	5.84	312	13.0	4.12
LB-1S	LB-021914-18	2/19/14	6.48	357	11.7	4.15
LB-1S	LB-081414-09	8/14/14	6.36	258	13.4	4.93
LB-1S	LB-021915-16	2/19/15	6.26	331	12.1	4.16
LB-1S	LB-081115-02	8/11/15	6.65	239	13.2	5.76
LB-1S	LB-021716-14	2/17/16	6.71	262	12.5	5.34
LB-1S	LB-082416-05	8/24/16	6.37	294	13.3	5.04

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-3D	LB-1189-W01	11/13/89	6.77	240	10.0	NT
LB-3D	LB-1289-W20	12/18/89	6.71	225	9.5	NT
LB-3D	LB-032097-14	3/20/97	6.79	271	12.1	NT
LB-3D	LB-032098-21	3/20/98	6.70	242	12.1	NT
LB-3D	LB-031899-15	3/18/99	6.75	198	13.5	NT
LB-3D	LB-031501-17	3/15/01	6.68	220	11.3	NT
LB-3D	LB-032002-18	3/20/02	6.78	216	11.5	7.82
LB-3D	LB-031303-14	3/13/03	6.43	170	12.0	NT
LB-3D	LB-022404-5	2/24/04	6.74	129	51.9	NT
LB-3D	LB-030905-15	3/9/05	6.56	176	11.9	7.20
LB-3D	LB031606-21	3/16/06	6.73	158	11.0	8.84
LB-3D	LB-030507-4	3/5/07	5.94	138	12.0	7.43
LB-3D	LB-032408-17	3/24/08	6.74	292	12.1	NT
LB-3D	LB-3D	3/18/09	6.68	204	12.9	8.52
LB-3D	LB-3D032410	3/24/10	6.66	233	14.3	NT
LB-3D	LB-3D	3/28/11	7.37	336	11.8	5.46
LB-3D	LB-031312-09	3/13/12	6.48	231	10.3	5.38
LB-3D	LB-020713-18	2/7/13	6.49	221	11.2	5.14
LB-3D	LB-021914-22	2/19/14	6.38	209	11.2	5.18
LB-3D	LB-021715-07	2/17/15	6.55	208	12.7	5.77
LB-3D	LB-021616-06	2/16/16	6.65	220	11.7	5.49
LB-3S	LB-1089-W02	10/17/89	7.36	241	11.0	NT
LB-3S	LB-1189-W02	11/13/89	6.63	224	10.5	NT
LB-3S	LB-1289-W11	12/15/89	6.14	220	10.0	NT
LB-3S	LB-390-W11	3/14/90	6.57	216	11.0	NT
LB-3S	LB-690-W06	6/19/90	NT	208	13.0	NT
LB-3S	LB-990-W10	9/14/90	6.93	211	11.5	NT
LB-3S	LB-1290-W08	12/12/90	6.72	209	11.1	NT
LB-3S	LB-391-W07	3/20/91	6.36	214	11.3	NT
LB-3S	LB-691-W10	6/26/91	6.04	222	11.9	NT
LB-3S	LB-991-16	9/24/91	6.38	222	11.1	NT
LB-3S	LB-1291-06	12/20/91	6.65	239	10.7	NT
LB-3S	LB-392-10	3/20/92	6.74	227	13.5	NT
LB-3S	LB-62692-8	6/26/92	7.22	243	13.0	NT
LB-3S	LB-91792-3	9/17/92	7.90	262	12.0	NT
LB-3S	LB-121092-14	12/10/92	6.41	274	12.0	NT
LB-3S	LB-031593-25	3/15/93	6.61	303	11.5	NT
LB-3S	LB-060393-14	6/3/93	6.87	281	13.5	NT
LB-3S	LB-092393-01	9/23/93	6.18	266	14.0	1.50
LB-3S	LB-121593-5	12/15/93	9.51	277	10.5	3.00
LB-3S	LB-032594-11	3/25/94	6.83	284	13.0	5.80
LB-3S	LB-062394-13	6/23/94	6.64	290	14.5	5.40
LB-3S	LB-090794-8	9/7/94	6.95	286	14.0	NT
LB-3S	LB-121494-13	12/14/94	6.62	356	11.5	3.30
LB-3S	LB-031395-20	3/13/95	6.48	348	13.0	6.10
LB-3S	LB-052095-14	6/20/95	6.58	352	13.0	4.80

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-3S	LB-092195-11	9/21/95	6.77	280	12.2	NT
LB-3S	LB-121995-4	12/19/95	6.89	170	10.0	NT
LB-3S	LB-032096-21	3/20/96	6.70	312	11.4	NT
LB-3S	LB-061996-11	6/19/96	6.54	261	13.5	NT
LB-3S	LB-032097-13	3/20/97	6.73	274	11.6	NT
LB-3S	LB-032098-20	3/20/98	6.70	242	12.8	NT
LB-3S	LB-031899-14	3/18/99	6.72	173	13.3	NT
LB-3S	LB-031501-18	3/15/01	6.67	173	11.2	NT
LB-3S	LB-032002-17	3/20/02	6.89	182	11.4	7.48
LB-3S	LB-031303-13	3/13/03	6.53	150	11.7	NT
LB-3S	LB-022404-6	2/24/04	6.62	121	52.2	NT
LB-3S	LB-030905-16	3/9/05	6.50	164	11.9	6.12
LB-3S	LB-031606-22	3/16/06	6.71	142	11.1	8.30
LB-3S	LB-030507-3	3/5/07	5.93	134	12.0	7.44
LB-3S	LB-032408-18	3/24/08	6.62	302	11.6	NT
LB-3S	LB-3S	3/18/09	6.61	223	12.2	7.39
LB-3S	LB-3S032410	3/24/10	6.76	239	13.9	NT
LB-3S	LB-3S	3/28/11	7.29	352	11.6	5.73
LB-3S	LB-031312-10	3/13/12	6.44	239	11.1	4.57
LB-3S	LB-020713-17	2/7/13	6.46	236	11.5	5.36
LB-3S	LB-021914-22	2/19/14	6.22	215	11.6	6.39
LB-3S	LB-021915-19	2/19/15	6.53	200	11.8	4.81
LB-3S	LB-021716-12	2/17/16	6.64	206	11.8	5.00
LB-5D	LB-289-W13	3/1/89	6.36	635	10.0	NT
LB-5D	LB-589-W13	5/24/89	6.71	534	13.0	NT
LB-5D	LB-1289-W24	12/19/89	6.62	559	10.5	NT
LB-5D	LB-690-W14	6/20/90	6.69	531	13.0	NT
LB-5D	LB-990-W15	9/18/90	6.43	554	13.0	NT
LB-5D	LB-1290-W24	12/14/90	6.75	550	10.2	NT
LB-5D	LB-391-W18	3/21/91	6.50	546	12.0	NT
LB-5D	LB-691-W17	6/26/91	6.73	513	13.2	NT
LB-5D	LB-991-06	9/25/91	6.44	547	12.1	NT
LB-5D	LB-1291-11	12/20/91	6.83	569	10.7	NT
LB-5D	LB-392-03	3/19/92	6.73	526	13.0	NT
LB-5D	LB-63092-4	6/30/92	6.77	576	13.5	NT
LB-5D	LB-91892-2	9/18/92	6.99	566	11.0	NT
LB-5D	LB-121092-11	12/10/92	6.76	550	13.0	NT
LB-5D	LB-031193-12	3/11/93	6.71	547	13.0	NT
LB-5D	LB-060293-8	6/2/93	6.42	515	14.0	NT
LB-5D	LB-092793-19	9/27/93	6.72	544	14.0	7.00
LB-5D	LB-121593-4	12/15/93	6.73	523	12.5	1.20
LB-5D	LB-032894-13	3/28/94	6.71	610	14.0	2.40
LB-5D	LB-062194-3	6/21/94	6.76	538	15.0	3.00
LB-5D	LB-090694-4	9/6/94	6.83	537	16.0	NT
LB-5D	LB-121394-8	12/13/94	6.84	577	13.5	2.20
LB-5D	LB-030995-4	3/9/95	6.98	563	14.0	2.90
LB-5D	LB-061995-7	6/19/95	6.87	600	13.0	4.70

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-5D	LB-092195-9	9/21/95	6.50	582	13.3	NT
LB-5D	LB-121895-2	12/18/95	6.72	591	12.3	NT
LB-5D	LB-031996-9	3/19/96	6.65	519	13.0	NT
LB-5D	LB-061896-8	6/18/96	7.01	511	13.5	NT
LB-5D	LB-031997-9	3/19/97	6.81	509	12.3	NT
LB-5D	LB-031998-6	3/19/98	6.71	539	14.4	NT
LB-5D	LB-031899-11	3/18/99	6.76	343	15.2	NT
LB-5D	LB-031401-11	3/14/01	6.73	409	13.5	NT
LB-5D	LB-031902-13	3/19/02	6.85	430	12.7	4.29
LB-5D	LB-031303-9	3/13/03	6.53	410	12.0	NT
LB-5D	LB-022504-7	2/25/04	6.80	307	52.7	NT
LB-5D	LB-030805-1	3/8/05	6.82	400	15.2	3.91
LB-5D	LB-031606-14	3/16/06	6.75	339	12.3	7.38
LB-5D	LB-030507-7	3/5/07	6.34	275	13.4	4.40
LB-5D	LB-031908-2	3/19/08	6.88	0.566	11.8	NT
LB-5D	LB-5D	3/17/09	6.88	351	13.1	4.22
LB-5D	LB-5D032410	3/24/10	7.00	365	15.0	NT
LB-5D	LB-5D	3/23/11	7.69	338	12.8	2.43
LB-5D	LB-031212-03	3/12/12	6.63	363	11.4	0.33
LB-5D	LB-020513-03	2/5/13	6.69	333	11.3	0.39
LB-5D	LB-021714-01	2/17/14	6.42	256	11.1	0.68
LB-5D	LB-021715-01	2/17/15	6.27	309	13.8	0.79
LB-5D	LB-021816-16	2/18/16	6.90	298	12.1	0.52
LB-5S	LB-390-W17	3/15/90	6.41	135	10.0	NT
LB-5S	LB-690-W13	6/20/90	6.84	161	12.0	NT
LB-5S	LB-990-W14	9/18/90	6.59	186	11.5	NT
LB-5S	LB-1290-W25	12/14/90	6.61	187	10.6	NT
LB-5S	LB-391-W17	3/21/91	6.31	162	11.1	NT
LB-5S	LB-691-W16	6/26/91	7.16	162.3	12.0	NT
LB-5S	LB-991-09	9/25/91	6.61	206	10.8	NT
LB-5S	LB-1291-10	12/20/91	6.86	124	10.8	NT
LB-5S	LB-392-04	3/19/92	6.66	168	12.0	NT
LB-5S	LB-63092-3	6/30/92	6.19	206	13.0	NT
LB-5S	LB-91892-1	9/18/92	6.57	208	11.5	NT
LB-5S	LB-121092-10	12/10/92	6.70	182	12.5	NT
LB-5S	LB-031193-11	3/11/93	6.63	179	12.0	NT
LB-5S	LB-060293-7	6/2/93	6.33	198	13.0	NT
LB-5S	LB-092793-18	9/27/93	6.72	180	14.5	9.60
LB-5S	LB-121593-3	12/15/93	6.78	161	12.0	11.00
LB-5S	LB-032894-12	3/28/94	6.28	200	13.0	11.00
LB-5S	LB-062194-2	6/21/94	6.59	219	15.0	10.50
LB-5S	LB-090694-3	9/6/94	6.50	178	15.5	NT
LB-5S	LB-121394-9	12/13/94	6.61	142	13.5	11.00
LB-5S	LB-030995-3	3/9/95	6.94	158	13.5	10.40
LB-5S	LB-051995-6	6/19/95	6.54	275	12.0	7.70
LB-5S	LB-092195-8	9/20/95	6.50	229	12.3	NT
LB-5S	LB-121895-1	12/18/95	7.49	89	11.7	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-5S	LB-031996-7	3/19/96	6.45	217	12.5	NT
LB-5S	LB-061896-7	6/18/96	6.65	238	12.5	NT
LB-5S	LB-031997-8	3/19/97	6.93	226	11.3	NT
LB-5S	LB-031998-5	3/19/98	6.39	226	12.1	NT
LB-5S	LB-031899-10	3/18/99	6.89	180	13.6	NT
LB-5S	LB-031401-12	3/14/01	6.53	177	11.9	NT
LB-5S	LB-092001-1	9/20/01	6.38	218	12.7	NT
LB-5S	LB-031902-12	3/19/02	6.76	185	11.6	8.89
LB-5S	LB-091802-6	9/18/02	6.90	220	14.0	NT
LB-5S	LB-031303-8	3/13/03	6.67	167	12.0	NT
LB-5S	LB-092203-1	9/22/03	6.08	190	13.5	7.00
LB-5S	LB-022504-9	2/25/04	6.45	146	54.3	NT
LB-5S	LB-090104-5	9/1/04	6.36	200	14.5	NT
LB-5S	LB-030805-2	3/8/05	6.19	200	12.8	9.26
LB-5S	LB-091405-4	9/14/05	6.37	180	13.3	8.16
LB-5S	LB-031606-16	3/16/06	6.60	203	11.4	11.18
LB-5S	LB-091206-1	9/12/06	6.27	264	13.6	7.18
LB-5S	LB-030507-6	3/5/07	5.82	175	12.4	9.72
LB-5S	LB-091907-3	9/19/07	6.27	223	13.0	9.42
LB-5S	LB-031908-1	3/19/08	6.45	0.457	10.7	NT
LB-5S	LB-091608-2	9/16/08	6.42	204	12.9	NT
LB-5S	LB-5S	3/17/09	6.55	213	11.9	9.21
LB-5S	LBLF5S091109	9/11/09	6.70	197	13.3	9.74
LB-5S	LB-5S032410	3/24/10	6.54	190	13.4	NT
LB-5S	LB-5S092310	9/23/10	6.70	174	12.4	NT
LB-5S	LB-5S	3/23/11	6.89	228	11.8	7.82
LB-5S	LB-090811-06	9/8/11	5.92	273	13.3	8.10
LB-5S	LB-032212-17	3/22/12	6.16	204	10.9	9.22
LB-5S	LB-091112-01	9/11/12	6.11	188	13.4	8.13
LB-5S	LB-020513-04	2/5/13	6.20	183	11.7	8.34
LB-5S	LB-082113-01	8/21/13	6.10	127	13.7	6.01
LB-5S	LB-021714-02	2/17/14	6.14	166	12.2	5.11
LB-5S	LB-081314-01	8/13/14	6.19	173	13.5	7.98
LB-5S	LB-021815-09	2/18/15	6.43	177	12.4	6.69
LB-5S	LB-081215-08	8/12/15	5.79	208	13.9	7.66
LB-5S	LB-021816-17	2/18/16	6.42	207	12.2	6.91
LB-5S	LB-082316-01	8/23/16	6.64	203	14.4	6.99
LB-6S	LB-289-W17	3/1/89	6.43	801	10.0	NT
LB-6S	LB-589-W17	5/24/89	6.80	630	13.5	NT
LB-6S	LB-1289-W13	12/15/89	6.89	835	10.5	NT
LB-6S	LB-390-W24	3/15/90	6.54	667	13.5	NT
LB-6S	LB-690-W22	6/21/90	6.99	567	13.0	NT
LB-6S	LB-990-W11	9/14/90	6.49	741	13.0	NT
LB-6S	LB-1290-W13	12/12/90	6.83	765	10.4	NT
LB-6S	LB-391-W16	3/21/91	6.44	522	12.4	NT
LB-6S	LB-691-W19	6/27/91	6.10	640	13.3	NT

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-6S	LB-991-14	9/25/91	6.84	665	12.9	NT
LB-6S	LB-1291-08	12/20/91	6.69	694	11.9	NT
LB-6S	LB-392-07	3/20/92	6.69	520	14.0	NT
LB-6S	LB-62692-5	6/26/92	7.02	649	13.5	NT
LB-6S	LB-92192-4	9/21/92	6.76	676	12.0	NT
LB-6S	LB-12992-4	12/9/92	6.77	727	13.0	NT
LB-6S	LB-031093-7	3/10/93	6.90	614	12.5	NT
LB-6S	LB-060393-11	6/3/93	6.64	410	14.0	NT
LB-6S	LB-092493-13	9/24/93	6.64	470	14.0	5.20
LB-6S	LB-121593-6	12/15/93	6.68	579	13.0	3.40
LB-6S	LB-032994-18	3/29/94	6.37	390	14.5	7.40
LB-6S	LB-062394-11	6/23/94	6.62	505	13.5	5.90
LB-6S	LB-090694-5	9/6/94	6.69	531	18.0	NT
LB-6S	LB-121394-6	12/13/94	6.61	524	13.0	3.00
LB-6S	LB-031095-10	3/10/95	6.81	320	12.0	8.90
LB-6S	LB-062095-9	6/20/95	6.50	487	12.0	5.60
LB-6S	LB-092095-6	9/20/95	6.74	495	15.0	NT
LB-6S	LB-122095-12	12/20/95	6.21	386	12.1	NT
LB-6S	LB-031996-5	3/19/96	6.29	336	13.5	NT
LB-6S	LB-061996-12	6/19/96	6.54	367	13.0	NT
LB-6S	LB-091896-12	9/18/96	6.31	362	12.8	NT
LB-6S	LB121796-3	12/17/96	7.01	431	12.2	NT
LB-6S	LB-031997-7	3/19/97	6.89	430	12.5	NT
LB-6S	LB-061797-6	6/17/97	6.45	456	13.4	NT
LB-6S	LB-091697-3	9/16/97	6.50	351	12.1	NT
LB-6S	LB-121797-14	12/17/97	6.43	584	12.5	0.60
LB-6S	LB-031998-7	3/19/98	6.46	633	13.4	NT
LB-6S	LB-061698-7	6/16/98	6.54	384	13.1	NT
LB-6S	LB-091798-5	9/17/98	6.54	292	13.5	NT
LB-6S	LB-121798-01	12/17/98	6.74	398	12.5	NT
LB-6S	LB-031799-2	3/17/99	6.75	352	14.5	NT
LB-6S	LB-062399-11	6/23/99	6.77	298	13.7	NT
LB-6S	LB-091699-5	9/16/99	6.56	554	13.2	NT
LB-6S	LB-121599-10	12/14/99	6.66	440	12.5	NT
LB-6S	LB-091200-3	9/12/00	6.42	413	13.2	NT
LB-6S	LB-121200-1	12/12/00	6.61	467	13.0	NT
LB-6S	LB-031301-7	3/13/01	6.58	531	13.2	NT
LB-6S	LB-092001-5	9/20/01	6.69	405	13.6	NT
LB-6S	LB-032002-15	3/20/02	6.82	468	13.2	4.54
LB-6S	LB-091802-2	9/18/02	7.00	430	14.5	NT
LB-6S	LB-031303-21	3/13/03	6.70	497	13.0	NT
LB-6S	LB-092203-5	9/22/03	6.50	310	13.5	5.70
LB-6S	LB-022604-18	2/26/04	6.79	279	54.4	NT
LB-6S	LB-090104-6	9/1/04	6.69	335	13.3	NT
LB-6S	LB-030805-9	3/8/05	6.84	432	14.5	3.13
LB-6S	LB-091405-6	9/14/05	6.67	302	13.4	2.34

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-6S	LB-0301506-13	3/15/06	6.67	287	12.1	8.38
LB-6S	LB-091206-4	9/12/06	6.66	344	13.1	5.80
LB-6S	LB-030507-12	3/5/07	6.20	249	13.0	9.40
LB-6S	LB-091907-6	9/19/07	6.72	349	12.6	3.59
LB-6S	LB-031908-9	3/19/08	6.69	418	13.0	NT
LB-6S	LB-091608-3	9/16/08	6.47	334	14.5	NT
LB-6S	LB-6S	3/18/09	6.63	304	12.4	4.61
LB-6S	LBLF6S091109	9/11/09	7.16	292	12.4	2.28
LB-6S	LB-6S032310	3/23/10	6.79	322	6.2	NT
LB-6S	LB6S092310	9/23/10	7.00	192	11.6	NT
LB-6S	LB-6S	3/22/11	7.58	241	12.2	7.52
LB-6S	LB-090711-05	9/7/11	6.76	219	15.0	7.01
LB-6S	LB-032212-23	3/22/12	6.54	240	11.7	6.65
LB-6S	LB-091212-06	9/12/12	6.40	214	12.7	4.02
LB-6S	LB-020613-15	2/6/13	6.66	200	11.7	3.23
LB-6S	LB-082113-07	8/21/13	6.03	181	13.6	4.61
LB-6S	LB-021914-23	2/19/14	6.39	179	11.5	3.44
LB-6S	LB-081314-06	8/13/14	6.33	152	12.6	6.43
LB-6S	LB-021815-14	2/18/15	6.86	211	12.0	3.79
LB-6S	LB-081115-03	8/11/15	6.83	179	13.0	6.60
LB-6S	LB-021816-21	2/18/16	6.72	214	11.9	6.43
LB-6S	LB-082416-08	8/24/16	6.65	182	14.4	8.60
LB-10DR	LB-031005-19	3/10/05	7.15	523	13.6	1.61
LB10-DR	LB-031406-5	3/14/06	6.83	389	12.3	2.98
LB10-DR	LB-030607-20	3/6/07	6.39	375	13.3	6.33
LB10-DR	LB-032408-22	3/24/08	6.92	535	12.6	NT
LB10-DR	LB-10DR	3/17/09	6.86	495	12.4	5.12
LB-10DR	LB-10DR032310	3/23/10	6.95	525	12.2	NT
LB-10DR	LB-10DR	3/29/11	6.33	491	11.8	2.81
LB-10DR	LB-0313012-07	3/13/12	6.70	463	11.7	1.42
LB-10DR	LB-020713-19	2/7/13	6.68	458	12.5	0.89
LB-10DR	LB-021914-15	2/19/14	6.94	357	12.5	1.50
LB-10DR	LB-021915-20	2/19/15	6.85	339	13.1	1.47
LB-10DR	LB-021716-09	2/19/16	7.00	415	12.7	0.86
LB-10SR	LB-031005-21	3/10/05	6.86	319	13.4	2.64
LB-10SR	LB-091505-7	9/14/05	6.89	150	13.1	3.40
LB10-SR	LB-031406-6	3/14/06	6.79	160	12.6	9.40
LB10-SR	LB-091306-9	9/13/06	6.57	431	13.4	6.94
LB10-SR	LB-030607-19	3/6/07	5.97	119	13.1	10.60
LB10-SR	LB-091907-7	9/19/07	6.57	435	13.3	4.99
LB10-SR	LB-032408-21	3/24/08	6.40	291	12.3	NT
LB10-SR	LB-091608-4	9/16/08	6.54	278	14.1	NT
LB10-SR	LB-10SR	3/17/09	6.84	358	12.1	7.87
LB10-SR	LBLF10S091109	9/11/09	7.11	252	13.4	2.32
LB10-SR	LB-10S032310	3/23/10	6.87	286	12.9	NT
LB10-SR	LB10R092310	9/23/10	6.60	123	12.3	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-10SR	LB-10SR	3/29/11	6.01	360	12.5	2.05
LB-10SR	LB-090811-08	9/8/11	6.52	410	14.8	0.80
LB-10SR	LB-031312-08	3/13/12	6.62	550	11.8	0.26
LB-10SR	LB-091212-09	9/12/12	6.78	480	14.5	0.59
LB-10SR	LB-020713-20	2/7/13	6.66	473	12.7	0.26
LB-10SR	LB-082213-09	8/22/13	6.70	319	14.0	0.26
LB-10SR	LB-021914-16	2/19/14	6.77	353	12.8	0.60
LB-10SR	LB-081414-08	8/14/14	6.52	401	14.4	0.48
LB-10SR	LB-021915-21	2/19/15	6.64	221	13.3	1.08
LB-10SR	LB-081015-01	8/10/15	6.65	412	15.1	0.50
LB-10SR	LB-021716-11	2/17/16	6.73	445	13.3	0.92
LB-10SR	LB-082416-07	8/24/16	6.64	498	14.9	1.02
LB-13D	LB-1089-W15	10/19/89	6.90	237	11.0	NT
LB-13D	LB-1189-W20	11/16/89	6.56	249	11.0	NT
LB-13D	LB-1289-W18	12/18/89	6.62	229	9.5	NT
LB-13D	LB-390-W18	3/15/90	6.79	232	12.0	NT
LB-13D	LB-690-W20	6/21/90	7.27	277	12.0	NT
LB-13D	LB-990-W17	9/18/90	6.64	236	13.0	NT
LB-13D	LB-1290-W20	12/13/90	6.64	234	10.7	NT
LB-13D	LB-391-W15	3/20/91	6.76	232	11.8	NT
LB-13D	LB-691-W22	6/27/91	6.91	235	13.1	NT
LB-13D	LB-991-13	9/25/91	7.15	240	12.0	NT
LB-13D	LB-1291-19	12/23/91	6.97	249	10.7	NT
LB-13D	LB-392-19	3/24/92	6.88	247	13.0	NT
LB-13D	LB-7292-2	7/2/92	7.40	250	13.0	NT
LB-13D	LB-91792-2	9/17/92	7.40	246	12.0	NT
LB-13D	LB-121092-9	12/9/92	6.82	251	12.0	NT
LB-13D	LB-031293-20	3/12/93	6.92	264	11.0	NT
LB-13D	LB-060493-21	6/4/93	6.99	231	13.5	NT
LB-13D	LB-092393-07	9/23/93	6.75	251	13.0	6.10
LB-13D	LB-121693-12	12/16/93	6.78	252	11.0	6.90
LB-13D	LB-032894-17	3/28/94	6.73	290	15.0	8.20
LB-13D	LB-062894-20	6/28/94	6.77	274	14.0	6.80
LB-13D	LB-090794-10	9/7/94	6.94	265	13.0	NT
LB-13D	LB-121594-21	12/15/94	6.68	304	11.0	6.90
LB-13D	LB-031395-18	3/13/95	6.80	296	12.5	7.10
LB-13D	LB-062195-19	6/21/95	6.73	353	12.0	7.10
LB-13D	LB-092295-16	9/22/95	6.99	256	12.6	NT
LB-13D	LB-121995-8	12/19/95	7.02	234	10.2	NT
LB-13D	LB-132096-15	3/20/96	6.58	271	13.2	NT
LB-13D	LB-061996-16	6/19/96	6.78	258	13.0	NT
LB-13D	LB-091796-4	9/17/96	6.81	257	13.9	NT
LB-13D	LB121796-9	12/17/96	7.25	300	11.0	NT
LB-13D	LB-032097-18	3/20/97	6.96	323	11.8	NT
LB-13D	LB-061897-15	6/18/97	6.88	291	12.9	NT
LB-13D	LB-091897-11	9/18/97	6.46	310	12.0	NT
LB-13D	LB-121797-9	12/17/97	6.60	301	11.8	11.00

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-13D	LB-032098-19	3/20/98	7.11	296	12.9	NT
LB-13D	LB-061798-14	6/17/98	6.69	238	13.2	NT
LB-13D	LB-091898-15	9/18/98	7.42	218	12.9	NT
LB-13D	LB-121898-12	12/18/98	6.76	270	11.7	NT
LB-13D	LB-031999-23	3/19/99	6.78	222	14.2	NT
LB-13D	LB-062399-12	6/23/99	6.81	195	12.7	NT
LB-13D	LB-091799-13	9/17/99	6.69	256	12.6	NT
LB-13D	LB-121499-3	12/14/99	6.75	252	12.1	NT
LB-13D	LB-091300-11	9/13/00	6.95	225	13.0	NT
LB-13D	LB-121500-12	12/15/00	6.80	198	12.1	NT
LB-13D	LB-031501-19	3/15/01	6.67	229	12.2	NT
LB-13D	LB-032002-20	3/20/02	6.87	223	12.3	6.53
LB-13D	LB-031303-16	3/13/03	6.93	197	13.0	NT
LB-13D	LB-022404-3	2/24/04	6.73	150	54.4	NT
LB-13D	LB-031005-17	3/10/05	6.62	194	12.3	7.65
LB-13D	LB-031506-9	3/15/06	6.75	175	11.8	8.09
LB-13D	LB-030607-18	3/6/07	6.26	143	12.2	11.33
LB-13D	LB-032008-13	3/20/08	6.76	263	11.7	NT
LB-13D	LB-13D	3/17/09	6.71	271	11.6	7.86
LB-13D	LB-13D032410	3/24/10	6.78	227	12.0	NT
LB-13D	LB-13D	3/25/11	6.99	216	11.6	6.18
LB-13D	LB-031212-01	3/12/12	6.27	235	11.5	5.32
LB-13D	LB-020713-22	2/7/13	6.46	228	11.7	5.88
LB-13D	LB-021814-08	2/18/14	6.70	220	11.6	5.84
LB-13D	LB-021715-03	2/17/15	6.53	211	12.0	5.98
LB-13D	LB-021616-02	2/16/16	6.68	210	11.8	5.78
LB-13I	LB-1089-W17	10/18/89	6.91	693	13.0	NT
LB-13I	LB-1189-W17	11/16/89	6.78	721	11.0	NT
LB-13I	LB-1289-W16	12/18/89	6.72	692	10.5	NT
LB-13I	LB-390-W19	3/15/90	6.61	676	12.5	NT
LB-13I	LB-690-W19	6/21/90	6.82	654	13.0	NT
LB-13I	LB-990-W16	9/18/90	6.83	706	13.0	NT
LB-13I	LB-1290-W21	12/13/90	6.82	744	11.5	NT
LB-13I	LB-391-W14	3/20/91	6.80	742	12.4	NT
LB-13I	LB-691-W21	6/27/91	6.74	619	13.2	NT
LB-13I	LB-991-12	9/25/91	7.05	757	11.8	NT
LB-13I	LB-1291-18	12/23/91	7.02	707	11.2	NT
LB-13I	LB-392-20	3/24/92	6.60	663	12.0	NT
LB-13I	LB-7292-1	7/2/92	6.88	679	13.0	NT
LB-13I	LB-91792-1	9/17/92	6.84	631	13.0	NT
LB-13I	LB-12992-8	12/9/92	6.92	671	12.0	NT
LB-13I	LB-031293-19	3/12/93	6.93	689	12.0	NT
LB-13I	LB-060493-20	6/4/93	6.80	640	15.0	NT
LB-13I	LB-092393-06	9/23/93	6.88	570	14.0	3.10
LB-13I	LB-121693-14	12/16/93	6.82	537	11.0	0.50

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-13I	LB-032894-16	3/28/94	6.82	680	15.0	3.00
LB-13I	LB-062894-19	6/28/94	7.00	495	15.0	1.90
LB-13I	LB-090794-9	9/7/94	7.09	503	14.0	NT
LB-13I	LB-121994-20	12/15/94	6.84	543	12.5	4.40
LB-13I	LB-031395-17	3/13/95	6.93	486	13.5	4.50
LB-13I	LB-052195-18	6/21/95	6.80	509	12.5	3.50
LB-13I	LB-092295-15	9/22/95	6.87	408	14.5	NT
LB-13I	LB-121995-7	12/19/95	6.78	357	10.9	NT
LB-13I	LB-032096-14	3/20/96	6.84	504	13.2	NT
LB-13I	LB-061996-15	6/19/96	6.91	547	14.0	NT
LB-13I	LB-091796-3	9/17/96	6.63	501	14.0	NT
LB-13I	LB121796-10	12/17/96	7.24	630	12.2	NT
LB-13I	LB-032097-19	3/20/97	6.76	706	13.1	NT
LB-13I	LB-061897-14	6/18/97	6.87	540	13.8	NT
LB-13I	LB-091897-12	9/18/97	6.88	890	14.0	NT
LB-13I	LB-121797-8	12/17/97	6.88	624	12.4	NT
LB-13I	LB-032098-18	3/20/98	6.90	752	14.4	NT
LB-13I	LB-061798-15	6/17/98	6.88	447	14.7	NT
LB-13I	LB-091898-14	9/18/98	7.11	294	13.7	NT
LB-13I	LB-121898-11	12/18/98	6.82	425	12.6	NT
LB-13I	LB-031999-22	3/19/99	6.93	422	15.0	NT
LB-13I	LB-062399-13	6/23/99	7.05	348	14.3	NT
LB-13I	LB-091799-12	9/17/99	6.91	648	13.9	NT
LB-13I	LB-121499-4	12/14/99	7.03	657	13.3	NT
LB-13I	LB-091300-12	9/13/00	6.97	634	13.7	NT
LB-13I	LB-121500-11	12/15/00	6.89	496	13.0	NT
LB-13I	LB-031501-20	3/15/01	6.75	509	13.1	NT
LB-13I	LB-092001-8	9/20/01	6.71	360	13.4	NT
LB-13I	LB-032002-19	3/20/02	6.81	325	13.0	4.14
LB-13I	LB-091802-7	9/18/02	7.00	460	14.0	NT
LB-13I	LB-031303-15	3/13/03	6.80	306	12.0	NT
LB-13I	LB-092203-7	9/22/03	6.52	330	14.0	4.37
LB-13I	LB-022404-4	2/24/04	6.70	240	54.7	NT
LB-13I	LB-090104-13	9/1/04	6.60	315	14.0	NT
LB-13I	LB-031005-18	3/10/05	6.68	286	12.8	2.04
LB-13I	LB-091505-9	9/15/05	6.80	202	12.9	3.65
LB-13I	LB-031506-10	3/15/06	6.75	228	12.0	3.90
LB-13I	LB-091306-8	9/13/06	6.74	263	12.8	3.80
LB-13I	LB-030607-17	3/6/07	6.42	203	12.5	9.15
LB-13I	LB-091907-8	9/19/07	6.70	352	12.5	6.65
LB-13I	LB-032008-12	3/20/08	7.15	329	11.4	NT
LB-13I	LB-091608/5	9/16/08	6.91	290	14.6	NT
LB-13I	LB-13I	3/17/09	6.88	285	11.7	5.64
LB-13I	LBLF13i091109	9/11/09	7.70	301	12.8	4.76
LB-13I	LB-13I032410	3/24/10	7.09	297	12.2	NT
LB-13I	LB-13I092310	9/23/10	7.10	204	11.6	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-13I	LB-13I	3/23/11	7.91	276	12.1	2.96
LB-13I	LB-090711-02	9/7/11	6.85	252	13.9	1.38
LB-13I	LB-032212-19	3/22/12	6.58	255	11.7	2.40
LB-13I	LB-091112-03	9/11/12	6.47	266	14.1	2.40
LB-13I	LB-020613-13	2/6/13	6.74	290	11.7	1.75
LB-13I	LB-082113-05	8/21/13	6.01	280	14.5	2.31
LB-13I	LB-021814-10	2/18/14	6.61	305	11.6	0.81
LB-13I	LB-081314-04	8/13/14	6.63	281	13.4	1.82
LB-13I	LB-021815-11	2/18/15	6.96	274	11.8	1.25
LB-13I	LB-081115-05	8/11/15	7.02	247	13.7	2.18
LB-13I	LB-021816-20	2/18/16	6.81	252	11.5	3.19
LB-13I	LB-082316-03	8/23/16	6.75	260	13.8	2.94
LB-17D	LB-1089-W10	10/18/89	6.95	830	13.0	NT
LB-17D	LB-1189-W12	11/15/89	6.82	890	13.0	NT
LB-17D	LB-1289-W28	12/20/89	6.76	930	13.0	NT
LB-17D	LB-390-W21	3/15/90	6.83	905	13.5	NT
LB-17D	LB-690-W18	6/21/90	6.91	882	15.5	NT
LB-17D	LB-990-W19	9/19/90	6.92	864	14.5	NT
LB-17D	LB-1290-W23	12/13/90	6.82	867	13.5	NT
LB-17D	LB-391-W19	3/21/91	6.74	829	14.2	NT
LB-17D	LB-691-W14	6/26/91	6.85	744	15.4	NT
LB-17D	LB-991-10	9/25/91	6.95	818	14.3	NT
LB-17D	LB-1291-16	12/23/91	7.09	1030	13.1	NT
LB-17D	LB-392-11	3/23/92	6.86	906	16.0	NT
LB-17D	LB-63092-5	6/30/92	6.72	919	16.5	NT
LB-17D	LB-031093-6	3/10/93	6.92	715	15.0	NT
LB-17D	LB-060493-22	6/4/93	6.65	637	15.5	NT
LB-17D	LB-092793-21	9/27/93	6.92	723	16.0	3.20
LB-17D	LB-121593-7	12/15/93	6.71	768	14.0	1.30
LB-17D	LB-032994-20	3/29/94	7.13	780	17.5	2.00
LB-17D	LB-052394-14	6/23/94	7.09	669	16.0	5.20
LB-17D	LB-090794-7	9/7/94	7.06	657	17.0	NT
LB-17D	LB-121494-10	12/14/94	6.98	657	13.0	NT
LB-17D	LB-030995-5	3/9/95	7.01	593	14.0	1.00
LB-17D	LB-062095-11	6/20/95	6.90	681	14.5	6.00
LB-17D	LB-092195-10	9/21/95	6.50	732	16.3	NT
LB-17D	LB-121895-3	12/18/95	7.21	542	12.0	NT
LB-17D	LB-031996-10	3/19/96	5.84	586	14.1	NT
LB-17D	LB-061996-14	6/19/96	6.98	587	12.0	NT
LB-17D	LB-032097-16	3/20/97	7.08	571	15.1	NT
LB-17D	LB-031998-14	3/19/98	6.97	573	15.5	NT
LB-17D	LB-031899-13	3/18/99	6.98	352	16.6	NT
LB-17D	LB-031401-9	3/14/01	6.98	333	15.1	NT
LB-17D	LB-031902-7	3/19/02	7.17	335	15.0	2.22
LB-17D	LB-031203-7	3/12/03	7.33	337	14.7	3.60
LB-17D	LB-022504-10	2/25/04	6.97	257	57.6	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-17D	LB-030905-10	3/9/05	7.06	313	15.4	0.74
LB-17D	LB-031506-7	3/15/06	7.06	301	13.7	3.45
LB-17D	LB-030607-14	3/6/07	6.39	258	15.1	9.31
LB-17D	LB-032008-11	3/20/08	7.07	353	12.9	NT
LB-17D	LB-17D	3/18/09	7.14	295	14.2	3.53
LB-17D	LB-17D032410	3/24/10	7.00	299	15.2	NT
LB-17D	LB-17D	3/22/11	7.45	278	13.8	2.42
LB-17D	LB-031212-04	3/12/12	6.68	388	13.1	0.20
LB-17D	LB-020513-05	2/5/13	6.73	344	13.5	0.14
LB-17D	LB-021714-03	2/17/14	6.48	330	13.3	0.40
LB-17D	LB-021715-05	2/17/15	6.82	296	14.4	0.96
LB-17D	LB-021616-01	2/16/16	6.83	292	13.0	0.37
LB-17I	LB-1089-W14	10/19/89	6.83	1231	14.0	NT
LB-17I	LB-1189-W14	11/15/89	6.65	1192	14.0	NT
LB-17I	LB-1289-W29	12/20/89	6.57	1167	13.5	NT
LB-17I	LB-390-W20	3/15/90	6.59	807	13.0	NT
LB-17I	LB-690-W17	6/21/90	6.48	1202	16.0	NT
LB-17I	LB-990-W18	9/19/90	6.47	1200	15.0	NT
LB-17I	LB-1290-W22	12/13/90	6.62	1125	13.4	NT
LB-17I	LB-391-W20	3/21/91	6.40	1069	14.2	NT
LB-17I	LB-392-13	3/23/92	6.71	1036	16.0	NT
LB-17I	LB-63092-6	6/30/92	6.57	1337	16.0	NT
LB-17I	LB-91892-3	9/18/92	6.72	1300	14.0	NT
LB-17I	LB-121192-18	12/11/92	6.85	992	15.0	NT
LB-17I	LB-031093-5	3/10/93	6.79	930	15.0	NT
LB-17I	LB-032994-21	3/29/94	6.85	960	18.0	2.80
LB-17I	LB-030995-6	3/9/95	6.93	695	14.0	2.60
LB-17I	LB-031996-11	3/19/96	6.87	782	13.2	NT
LB-17I	LB-032097-17	3/20/97	6.99	674	15.9	NT
LB-17I	LB-031998-13	3/19/98	6.87	567	17.2	NT
LB-17I	LB-031899-12	3/18/99	6.86	410	17.5	NT
LB-17I	LB-031401-10	3/14/01	6.80	359	16.4	NT
LB-17I	LB-031902-6	3/19/02	7.03	478	15.9	2.23
LB-17I	LB-031203-6	3/12/03	6.93	510	16.0	1.00
LB-17I	LB-022504-11	2/25/04	6.90	362	59.9	NT
LB-17I	LB-030905-11	3/9/05	7.08	507	15.8	1.68
LB-17I	LB-031506-8	3/15/06	6.80	538	14.5	2.03
LB-17I	LB-030607-13	3/6/07	6.36	458	15.4	12.80
LB-17I	LB-032008-10	3/20/08	7.04	483	13.0	NT
LB-17I	LB-17I	3/18/09	6.95	343	14.8	3.85
LB-17I	LB-171032410	3/24/10	7.13	476	4.1	NT
LB-17I	LB-17I	3/22/11	7.74	528	14.0	2.35
LB-17I	LB-031312-16	3/13/12	6.85	414	12.9	0.15
LB-17I	LB-020513-06	2/5/13	6.89	362	14.1	0.10
LB-17I	LB-021714-04	2/17/14	6.77	376	13.8	0.40

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-17I	LB-021815-15	2/18/15	7.11	408	13.7	0.48
LB-17I	LB-021816-15	2/18/16	7.00	423	13.0	0.29
LB-20S	LB-1289-W36	12/21/89	6.69	817	11.5	NT
LB-20S	LB-390-W12	3/14/90	6.32	1255	13.0	NT
LB-20S	LB-690-W08	6/19/90	NT	1312	13.5	NT
LB-20S	LB-990-W09	9/14/90	6.68	881	14.0	NT
LB-20S	LB-1290-W10	12/12/90	6.62	1164	13.2	NT
LB-20S	LB-391-W08	3/20/91	6.62	716	13.1	NT
LB-20S	LB-691-W11	6/26/91	6.44	869	13.8	NT
LB-20S	LB-991-19	9/26/91	6.68	942	13.2	NT
LB-20S	LB-1291-05	12/19/91	6.08	1130	12.7	NT
LB-20S	LB-392-18	3/24/92	6.62	770	15.0	NT
LB-20S	LB-031593-26	3/15/93	6.75	686	14.0	NT
LB-20S	LB-032994-23	3/29/94	6.77	890	17.0	4.90
LB-20S	LB-031395-19	3/13/95	6.86	1020	16.0	8.30
LB-20S	LB-032096-20	3/20/96	6.91	796	15.0	NT
LB-20S	LB-032097-15	3/20/97	6.94	798	13.7	NT
LB-20S	LB-032098-23	3/20/98	6.93	542	14.6	NT
LB-20S	LB-031899-16	3/18/99	6.89	287	15.4	NT
LB-20S	LB-031401-13	3/14/01	6.65	424	13.6	NT
LB-20S	LB-032002-14	3/20/02	6.63	481	12.8	2.21
LB-20S	LB-031203-20	3/12/03	6.47	377	13.0	NT
LB-20S	LB-022604-19	2/26/04	6.87	281	53.7	NT
LB-20S	LB-030905-12	3/9/05	6.85	517	12.6	12.06
LB-20S	LB-031406-4	3/14/06	6.41	246	12.5	3.94
LB-20S	LB-030607-16	3/6/07	6.17	300	13.0	9.53
LB-20S	LB-032408-16	3/24/08	6.83	504	12.1	NT
LB-20S	LB-20S	3/18/09	7.02	457	13.3	4.93
LB-20S	LB-20S032410	3/24/10	6.83	405	12.9	NT
LB-20S	LB-20S	3/24/11	6.81	586	12.1	2.09
LB-20S	LB-031312-15	3/13/12	6.78	385	11.6	0.17
LB-20S	LB-020513-10	2/5/13	6.76	574	12.2	0.15
LB-20S	LB-021914-20	2/19/14	6.80	400	12.0	0.51
LB-20S	LB-021915-18	2/19/15	6.99	281	12.6	0.79
LB-20S	LB-021716-13	2/17/16	7.04	320	12.7	0.48
LB-26D	LB-0892-2	8/27/92	6.51	364	13.5	NT
LB-26D	LB-92192-7	9/21/92	6.60	370	13.0	NT
LB-26D	LB-121092-13	12/10/92	6.72	326	11.5	NT
LB-26D	LB-031193-14	3/11/93	7.16	302	11.5	NT
LB-26D	LB-060193-3	6/1/93	6.36	280	13.0	NT
LB-26D	LB-092493-12	9/24/93	6.55	295	13.5	6.60
LB-26D	LB-121693-16	12/16/93	6.76	295	13.0	6.50
LB-26D	LB-032494-7	3/24/94	6.70	307	14.0	6.90
LB-26D	LB-062294-6	6/22/94	6.66	325	15.0	6.50
LB-26D	LB-090894-15	9/8/94	6.70	309	14.0	NT
LB-26D	LB-121394-5	12/13/94	6.59	343	13.0	5.90

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-26D	LB-031095-14	3/10/95	6.66	302	13.0	8.00
LB-26D	LB-061995-2	6/19/95	6.72	343	13.0	4.30
LB-26D	LB-092095-4	9/20/95	6.68	324	15.0	NT
LB-26D	LB-122095-15	12/20/95	6.76	291	10.2	NT
LB-26D	LB-031996-2	3/19/96	6.06	330	12.5	NT
LB-26D	LB-061896-2	6/18/96	6.60	335	12.0	NT
LB-26D	LB-091896-11	9/18/96	6.71	320	12.1	NT
LB-26D	LB-121796-4	12/17/96	7.09	352	11.5	NT
LB-26D	LB-031997-6	3/19/97	6.67	366	11.8	NT
LB-26D	LB-061797-8	6/17/97	6.58	329	12.7	NT
LB-26D	LB-091697-4	9/16/97	6.84	285	11.7	NT
LB-26D	LB-121697-6	12/16/97	6.61	350	12.0	5.00
LB-26D	LB-031998-9	3/19/98	6.93	355	13.2	NT
LB-26D	LB-061698-9	6/16/98	6.62	281	12.9	NT
LB-26D	LB-091798-6	9/17/98	6.81	230	13.0	NT
LB-26D	LB-121798-3	12/17/98	6.98	279	11.9	NT
LB-26D	LB-031899-6	3/18/99	6.60	287	14.5	NT
LB-26D	LB-062399-9	6/23/99	6.79	214	13.0	NT
LB-26D	LB-091699-3	9/16/99	6.54	290	12.2	NT
LB-26D	LB-121599-9	12/15/99	6.90	285	12.0	NT
LB-26D	LB-091200-4	9/12/00	6.69	252	12.3	NT
LB-26D	LB-121500-7	12/15/00	6.72	222	11.7	NT
LB-26D	LB-031301-5	3/13/01	6.72	247	11.9	NT
LB-26D	LB-031902-8	3/19/02	6.87	226	11.9	5.92
LB-26D	LB-031203-5	3/12/03	7.43	210	12.0	NT
LB-26D	LB-022504-12	2/25/04	6.56	149	52.4	NT
LB-26D	LB-030805-7	3/8/05	6.62	199	12.3	7.22
LB-26D	LB-031606-19	3/16/06	6.81	183	11.4	8.60
LB-26D	LB-030507-11	3/5/07	6.38	156	12.1	8.93
LB-26D	LB-031908-8	3/19/08	6.79	319	12.5	NT
LB-26D	LB-26D	3/17/09	6.83	230	11.5	8.02
LB-26D	LB-26D032410	3/24/10	6.86	237	11.7	NT
LB-26D	LB-26D	3/23/11	7.60	230	12.3	6.13
LB-26D	LB-031212-05	3/12/12	6.39	234	11.6	4.92
LB-26D	LB-020713-23	2/7/13	6.45	236	11.8	4.43
LB-26D	LB-021714-05	2/17/14	6.43	226	11.9	2.09
LB-26D	LB-021715-04	2/17/15	6.57	221	12.2	3.00
LB-26D	LB-021616-04	2/16/16	6.66	231	11.8	2.71
LB-26I	LB-0892-1	8/27/92	6.64	571	14.0	NT
LB-26I	LB-92192-6	9/21/92	6.88	576	13.0	NT
LB-26I	LB-121092-12	12/10/92	6.89	616	12.0	NT
LB-26I	LB-031193-13	3/11/93	6.89	626	13.0	NT
LB-26I	LB-060193-1	6/1/93	6.78	544	13.5	NT
LB-26I	LB-092493-11	9/24/93	6.76	525	14.0	4.20
LB-26I	LB-121693-15	12/16/93	6.96	547	13.0	1.90

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-26I	LB-032494-6	3/24/94	6.90	508	14.0	2.90
LB-26I	LB-062294-5	6/22/94	6.89	550	16.0	1.90
LB-26I	LB-09894-16	9/8/94	6.96	492	15.0	NT
LB-26I	LB-121394-4	12/13/94	6.78	536	13.5	4.40
LB-26I	LB-031095-12	3/10/95	6.98	499	13.0	0.80
LB-26I	LB-061995-1	6/19/95	6.81	503	13.5	3.20
LB-26I	LB-092095-5	9/20/95	6.91	437	15.0	NT
LB-26I	LB-122095-14	12/20/95	7.05	395	10.4	NT
LB-26I	LB-031996-1	3/19/96	6.25	428	12.0	NT
LB-26I	LB-061896-1	6/18/96	6.93	412	12.0	NT
LB-26I	LB-091896-10	9/18/96	6.96	426	12.6	NT
LB-26I	LB121796-5	12/17/96	7.18	437	12.1	NT
LB-26I	LB-031997-5	3/19/97	6.75	468	12.2	NT
LB-26I	LB-061797-7	6/17/97	6.75	415	14.0	NT
LB-26I	LB-091697-5	9/16/97	6.82	359	12.0	NT
LB-26I	LB-121697-7	12/16/97	6.86	607	12.9	0.80
LB-26I	LB-031998-8	3/19/98	6.81	590	13.3	NT
LB-26I	LB-061698-8	6/16/98	6.88	391	13.1	NT
LB-26I	LB-091798-7	9/17/98	6.67	287	13.4	NT
LB-26I	LB-121798-2	12/17/98	7.13	369	12.6	NT
LB-26I	LB-031799-1	3/17/99	7.29	328	14.8	NT
LB-26I	LB-062399-10	6/23/99	6.96	281	13.6	NT
LB-26I	LB-091699-4	9/16/99	6.78	541	13.0	NT
LB-26I	LB-121599-8	12/15/99	7.01	510	12.6	NT
LB-26I	LB-091200-5	9/12/00	6.93	448	13.1	NT
LB-26I	LB-121500-8	12/15/00	7.01	385	12.5	NT
LB-26I	LB-031301-6	3/13/01	6.94	407	12.5	NT
LB-26I	LB-092001-3	9/20/01	6.87	384	13.6	NT
LB-26I	LB-031902-9	3/19/02	6.96	353	12.4	4.11
LB-26I	LB-091802-4	9/18/02	7.10	350	13.0	NT
LB-26I	LB-031203-4	3/12/03	6.68	293	13.0	NT
LB-26I	LB-092203-4	9/22/03	7.30	250	15.0	5.37
LB-26I	LB-022504-13	2/25/04	6.80	200	53.5	NT
LB-26I	LB-090104-26	9/1/04	6.77	288	13.5	NT
LB-26I	LB-030805-8	3/8/05	6.80	306	12.7	3.23
LB-26I	LB-091405-5	9/14/05	6.76	239	13.7	3.69
LB-26I	LB-031606-20	3/16/06	6.90	267	11.7	7.18
LB-26I	LB-091206-3	9/12/06	7.00	297	13.3	3.02
LB-26I	LB-030507-10	3/5/07	6.37	223	12.6	5.78
LB-26I	LB-091907-5	9/19/07	6.94	315	12.3	4.67
LB-26I	LB-031908-7	3/19/08	7.00	385	13.2	NT
LB-26I	LB-091608-6	9/16/08	6.40	220	17.8	NT
LB-26I	LB-26I	3/17/09	6.92	328	11.6	7.05
LB-26I	LBLF26I091109	9/11/09	7.39	234	12.9	7.06
LB-26I	LB-23I032410	3/24/10	7.07	331	12.0	NT
LB-26I	LB26I092310	9/23/10	7.10	229	11.6	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-26I	LB-26I	3/23/11	7.75	300	12.1	4.41
LB-26I	LB-090711-03	9/7/11	6.77	230	15.1	4.41
LB-26I	LB-032212-21	3/22/12	6.57	274	11.5	4.96
LB-26I	LB-091112-04	9/11/12	6.31	253	13.1	5.07
LB-26I	LB-020613-14	2/6/13	6.61	250	11.8	4.65
LB-26I	LB-082113-06	8/21/13	6.00	244	13.7	4.25
LB-26I	LB-021714-06	2/17/14	6.30	255	11.7	2.88
LB-26I	LB-081314-05	8/13/14	6.50	234	13.9	4.92
LB-26I	LB-021815-12	2/18/15	6.87	270	11.9	3.54
LB-26I	LB-081115-06	8/11/15	6.71	215	13.7	4.48
LB-26I	LB-021616-05	2/16/16	6.73	252	11.8	4.63
LB-26I	LB-082316-04	8/23/16	6.70	266	13.9	4.30
LB-27D	LB-0892-4	8/27/92	6.85	289	14.0	NT
LB-27D	LB-92292-5	9/22/92	7.34	258	13.0	NT
LB-27D	LB-121192-21	12/11/92	7.12	321	13.0	NT
LB-27D	LB-031193-16	3/11/93	6.50	311	11.5	NT
LB-27D	LB-060193-4	6/1/93	7.28	305	13.5	NT
LB-27D	LB-092493-16	9/24/93	7.24	273	14.0	4.60
LB-27D	LB-121693-17	12/16/93	7.24	315	13.0	5.00
LB-27D	LB-032494-4	3/24/94	7.25	306	13.0	5.10
LB-27D	LB-062294-9	6/22/94	7.19	321	15.5	5.30
LB-27D	LB-090894-12	9/8/94	7.09	319	13.5	NT
LB-27D	LB-121394-2	12/12/94	7.48	337	11.5	6.60
LB-27D	LB-031095-8	3/10/95	7.18	339	13.5	7.60
LB-27D	LB-051995.4	6/19/95	7.20	343	14.0	5.60
LB-27D	LB-092095-1	9/20/95	7.16	301	16.0	NT
LB-27D	LB-122095-17	12/20/95	7.05	270	11.2	NT
LB-27D	LB-031996-3	3/19/96	7.26	295	13.0	NT
LB-27D	LB-061896-4	6/18/96	7.16	280	14.0	NT
LB-27D	LB-091796-9	9/17/96	7.02	290	14.2	NT
LB-27D	LB121796-8	12/17/96	7.61	290	13.1	NT
LB-27D	LB-031997-12	3/19/97	7.01	302	12.3	NT
LB-27D	LB-061797-11	6/17/97	7.00	260	15.3	NT
LB-27D	LB-091697-8	9/16/97	7.24	258	12.5	NT
LB-27D	LB-121797-13	12/17/97	6.97	300	12.0	4.20
LB-27D	LB-031998-12	3/19/98	6.97	292	13.6	NT
LB-27D	LB-061798-10	6/17/98	6.92	254	13.0	NT
LB-27D	LB-091798-8	9/17/98	7.07	224	14.9	NT
LB-27D	LB-121798-6	12/17/98	7.19	276	12.8	NT
LB-27D	LB-031899-9	3/18/99	7.04	238	14.5	NT
LB-27D	LB-062399-7	6/23/99	6.99	199	13.7	NT
LB-27D	LB-091599-1	9/15/99	6.85	270	12.9	NT
LB-27D	LB-121599-7	12/15/99	7.13	282	12.6	NT
LB-27D	LB-091300-8	9/13/00	6.95	268	13.2	NT
LB-27D	LB-091300-9	9/13/00	6.95	268	13.2	NT
LB-27D	LB-121500-5	12/15/00	7.03	254	12.5	NT

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-27D	LB-031301-3	3/13/01	6.97	288	12.9	NT
LB-27D	LB-031902-11	3/19/02	6.99	308	12.9	5.02
LB-27D	LB-031203-3	3/12/03	6.96	293	13.0	NT
LB-27D	LB-022604-15	2/26/04	6.88	237	54.7	NT
LB-27D	LB-030805	3/8/05	6.82	322	13.0	4.20
LB-27D	LB-031606-17	3/16/06	6.90	298	12.4	6.81
LB-27D	LB-030507-9	3/5/07	6.20	270	13.5	9.54
LB-27D	LB-031908-5	3/19/08	7.00	0.489	12.4	NT
LB-27D	LB-27D	3/18/09	6.98	315	13.3	7.65
LB-27D	LB-27D032410	3/24/10	7.01	331	13.0	NT
LB-27D	LB-27D	3/25/11	7.43	317	11.3	4.47
LB-27D	LB-031212-02	3/12/12	6.60	338	12.1	3.32
LB-27D	LB-020713-21	2/7/13	6.77	330	11.0	3.64
LB-27D	LB-021814-13	2/18/14	6.66	313	11.3	3.32
LB-27D	LB-021715-02	2/17/15	6.50	299	12.4	3.82
LB-27D	LB-021816-18	2/18/16	6.92	287	11.7	3.61
LB-271	LB-0892-3	8/27/92	6.60	811	14.0	NT
LB-271	LB-92292-4	9/22/92	7.36	836	14.0	NT
LB-271	LB-121192-20	12/11/92	6.62	783	13.5	NT
LB-271	LB-031293-21	3/12/93	7.24	756	13.0	NT
LB-271	LB-060193-2	6/1/93	6.77	664	14.0	NT
LB-271	LB-092493-14	9/24/93	6.97	769	14.0	7.20
LB-271	LB-121693-14	12/16/93	6.81	707	13.0	2.30
LB-271	LB-032494-3	3/24/94	6.67	718	15.5	6.00
LB-271	LB-062294-8	6/22/94	6.73	649	17.0	2.40
LB-271	LB-090894-11	9/8/94	6.84	568	14.0	NT
LB-271	LB-121394-1	12/13/94	8.12	671	12.0	11.00
LB-271	LB-031095-7	3/10/95	6.77	661	13.5	4.20
LB-271	LB-061995-3	6/19/95	6.83	673	14.0	3.20
LB-271	LB-092095-3	9/20/95	6.85	585	14.5	NT
LB-271	LB-122095-16	12/20/95	6.89	482	11.6	NT
LB-271	LB-031996-4	3/19/96	7.05	640	14.7	NT
LB-271	LB-061896-3	6/18/96	6.94	609	14.0	NT
LB-271	LB-091796-7	9/17/96	6.99	752	14.3	NT
LB-271	LB121796-6	12/17/96	7.31	947	12.9	NT
LB-271	LB-031997-10	3/19/97	6.87	771	12.8	NT
LB-271	LB-061797-9	6/17/97	6.98	548	14.1	NT
LB-271	LB-091697-6	9/16/97	6.93	544	12.6	NT
LB-271	LB-121797-11	12/17/97	6.86	750	12.8	0.80
LB-271	LB-031998-10	3/19/98	6.80	917	15.7	NT
LB-271	LB-061798-11	6/17/98	6.85	494	14.1	NT
LB-271	LB-091798-9	9/17/98	6.82	327	15.6	NT
LB-271	LB-121798-4	12/17/98	6.96	446	13.8	NT
LB-271	LB-031899-7	3/18/99	6.83	476	15.5	NT
LB-271	LB-062399-8	6/23/99	7.00	396	14.5	NT

**Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2016
Leichner Landfill**

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-27I	LB-091599-2	9/15/99	6.76	914	14.3	NT
LB-27I	LB-121599-6	12/15/99	7.02	940	12.8	NT
LB-27I	LB-091300-10	9/13/00	6.86	741	14.4	NT
LB-27I	LB-121500-6	12/15/00	6.85	778	13.3	NT
LB-27I	LB-031301-4	3/13/01	6.81	665	13.8	NT
LB-27I	LB-092001-2	9/20/01	6.68	612	14.1	NT
LB-27I	LB-031902-10	3/19/02	6.82	685	13.5	2.62
LB-27I	LB-091802-5	9/18/02	7.30	590	15.0	NT
LB-27I	LB-031203-1	3/12/03	6.88	563	14.0	NT
LB-27I	LB-092203-2	9/22/03	6.10	540	14.5	2.40
LB-27I	LB-022604-17	2/26/04	6.82	382	55.7	NT
LB-27I	LB-090104-27	9/1/04	6.76	554	14.2	NT
LB-27I	LB-030805-5	3/8/05	6.85	525	13.7	2.81
LB-27I	LB-091405-3	9/14/05	6.91	353	14.0	2.80
LB-27I	LB-031606-18	3/16/06	6.98	376	12.6	6.90
LB-27I	LB-091206-2	9/12/06	6.78	564	13.8	1.50
LB-27I	LB-030507-8	3/5/07	6.05	445	13.7	3.88
LB-27I	LB-091907-4	9/19/07	6.78	486	13.2	2.30
LB-27I	LB-031908-4	3/19/08	6.91	0.786	12.9	NT
LB-27I	LB-091608-7	9/16/08	7.00	531	14.3	NT
LB-27I	LB-27I	3/18/09	6.94	557	13.4	4.44
LB-27I	LBLF27i091109	9/11/09	7.01	538	14.5	3.07
LB-27I	LB-27I032410	3/24/10	6.97	419	12.7	NT
LB-27I	LB27I092310	9/23/10	7.00	401	12.3	NT
LB-27I	LB-27I	3/25/11	7.39	523	11.6	3.20
LB-27I	LB-090711-01	9/7/11	6.46	707	14.2	1.11
LB-27I	LB-032212-18	3/22/12	6.82	643	11.7	0.32
LB-27I	LB-091112-02	9/11/12	6.72	706	14.0	1.02
LB-27I	LB-020613-11	2/6/13	6.81	670	12.1	0.29
LB-27I	LB-082113-03	8/21/13	6.00	720	14.5	0.38
LB-27I	LB-021814-14	2/18/14	6.85	574	11.9	0.81
LB-27I	LB-081314-03	8/13/14	6.79	576	13.6	0.66
LB-27I	LB-021815-10	2/18/15	6.94	613	12.2	1.96
LB-27I	LB-081215-09	8/12/15	6.75	575	14.0	0.54
LB-27I	LB-021816-19	2/18/16	6.95	512	11.6	1.10
LB-27I	LB-082316-02	8/23/16	6.62	590	13.6	2.18
FIELDQC	LB-021715-08	2/17/15	N/A	N/A	N/A	N/A
FIELDQC	LB-081215-07	8/12/15	N/A	N/A	N/A	N/A
FIELDQC	LB-021716-07	2/17/2016	N/A	N/A	N/A	N/A
FIELDQC	LB-082416-06	8/24/2016	N/A	N/A	N/A	N/A

Notes:
NT = not tested; N/A = Not Applicable

Volatile Organic Compounds

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1D	LB-01D	6/2/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-1D	LB-01D	7/21/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-1D	LB-01D	9/4/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1D	LB-01D	11/6/87	0.6	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1D	LB-01D	6/22/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1D	LB-01D	8/30/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-1D	LB-01D	9/1/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-1D	LB-01D	12/5/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1D	LB-289-W04	2/28/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-589-W03	5/23/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-989-W16	9/12/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1089-W01	10/17/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1189-W04	11/14/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1289-W22	12/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-390-W09	3/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-690-W11	6/20/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-990-W08	9/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1290-W06	12/11/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-391-W11	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-691-W06	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-991-06	9/24/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1291-14	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-392-14	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-63092-2	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-92292-3	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-121192-16	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-031093-4	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-060293-6	6/2/93	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-092393-8	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-092393-8	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	NT	0.3 L	0.2 L	NT
LB-1D	LB-121593-2	12/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-032494-2	3/24/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-062194-1	6/21/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1D	LB-090694-2	9/6/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1D	LB-121494-12	12/14/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1D	LB-030995-2	3/9/95	0.3 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1D	LB-062095-13	6/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.3 B	0.1 L	0.1 L	0.1 L
LB-1D	LB-092295-14	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1D	LB-121995-6	12/19/95	0.2	0.2 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L
LB-1D	LB-032096-18	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L
LB-1D	LB-061896-10	6/18/96	0.2	0.1 L	0.0 L	0.1 L	0.2	0.1 L	0.2 L	0.1 L
LB-1D	LB-091796-6	9/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.2	0.1 L	0.2 L	0.1 L
LB-1D	LB121796-2	12/17/96	0.2	0.1 L	0.0 L	0.1 L	0.2	0.1 L	0.2 L	0.1 L
LB-1D	LB-031997-4	3/19/97	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-061797-4	6/17/97	0.2	0.1	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L
LB-1D	LB-091697-1	9/16/97	0.2	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L
LB-1D	LB-121697-4	12/16/97	0.1	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L
LB-1D	LB-031998-4	3/19/98	0.2	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-061698-6	6/16/98	0.1	0.1 L	0.0 L	0.1 L	0.4	0.1 L	0.2 L	0.1 L
LB-1D	LB-091798-3	9/17/98	0.2 L	0.3 L	0.2 B	0.2 L	0.5	0.2 L	0.3 L	0.2 L
LB-1D	LB-121898-10	12/18/98	0.2 L	0.3 L	0.2 L	0.2 L	0.4	0.2 L	0.3 L	0.2 L
LB-1D	LB-031799-4	3/17/99	0.2 L	0.3 L	0.2 L	0.2 L	0.5	0.2 L	0.3 L	0.2 L
LB-1D	LB-062399-15	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.6	0.2 L	0.3 L	0.2 L
LB-1D	LB-091799-11	9/17/99	0.2 L	0.3 L	0.3 J	NT	0.5	0.2 L	NT	NT
LB-1D	LB-121699-12	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-1D	LB-031700-16	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D	LB-061300-8	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.8	0.5 L	0.5 L	0.5 L
LB-1D	LB-091100-2	9/11/00	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L	0.5 L
LB-1D	LB-121500-10	12/15/00	0.2 J	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D	LB-031501-15	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L	0.5 L
LB-1D	LB-031501-16	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L	0.5 L
LB-1D	LB-031902-2	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L	0.5 L
LB-1D	LB-031303-12	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L	0.5 L
LB-1D	LB-022404-1	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D	LB030905-13	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D	LB-031406-1	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D (Dup)	LB-031406-2	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.6	0.5 L	0.5 L	0.5 L
LB-1D	LB-030507-2	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1D	LB-032408-15	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D	3/24/11	0.1 L	0.1 L	0.2 L	0.1 L	0.28	0.25 L	0.1 L	0.1 L
LB-1D	LB-031312-13	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1D	LB-020513-07	2/5/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-1D	LB-021914-17	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-1D	LB-021915-17	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-1D	LB-021716-08	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-1S	LB-01S	5/11/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-1S	LB-01S	7/21/87	2.0 L	2.0 L	NT	1.0 L	2.0 L	5.0 L	NT	2.0 L
LB-1S	LB-01S	9/4/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1S	LB-01S	11/6/87	0.9	1.1	1.0 L	1.8	1.0 L	1.0 L	NT	1.0 L
LB-1S	LB-01S	2/11/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1S	LB-01S	6/22/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1S	LB-01S	8/30/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0 L	5.0	1.0 L
LB-1S	LB-01S	12/5/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-1S	LB-289-W05	2/28/89	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	4.5	1.0 L
LB-1S	LB-589-W04	5/23/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	8.3	1.0 L
LB-1S	LB-989-W15	9/12/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	8.0	1.0 L
LB-1S	LB-1289-W12	12/15/89	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	8.5	1.0 L
LB-1S	LB-390-W10	3/14/90	1.0 L	1.0 L	1.0 L	1.1	1.0 L	1.0 L	9.1	1.0 L
LB-1S	LB-690-W10	6/20/90	1.0 L	1.0 L	1.0 L	1.3	1.0 L	1.0 L	5.5	1.0 L
LB-1S	LB-990-W06	9/14/90	1.0 L	1.0 L	1.0 L	1.5	1.0 L	1.8	3.1	1.0 L
LB-1S	LB-1290-W05	12/11/90	1.0 L	1.0 L	1.0 L	3.7	1.0 L	1.0 L	2.6	1.0 L
LB-1S	LB-391-W10	3/20/91	1.0 L	1.0 L	1.0 L	2.2	1.0 L	1.0 L	3.7	1.0 L
LB-1S	LB-691-W05	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.4	1.0 L
LB-1S	LB-991-05	9/24/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L
LB-1S	LB-1291-13	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0	1.0 L
LB-1S	LB-392-15	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1S	LB-63092-1	6/30/92	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.8 B	0.2 L
LB-1S	LB-92292-2	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1S	LB-121192-15	12/11/92	0.2 L	0.2 L	0.2 L	0.3	0.5 L	0.3 L	0.3	0.2 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1S	LB-031093-3	3/10/93	0.2 L	0.2 L	0.2 L	1.8	0.5 L	0.3 L	0.9	0.2 L
LB-1S	LB-060293-5	6/2/93	0.2 L	0.2	0.2 L	0.7	0.5 L	0.3 L	0.6	0.2 L
LB-1S	LB-092393-9	9/23/93	0.2 L	0.2 L	0.2 L	0.3	0.5 L	0.3 L	0.2	0.2 L
LB-1S	LB-092393-9	9/23/93	0.2 L	0.2 L	0.2 L	NT	NT	0.3 L	NT	NT
LB-1S	LB-121593-1	12/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1S	LB-032494-1	3/24/94	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2	0.2 L
LB-1S	LB-062194-4	6/21/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-090694-1	9/6/94	0.2 L	0.3 L	0.4 L	0.3	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-121494-11	12/14/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-121995-5	2/19/95	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030995-1	3/9/95	0.3 L	0.2 L	0.1 L	0.1 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-062095-12	6/20/95	0.3 L	0.2 L	0.1 L	0.1 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-092295-13	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-121995-5	12/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-032096-17	3/20/96	0.3 L	0.2 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-061896-9	6/18/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-091796-5	9/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB121796-1	12/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-031997-3	3/19/97	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061797-3	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091697-2	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-121697-5	12/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031998-3	3/19/98	0.5 L	0.5 L	0.5 L	0.1 B	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061698-5	6/16/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-091798-4	9/17/98	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-121898-9	12/18/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-031799-3	3/17/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-062399-14	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-091799-10	9/17/99	0.2 L	0.3 L	0.3 J	NT	NT	0.2 L	NT	0.2 L
LB-1S	LB-091799-9	9/17/99	0.2 L	0.3 L	0.3 J	NT	NT	0.2 L	NT	0.2 L
LB-1S	LB-121699-13	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	0.2 L	NT	0.2 L
LB-1S	LB-031700-15	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061300-7	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1S	LB-091100-1	9/11/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-121500-9	12/15/00	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031401-14	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031902-1	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091802-1	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031303-10	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031303-11	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-092203-6	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-022404-2	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-090104-1	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-090104-30	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030905-14	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091405-1	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091405-2	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031406-3	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091306-5	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091306-6	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030507-1	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091907-1	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091907-2	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-032408-14	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091608-1	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LBLF1S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB1S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S	3/24/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-090811-07	9/8/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-031312-14	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-091212-08	9/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-020513-09	2/5/2013	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1S	LB-082213-08	8/22/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-1S	LB-021914-18	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-1S (Dup)	LB-021914-19	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1S	LB-081414-09	8/14/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-1S	LB-021915-16	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-1S	LB-081115-02	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-1S	LB-021716-14	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-1S	LB-082416-05	8/24/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3D	LB-03D	5/28/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-3D	LB-1189-W01	11/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3D	LB-1289-W20	12/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3D	LB-032097-14	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032098-21	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031899-15	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-3D	LB-031600-9	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031501-17	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032002-18	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031303-14	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-022404-5	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030905-15	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031606-21	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030507-4	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030507-5	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032408-17	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D	3/28/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3D	LB-031312-09	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3D	LB-020713-18	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-3D	LB-021914-22	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-3D	LB-021715-07	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3D	LB-021616-06	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-03S	5/12/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-3S	LB-03S	7/16/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-3S	LB-1089-W02	10/17/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-3S	LB-1189-W02	11/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3S	LB-1289-W11	12/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3S	LB-032594-11	3/25/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-3S	LB-032097-13	3/20/97	0.6	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032098-20	3/20/98	0.5	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031899-14	3/18/99	0.4	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-3S	LB-031600-8	3/16/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031501-18	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032002-17	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031303-13	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-022404-6	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB030905-16	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031606-22	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-030507-3	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032408-18	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S	3/28/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3S	LB-031312-10	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3S	LB-020713-17	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-3S	LB-021914-22	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-3S	LB-021915-19	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-021716-12	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5D	LB-05D	5/27/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-5D	LB-05D	7/20/87	1.0 L	1.0 L	NT	1.0 L	2.0 L	4.0 L	NT	1.0 L
LB-5D	LB-05D	2/11/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-5D	LB-05D	8/30/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-5D	LB-1289-W24	12/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-5D	LB-032894-13	3/28/94	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-5D	LB-031997-9	3/19/97	0.5 L	0.5 L	0.5 L	0.2	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031998-6	3/19/98	0.5 L	0.5 L	0.5 L	0.2	0.5 L	0.2	0.5 L	0.5 L
LB-5D	LB-031899-11	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-5D	LB-031600-5	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031401-11	3/14/01	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-5D	LB-031902-13	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031303-9	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-022504-7	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-022504-8	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-030805-1	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031606-14	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-031606-15	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-030507-7	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031908-2	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-031908-3	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D	3/23/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5D	LB-031212-03	3/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5D	LB-020513-03	2/5/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-5D	LB-021714-01	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-5D	LB-021715-01	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5D	LB-021816-16	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5S	LB-05S	5/29/87	2.0 L	2.0 L	NT	2.0 L	2.0 L	5.0 L	NT	2.0 L
LB-5S	LB-05S	7/19/87	1.0 L	1.0 L	NT	2.0 L	2.0 L	4.0 L	NT	1.0 L
LB-5S	LB-05S	9/10/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-5S	LB-05S	11/11/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-5S	LB-05S	2/10/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	NT	1.0 L
LB-5S	LB-032894-12	3/28/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-5S	LB-031997-8	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031998-5	3/19/98	2.4	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031899-10	3/18/99	2.6	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-5S	LB-031600-4	3/16/00	1.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031401-12	3/14/01	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031902-12	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091802-6	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031303-8	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-092203-1	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-5S	LB-022504-9	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-090104-5	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB030805-2	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB030805-3	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091405-4	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031606-16	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091206-1	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-030507-6	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091907-3	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031908-1	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091608-2	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-091608-8	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LBLF5S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-DUP2032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB5S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB51S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	3/23/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-090811-06	9/8/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-032212-17	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-091112-01	9/11/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-020513-04	2/5/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-5S	LB-082113-01	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-5S	LB-021714-02	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-5S	LB-081314-01	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-5S	LB-021815-09	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5S	LB-081215-08	8/12/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5S	LB-021816-17	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5S	LB-082316-01	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S	LB-06S	7/17/87	1.0 L	1.0 L	NT	3.0	2.0	4.0 L	NT	1.0 L
LB-6S	LB-06S	9/10/87	1.0 L	1.1	1.0 L	1.0 L	8.0	1.0 L	NT	1.0 L
LB-6S	LB-06S	11/11/87	1.0 L	2.6	1.0 L	4.2	7.1	1.0 L	NT	1.0 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-06S	2/11/88	1.0 L	1.5	1.0 L	1.4	1.0 L	1.0 L	NT	1.0 L
LB-6S	LB-06S	6/22/88	1.0 L	4.0	1.0 L	6.0	1.0 L	1.0 L	NT	1.0 L
LB-6S	LB-06S	8/31/88	1.0 L	1.0	1.0 L	3.0	1.0 L	2.0 L	40.0	1.0 L
LB-6S	LB-06S	12/6/88	1.0 L	1.0 L	1.0 L	6.0	1.0 L	2.0	NT	1.0 L
LB-6S	LB-289-W17	3/1/89	1.0 L	1.0 L	1.0 L	6.9	1.0 L	2.6	24.1	1.0 L
LB-6S	LB-589-W17	5/24/89	1.0 L	1.0 L	1.0 L	5.2	1.0	1.0 L	21.0	1.0 L
LB-6S	LB-989-W07	9/7/89	1.0 L	1.0 L	1.0 L	5.6	1.0 L	1.5	20.0	1.0 L
LB-6S	LB-1289-W13	12/15/89	1.0	2.0	1.0 L	13.0	1.0 L	1.7	51.0	1.0 L
LB-6S	LB-390-W24	3/15/90	1.0 L	1.5	1.0 L	11.0	1.0 L	1.0 L	37.0	1.0 L
LB-6S	LB-690-W22	6/21/90	1.0 L	1.0 L	1.0 L	9.7	1.0 L	1.0 L	31.0	1.0 L
LB-6S	LB-990-W11	9/14/90	1.1	1.7	1.0 L	12.0	1.0 L	6.2	37.0	1.0 L
LB-6S	LB-1290-W13	12/12/90	1.0 L	1.0 L	1.0 L	10.0	1.0 L	4.5	34.0	1.0 L
LB-6S	LB-391-W16	3/21/91	1.0 L	1.0 L	1.0 L	4.3	1.0 L	1.0 L	14.0	1.0 L
LB-6S	LB-691-W19	6/26/91	1.0 L	1.0 L	1.0 L	3.7	1.0 L	1.0 L	13.0	1.0 L
LB-6S	LB-691-W20	6/26/91	1.0 L	1.0 L	1.0 L	4.1	1.0 L	1.0 L	15.0	1.0 L
LB-6S	LB-991-14	9/25/91	1.0 L	1.0 L	1.0 L	5.0	1.0 L	1.0 L	18.0	1.0 L
LB-6S	LB-991-15	9/25/91	1.0 L	1.0 L	1.0 L	4.0	1.0 L	1.0	15.0	1.0 L
LB-6S	LB-1291-08	12/20/91	1.0 L	1.0 L	1.0 L	5.0	1.0 L	1.0 L	29.0	1.0 L
LB-6S	LB-1291-09	12/20/91	1.0 L	1.0 L	1.0 L	4.0	1.0 L	1.0 L	28.0	1.0 L
LB-6S	LB-392-07	3/20/92	1.0 L	1.0 L	1.0 L	2.0	1.0 L	1.0 L	4.0	1.0 L
LB-6S	LB-392-08	3/20/92	1.0 L	1.0 L	1.0 L	2.0	1.0 L	1.0 L	4.0	1.0 L
LB-6S	LB-62692-5	6/26/92	0.4	NT	0.2 L	NT	0.5 L	NT	NT	0.2 L
LB-6S	LB-62692-5	6/26/92	NT	0.4 B	0.2 L	2.6	NT	0.9	6.1 B	NT
LB-6S	LB-62692-6	6/26/92	NT	NT	0.2 L	NT	0.5 L	0.8	5.2 B	0.2 L
LB-6S	LB-62692-6	6/26/92	0.4	0.4 B	0.2 L	2.6	NT	NT	NT	NT
LB-6S	LB-92192-4	9/21/92	0.5	0.4	0.2 L	NT	0.5 L	2.1	5.9	0.2 L
LB-6S	LB-92192-4	9/21/92	NT	NT	0.2 L	3.0	NT	NT	NT	NT
LB-6S	LB-92192-5	9/21/92	NT	NT	0.2 L	NT	0.5 L	NT	NT	0.2 L
LB-6S	LB-92192-5	9/21/92	0.5	0.4	0.2 L	3.0	NT	1.9	5.6	NT
LB-6S	LB-12992-4	12/9/92	0.6 B	NT	0.2	NT	7.8 B	0.3 L	NT	0.2 L
LB-6S	LB-12992-4	12/9/92	NT	0.2	NT	3.6	NT	0.3 L	5.8	NT
LB-6S	LB-12992-5	12/9/92	NT	0.2 L	NT	3.9	3.1 B	0.3 L	6.6	0.2
LB-6S	LB-12992-5	12/9/92	0.4 B	0.2 L	0.2	NT	NT	0.3 L	NT	NT

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-031093-7	3/10/93	0.2 L	0.2 L	0.2 L	NT	0.5 L	0.9	2.3	0.2 L
LB-6S	LB-031093-7	3/10/93	0.2 L	0.2 L	0.2 L	2.6	NT	NT	NT	NT
LB-6S	LB-031093-8	3/10/93	0.2 L	0.2 L	0.2 L	NT	0.5 L	0.3 L	2.1	0.2 L
LB-6S	LB-031093-8	3/10/93	0.2 L	0.2 L	0.2 L	2.4	NT	0.3 L	NT	NT
LB-6S	LB-060393-11	6/3/93	0.4	NT	0.2 L	1.3	0.5 L	NT	1.2	0.2 L
LB-6S	LB-060393-11	6/3/93	NT	0.3	0.2 L	NT	NT	0.6	NT	NT
LB-6S	LB-060393-12	6/3/93	0.4	NT	0.2 L	NT	0.5 L	NT	NT	0.2 L
LB-6S	LB-060393-12	6/3/93	NT	0.3	0.2 L	1.1	NT	0.4	1.0	NT
LB-6S	LB-092493-13	9/24/93	0.2 L	0.2 L	0.2 L	1.8	0.5 L	2.9	1.4	0.2 L
LB-6S	LB-092493-13	9/24/93	0.2 L	0.2 L	0.2 L	NT	NT	NT	NT	NT
LB-6S	LB-121593-6	12/15/93	0.2 L	0.2 L	0.2 L	1.6	0.5 L	1.3	1.8	0.2 L
LB-6S	LB-032994-18	3/29/94	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.6	0.5	0.2 L
LB-6S	LB-032994-19	3/29/94	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.5	0.5	0.2 L
LB-6S	LB-062394-11	6/23/94	0.2 L	0.3 L	0.4 L	0.5	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-062394-12	6/23/94	0.2 L	0.3 L	0.4 L	0.6	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-090694-5	9/6/94	0.2 L	0.3 L	0.4 L	0.8	0.3 L	0.8	0.4	0.3 L
LB-6S	LB-090694-6	9/6/94	0.2 L	0.3 L	0.4 L	0.8	0.3 L	0.8	0.4	0.3 L
LB-6S	LB-121394-6	12/13/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-121394-7	12/13/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-031095-10	3/10/95	0.3 L	0.2 L	0.1 L	0.2 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-031095-11	3/10/95	0.3 L	0.2 L	0.1	0.2 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-062095-10	6/20/95	0.3 L	0.2 L	0.1 L	0.3 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-062095-9	6/20/95	0.3 L	0.2 L	0.1 L	0.3 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-092095-6	9/20/95	0.3 L	0.3 L	0.1 L	0.3	0.1 L	0.1	0.2	0.1 L
LB-6S	LB-092095-7	9/20/95	0.3 L	0.3 L	0.1 L	0.3	0.1 L	0.1	0.2	0.1 L
LB-6S	LB-122095-12	12/20/95	0.3 L	0.2 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-6S	LB-122095-13	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1	0.1 L
LB-6S	LB-031996-5	3/19/96	0.3 L	0.2 L	0.1 L	0.2	0.1 L	0.1 L	0.1	0.1 L
LB-6S	LB-031996-6	3/19/96	0.3 L	0.2 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-6S	LB-061996-12	6/19/96	0.1 L	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-061996-13	6/19/96	0.1	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB-091896-12	9/18/96	0.1 L	0.1 L	0.0 L	0.4	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB121796-3	12/17/96	0.1 L	0.1 L	0.0 L	0.4	0.1 L	0.1	0.2	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-031997-7	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-061797-6	6/17/97	0.2	0.1	0.0	0.5	0.5 L	0.5 L	0.9	0.5 L
LB-6S	LB-091697-3	9/16/97	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.6	0.5 L
LB-6S	LB-121797-14	12/17/97	0.4	0.2	0.5 L	1.0	0.5 L	0.5 L	1.7	0.5 L
LB-6S	LB-031998-7	3/19/98	0.3	0.2	0.1	0.5	0.5 L	0.2	0.5 L	0.5 L
LB-6S	LB-061698-7	6/16/98	0.1	0.1	0.1	0.2	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB-091798-5	9/17/98	0.2	0.3 L	0.2 B	0.5	0.3 L	0.2 L	0.6	0.2 L
LB-6S	LB-121798-1	12/17/98	0.2 L	0.3 L	0.2 L	0.2	0.3 L	0.2 L	0.3 L	0.2 L
LB-6S	LB-031799-2	3/17/99	0.2 L	0.3 L	0.2 L	0.4	0.3 L	0.2 L	0.4	0.2 L
LB-6S	LB-062399-11	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-6S	LB-121599-10	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-6S	LB-031700-10	3/17/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031700-11	3/17/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-061300-6	6/13/00	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091200-3	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-121200-1	12/12/00	0.2 J	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.3 J	0.5 L
LB-6S	LB-121200-2	12/12/00	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.2 J	0.5 L
LB-6S	LB-031301-7	3/13/01	0.2 J	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031301-8	3/13/01	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-032002-15	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-032002-16	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091802-2	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091802-3	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031303-21	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-092203-5	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-022604-18	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-090104-6	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-030805-9	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091405-6	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031506-13	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091206-4	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-030507-12	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091907-6	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-031908-9	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091608-3	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LBLF6S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S (Dup)	LBLFDUP1091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB6S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S	3/22/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	DUP1	3/22/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-090711-05	9/7/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-090711-04	9/7/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-032212-23	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-032212-22	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-091212-06	9/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-091212-07	9/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-020613-15	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-6S (Dup)	LB-020613-16	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-6S	LB-082113-07	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-6S	LB-021914-23	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-6S	LB-081314-06	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-6S (Dup)	LB-081314-07	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-6S	LB-021815-14	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S (Dup)	LB-021815-13	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S	LB-081115-03	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S (Dup)	LB-081115-04	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S	LB-021816-21	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S	LB-082416-08	8/24/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-6S (Dup)	LB-082416-09	8/24/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB10-DR	LB-031005-19	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR (Dup)	LB-031005-20	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-031406-5	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-030607-20	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-032408-22	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-10D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB10-DR	LB-10D032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10DR	LB-10DR	3/29/11	0.1 L	0.1 L	0.2 L	0.18	0.1 L	0.25 L	0.1 L	0.1 L
LB-10DR	LB-0313012-07	3/13/12	0.1 L	0.1 L	0.2 L	0.12	0.1 L	0.25 L	0.1 L	0.1 L
LB-10DR	LB-020713-19	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-10DR	LB-021914-15	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-10DR	LB-021915-20	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-10DR	LB-021716-09	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-10DR (Dup)	LB-021716-10	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-10SR	LB-031005-21	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091505-7	9/15/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-031406-6	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091306-9	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-030607-19	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091907-7	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-032408-21	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR (Re)	MW10SR-043008	4/30/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091608-4	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-10S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR (Dup)	Dup-1	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LBLF10S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-10SR032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB10S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-10SR	3/29/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR (Dup)	DUP2	3/29/11	0.1 L	0.15	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-090811-08	9/8/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-031312-08	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-091212-09	9/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-020713-20	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-10SR	LB-082213-09	8/22/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-10SR	LB-021914-16	2/19/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-10SR	LB-081414-08	8/14/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-10SR	LB-021915-21	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-10SR	LB-081015-01	8/10/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-10SR	LB-021716-11	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-10SR	LB-082416-07	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13D	LB-989-W20	9/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1089-W15	10/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1189-W20	11/16/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1289-W18	12/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-390-W18	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-690-W20	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-990-W17	9/18/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0 L
LB-13D	LB-1290-W20	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-391-W15	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-691-W22	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-991-13	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1291-19	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-392-19	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-7292-2	7/2/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-91792-2	9/17/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-121092-9	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-031293-20	3/12/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-060493-21	6/4/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-092393-7	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-092393-7	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	NT	0.3 L	0.2 L	NT
LB-13D	LB-121693-12	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-032894-17	3/28/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-062394-20	6/28/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-090794-10	9/7/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-121594-21	12/15/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-031395-18	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-062195-19	6/21/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-092295-16	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-121995-8	12/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-032096-15	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-032096-16	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13D	LB-061996-16	6/19/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-091796-4	9/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB121796-9	12/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-032097-18	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061897-15	6/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-091897-11	9/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-121797-9	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.8 L	0.5 L	0.5 L
LB-13D	LB-032098-19	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061798-14	6/17/98	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-091898-15	9/18/98	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-121898-12	12/18/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-031999-23	3/19/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-062399-12	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-091799-13	9/17/99	0.2 L	0.3 L	0.3 J	NT	NT	NT	NT	NT
LB-13D	LB-121699-3	12/14/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-13D	LB-031700-18	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061400-10	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-091300-11	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-121500-12	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031501-19	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-032002-20	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031303-16	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-022404-3	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031005-17	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031506-9	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-030607-18	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-032008-13	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-13D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-13D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-13D	3/25/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13D	LB-031212-01	3/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13D	LB-020713-22	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-13D	LB-021814-08	2/18/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-13D	LB-021715-03	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13D	LB-021616-02	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13D (Dup)	LB-021616-03	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13I	LB-989-W22	9/13/89	1.0 L	1.0 L	1.0 L	6.5	1.0 L	1.8	13.0	1.0 L
LB-13I	LB-989-W23	9/13/89	1.0 L	1.0 L	1.0 L	5.6	1.0 L	1.3	11.0	1.0 L
LB-13I	LB-1089-W17	10/19/89	1.0 L	1.0 L	1.0 L	6.0	1.0 L	2.3	10.0	1.0 L
LB-13I	LB-1189-W17	11/16/89	1.0 L	1.0 L	1.0 L	4.9	1.0 L	2.3	1.0 L	1.0 L
LB-13I	LB-1289-W16	12/18/89	1.0 L	1.0 L	1.0 L	5.7	1.0 L	1.9	10.0	1.0 L
LB-13I	LB-390-W19	3/15/90	1.0 L	1.0 L	1.0 L	2.0	1.0 L	3.7	2.2	1.0 L
LB-13I	LB-690-W19	6/21/90	1.0 L	1.0 L	1.0 L	3.6	1.0 L	1.4	8.1	1.0 L
LB-13I	LB-990-W16	9/18/90	1.0 L	1.0 L	1.0 L	5.1	1.0 L	2.4	8.3	1.0 L
LB-13I	LB-1290-W21	12/13/90	1.0 L	1.0 L	1.0 L	4.6	1.0 L	2.9	7.9	1.0 L
LB-13I	LB-391-W14	3/20/91	1.0 L	1.0 L	1.0 L	3.1	1.0 L	1.0 L	7.1	1.0 L
LB-13I	LB-691-W21	6/26/91	1.0 L	2.1	1.0 L	2.4	1.0 L	1.2	4.1	1.0 L
LB-13I	LB-991-12	9/25/91	1.0 L	1.0 L	1.0 L	3.0	1.0 L	1.0	9.0	1.0 L
LB-13I	LB-1291-18	12/23/91	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	9.0	1.0 L
LB-13I	LB-392-20	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L
LB-13I	LB-7292-1	7/2/92	0.2 L	0.2 L	0.2 L	0.4	0.5 L	1.4	0.2 L	0.2 L
LB-13I	LB-91792-1	9/17/92	0.2 L	0.2 L	0.2 L	1.6	0.5 L	6.6	2.5	0.2 L
LB-13I	LB-121092-8	12/10/92	0.2 L	0.2 L	0.2 L	1.6	0.5 L	0.3 L	1.9	0.2 L
LB-13I	LB-031293-19	3/12/93	0.2 L	0.2 L	0.2 L	1.3	0.5 L	1.2	1.7	0.2 L
LB-13I	LB-060493-20	6/4/93	0.2 L	0.2	0.2 L	0.8	0.5 L	0.5	0.9	0.2 L
LB-13I	LB-092393-6	9/23/93	0.2 L	0.2 L	0.2 L	0.8	0.5 L	1.6	0.6	0.2 L
LB-13I	LB-092393-6	9/23/93	0.2 L	0.2 L	0.2 L	NT	NT	NT	NT	NT
LB-13I	LB-121693-14	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13I	LB-032894-16	3/28/94	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.3 L	0.5	0.2 L
LB-13I	LB-0624894-19	6/28/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.6	0.3 L	0.3 L
LB-13I	LB-090794-9	9/7/94	0.2 L	0.3 L	0.4 L	0.2	0.3 L	0.6	0.3 L	0.3 L
LB-13I	LB-121594-20	12/15/94	0.2 L	0.3 L	0.4 L	0.3	0.3 L	0.3 L	0.3 L	0.3 L
LB-13I	LB-031395-17	3/13/95	0.3 L	0.2 L	0.1 L	0.2 B	0.1 L	0.2	0.1 L	0.1 L
LB-13I	LB-062195-18	6/21/95	0.3 L	0.2 L	0.1 L	0.2 B	0.1 L	0.1 L	0.1	0.1 L
LB-13I	LB-092295-15	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L
LB-13I	LB-121995-7	12/19/95	0.3 L	0.1	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13I	LB-032096-14	3/20/96	0.3 L	0.2 L	0.1 L	0.4	0.1 L	0.1 L	0.2 B	0.1 L
LB-13I	LB-061996-15	6/19/96	0.1 L	0.1 L	0.0	0.6	0.1 L	1.1	0.2	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13I	LB-091796-3	9/17/96	0.1 L	0.1 L	0.0 L	0.2	0.1 L	0.8	0.2 L	0.1 L
LB-13I	LB121796-10	12/17/96	0.1 L	0.1 L	0.0	0.1 L	0.1 L	1.1	0.2 L	0.1 L
LB-13I	LB-032097-19	3/20/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5	0.5 L	0.5 L
LB-13I	LB-061897-14	6/18/97	0.5 L	0.5 L	0.1	0.1	0.5 L	0.9	0.5 L	0.5 L
LB-13I	LB-091897-12	9/18/97	0.5 L	0.5 L	0.2	0.2	0.5 L	0.9	0.5 L	0.5 L
LB-13I	LB-121797-8	12/17/97	0.5 L	0.5 L	0.1	0.1	0.5 L	0.8	0.5 L	0.5 L
LB-13I	LB-032098-18	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L
LB-13I	LB-061798-15	6/17/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.6	0.2 L	0.1 L
LB-13I	LB-091898-14	9/18/98	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.7	0.3 L	0.2 L
LB-13I	LB-121898-11	12/18/98	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-13I	LB-031999-22	3/19/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.4	0.3 L	0.2 L
LB-13I	LB-062399-13	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13I	LB-091799-12	9/17/99	0.2 L	0.3 L	0.3 J	NT	NT	0.4 J	NT	NT
LB-13I	LB-121699-4	12/14/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-13I	LB-031700-17	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-061400-9	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091300-12	9/13/00	0.3 J	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-121500-11	12/15/00	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031501-20	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-032002-19	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091802-7	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031303-15	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-092203-7	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-022404-4	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-090104-13	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031005-18	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091505-9	9/15/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031506-10	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091306-8	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-030607-17	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091907-8	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-032008-12	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091608-5	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13I	LB-13I	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LBLF13i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I	3/23/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-090711-02	9/7/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-032212-19	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I (Dup)	LB-032212-20	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-091112-03	9/11/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-020613-13	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-13I	LB-082113-05	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-13I	LB-021814-10	2/18/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-13I	LB-081314-04	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-13I	LB-021815-11	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13I	LB-081115-05	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13I	LB-021816-20	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-13I	LB-082316-03	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-17D	LB-989-W08	9/7/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1089-W10	10/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1089-W11	10/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1189-W12	11/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1189-W13	11/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1289-W28	12/20/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-390-W21	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-390-W22	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-690-W18	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-990-W19	9/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-990-W20	9/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1290-W23	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-391-W19	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-391-W21	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-691-W14	6/11/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-691-W15	6/11/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17D	LB-991-10	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-991-11	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1291-16	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1291-17	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-392-11	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-392-12	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-63092-5	6/30/92	0.2 L	0.2 L	0.5	0.2 L	0.5 L	0.9	0.2 L	0.2 L
LB-17D	LB-031093-6	3/10/93	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-17D	LB-060493-22	6/4/93	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.4	0.2 L	0.2 L
LB-17D	LB-092793-21	9/27/93	0.2 L	0.2 L	0.3	0.2 L	0.5 L	2.3	0.2 L	0.2 L
LB-17D	LB-092793-21	9/27/93	0.2 L	0.2 L	NT	0.2 L	NT	NT	0.2 L	NT
LB-17D	LB-121593-7	12/15/93	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.7	0.2 L	0.2 L
LB-17D	LB-032994-20	3/29/94	0.2 L	0.2 L	0.3	0.5 L	0.5 L	0.8	0.2 L	0.2 L
LB-17D	LB-062394-14	6/23/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-17D	LB-090794-7	9/7/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.7	0.3 L	0.3 L
LB-17D	LB-121494-10	12/14/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.4	0.3 L	0.3 L
LB-17D	LB-030995-5	3/9/95	0.3 L	0.4	0.2	0.1 L	0.1 L	0.4	0.2	0.1 L
LB-17D	LB-062095-11	6/20/95	0.3 L	0.2 L	0.3	0.1 L	0.1 L	0.3	0.1 L	0.1 L
LB-17D	LB-092095-10	9/20/95	0.3 L	0.3 L	0.4	0.1 L	0.1 L	0.1 L	0.1	0.1 L
LB-17D	LB-121895-3	12/18/95	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.4	0.5 L	0.5 L
LB-17D	LB-121895-3	12/18/95	0.3 L	0.2 L	NT	0.1 L	0.1 L	NT	0.1 L	0.1 L
LB-17D	LB-031996-11	3/19/96	0.3 L	0.2 L	0.3 B	0.1 L	0.1 L	0.4	0.1 L	0.1 L
LB-17D	LB-061996-14	6/19/96	0.1 L	0.1 L	0.3	0.1 L	0.1 L	0.6	0.2 L	0.1
LB-17D	LB-032097-16	3/20/97	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031998-14	3/19/98	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031899-13	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-17D	LB-031600-7	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031401-9	3/14/01	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031902-7	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031203-7	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-022504-10	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-030905-10	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031506-7	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17D	LB-030607-14	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D (Dup)	LB-030607-15	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-032008-11	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D	3/22/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LN-17D	LB-031212-04	3/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-17D	LB-020513-05	2/5/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-17D	LB-021714-03	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-17D	LB-021715-05	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-17D (Dup)	LB-021715-06	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-17D	LB-021616-01	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-17I	LB-989-W04	9/6/89	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-1089-W14	10/19/89	1.0 L	1.0 L	1.6	1.0 L	1.0 L	1.0 L	1.0 L	1.4
LB-17I	LB-1189-W14	11/15/89	1.0 L	1.0 L	1.3	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-1289-W29	12/20/89	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.1
LB-17I	LB-1289-W30	12/20/89	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.1
LB-17I	LB-390-W20	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-690-W17	6/21/90	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-990-W18	9/19/90	1.0 L	1.0 L	1.2	1.0 L	1.0 L	1.0 L	1.0 L	1.1
LB-17I	LB-1290-W22	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-391-W20	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-392-13	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-63092-6	6/30/92	0.2 L	0.2 L	0.7		0.5 L	NT	0.2 L	0.8
LB-17I	LB-63092-6	6/30/92	0.2 L	0.2 L	NT	0.2	NT	1.0	0.2 L	NT
LB-17I	LB-63092-7	6/30/92	0.2 L	0.2 L	0.7	0.3	0.5 L	1.0		0.9
LB-17I	LB-63092-7	6/30/92	0.2 L	0.2 L	NT		NT	NT	0.3 B	NT
LB-17I	LB-91892-3	9/18/92	0.2 L	0.2 L	1.0	0.2	0.5 L	4.1	0.2 L	1.3
LB-17I	LB-91892-3	9/18/92	0.2 L	0.2 L	NT		NT	NT	0.2 L	NT
LB-17I	LB-91892-4	9/18/92	0.2 L	0.2 L	0.9		0.5 L	NT	0.2 L	1.2
LB-17I	LB-91892-4	9/18/92	0.2 L	0.2 L	NT	0.2	NT	4.1	0.2 L	NT

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17I	LB-121192-18	12/11/92	0.2 L	0.2 L	NT	0.2 L	0.5 L	1.0	0.2 L	1.5
LB-17I	LB-121192-18	12/11/92	0.2 L	0.2 L	1.3	0.2 L	NT	NT	0.2 L	NT
LB-17I	LB-121192-19	12/11/92	0.2 L	0.2 L	1.3	0.2 L	0.5 L	NT	0.2 L	1.6
LB-17I	LB-121192-19	12/11/92	0.2 L	0.2 L	NT	0.2 L	NT	1.1	0.2 L	NT
LB-17I	LB-031093-5	3/10/93	0.2 L	0.2 L	1.5	0.2 L	0.5 L	0.8	0.2 L	1.9
LB-17I	LB-032994-21	3/29/94	0.2 L	0.2 L	0.9	0.5 L	0.5 L	0.4	0.2 L	0.8
LB-17I	LB-030995-6	3/9/95	0.3 L	0.2 L	0.8	0.1 L	0.1 L	0.2	0.1 L	1.0
LB-17I	LB-031996-10	3/19/96	0.3 L	0.2 L	0.7	0.1 L	0.1 L	0.4	0.1 L	0.9
LB-17I	LB-032097-17	3/20/97	0.5 L	0.5 L	1.3	0.5 L	0.5 L	0.5 L	0.5 L	1.5
LB-17I	LB-031998-13	3/19/98	0.5 L	0.5 L	0.8 J	0.5 L	0.5 L	0.1 J	0.5 L	1.1 J
LB-17I	LB-031899-12	3/18/99	0.2 L	0.3 L	0.6	0.2 L	0.3 L	0.2 L	0.3 L	0.8
LB-17I	LB-031600-6	3/16/00	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J
LB-17I	LB-031401-10	3/14/01	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J
LB-17I	LB-031902-6	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-031203-6	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-022504-11	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB030905-11	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-031506-8	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-030607-13	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-032008-10	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I (Dup)	LB-DUP1032410	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I	3/22/11	0.1 L	0.81	0.26	0.1 L	0.1 L	0.25 L	0.27	0.1 L
LB-17I	LB-031312-16	3/13/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-17I	LB-020513-06	2/5/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-17I	LB-021714-04	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-17I	LB-021815-15	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-17I	LB-021816-15	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-20S	LB-1289-W36	12/21/89	1.0 L	1.0 L	1.0 L	1.0	22.0	2.6	1.3	1.0 L
LB-20S	LB-390-W12	3/14/90	1.0 L	1.0 L	1.0 L	2.5	1.0 L	10.0	2.0	1.1
LB-20S	LB-690-W08	6/19/90	1.0 L	1.0 L	1.0 L	1.8	1.0 L	12.0	1.1	2.2
LB-20S	LB-690-W09	6/19/90	1.0 L	1.0 L	1.0 L	2.2	1.0 L	14.0	1.8	2.4
LB-20S	LB-990-W09	9/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.9	1.0 L	1.3

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-20S	LB-1290-W10	12/12/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.8	1.0 L	1.7
LB-20S	LB-1290-W11	12/12/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.5
LB-20S	LB-391-W08	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-20S	LB-392-18	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-20S	LB-031593-26	3/15/93	0.2 L	0.2 L	NT	NT	0.5 L	1.3	0.2 L	1.3
LB-20S	LB-031593-26	3/15/93	0.2 L	0.2 L	0.4	0.2	NT	NT	0.2 L	NT
LB-20S	LB-031593-27	3/15/93	0.2 L	0.2 L	0.4	NT	0.5 L	NT	0.2 L	1.5
LB-20S	LB-031593-27	3/15/93	0.2 L	0.2 L	NT	0.2	NT	1.6	0.2 L	NT
LB-20S	LB-032994-23	3/29/94	0.2 L	0.2 L	0.5	0.3	0.5 L	1.6	0.2 L	1.1
LB-20S	LB-031395-19	3/13/95	0.3 L	0.2 L	0.3	0.2 B	0.1 L	1.2	0.2	1.4
LB-20S	LB-032096-20	3/20/96	0.3 L	0.3	1.0	0.2	0.1 L	1.9	0.1 B	1.9
LB-20S	LB-032097-15	3/20/97	0.5 L	0.5 L	1.6	0.5 L	0.5 L	2.0	0.5 L	2.3
LB-20S	LB-032098-23	3/20/98	0.5 L	0.5 L	0.8	0.5 L	0.5 L	0.5	0.5 L	1.0
LB-20S	LB-031899-16	3/18/99	0.2 L	0.3 L	0.5	0.2 L	0.3 L	0.9	0.3 L	0.6
LB-20S	LB-031700-14	3/17/00	0.5 L	0.5 L	0.5	0.5 L	0.5 L	0.8	0.5 L	0.8
LB-20S	LB-031401-13	3/14/01	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.6
LB-20S	LB-032002-14	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-031303-20	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-022604-19	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB030905-12	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-031406-4	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-030607-16	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5
LB-20S	LB-032408-16	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5
LB-20S	LB-20S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-20S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-20S	3/24/11	0.1 L	0.1 L	0.25	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-20S	LB-031312-15	3/13/12	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-20S	LB-020613-10	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-20S	LB-021914-20	2/19/14	0.15 L	0.13 L	0.23 J	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-20S	LB-021915-18	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-20S	LB-021716-13	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26D	LB-0892-2	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.5 L J	0.3 L J	0.3 J	0.2 L J
LB-26D	LB-92192-7	9/21/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-121092-13	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26D	LB-031193-14	3/11/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-060193-3	6/1/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-092493-12	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-092493-12	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	NT	0.3 L	0.2 L	NT
LB-26D	LB-121693-16	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-032594-7	3/25/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-062294-6	6/22/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-090894-15	9/8/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-121394-5	12/13/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-031095-14	3/10/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-061995-2	6/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-092095-4	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-122095-15	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-031996-2	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-061896-2	6/18/96	0.1 L	0.1 L	0.0 L	0.2	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-091896-10	9/18/96	0.1 L	0.1 L	0.0 L	4.0 B	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB121796-4	12/17/96	0.1 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-031997-6	3/19/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061797-8	6/17/97	0.5 L	0.5 L	0.1	0.1	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-091697-4	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-121697-5	12/16/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031998-9	3/19/98	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061698-9	6/16/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-091798-6	9/17/98	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-121798-3	12/17/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-031899-6	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-062399-9	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-121599-9	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-26D	LB-031700-13	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061300-5	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-091200-4	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-121500-7	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031301-5	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031902-8	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26D	LB-031203-5	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-022504-12	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-030805-7	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031606-19	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-030507-11	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031908-8	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D	3/23/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26D	LB-031212-05	3/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26D	LB-020713-23	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-26D	LB-021714-05	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-26D	LB-021715-04	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26D	LB-021616-04	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26I	LB-0892-1	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.5 J	0.5 L J	1.3 J	0.2 L J	0.2 L J
LB-26I	LB-92192-6	9/21/92	0.2 L	0.2 L	0.2 L	0.6	0.5 L	2.1	0.2 L	0.2 L
LB-26I	LB-121092-12	12/10/92	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-26I	LB-031193-13	3/11/93	0.2 L	0.2 L	0.2 L	0.6	0.5 L	1.1	0.2 L	0.2 L
LB-26I	LB-060193-1	6/1/93	0.2 L	0.2 L	0.2 L	0.3	0.5 L	1.6	0.2 L	0.2 L
LB-26I	LB-092493-11	9/24/93	0.2 L	0.2 L	0.2 L	0.3	0.5 L	3.0	0.2 L	0.2 L
LB-26I	LB-092493-11	9/24/93	0.2 L	0.2 L	0.2 L	NT	NT	NT	0.2 L	NT
LB-26I	LB-121693-15	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.8	0.2 L	0.2 L
LB-26I	LB-032594-6	3/25/94	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.8	0.2 L	0.2 L
LB-26I	LB-062294-5	6/22/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26I	LB-090894-16	9/8/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	1.0	0.3 L	0.3 L
LB-26I	LB-121394-4	12/13/94	0.2 L	0.3 L	0.4 L	0.2 L	0.3 L	0.6	0.3 L	0.3 L
LB-26I	LB-031095-13	3/10/95	0.3 L	0.2 L	0.1 L	0.1 B	0.1 L	0.5	0.1 L	0.1 L
LB-26I	LB-061995-1	6/19/95	0.3 L	0.2 L	0.1 L	0.1 B	0.1 L	0.5	0.1 L	0.1 L
LB-26I	LB-092095-5	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.3	0.1 L	0.1 L
LB-26I	LB-122095-14	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26I	LB-031996-1	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.7	0.1 L	0.1 L
LB-26I	LB-061896-1	6/18/96	0.1 L	0.1 L	0.0 L	0.2	0.1 L	0.5	0.2 L	0.1 L
LB-26I	LB-091896-10	9/18/96	0.1 L	0.1 L	0.0 L	0.2	0.1 L	0.8	0.2 L	0.1 L
LB-26I	LB-121796-5	12/17/96	0.1 L	0.1 L	0.0 L	0.2	0.1 L	0.1 L	0.2 L	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26I	LB-031997-4	3/19/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-061797-7	6/17/97	0.5 L	0.5 L	0.1	0.1	0.5 L	0.4	0.5 L	0.5 L
LB-26I	LB-091697-5	9/16/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-121697-7	12/16/97	0.1	0.1	0.1	0.5	0.5 L	0.5 L	0.6	0.5 L
LB-26I	LB-031998-8	3/19/98	0.5 L	0.5 L	0.1	0.1	0.5 L	0.4	0.5 L	0.5 L
LB-26I	LB-061698-8	6/16/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26I	LB-091798-7	9/17/98	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.3	0.3 L	0.2 L
LB-26I	LB-121798-2	12/17/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26I	LB-031799-1	3/17/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.4	0.3 L	0.2 L
LB-26I	LB-062399-10	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26I	LB-121599-8	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-26I	LB-031700-12	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-061300-4	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-26I	LB-091200-5	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-121500-8	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031301-6	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031902-9	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091802-4	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031203-4	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-092203-4	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-022504-13	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-090104-26	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-030805-8	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091405-5	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031606-20	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091206	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-030507-10	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091907-5	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031908-7	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091608-6	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26I	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB26I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26I	LB-26I	3/23/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-090711-03	9/7/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-032212-21	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-091112-04	9/11/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-020613-14	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-26I	LB-082113-06	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-26I	LB-021714-06	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-26I (Dup)	LB-021714-07	2/17/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-26I	LB-081314-05	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-26I	LB-021815-12	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26I	LB-081115-06	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26I	LB-021616-05	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-26I	LB-082316-04	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27D	LB-0892-4	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.4 J	0.5 L J	0.3 L J	0.2 L J	0.2 L J
LB-27D	LB-92202-5	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	1.6 J	0.2 L	0.2 L
LB-27D	LB-121192-21	12/11/92	0.2 L	0.2	0.2 L	0.7	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-031193-16	3/11/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-060193-4	6/1/93	0.2 L	0.2 L	0.2 L	0.4	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-16	9/24/93	0.2 L	0.2 L	0.2 L	NT	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-16	9/24/93	0.2 L	0.2 L	0.2 L	0.4	NT	0.3 L	0.2 L	NT
LB-27D	LB-092493-17	9/24/93	0.2 L	0.2 L	0.2 L	NT	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-17	9/24/93	0.2 L	0.2 L	0.2 L	0.4	NT	0.3 L	0.2 L	NT
LB-27D	LB-121693-17	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-121693-18	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-032494-4	3/24/94	0.2 L	0.2 L	0.2 L	0.4	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-032494-5	3/24/94	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-062294-10	6/22/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-062294-9	6/22/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-090894-12	9/8/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-090894-13	9/8/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-121394-2	12/13/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-121394-3	12/13/94	0.2 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-031095-8	3/10/95	0.3 L	0.2 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-031095-9	3/10/95	0.3	0.2 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27D	LB-061995-4	6/19/95	0.3 L	0.2 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-061995-5	6/19/95	0.3 L	0.2 L	0.1 L	3.6 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-092095-1	9/20/95	0.3 L	0.3 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-092095-2	9/20/95	0.3 L	0.3 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-122095-17	12/20/95	0.3 L	0.2 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-122095-18	12/20/95	0.3 L	0.2 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-031996-3	3/19/96	0.3 L	0.2 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-061896-4	6/18/96	0.1 L	0.1 L	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-061896-5	6/18/96	0.1 L	0.1	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-091796-9	9/17/96	0.1 L	0.1 L	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB121796-8	12/17/96	0.1 L	0.1	0.0 L	0.6	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-031997-12	3/19/97	0.5 L	0.5 L	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061797-11	6/17/97	0.5 L	0.1	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091697-8	9/16/97	0.5 L	0.5 L	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-121797-13	12/17/97	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031998-12	3/19/98	0.5 L	0.1	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061798-10	6/17/98	0.1 L	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-091798-8	9/17/98	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-121798-6	12/17/98	0.2 L	0.3 L	0.2 L	0.2	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-031899-9	3/18/99	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-062399-7	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-091599-1	9/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-27D	LB-121599-7	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-27D	LB-031600-3	3/16/00	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061300-3	6/13/00	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091300-8	9/13/00	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091300-9	9/13/00	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-121500-5	12/15/00	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031301-3	3/13/01	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031902-11	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031203-3	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-022604-15	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D (Dup)	LB-022604-16	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-030805-6	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27D	LB-031606-17	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-030507-9	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031908-5	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D (Dup)	LB-031908-6	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-27D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-27D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-27D	3/25/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27D	LB-031212-02	3/12/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27D	LB-020713-21	2/7/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-27D	LB-021814-13	2/18/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-27D	LB-021715-02	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27D	LB-021816-18	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27I	LB-0892-3	8/27/92	0.8 J	0.5 J	0.2 L J	2.1 J	0.5 L J	1.6 J	0.9 J	0.2 J
LB-27I	LB-92292-4	9/22/92	1.1	0.6	0.2 L	1.9	0.5 L	1.5	1.2	0.2 L
LB-27I	LB-121192-20	12/11/92	0.9	0.5	0.2 L	2.4	0.5 L	0.3 L	1.6	0.2
LB-27I	LB-031293-21	3/12/93	0.9	0.5	0.2 L	1.3	0.5 L	0.8	1.7	0.2 L
LB-27I	LB-060193-2	6/1/93	0.7	0.4	0.2 L	1.0	0.5 L	1.3	1.0	0.2 L
LB-27I	LB-092493-14	9/24/93	NT	NT	0.2 L	0.7	0.5 L	NT	0.4	0.2 L
LB-27I	LB-092493-14	9/24/93	0.5	0.2	0.2 L	NT	NT	1.2	NT	NT
LB-27I	LB-092493-15	9/24/93	NT	0.2	0.2 L	0.7	0.5 L	1.2	0.4	0.2 L
LB-27I	LB-092493-15	9/24/93	0.6	NT	0.2 L	NT	NT	NT	NT	NT
LB-27I	LB-121693-19	12/16/93	0.5	0.2 L	0.2 L	0.2 L	0.5 L	0.6	0.5	0.2 L
LB-27I	LB-121693-20	12/16/93	0.5	0.2	0.2 L	0.2 L	0.5 L	0.6	0.5	0.2 L
LB-27I	LB-032494-3	3/24/94	0.6	0.3	0.2 L	1.0	0.5 L	0.3 L	1.2	0.2 L
LB-27I	LB-062294-8	6/22/94	0.5	0.3 L	0.4 L	0.9	0.3 L	0.3 L	1.0	0.3 L
LB-27I	LB-090894-11	9/8/94	0.5	0.3 L	0.4 L	1.0	0.3 L	0.5	1.0	0.3 L
LB-27I	LB-121394-1	12/13/94	0.6	0.3 L	0.4 L	0.6	0.3 L	0.3 L	0.6	0.3 L
LB-27I	LB-031095-7	3/10/95	0.7	0.3	0.1	0.6 B	0.1 B	0.3	0.5	0.1 L
LB-27I	LB-061995-3	6/19/95	0.7	0.2	0.1	0.6 B	0.1 L	0.5	0.2	0.1 L
LB-27I	LB-092095-3	9/20/95	0.3	0.3 L	0.1	0.3	0.1 L	0.7	0.2	0.1 L
LB-27I	LB-122095-16	12/20/95	0.3	0.2 L	0.1 L	0.1 L	0.1 L	0.8	0.1 L	0.1 L
LB-27I	LB-031996-4	3/19/96	0.4	0.2 L	0.1 B	0.3	0.1 L	1.4	0.1 L	0.1 L
LB-27I	LB-061896-3	6/18/96	0.2	0.1 L	0.2	0.1 L	0.1 L	2.0	0.3	0.1 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27I	LB-091796-7	9/17/96	0.4	0.2	0.1	1.1	0.1 L	2.6	0.3	0.2
LB-27I	LB-091796-8	9/17/96	0.1 L	0.1	0.1	1.2	0.1 L	2.9	0.3	0.4
LB-27I	LB121796-6	12/17/96	0.2	0.1	0.2	0.7	0.1 L	1.7	0.2 L	0.1
LB-27I	LB121796-7	12/17/96	0.2	0.1	0.2	0.6	0.1 L	1.6	0.2 L	0.1
LB-27I	LB-031997-10	3/19/97	0.5 L	0.5 L	0.2	0.2	0.5 L	0.8	0.5 L	0.5 L
LB-27I	LB-031997-11	3/19/97	0.5 L	0.5 L	0.2	0.2	0.5 L	0.8	0.5 L	0.5 L
LB-27I	LB-061797-9	6/17/97	0.5 L	0.5 L	0.1	0.2	0.5 L	1.0	0.5 L	0.5 L
LB-27I	LB-061797-9	6/17/97	0.5 L	0.5 L	NT	NT	0.5 L	1.1	0.5 L	0.5 L
LB-27I	LB-091697-6	9/16/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091697-7	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-121797-11	12/17/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.2	0.5 L	0.5 L
LB-27I	LB-121797-12	12/17/97	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.4	0.5 L	0.5 L
LB-27I	LB-031998-10	3/19/98	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.3	0.5 L	0.5 L
LB-27I	LB-031998-11	3/19/98	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.3	0.5 L	0.5 L
LB-27I	LB-061798-11	6/17/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-27I	LB-061798-12	6/17/98	0.1 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-27I	LB-091798-10	9/17/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-091798-9	9/17/98	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-121798-4	12/17/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-121798-5	12/17/98	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-031899-7	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-031899-8	3/18/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-062399-8	6/23/99	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-091599-2	9/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-27I	LB-121599-6	12/15/99	0.2 L	0.3 L	0.2 L	NT	NT	NT	NT	NT
LB-27I	LB-031600-1	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031600-2	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-061300-1	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-061300-2	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091300-10	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-121500-6	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-031301-4	3/13/01	0.3 J	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031902-10	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091802-5	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27I	LB-031203-1	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031203-2	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-092203-2	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-092203-3	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-022604-17	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-090104-27	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB030805-5	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091405-3	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031606-18	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091206-2	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-030507-8	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-0919-07-4	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031908-4	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091608-7	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LBLF27i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I	3/25/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-090711-01	9/7/11	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-032212-18	3/22/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-091112-02	9/11/12	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-020613-11	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-27I (Dup)	LB-020613-12	2/6/2013	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L	1.00 L
LB-27I	LB-082113-03	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-27I (Dup)	LB-082113-04	8/21/2013	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.18 J	0.16 L	0.11 L
LB-27I	LB-021814-14	2/18/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-27I	LB-081314-03	8/13/14	0.15 L	0.13 L	0.16 L	0.14 L	0.14 L	0.17 L	0.16 L	0.11 L
LB-27I	LB-021815-10	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27I	LB-081215-09	8/12/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27I	LB-021816-19	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-27I	LB-082316-02	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	LB-021715-08	2/17/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	LB-081215-07	8/12/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L

Table B-2
Groundwater Chemistry, Volatile Organic Compounds^a (µg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	PCE	TCE	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
FIELDQC	LB-021716-07	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	LB-082416-06	8/24/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	2/18/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	2/19/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	8/10/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	8/11/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	8/12/15	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	2/16/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	2/17/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	2/18/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	8/23/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELDQC	Trip Blank	8/24/16	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L

Notes:

PCE = tetrachloroethene; TCE = trichloroethene; ; 1,4-DCB = 1,4-dichlorobenzene; 1,1-DCA = 1,1-dichloroethane; 1,1,1-TCA = 1,1,1-trichloroethane; cis-1,2-DCE = cis-1,2-dichloroethene

B = analyte detected above the laboratory method detection limit (MDL) but below the method reporting limit (MRL)

Dup = field duplicate sample; J = estimated concentration; L = not detected at or above MRL; Re = resample.; NT = not tested

^a Only VOCs historically detected in groundwater samples are listed, except for vinyl chloride and 1,1-dichloroethene that have not been analyzed for since 2013 as approved by the Washington State Department of Ecology (Ecology, 2013).

**Inorganic Parameters (Nitrate, Cl, and TDS)
And Dissolved Metals (Fe and Mn)**

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1D	LB-01D	6/2/87	234	4.0	4.7	NT	0.05 L	0.01 L
LB-1D	LB-01D	7/21/87	NT	5.0	4.5	NT	0.05 L	0.005 L
LB-1D	LB-01D	9/4/87	NT	5.0	2.6	NT	0.05 L	0.01 L
LB-1D	LB-01D	11/6/87	NT	5.9	4.7	NT	0.05 L	0.01 L
LB-1D	LB-01D	2/9/88	224	5.0	4.5	NT	0.05 L	0.01 L
LB-1D	LB-01D	6/22/88	214	5.0	3.8	NT	0.05 L	0.05 L
LB-1D	LB-01D	8/30/88	250	5.0	4.6	NT	0.05 L	0.01 L
LB-1D	LB-01D	9/1/88	206	5.0	4.5	NT	0.05 L	0.01 L
LB-1D	LB-01D	12/5/88	193	5.4	4.2	NT	0.01 L	0.01 L
LB-1D	LB-289-W04	2/28/89	210	5.0	4.5	NT	0.01 L	0.01 L
LB-1D	LB-589-W03	5/23/89	212	6.3	4.9	NT	0.05 L	0.01 L
LB-1D	LB-989-W16	9/12/89	168	4.0	5.0	NT	0.02 L	0.005 L
LB-1D	LB-1089-W01	10/17/89	188	4.2	4.5	161	0.05 L	0.005 L
LB-1D	LB-1189-W04	11/14/89	141	5.5	4.9	150	0.02 L	0.005 L
LB-1D	LB-1289-W22	12/19/89	174	5.0	4.6	NT	NT	NT
LB-1D	LB-390-W09	3/14/90	204	5.3	4.7	143	NT	NT
LB-1D	LB-690-W11	6/20/90	195	4.9	4.8	180	NT	NT
LB-1D	LB-990-W08	9/14/90	187	5.3	4.8	196	NT	NT
LB-1D	LB-1290-W06	12/11/90	203	5.5	4.7	125	NT	NT
LB-1D	LB-391-W11	3/20/91	202	5.2	4.6	187	NT	NT
LB-1D	LB-691-W06	6/26/91	200	5.0	4.5	157	NT	NT
LB-1D	LB-991-06	9/24/91	176	5.1	4.4	172	NT	NT
LB-1D	LB-1291-14	12/23/91	201	4.3	4.6	162	NT	NT
LB-1D	LB-392-14	3/23/92	197	5.5	4.6	163	NT	NT
LB-1D	LB-63092-2	6/30/92	196	4.7	5.7	167	NT	NT
LB-1D	LB-92292-3	9/22/92	201	5.1	4.7	160	NT	NT
LB-1D	LB-121192-16	12/11/92	204	5.9	4.7	176	NT	NT
LB-1D	LB-031093-3	3/10/93	199	5.7	4.2	169	NT	NT
LB-1D	LB-060293-6	6/2/93	199	5.5	4.3	156	NT	NT
LB-1D	LB-092393-8	9/23/93	187	5.5	4.3	163	NT	NT
LB-1D	LB-121593-2	12/15/93	170	6.1	4.6	163	NT	NT
LB-1D	LB-032494-2	3/24/94	208	5.8	4.6	159	NT	NT
LB-1D	LB-062194-1	6/21/94	171	5.6	4.4	167	NT	NT
LB-1D	LB-090694-2	9/6/94	186	5.1	5.1	172	NT	NT
LB-1D	LB-121494-12	12/14/94	168	5.1	4.9	147	NT	NT
LB-1D	LB-030995-02	3/9/95	160	5.8	4.6	171	NT	NT
LB-1D	LB-062095-13	6/20/95	184	5.8	5.4	145	NT	NT
LB-1D	LB-092295-14	9/22/95	239	6.1	4.6	128	NT	NT
LB-1D	LB-121995-6	12/19/95	196	6.1	5.3	162	NT	NT
LB-1D	LB-032096-18	3/20/96	193	6.0	5.2	177	NT	NT
LB-1D	LB-061896-10	6/18/96	174	6.1	5.2	169	NT	NT
LB-1D	LB-091796-6	9/17/96	190	6.6	5.1	160	0.02 L	0.005 L
LB-1D	LB121796-2	12/17/96	214	6.4	5.3	183	0.02 L	0.005 L
LB-1D	LB-031997-4	3/19/97	174	7.0	5.8	183	0.02 L	0.005 L
LB-1D	LB-061797-4	6/17/97	214	6.2	5.2	183	0.02 L	0.005 L
LB-1D	LB-091697-1	9/16/97	208	6.5	5.3	185	0.02 L	0.005 L
LB-1D	LB-121697-4	12/16/97	206	6.7	5.7	173	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1D	LB-031998-4	3/19/98	227	7.1	6.2	184	0.02 L	0.005 L
LB-1D	LB-061698-6	6/16/98	158	6.7	6.1	184	0.02 L	0.005 L
LB-1D	LB-091798-3	9/17/98	224	6.7	5.7	196	0.02 L	0.005 L
LB-1D	LB-121898-10	12/18/98	178	7.4	6.3	201	0.02	0.005 L
LB-1D	LB-031799-4	3/17/99	182	7.4	6.1	161	0.02 L	0.005 L
LB-1D	LB-062399-15	6/23/99	187	7.2	6.2	187	0.02 L	0.005 L
LB-1D	LB-091799-11	9/17/99	204	7.6	6.0	157	0.02 L	0.005 L
LB-1D	LB-121699-12	12/16/99	190	6.9	5.6	178	0.02 L	0.005 L
LB-1D	LB-031700-16	3/17/00	180	7.0	5.8	170	0.02 L	0.005 L
LB-1D	LB-061300-8	6/13/00	190	7.3	6.0	184	0.01 B	0.005 L
LB-1D	LB-091100-2	9/11/00	215	7.6	6.4	192	0.02 L	0.005 L
LB-1D	LB-121500-10	12/15/00	219	7.0	5.7	146	0.02 L	0.005 L
LB-1D	LB-031501-15	3/15/01	NT	7.2	5.9	180	0.02 L	0.005 L
LB-1D	LB-031501-16	3/15/01	NT	7.0	5.9	166	0.02 L	0.005 L
LB-1D	LB-031902-02	3/19/02	NT	6.9	5.9	159	0.02 L	0.005 L
LB-1D	LB-031303-12	3/13/03	NT	6.6	5.7	198	0.02 L	0.005 L
LB-1D	LB-022404-1	2/24/04	NT	6.7	5.6	188	0.07	0.006
LB-1D	LB030905-13	3/9/05	NT	6.7	5.5	224	0.02 L	0.005 L
LB-1D	LB-031406-1	3/14/06	NT	6.0	5.3	168	0.02 L	0.005 L
LB-1D (Dup)	LB-031406-2	3/14/06	NT	6.1	5.3	144	0.02 L	0.005 L
LB-1D	LB-030507-2	3/5/07	NT	6.1	5.6	194	0.02 L	0.005 L
LB-1D	LB-032408-15	3/24/08	NT	6.6	5.7	154	0.02 L	0.005 L
LB-1D	LB-1D	3/17/09	NT	7.0	5.9	147	0.02 L	0.005 L
LB-1D	LB-1D032310	3/23/10	NT	6.39	6.14	162	0.02 L	0.005 L
LB-1D	LB-1D	3/28/11	220	7.49	5.87	195	0.025 L	0.002 L
LB-1D	LB-031312-13	3/13/12	NT	7.4	6.0	190	0.025 L	0.002 L
LB-1D	LB-020513-07	2/5/13	NT	7.6	6.0	160	0.036	0.0058
LB-1D	LB-021914-17	2/19/14	NT	7.7	6.0	200	0.025 L	0.0020 L
LB-1D	LB-021915-17	2/19/15	NT	7.23	7.09	210	0.025 L	0.0020 L
LB-1D	LB-021716-08	2/17/16	NT	7.13	6.15	183	0.040 L	0.0020 L
LB-1S	LB-01S	5/11/87	602	16.0	1.1	NT	0.05 L	0.031
LB-1S	LB-01S	7/21/87	NT	20.0	2.7	NT	0.05 L	0.006
LB-1S	LB-01S	9/4/87	NT	15.0	1.8	NT	0.05 L	0.01 L
LB-1S	LB-01S	11/6/87	NT	14.0	3.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	2/11/88	410	15.0	2.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	6/22/88	496	20.0	2.0	NT	0.05 L	0.05 L
LB-1S	LB-01S	8/30/88	478	18.0	3.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	12/5/88	348	17.0	3.5	NT	0.01 L	0.01 L
LB-1S	LB-289-W05	2/28/89	408	14.0	3.7	NT	0.29	0.01 L
LB-1S	LB-589-W04	5/23/89	510	22.0	3.8	NT	0.05 L	0.01 L
LB-1S	LB-989-W15	9/12/89	334	13.0	4.0	NT	0.20 L	0.005 L
LB-1S	LB-1289-W12	12/15/89	300	12.0	4.7	NT	NT	NT
LB-1S	LB-390-W10	3/14/90	388	13.6	4.7	152	NT	NT
LB-1S	LB-690-W10	6/20/90	526	17.8	4.0	302	NT	NT
LB-1S	LB-990-W06	9/14/90	531	20.2	3.8	325	NT	NT
LB-1S	LB-1290-W05	12/11/90	456	23.6	2.5	328	NT	NT
LB-1S	LB-391-W10	3/20/91	602	17.7	3.1	320	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1S	LB-691-W05	6/26/91	472	14.8	4.4	294	NT	NT
LB-1S	LB-991-05	9/24/91	350	10.2	5.4	253	NT	NT
LB-1S	LB-1291-13	12/23/91	382	10.0	4.0	290	NT	NT
LB-1S	LB-392-15	3/23/92	421	13.0	4.0	287	NT	NT
LB-1S	LB-63092-1	6/30/92	367	10.0	5.7	259	NT	NT
LB-1S	LB-92292-2	9/22/92	367	11.0	5.0	252	NT	NT
LB-1S	LB-121192-15	12/11/92	378	12.0	5.0	246	NT	NT
LB-1S	LB-031093-4	3/10/93	675	17.0	1.8	388	NT	NT
LB-1S	LB-060293-5	6/2/93	616	12.0	3.5	388	NT	NT
LB-1S	LB-092393-9	9/23/93	487	15.0	3.9	309	NT	NT
LB-1S	LB-121593-1	12/15/93	382	17.0	4.2	291	NT	NT
LB-1S	LB-032494-1	3/24/94	591	20.0	3.3	373	NT	NT
LB-1S	LB-052194-4	6/21/94	463	14.0	5.1	305	NT	NT
LB-1S	LB-090694-1	9/6/94	481	15.0	5.4	369	NT	NT
LB-1S	LB-121494-11	12/14/94	499	16.0	5.2	357	NT	NT
LB-1S	LB-030995-01	3/9/95	330	14.0	7.1	296	NT	NT
LB-1S	LB-062095-12	6/20/95	410	12.0	8.8	307	NT	NT
LB-1S	LB-092295-13	9/22/95	494	19.0	7.0	248	NT	NT
LB-1S	LB-121995-5	12/19/95	422	17.0	8.0	291	NT	NT
LB-1S	LB-032096-17	3/20/96	488	21.0	6.8	312	NT	NT
LB-1S	LB-061896-9	6/18/96	325	15.0	9.1	275	NT	NT
LB-1S	LB-091796-5	9/17/96	377	15.0	8.7	303	0.02 L	0.005 L
LB-1S	LB121796-1	12/17/96	455	17.0	7.9	298	0.02 L	0.005 L
LB-1S	LB-031997-3	3/19/97	444	35.0	7.2	370	0.03	0.005 L
LB-1S	LB-061797-3	6/17/97	348	12.0	7.5	279	0.02 L	0.005 L
LB-1S	LB-091697-2	9/16/97	382	21.6	7.4	291	0.02 L	0.005 L
LB-1S	LB-121697-5	12/16/97	456	22.0	8.9	310	0.03	0.005 L
LB-1S	LB-031998-3	3/19/98	526	35.1	8.7	306	0.02 L	0.005 L
LB-1S	LB-061698-5	6/16/98	303	19.6	10.2	307	0.02 L	0.005 L
LB-1S	LB-091798-4	9/17/98	448	21.6	9.0	298	0.02	0.005 L
LB-1S	LB-121898-9	12/18/98	363	18.1	9.0	332	0.34	0.008
LB-1S	LB-031799-3	3/17/99	465	29.7	9.1	355	0.02	0.005 L
LB-1S	LB-062399-14	6/23/99	363	21.0	8.1	277	0.02 L	0.005 L
LB-1S	LB-091799-10	9/17/99	447	19.6	8.3	279	0.10	0.005 L
LB-1S	LB-091799-9	9/17/99	457	21.1	7.4	285	0.03	0.005 L
LB-1S	LB-121699-13	12/16/99	358	12.1	8.1	255	0.02 L	0.005 L
LB-1S	LB-031700-15	3/17/00	383	18.5	7.3	249	0.02 L	0.005 L
LB-1S	LB-061300-7	6/13/00	297	9.8	9.8	222	0.02 L	0.005 L
LB-1S	LB-091100-1	9/11/00	365	14.2	8.9	264	0.02 L	0.005 L
LB-1S	LB-121500-9	12/15/00	362	10.2	7.4	213	0.02 L	0.005 L
LB-1S	LB-031401-14	3/14/01	NT	8.6	9.8	227	0.02 L	0.005 L
LB-1S	LB-092001-6	9/20/01	NT	8.3	7.3	212	0.02 L	0.005 L
LB-1S	LB-031902-01	3/19/02	NT	7.5	4.3	206	0.02 L	0.005 L
LB-1S	LB-091802-01	9/17/02	NT	6.0	7.0	206	0.02 L	0.005 L
LB-1S	LB-031303-10	3/13/03	NT	5.2	4.7	216	0.02 L	0.005 L
LB-1S	LB-031303-11	3/13/03	NT	5.1	4.7	198	0.03	0.005 L
LB-1S	LB-092203-6	9/22/03	NT	4.5	5.2	208	2.32	0.069

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1S	LB-022404-2	2/24/04	NT	4.4	4.0	184	0.12	0.005 L
LB-1S	LB-090104-1	9/1/04	NT	4.0	3.6	179	0.02 L	0.005 L
LB-1S (Dup)	LB-090104-30	9/1/04	NT	4.0	3.6	186	0.02 L	0.005 L
LB-1S	LB030905-14	3/9/05	NT	4.7	3.7	220	0.24	0.203
LB-1S	LB-091405-1	9/14/05	NT	5.0	4.4	148	0.02 L	0.005 L
LB-1S (Dup)	LB-091405-2	9/14/05	NT	5.0	4.5	188	0.02 L	0.005 L
LB-1S	LB-031406-3	3/14/06	NT	6.6	2.5	234	1.62	0.045
LB-1S	LB-091306-5	9/13/06	NT	4.6	5.0	174	0.02 L	0.005 L
LB-1S (Dup)	LB-091306-6	9/13/06	NT	4.6	5.0	176	0.104	0.005 L
LB-1S	LB-030507-1	3/5/07	NT	4.6	4.9	196	1.62	0.045
LB-1S	LB-091907-1	9/19/07	NT	4.6	4.6	168	0.02 L	0.005 L
LB-1S (Dup)	LB-091907-2	9/19/07	NT	4.6	4.7	187	0.104	0.005 L
LB-1S	LB-032408-14	3/24/08	NT	8.9	4.3	196	0.020 L	0.005 L
LB-1S	LB-091608-1	9/16/08	NT	5.2	5.6	209	0.024	0.005 L
LB-1S	LB-1S	3/17/09	NT	6.0	4.8	159	0.020 L	0.005 L
LB-1S	LBLF1S091109	9/11/09	NT	4.99	4.94	202	0.051	0.005 L
LB-1S	LB-1S032310	3/23/10	NT	6.53	4.08	201	0.020 L	0.005 L
LB-1S	LB-1092310	9/23/10	NT	6.96	6.21	185	0.020 L	0.005 L
LB-1S	LB-1S	3/24/11	248	5.92	5.70	220	0.025 L	0.002 L
LB-1S	LB-090811-07	9/8/11	NT	5.71	6.87	205	0.025 L	0.002 L
LB-1S	LB-031312-14	3/13/12	NT	5.2	6.0	210	0.025 L	0.002 L
LB-1S	LB-091212-08	9/12/12	NT	14	5.9	210	0.025 L	0.002
LB-1S	LB-020513-09	2/5/13	NT	7.9	6.3	200	0.025 L	0.0020 L
LB-1S	LB-082213-08	8/22/13	NT	13.0	8.7	250	0.025 L	0.0020 L
LB-1S	LB-021914-18	2/19/14	NT	19.0	3.9	240	0.025 L	0.0020 L
LB-1S (Dup)	LB-021914-19	2/19/14	NT	19.0	3.9	260	0.025 L	0.0020 L
LB-1S	LB-081414-09	8/14/14	NT	7.1	6.7	200	0.025 L	0.0020 L
LB-1S	LB-021915-16	2/19/15	NT	7.23	7.09	210	0.025 L	0.0020 L
LB-1S	LB-081115-02	8/11/15	NT	6.79	5.66	204	0.040 L	0.0020 L
LB-1S	LB-021716-14	2/17/16	NT	7.19	4.86	194	0.040 L	0.0020 L
LB-1S	LB-082416-05	8/24/16	NT	11	5.4	190	0.040 L	0.0020 L
LB-3D	LB-03D	5/28/87	270	8.0	4.3	NT	0.05 L	0.01 L
LB-3D	LB-03D	7/17/87	NT	8.0	4.1	NT	0.05 L	0.005 L
LB-3D	LB-03D	9/8/87	NT	8.0	2.2	NT	0.05 L	0.05 L
LB-3D	LB-03D	11/6/87	NT	8.2	4.9	NT	0.05 L	0.01 L
LB-3D	LB-1189-W01	11/13/89	176	5.5	5.0	179	0.02 L	0.005 L
LB-3D	LB-1289-W20	12/18/89	206	6.2	4.8	173	0.02 L	0.005 L
LB-3D	LB-032097-14	3/20/97	204	5.3	6.2	196	0.02 L	0.005 L
LB-3D	LB-032098-21	3/20/98	236	5.2	7.3	175	0.02 L	0.005 L
LB-3D	LB-031899-15	3/18/99	193	5.2	7.7	182	0.03	0.005 L
LB-3D	LB-031600-9	3/16/00	199	4.7	8.0	222	0.02 L	0.005 L
LB-3D	LB-031501-17	3/15/01	NT	5.2	7.6	171	0.02 L	0.005 L
LB-3D	LB-032002-18	3/20/02	NT	5.6	6.7	157	0.02 L	0.005 L
LB-3D	LB-031303-14	3/13/03	NT	4.1	5.5	181	0.02 L	0.005 L
LB-3D	LB-022404-5	2/24/04	NT	3.3	4.4	164	0.02 L	0.005 L
LB-3D	LB-030905-15	3/9/05	NT	3.2	4.1	169	0.02 L	0.005 L
LB-3D	LB-031606-21	3/16/06	NT	3.0	4.2	122	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-3D	LB-030507-4	3/5/07	NT	3.2	4.4	156	0.02 L	0.005 L
LB-3D (Dup)	LB-030507-5	3/5/07	NT	3.2	4.4	161	0.02 L	0.005 L
LB-3D	LB-032408-17	3/24/08	NT	3.3	4.2	145	0.02 L	0.005 L
LB-3D	LB-3D	3/18/09	NT	3.5	4.5	147	0.02 L	0.005 L
LB-3D	LB-3D032410	3/24/10	NT	3.60	5.76	152	0.02 L	0.005 L
LB-3D	LB-3D	3/28/11	210	4.23	5.05	201	0.025 L	0.002 L
LB-3D	LB-031312-09	3/13/12	NT	4.1	4.6	180	0.025 L	0.002 L
LB-3D	LB-020713-18	2/7/13	NT	4.4	4.5	170	0.025 L	0.0020 L
LB-3D	LB-021914-22	2/19/14	NT	4.6	4.7	200	0.025 L	0.0020 L
LB-3D	LB-021715-07	2/17/15	NT	4.41	4.81	194	0.025 L	0.0020 L
LB-3D	LB-021616-06	2/16/16	NT	5.32	4.81	166	0.040 L	0.0020 L
LB-3S	LB-03S	5/11/87	308	9.0	1.9	NT	0.05 L	0.01
LB-3S	LB-03S	7/16/87	NT	7.0	2.1	NT	0.05 L	0.005 L
LB-3S	LB-03S	9/4/87	NT	7.0	1.5	NT	0.05 L	0.01 L
LB-3S	LB-03S	11/5/87	NT	6.4	3.4	NT	0.05 L	0.01 L
LB-3S	LB-1089-W02	10/17/89	192	4.0	4.0	193	0.05 L	0.005 L
LB-3S	LB-1189-W02	11/13/89	160	4.5	4.1	144	0.02	0.005 L
LB-3S	LB-1289-W11	12/15/89	190	5.0	4.0	176	0.03	0.064
LB-3S	LB-390-W11	3/14/90	218	5.3	3.8	164	NT	NT
LB-3S	LB-690-W06	6/19/90	212	4.7	3.7	148	NT	NT
LB-3S	LB-990-W10	9/14/90	213	4.9	3.6	219	NT	NT
LB-3S	LB-1290-W08	12/12/90	377	4.6	3.5	194	NT	NT
LB-3S	LB-391-W07	3/20/91	217	4.5	3.4	150	NT	NT
LB-3S	LB-691-W10	6/11/91	226	4.9	3.3	188	NT	NT
LB-3S	LB-991-16	9/26/91	250	4.6	2.4	193	NT	NT
LB-3S	LB-1291-06	12/20/91	333	4.5	3.3	186	NT	NT
LB-3S	LB-392-10	3/20/92	230	4.4	3.3	195	NT	NT
LB-3S	LB-62692-8	6/26/92	253	4.9	2.6	204	NT	NT
LB-3S	LB-91792-3	9/17/92	266	4.4	2.9	205	NT	NT
LB-3S	LB-121092-14	12/10/92	273	4.3	3.2	202	NT	NT
LB-3S	LB-031593-25	3/15/93	309	4.7	2.7	218	NT	NT
LB-3S	LB-060393-14	6/3/93	296	4.5	2.6	214	NT	NT
LB-3S	LB-092393-1	9/23/93	278	4.2	3.0	212	NT	NT
LB-3S	LB-121593-5	12/15/93	255	4.1	3.1	212	NT	NT
LB-3S	LB-032594-11	3/25/94	281	3.8	3.0	204	NT	NT
LB-3S	LB-062394-13	6/23/94	276	4.1	2.9	208	NT	NT
LB-3S	LB-090794-8	9/7/94	235	3.3	3.3	213	NT	NT
LB-3S	LB-121494-13	12/14/94	274	3.6	2.5	215	NT	NT
LB-3S	LB-031395-20	3/13/95	267	3.9	3.4	214	NT	NT
LB-3S	LB-062095-14	6/20/95	259	3.7	3.8	221	NT	NT
LB-3S	LB-092095-11	9/20/95	328	3.9	3.7	202	NT	NT
LB-3S	LB-121995-4	12/19/95	272	5.0	4.2	206	NT	NT
LB-3S	LB-032096-21	3/20/96	254	5.1	4.3	199	NT	NT
LB-3S	LB-061996-11	6/19/96	257	4.5	4.4	213	NT	NT
LB-3S	LB-032097-13	3/20/97	211	3.6	5.0	207	0.30	0.008
LB-3S	LB-032098-20	3/20/98	228	3.1	4.4	185	0.02 L	0.005 L
LB-3S	LB-031899-14	3/18/99	159	3.1	4.0	154	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-3S	LB-031600-8	3/16/00	148	2.4	4.4	169	0.02	0.007
LB-3S	LB-031501-18	3/15/01	NT	3.2	4.6	148	0.02 L	0.005 L
LB-3S	LB-032002-17	3/20/02	NT	3.7	4.8	155	0.02 L	0.005 L
LB-3S	LB-031303-13	3/13/03	NT	3.1	4.1	220	0.02 L	0.005 L
LB-3S	LB-022404-6	2/24/04	NT	2.7	3.3	159	4.59	0.07
LB-3S	LB-030905-16	3/9/05	NT	2.7	2.7	163	0.10	0.005 L
LB-3S	LB-031606-22	3/16/06	NT	2.4	2.5	134	0.02 L	0.005 L
LB-3S	LB-030507-3	3/5/07	NT	2.7	2.9	160	0.02 L	0.005 L
LB-3S	LB-032408-18	3/24/08	NT	2.8	3.2	145	0.02 L	0.005 L
LB-3S	LB-3S	3/18/09	NT	3.3	3.3	162	0.02 L	0.005 L
LB-3S	LB-3S032310	3/23/10	NT	2.83	3.56	144	0.02 L	0.005 L
LB-3S	LB-3S	3/28/11	214	3.40	3.63	188	0.025 L	0.002 L
LB-3S	LB-031312-10	3/13/12	NT	3.7	3.8	170	0.025 L	0.002 L
LB-3S	LB-020713-17	2/7/13	NT	4.1	4.3	180	0.025 L	0.0020 L
LB-3S	LB-021914-22	2/19/14	NT	3.7	4.0	180	0.025 L	0.0020 L
LB-3S	LB-021915-19	2/19/15	NT	3.38	3.90	190	0.025 L	0.0020 L
LB-3S	LB-021716-12	2/17/16	NT	4.14	3.44	155	0.025 L	0.0020 L
LB-5D	LB-05D	5/27/87	606	38.0	2.6	NT	0.05 L	1.5
LB-5D	LB-05D	7/20/87	NT	45.0	0.1	NT	0.05 L	0.016
LB-5D	LB-05D	9/10/87	NT	44.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	11/11/87	NT	43.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	2/10/88	624	41.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	6/23/88	593	42.0	0.1	NT	0.05 L	0.05 L
LB-5D	LB-05D	8/31/88	616	43.0	0.1 L	NT	0.07	0.01 L
LB-5D	LB-05D	12/6/88	494	40.0	0.6	NT	0.01 L	0.01 L
LB-5D	LB-289-W03	3/1/89	548	40.0	0.2 L	NT	0.01 L	0.025
LB-5D	LB-589-W13	5/24/89	576	51.0	0.2 L	NT	0.05 L	0.01 L
LB-5D	LB-989-W11	9/8/89	460	38.0	0.2 L	NT	0.02 L	0.006
LB-5D	LB-1289-W24	12/19/89	470	40.0	0.2	325	NT	NT
LB-5D	LB-390-W16	3/15/90	562	39.8	0.2	368	NT	NT
LB-5D	LB-690-W14	6/20/90	550	39.4	0.2 L	367	NT	NT
LB-5D	LB-990-W15	9/18/90	545	37.8	0.2	394	NT	NT
LB-5D	LB-1290-W24	12/14/90	472	40.8	0.2	346	NT	NT
LB-5D	LB-391-W14	3/21/91	615	45.9	0.3	521	NT	NT
LB-5D	LB-691-W17	6/26/91	551	39.6	0.3	372	NT	NT
LB-5D	LB-991-08	9/25/91	580	42.1	0.2	336	NT	NT
LB-5D	LB-1291-11	12/20/91	527	37.7	0.3	336	NT	NT
LB-5D	LB-392-03	3/19/92	582	44.0	0.2 L	348	NT	NT
LB-5D	LB-63092-4	6/30/92	548	42.0	0.2	356	NT	NT
LB-5D	LB-91892-2	9/18/92	549	44.0	0.2 L	351	NT	NT
LB-5D	LB-121092-11	12/10/92	562	45.0	0.2 L	NT	NT	NT
LB-5D	LB-031193-12	3/11/93	552	45.0	0.2	340	NT	NT
LB-5D	LB-060293-8	6/2/93	548	45.0	0.3	332	NT	NT
LB-5D	LB-092793-19	9/27/93	511	41.0	0.3	339	NT	NT
LB-5D	LB-121593-4	12/15/93	522	48.0	0.3	360	NT	NT
LB-5D	LB-032894-13	3/28/94	553	47.0	0.4	349	NT	NT
LB-5D	LB-062194-3	6/21/94	447	44.0	0.4	359	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-5D	LB-090694-4	9/6/94	529	45.0	0.4	364	NT	NT
LB-5D	LB-121394-8	12/13/94	509	46.0	0.4	364	NT	NT
LB-5D	LB-030995-04	3/9/95	486	46.0	0.3	364	NT	NT
LB-5D	LB-61995-7	6/19/95	511	46.0	0.4	345	NT	NT
LB-5D	LB-092195-9	9/21/95	571	43.0	0.2 L	350	NT	NT
LB-5D	LB-121895-2	12/18/95	541	44.0	0.4	354	NT	NT
LB-5D	LB-031996-9	3/19/96	570	41.0	0.3	321	NT	NT
LB-5D	LB-061896-8	6/18/96	473	42.0	0.3	369	NT	NT
LB-5D	LB-031997-9	3/19/97	419	38.0	0.3	355	0.03	0.005 L
LB-5D	LB-031998-6	3/19/98	541	33.8	0.2 L	319	0.02	0.005 L
LB-5D	LB-031899-11	3/18/99	419	32.6	0.4	332	0.02	0.005 L
LB-5D	LB-031600-5	3/16/00	411	26.4	0.3	292	0.02 L	0.005 L
LB-5D	LB-031401-11	3/14/01	NT	25.1	0.3	278	0.02 L	0.005 L
LB-5D	LB-031902-13	3/19/02	NT	23.0	0.5	269	0.02 L	0.005 L
LB-5D	LB-031303-9	3/13/03	NT	20.0	0.8	256	0.02 L	0.005 L
LB-5D	LB-022504-7	2/25/04	NT	18.0	0.6	276	0.02 L	0.005 L
LB-5D (Dup)	LB-022504-8	2/25/04	NT	18.0	0.6	296	0.08	0.005 L
LB-5D	LB030805-1	3/8/05	NT	16.7	1.1	282	0.02 L	0.005 L
LB-5D	LB-031606-14	3/16/06	NT	17.0	0.6	324	0.03	0.005 L
LB-5D (Dup)	LB-031606-15	3/16/06	NT	16.9	0.6	344	0.02 L	0.005 L
LB-5D	LB-030507-7	3/5/07	NT	13.7	0.7	249	0.02 L	0.005 L
LB-5D	LB-031908-2	3/19/08	NT	13.3	1.0	242	0.02 L	0.005 L
LB-5D (Dup)	LB-031908-3	3/19/08	NT	13.3	1.0	225	0.02 L	0.005 L
LB-5D	LB-5D	3/17/09	NT	13.0	1.2	209	0.02 L	0.005 L
LB-5D	LB-5D032410	3/24/10	NT	11.3	1.7	228	0.02 L	0.005 L
LB-5D	LB-5D	3/23/11	328	10.8	0.78	238	0.025 L	0.002 L
LB-5D	LB-031212-03	3/12/12	NT	11	1.2	240	0.025 L	0.002 L
LB-5D	LB-020513-03	2/5/13	NT	9.3	0.68	210	0.025 L	0.0022
LB-5D	LB-021714-01	2/17/14	NT	9.3	0.74	230	0.025 L	0.0026
LB-5D	LB-021715-01	2/17/15	NT	10.0	0.78	231	0.025 L	0.00256
LB-5D	LB-021816-16	2/18/16	NT	9.1	0.834	214	0.040 L	0.00200 L
LB-5S	LB-05S	5/26/87	152	6.0	2.4	NT	0.07	0.007
LB-5S	LB-05S	7/19/87	NT	4.0	2.7	NT	0.05 L	0.005 L
LB-5S	LB-05S	9/10/87	NT	4.0	1.7	NT	0.05 L	0.01 L
LB-5S	LB-05S	11/11/87	NT	6.3	1.9	NT	0.05 L	0.01 L
LB-5S	LB-05S	2/10/88	149	5.0	2.7	NT	0.05 L	0.01 L
LB-5S	LB-390-W17	3/15/90	156	4.8	4.9	184	NT	NT
LB-5S	LB-690-W13	6/20/90	161	5.0	4.8	153	NT	NT
LB-5S	LB-990-W14	9/18/90	192	6.1	6.1	202	NT	NT
LB-5S	LB-1290-W25	12/14/90	207	7.4	5.8	148	NT	NT
LB-5S	LB-391-W17	3/21/91	1410	4.4	4.0	704	NT	NT
LB-5S	LB-691-W16	6/26/91	168	4.4	3.4	175	NT	NT
LB-5S	LB-991-09	9/25/91	211	6.8	7.7	161	NT	NT
LB-5S	LB-1291-10	12/20/91	126	2.7	2.9	122	NT	NT
LB-5S	LB-392-04	3/19/92	160	4.3	4.1	142	NT	NT
LB-5S	LB-63092-3	6/30/92	179	5.1	5.7	183	NT	NT
LB-5S	LB-91892-1	9/18/92	182	5.5	6.1	181	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-5S	LB-121092-10	12/10/92	170	6.3	6.5		NT	NT
LB-5S	LB-031193-11	3/11/93	181	7.0	5.4	175	NT	NT
LB-5S	LB-060293-7	6/2/93	195	7.6	5.0	173	NT	NT
LB-5S	LB-092793-18	9/27/93	170	4.8	4.5	147	NT	NT
LB-5S	LB-121593-3	12/15/93	162	4.9	3.9	152	NT	NT
LB-5S	LB-032894-12	3/28/94	154	4.9	4.6	148	NT	NT
LB-5S	LB-062194-2	6/21/94	163	5.6	5.0	176	NT	NT
LB-5S	LB-090694-3	9/6/94	167	4.7	4.1	159	NT	NT
LB-5S	LB-121394-9	12/13/94	95	2.6	1.7	114	NT	NT
LB-5S	LB-030995-03	3/9/95	141	6.6	3.5	147	NT	NT
LB-5S	LB-061995-6	6/19/95	201	5.7	3.8	168	NT	NT
LB-5S	LB-092195-8	9/21/95	596	7.1	5.0	184	NT	NT
LB-5S	LB-121895-1	12/18/95	111	1.8	1.3	114	NT	NT
LB-5S	LB-031996-7	3/19/96	223	6.0	4.4	170	NT	NT
LB-5S	LB-061896-7	6/18/96	174	8.5	3.1	175	NT	NT
LB-5S	LB-031997-8	3/19/97	177	7.5	5.3	184	0.02	0.005 L
LB-5S	LB-031998-5	3/19/98	229	9.1	7.1	183	0.04	0.005 L
LB-5S	LB-031899-10	3/18/99	162	4.9	5.5	164	0.02 L	0.005 L
LB-5S	LB-031600-4	3/16/00	237	4.0	6.2	194	0.02 L	0.005 L
LB-5S	LB-031401-12	3/14/01	NT	4.3	4.7	159	0.02 L	0.005 L
LB-5S	LB-092001-1	9/20/01	NT	4.3	3.8	176	0.02 L	0.005 L
LB-5S	LB-031902-12	3/19/02	NT	3.1	2.7	137	0.02 L	0.005 L
LB-5S	LB-091802-06	9/17/02	NT	6.0	6.0	185	1.26	0.03
LB-5S	LB-031303-8	3/13/03	NT	4.1	3.7	138	0.02 L	0.005 L
LB-5S	LB-092203-1	9/22/03	NT	4.6	4.4	180	9.52	0.22
LB-5S	LB-022504-9	2/25/04	NT	4.0	2.7	159	14.80	0.407
LB-5S	LB-090104-5	9/1/04	NT	4.1	3.3	168	0.02 L	0.005 L
LB-5S	LB030805-2	3/8/05	NT	4.2	3.8	182	0.21	0.005 L
LB-5S (Dup)	LB030805-3	3/8/05	NT	4.0	3.6	186	0.05	0.005 L
LB-5S	LB-091405-4	9/14/05	NT	4.5	4.5	204	0.75	0.005 L
LB-5S	LB-031606-16	3/16/06	NT	3.5	3.6	192	0.02 L	0.005 L
LB-5S	LB-091206-1	9/12/06	NT	4.1	4.5	203	0.02 L	0.005 L
LB-5S	LB-030507-6	3/5/07	NT	3.6	4.5	169	0.02 L	0.005 L
LB-5S	LB-091907-3	9/19/07	NT	4.4	5.5	191	0.02 L	0.005 L
LB-5S	LB-031908-1	3/19/08	NT	4.9	5.2	186	0.14	0.005 L
LB-5S	LB-091608-2	9/16/08	NT	5.1	4.7	147	0.076	0.005 L
LB-5S (Dup)	LB-091608-8	9/16/08	NT	5.0	4.5	168	0.02 L	0.005 L
LB-5S	LB-5S	3/17/09	NT	6.1	5.3	159	0.092	0.005 L
LB-5S	LBLF5S091109	9/11/09	NT	4.42	3.91	164	0.707	0.0157
LB-5S	LB-5S032410	3/24/10	NT	7.30	4.09	163	0.020 L	0.005 L
LB-5S (Dup)	LBDUP2032410	3/24/10	NT	5.61	3.31	151	0.020 L	0.005 L
LB-5S	LB5S092310	9/23/10	NT	3.86	4.58	158	0.020 L	0.005 L
LB-5S (Dup)	LB5S1092310	9/23/10	NT	3.91	4.61	151	0.020 L	0.005 L
LB-5S	LB-5S	3/23/11	222	5.07	5.15	184	0.025 L	0.002 L
LB-5S	LB-090811-06	9/8/11	NT	7.08	6.19	210	0.025 L	0.002 L
LB-5S	LB-032212-17	3/22/12	NT	4.1	3.7	160	0.025 L	0.002 L
LB-5S	LB-091112-01	9/11/12	NT	4.2	4.7	160	0.025 L	0.002 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-5S	LB-020513-04	2/5/13	NT	4.0	3.5	150	0.025 L	0.0020 L
LB-5S	LB-082113-01	8/21/13	NT	3.9	4.8	150	0.025 L	0.0020 L
LB-5S	LB-021714-02	2/17/14	NT	4.1	3.6	150	0.025 L	0.0020 L
LB-5S	LB-081314-01	8/13/14	NT	3.9	3.7	160	0.025 L	0.0020 L
LB-5S	LB-021815-09	2/18/15	NT	3.81	4.27	150	0.025 L	0.0020 L
LB-5S	LB-081215-08	8/12/15	NT	3.35	4.38	179	0.040 L	0.0020 L
LB-5S	LB-021816-17	2/18/16	NT	4.67	6.36	168	0.040 L	0.0020 L
LB-5S	LB-082316-01	8/23/16	NT	5.1	6.6	170	0.040 L	0.0020 L
LB-6S	LB-06S	7/17/87	NT	18.0	2.5	NT	0.05 L	0.012
LB-6S	LB-06S	9/10/87	NT	NT	1.0	NT	0.05 L	0.01 L
LB-6S	LB-06S	11/11/87	NT	28.0	0.7	NT	0.05 L	0.01 L
LB-6S	LB-06S	2/12/88	692	35.0	1.1	NT	0.05 L	0.06
LB-6S	LB-06S	6/22/88	502	18.0	2.1	NT	0.05 L	0.05 L
LB-6S	LB-06S	8/31/88	586	27.0	2.0	NT	0.05 L	0.01 L
LB-6S	LB-06S	12/6/88	594	21.0	0.7	NT	0.02	0.073
LB-6S	LB-289-W13	3/1/89	655	28.0	2.5	NT	NT	NT
LB-6S	LB-289-W17	3/1/89	NT	NT	NT	NT	0.01	0.01 L
LB-6S	LB-589-W17	5/24/89	560	20.0	6.1	NT	0.05 L	0.01 L
LB-6S	LB-989-W07	9/7/89	500	32.0	1.0	NT	0.02 L	0.026
LB-6S	LB-1289-W13	12/15/89	680	34.0	0.6	462	0.02	0.078
LB-6S	LB-390-W24	3/15/90	616	17.0	2.3	376	0.03	0.923
LB-6S	LB-690-W22	6/21/90	597	24.0	1.1	401	0.02 L	0.039
LB-6S	LB-990-W11	11/21/90	713	31.1	0.8	604	0.02	0.35
LB-6S	LB-1290-W13	12/12/90	678	33.5	0.4	494	0.02 L	0.14
LB-6S	LB-391-W16	3/20/91	711	21.4	2.2	440	0.03 L	1.39
LB-6S	LB-691-W19	6/26/91	696	24.2	1.9	386	0.04 L	0.009
LB-6S	LB-691-W20	6/26/91	706	23.1	1.8	375	0.04 L	0.011
LB-6S	LB-991-14	9/25/91	676	28.2	0.8	392	0.02 L	0.017
LB-6S	LB-991-15	9/25/91	629	13.5	1.1	397	NT	NT
LB-6S	LB-1291-08	12/20/91	621	21.4	0.9	403	0.04 B	0.005 L
LB-6S	LB-1291-09	12/20/91	634	22.2	0.9	400	0.03 B	0.005 L
LB-6S	LB-392-07	3/20/92	497	16.0	2.8	333	0.02 L	0.537
LB-6S	LB-392-08	3/20/92	539	19.0	2.3	348	0.02 L	0.546
LB-6S	LB-62692-5	6/26/92	631	26.0	2.5	404	0.03	0.026
LB-6S	LB-62692-6	6/26/92	620	26.0	2.3	400	0.03	0.029
LB-6S	LB-92192-4	9/21/92	735	29.0	0.7	444	0.02	0.077
LB-6S	LB-92192-5	9/21/92	731	28.0	0.7	453	0.02	0.066
LB-6S	LB-12992-4	12/9/92	760	33.0	0.7	439	0.02 L	0.144
LB-6S	LB-12992-5	12/9/92	736	30.0	0.7	435	0.02 L	0.142
LB-6S	LB-030193-7	3/10/93	592	20.0	2.6	369	0.02 L	0.114
LB-6S	LB-030193-8	3/10/93	625	22.0	2.2	386	0.02 L	0.106
LB-6S	LB-060393-11	6/3/93	517	17.0	2.5	328	0.03	0.018
LB-6S	LB-060393-12	6/3/93	467	13.0	2.9	302	0.02 L	0.019
LB-6S	LB-092493-13	9/24/93	529	19.0	3.7	328	0.02 L	0.025
LB-6S	LB-121593-6	12/15/93	580	27.0	2.1	393	0.02	0.077
LB-6S	LB-032994-18	3/29/94	391	12.0	3.7	256	0.02 L	0.052
LB-6S	LB-032994-19	3/29/94	450	15.0	3.4	306	0.02 L	0.038

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-6S	LB-062394-11	6/23/94	509	21.0	3.1	347	0.02 L	0.013
LB-6S	LB-062394-12	6/23/94	477	20.0	3.2	358	0.02 L	0.013
LB-6S	LB-090694-5	9/6/94	563	19.0	3.6	366	0.02 L	0.054
LB-6S	LB-090694-6	9/6/94	496	19.0	3.5	360	0.04	0.054
LB-6S	LB-121394-6	12/13/94	475	19.0	3.4	316	0.52	0.124
LB-6S	LB-121394-7	12/13/94	485	19.0	3.4	335	0.20	0.093
LB-6S	LB-031095-10	3/10/95	307	5.3	2.3	217	0.04	0.005 L
LB-6S	LB-031095-11	3/10/95	282	8.2	2.3	196	0.06	0.006
LB-6S	LB-062095-10	6/20/95	397	16.0	4.3	290	0.02 L	0.005 L
LB-6S	LB-062095-9	6/20/95	386	14.0	4.4	234	0.02 L	0.005 L
LB-6S	LB-092095-6	9/20/95	530	20.0	4.3	313	0.02 L	0.005 L
LB-6S	LB-092095-7	9/20/95	518	21.0	4.3	308	0.02	0.005 L
LB-6S	LB-122095-12	12/20/95	407	10.0	3.2	289	0.03	0.005 L
LB-6S	LB-122095-13	12/20/95	448	12.0	3.3	286	0.02 L	0.005 L
LB-6S	LB-031996-5	3/19/96	316	6.2	3.3	222	0.02 L	0.005 L
LB-6S	LB-031996-6	3/19/96	326	5.4	3.6	226	0.02 L	0.005 L
LB-6S	LB-061996-12	6/19/96	NT	21.0	4.0	NT	NT	NT
LB-6S	LB-061996-13	6/19/96	451	23.0	3.8	320	0.03	0.005 L
LB-6S	LB-091896-12	9/18/96	426	22.0	2.4	280	0.02 L	0.005 L
LB-6S	LB-121796-3	12/17/96	460	20.0	1.5	312	0.02 L	0.005 L
LB-6S	LB-031997-7	3/19/97	360	26.0	3.8	318	0.03	0.005 L
LB-6S	LB-061797-6	6/17/97	578	30.0	1.3	349	0.02	0.005 L
LB-6S	LB-091697-3	9/16/97	436	28.6	1.3	364	0.02 L	0.005 L
LB-6S	LB-121797-14	12/17/97	516	22.5	3.2	340	0.16	0.005 L
LB-6S	LB-031998-7	3/19/98	628	22.6	4.9	388	0.03	0.005 L
LB-6S	LB-061698-7	6/16/98	422	30.8	2.6	375	0.02 L	0.005 L
LB-6S	LB-091798-5	9/17/98	625	22.0	3.5	372	0.03	0.005 L
LB-6S	LB-121798-1	12/17/98	519	28.0	5.1	407	0.03	0.005 L
LB-6S	LB-031799-2	3/17/99	521	25.1	3.7	389	0.03	0.005 L
LB-6S	LB-062399-11	6/23/99	443	20.6	2.1	323	0.03	0.005 L
LB-6S	LB-091699-5	9/16/99	557	26.1	3.0	350	0.03	0.005 L
LB-6S	LB-121599-11	12/15/99	518	23.8	4.9	324	0.02 L	0.005 L
LB-6S	LB-031700-10	3/17/00	397	23.0	4.9	295	0.02 L	0.008
LB-6S	LB-031700-11	3/17/00	407	25.4	5.2	328	0.02 L	0.005 L
LB-6S	LB-061300-6	6/13/00	445	28.4	4.6	318	0.01 B	0.005 L
LB-6S	LB-091200-3	9/12/00	441	29.8	4.2	313	0.02 L	0.005 L
LB-6S	LB-121200-1	12/12/00	578	31.7	3.3	352	0.02 L	0.005 L
LB-6S	LB-121200-2	12/12/00	585	35.5	2.9	338	0.02 L	0.0073
LB-6S	LB-031301-7	3/13/01	NT	36.8	3.0	326	0.02 L	0.006
LB-6S	LB-031301-8	3/13/01	NT	35.9	3.2	352	0.02 L	0.0055
LB-6S	LB-092001-5	9/20/01	NT	19.0	3.3	246	0.02 L	0.035
LB-6S	LB-032002-15	3/20/02	NT	17.7	4.3	291	0.02 L	0.005 L
LB-6S	LB-032002-16	3/20/02	NT	21.1	4.4	305	0.02 L	0.005 L
LB-6S	LB-091802-02	9/17/02	NT	16.0	5.0	302	0.02 L	0.005 L
LB-6S	LB-091802-03	9/17/02	NT	16.0	5.0	306	0.02 L	0.005 L
LB-6S	LB-031303-21	3/13/03	NT	26.0	2.9	348	0.02 L	0.005 L
LB-6S	LB-092203-5	9/22/03	NT	11.9	2.7	274	0.13	0.014

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-6S	LB-022604-18	2/26/04	NT	13.4	2.7	284	0.02 L	0.005 L
LB-6S	LB-090104-6	9/1/04	NT	9.6	2.1	268	0.02 L	0.005 L
LB-6S	LB030805-9	3/8/05	NT	13.0	1.6	328	0.02 L	0.017
LB-6S	LB-091405-6	9/14/05	NT	9.3	2.1	254	0.02 L	0.005 L
LB-6S	LB-031506-13	3/15/06	NT	5.1	2.4	132	0.02 L	0.005 L
LB-6S	LB-091206-4	9/12/06	NT	6.9	2.9	228	0.02 L	0.005 L
LB-6S	LB-030507-12	3/5/07	NT	5.6	2.7	238	0.02 L	0.005 L
LB-6S	LB-091907-6	9/19/07	NT	7.1	1.7	245	0.297	0.0369
LB-6S	LB-031908-9	3/19/08	NT	6.1	2.9	240	0.029	0.005 L
LB-6S	LB-091608-3	9/16/08	NT	5.7	1.4	222	0.02 L	0.005 L
LB-6S	LB-6S	3/18/09	NT	5.2	2.2	194	0.02 L	0.005 L
LB-6S	LBLF6S091109	9/11/09	NT	6.72	2.82	244	0.061	0.0059
LB-6S (Dup)	LBLFDUP1091109	9/11/09	NT	6.89	2.83	220	0.035	0.005 L
LB-6S	LB-6S032310	3/23/10	NT	6.64	3.53	194	0.024	0.005 L
LB-6S	LB6S092310	9/23/10	NT	5.67	2.60	192	0.379	0.031
LB-6S	LB-6S	3/22/11	248	6.29	2.79	218 H	0.025 L	0.00218
LB-6S (Dup)	DUP1	3/22/11	266	7.05	2.90	229 H	0.025 L	0.002 L
LB-6S	LB-090711-05	9/7/11	NT	9.09	0.73	178	0.025 L	0.002 L
LB-6S (Dup)	LB-090711-04	9/7/11	NT	8.97	0.73	177	0.025 L	0.002 L
LB-6S	LB-032212-23	3/22/12	NT	5.5	1.7	180	0.025 L	0.002 L
LB-6S (Dup)	LB-032212-22	3/22/12	NT	5.6	1.7	180	0.025 L	0.002 L
LB-6S	LB-091212-06	9/12/12	NT	5.5	0.78	160	0.025 L	0.002 L
LB-6S (Dup)	LB-091212-07	9/12/12	NT	9.8	0.75	160	0.025 L	0.002 L
LB-6S	LB-020613-15	2/6/13	NT	4.9	1.1	130	0.025 L	0.0020 L
LB-6S (Dup)	LB-020613-16	2/6/13	NT	8.0	1.0	150	0.028	0.0021
LB-6S	LB-082113-07	8/21/13	NT	3.7	1.5	150	0.025 L	0.0020 L
LB-6S	LB-021914-23	2/19/14	NT	4.9	1.1	170	0.025 L	0.0020 L
LB-6S	LB-081314-06	8/13/14	NT	2.4	0.89	140	0.025 L	0.0020 L
LB-6S (Dup)	LB-081314-07	8/13/14	NT	2.3	0.88	130	0.025 L	0.0020 L
LB-6S	LB-021815-14	2/18/15	NT	6.98	2.23	190	0.025 L	0.0020 L
LB-6S (Dup)	LB-021815-13	2/18/15	NT	6.98	2.18	190	0.025 L	0.0020 L
LB-6S	LB-081115-03	8/11/15	NT	4.52	2.65	164	0.040 L	0.0020 L
LB-6S (Dup)	LB-081115-04	8/11/15	NT	4.51	2.65	158	0.040 L	0.0020 L
LB-6S	LB-021816-21	2/18/16	NT	6.15	0.100 L	162	0.040 L	0.0020 L
LB-6S	LB-082416-08	8/24/16	NT	4.8	1.7	160	0.040 L	0.0020 L
LB-6S (Dup)	LB-082416-09	8/24/16	NT	4.9	1.6	150	0.040 L	0.0020 L
LB10-DR	LB-031005-19	3/10/05	NT	26.8	0.7	428	1.03	0.879
LB10-DR (Dup)	LB-031005-20	3/8/05	NT	27.0	0.7	432	0.93	0.771
LB10-DR	LB-031406-5	3/14/06	NT	31.3	0.6	492	0.763	0.417
LB10-DR	LB-030607-20	3/6/07	NT	24.9	0.9	332	0.022	0.197
LB10-DR	LB-032408-22	3/24/08	NT	28.3	0.8	320	0.02 L	0.155
LB10-DR	LB-10D	3/17/09	NT	26.8	1.0	286	0.032	0.0677
LB10-DR	LB10-DR032310	3/23/10	NT	23.9	1.1	295	0.047	0.0320
LB-10DR	LB-10DR	3/29/11	479	26.0	1.27	329	0.025 L	0.00696
LB-10DR	LB-0313012-07	3/13/12	NT	20	1.8	280	0.025 L	0.002 L
LB-10DR	LB-020713-19	2/6/13	NT	22	1.7	290	0.025 L	0.0020 L
LB-10DR	LB-021914-15	2/19/14	NT	15	2.3	260	0.025 L	0.0020 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-10DR	LB-021915-20	2/19/15	NT	14	2.63	290	0.025 L	0.0020 L
LB-10DR	LB-021716-09	2/17/16	NT	17.2	2.02	258	0.040 L	0.00217
LB-10DR (Dup)	LB-021716-10	2/17/16	NT	17.1	2.05	264	0.040 L	0.0020 L
LB10-SR	LB031005-21	3/10/05	NT	3.8	9.8	272	0.13	2.050
LB10-SR	LB-091505-7	9/15/05	NT	4.6	6.5	506	1.04	0.0187
LB10-SR	LB-031406-6	3/14/06	NT	4.8	2.6	116	0.02 L	0.006
LB10-SR	LB-091306-9	9/13/06	NT	13.5	0.7	298	0.02 L	0.005 L
LB10-SR	LB-030607-19	3/6/07	NT	3.6	1.2	105	0.02 L	0.006
LB10-SR	LB-091907-7	9/19/07	NT	14.3	1.1	297	0.02 L	0.005 L
LB10-SR	LB-032408-21	3/24/08	NT	6.3	0.9	202	0.02 L	0.005 L
LB10-SR	LB-091608-4	9/16/08	NT	6.1	2.5	225	0.02 L	0.005 L
LB10-SR	LB-10S	3/17/09	NT	10.0	2.3	216	0.02 L	0.005 L
LB10-SR (Dup)	Dup-1	3/17/09	NT	10.6	2.3	207	0.02 L	0.005 L
LB10-SR	LBLF10S091190	9/11/09	NT	5.55	5.13	233	1.15	0.0138
LB10-SR	LB10-SR032310	3/23/10	NT	8.53	5.97	196	0.02 L	0.005 L
LB10-SR	LB10S092310	9/23/10	NT	3.90	2.80	176	0.02 L	0.005 L
LB-10SR	LB-10SR	3/29/11	341	15.30	1.53	270	0.025 L	0.002 L
LB-10SR (Dup)	DUP2	3/29/11	341	15.30	1.57	270	0.025 L	0.002 L
LB-10SR	LB-090811-08	9/8/11	NT	17.70	1.15	251	0.025 L	0.00205
LB-10SR	LB-031312-08	3/13/12	NT	26	1.8	330	0.025 L	0.0023
LB-10SR	LB-091212-09	9/12/12	NT	30	0.91	310	0.025 L	0.0033
LB-10SR	LB-020713-20	2/7/13	NT	32	1.1	290	0.025 L	0.0058
LB-10SR	LB-082213-09	8/22/13	NT	18	0.8	270	0.025 L	0.0025
LB-10SR	LB-021914-16	2/19/14	NT	8.1	2.5	240	0.025 L	0.0026
LB-10SR	LB-081414-08	8/14/14	NT	24	1.2	250	0.025 L	0.0023
LB-10SR	LB-021915-21	2/19/15	NT	10	4.15	220	0.025 L	0.0059
LB-10SR	LB-081015-01	8/10/15	NT	12.4	4.12	265	0.040 L	0.00207
LB-10SR	LB-021716-11	2/17/16	NT	21.4	2.19	260	0.040 L	0.00200 L
LB-10SR	LB-082416-07	8/24/16	NT	26	1.1	280	0.040 L	0.0020 L
LB-13D	LB-989-W20	9/13/89	199	6.0	4.0	244	0.02 L	0.05
LB-13D	LB-1089-W15	10/19/89	200	6.5	4.5	197	0.05 L	0.028
LB-13D	LB-1189-W20	11/16/89	176	6.0	4.7	91	0.02	0.014
LB-13D	LB-1289-W18	12/18/89	210	5.0	4.7	134	0.02 L	0.007
LB-13D	LB-390-W18	3/15/90	244	8.2	4.9	206	0.02 L	0.005 L
LB-13D	LB-690-W20	6/21/90	235	6.8	4.9	242	0.02 L	0.005 L
LB-13D	LB-990-W17	9/18/90	230	6.9	4.9	225	0.02	0.005 L
LB-13D	LB-1290-W20	12/13/90	238	6.8	4.8	160	0.02 L	0.005 L
LB-13D	LB-391-W15	3/20/91	241	6.4	4.8	179	0.03 L	0.005 L
LB-13D	LB-691-W22	6/26/91	314	6.3	4.4	258	NT	NT
LB-13D	LB-991-13	9/25/91	248	6.1	5.0	183	NT	NT
LB-13D	LB-1291-19	12/23/91	243	5.1	4.9	186	NT	NT
LB-13D	LB-392-19	3/24/92	246	5.9	4.9	190	NT	NT
LB-13D	LB-7292-2	7/2/92	239	5.7	4.8	194	NT	NT
LB-13D	LB-91792-2	9/17/92	240	5.3	4.5	190	NT	NT
LB-13D	LB-121092-9	12/10/92	240	6.2	5.1	179	NT	NT
LB-13D	LB-031293-20	3/12/93	245	6.0	4.6	180	NT	NT

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Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13D	LB-060493-21	6/4/93	238	6.1	4.4	182	NT	NT
LB-13D	LB-092393-7	9/23/93	240	5.8	4.3	178	NT	NT
LB-13D	LB-121693-12	12/16/93	220	6.1	4.9	193	NT	NT
LB-13D	LB-032894-17	3/28/94	242	6.2	4.8	188	NT	NT
LB-13D	LB-052894-20	6/28/94	220	6.0	4.8	186	NT	NT
LB-13D	LB-090794-10	9/7/94	217	5.8	5.5	191	NT	NT
LB-13D	LB-121594-21	12/15/94	216	6.3	5.3	176	NT	NT
LB-13D	LB-031395-18	3/13/95	222	6.0	5.2	170	NT	NT
LB-13D	LB-062195-19	6/21/95	239	6.5	5.7	205	NT	NT
LB-13D	LB-092295-16	9/22/95	299	6.5	5.8	165	NT	NT
LB-13D	LB-121995-8	12/19/95	249	6.9	6.4	185	NT	NT
LB-13D	LB-032096-15	3/20/96	262	6.6	6.8	200	NT	NT
LB-13D	LB-032096-16	3/20/96	253	6.6	6.7	178	NT	NT
LB-13D	LB-061996-16	6/19/96	267	7.0	7.1	224	NT	NT
LB-13D	LB-091796-4	9/17/96	261	7.8	7.2	201	0.02 L	0.005 L
LB-13D	LB121796-9	12/17/96	312	9.9	7.4	223	0.02 L	0.005 L
LB-13D	LB-032097-18	3/20/97	241	9.8	0.2 L	217	0.02 L	0.005 L
LB-13D	LB-061897-15	6/18/97	305	8.8	7.1	223	0.02 L	0.005 L
LB-13D	LB-091897-11	9/18/97	310	8.8	8.1	246	0.02 L	0.005 L
LB-13D	LB-121797-9	12/17/97	239	8.3	8.0	133	0.02	0.005 L
LB-13D	LB-032098-19	3/20/98	296	7.8	7.9	207	0.05 B	0.005 L
LB-13D	LB-061798-14	6/17/98	242	7.6	8.4	210	0.02 L	0.005 L
LB-13D	LB-091898-15	9/18/98	277	7.0	7.8	172	0.02 L	0.005 L
LB-13D	LB-121898-12	12/18/98	223	7.1	8.1	245	0.02	0.005 L
LB-13D	LB-031999-23	3/19/99	219	6.5	7.6	207	0.02	0.005 L
LB-13D	LB-062399-12	6/23/99	222	6.7	7.6	198	0.02	0.005 L
LB-13D	LB-091799-13	9/17/99	246	7.2	7.5	176	0.02 L	0.005 L
LB-13D	LB-121499-3	12/14/99	243	6.3	7.4	161	0.02 L	0.005 L
LB-13D	LB-031700-18	3/17/00	210	6.0	6.8	200	0.02 L	0.005 L
LB-13D	LB-061400-10	6/14/00	215	5.9	7.8	222	0.02 L	0.005 L
LB-13D	LB-091300-11	9/13/00	231	6.0	7.5	204	0.02 L	0.005 L
LB-13D	LB-121500-12	12/15/00	233	5.2	7.5	165	2.06	0.0053
LB-13D	LB-031501-19	3/15/01	NT	5.2	7.1	170	0.02 L	0.005 L
LB-13D	LB-032002-20	3/20/02	NT	5.0	6.3	174	0.02 L	0.005 L
LB-13D	LB-031303-16	3/13/03	NT	4.3	5.8	224	0.02 L	0.005 L
LB-13D	LB-022404-3	2/24/04	NT	4.0	5.2	179	0.02 L	0.005 L
LB-13D	LB-031005-17	3/10/05	NT	3.8	4.9	190	0.02	0.005
LB-13D	LB-031506-9	3/15/06	NT	3.4	4.6	115	0.02 L	0.005 L
LB-13D	LB-030607-18	3/6/07	NT	3.6	5.0	118	0.02 L	0.005 L
LB-13D	LB-032008-13	3/20/08	NT	3.6	4.8	190	0.02 L	0.005 L
LB-13D	LB-13-D	3/17/09	NT	4.0	5.1	148	0.02 L	0.005 L
LB-13D	LB-13D032410	3/24/10	NT	3.59	5.4	167	0.02 L	0.005 L
LB-13D	LB-13D	3/25/11	214	4.36	5.3	193	0.025 L	0.002 L
LB-13D	LB-031212-01	3/12/12	NT	4.4	5.3	190	0.025 L	0.002 L
LB-13D	LB-020713-22	2/5/13	NT	5.0	5.1	170	0.025 L	0.0020 L
LB-13D	LB-021814-08	2/18/14	NT	4.6	4.9	150	0.025 L	0.0020 L
LB-13D	LB-021715-03	2/17/15	NT	4.49	4.99	185	0.025 L	0.0020 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13D	LB-021616-02	2/16/16	NT	5.03	5.23	170	0.040 L	0.0020 L
LB-13D (Dup)	LB-021616-03	2/16/16	NT	5.03	5.06	176	0.040 L	0.0020 L
LB-13I	LB-989-W22	9/13/89	600	28.0	1.4	402	0.02 L	0.017
LB-13I	LB-989-W23	9/13/89	576	28.0	1.3	478	0.02 L	0.013
LB-13I	LB-1089-W17	10/17/89	600	33.0	1.3	460	0.05 L	0.012
LB-13I	LB-1189-W17	11/16/89	530	31.0	1.2	404	0.04	0.091
LB-13I	LB-1289-W16	12/18/89	596	34.0	0.8	377	0.02	0.009
LB-13I	LB-390-W19	3/15/90	704	40.0	0.2 L	462	0.02	0.009
LB-13I	LB-690-W19	6/21/90	695	38.4	0.3	481	0.02 L	0.018
LB-13I	LB-990-W16	9/18/90	703	40.5	0.6	491	0.02	0.012
LB-13I	LB-1290-W21	12/13/90	629	36.9	0.6	433	0.02 L	0.01
LB-13I	LB-391-W14	3/20/91	740	43.4	0.4	486	0.03 L	0.012
LB-13I	LB-691-W21	6/26/91	738	26.6	0.9	454	0.04 L	0.018
LB-13I	LB-991-12	9/25/91	765	35.3	0.6	444	0.02	0.016
LB-13I	LB-1291-18	12/23/91	707	32.9	0.2 L	347	0.10	0.047
LB-13I	LB-392-20	3/24/92	661	33.0	0.2 L	422	0.02 L	0.017
LB-13I	LB-7292-1	7/2/92	659	37.0	0.2 L	402	1.16	0.039
LB-13I	LB-91792-1	9/17/92	680	31.0	0.6	429	0.48	0.025
LB-13I	LB-121092-8	12/10/92	687	33.0	0.8	393	0.02 L	0.014
LB-13I	LB-031293-19	3/12/93	681	27.0	0.9	410	0.02 L	0.014
LB-13I	LB-060493-20	6/4/93	620	23.0	1.5	376	0.02 L	0.016
LB-13I	LB-092393-6	9/23/93	568	20.0	1.5	339	0.05	0.017
LB-13I	LB-121693-14	12/16/93	511	21.0	1.8	352	0.03	0.12
LB-13I	LB-032894-16	3/28/94	590	22.0	2.2	364	0.02 L	0.017
LB-13I	LB-052894-19	6/28/94	430	22.0	0.6	309	0.02 L	0.013
LB-13I	LB-090794-9	9/7/94	418	22.0	0.8	329	0.21	0.14
LB-13I	LB-121594-20	12/15/94	453	21.0	2.6	339	0.04	0.017
LB-13I	LB-031395-17	3/13/95	468	17.0	3.1	287	0.02	0.014
LB-13I	LB-061996-15	6/19/95	NT	NT	NT	NT	0.03	0.005 L
LB-13I	LB-052195-18	6/21/95	424	18.0	2.5	289	0.02 L	0.014
LB-13I	LB-092295-15	9/22/95	469	18.0	0.9	248	0.02	0.012
LB-13I	LB-121995-7	12/19/95	463	18.0	3.6	193	0.02 L	0.005 L
LB-13I	LB-032096-14	3/20/96	477	20.0	0.9	349	0.02	0.01
LB-13I	LB-061996-15	6/19/96	549	29.0	1.3	371	0.03 L	0.005 L
LB-13I	LB-091796-3	9/17/96	548	37.0	0.2 L	348	0.02 L	0.01
LB-13I	LB121796-10	12/17/96	708	52.0	0.2 L	418	0.02 L	0.013
LB-13I	LB-032097-19	3/20/97	579	70.0	0.2 L	458	0.02	0.014
LB-13I	LB-061897-14	6/18/97	729	63.0	0.2 L	462	0.03	0.019
LB-13I	LB-091897-12	9/18/97	814	68.1	0.2 L	514	0.02	0.021
LB-13I	LB-121797-8	12/17/97	578	63.0	0.2 L	444	0.03	0.021
LB-13I	LB-032098-18	3/20/98	695	58.8	0.3	428	0.02 L	0.02
LB-13I	LB-061798-15	6/17/98	624	66.4	0.2 L	444	0.03	0.02
LB-13I	LB-091898-14	9/18/98	763	62.4	0.3	394	0.03	0.022
LB-13I	LB-121898-11	12/18/98	616	32.4	3.2	464	0.04	0.022
LB-13I	LB-031999-22	3/19/99	582	51.1	0.5	457	0.03	0.022
LB-13I	LB-062399-13	6/23/99	576	44.7	0.3	389	0.02	0.02
LB-13I	LB-091799-12	9/17/99	626	44.6	0.2	383	0.03	0.021

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13I	LB-121499-4	12/14/99	637	29.2	2.6	357	0.02 L	0.022
LB-13I	LB-121499-5	12/14/99	634	30.0	2.6	378	0.02 L	0.022 L
LB-13I	LB-031700-17	3/17/00	552	28.1	0.8	392	0.02 L	0.02
LB-13I	LB-061400-9	6/14/00	525	29.3	0.5	372	0.02 L	0.02
LB-13I	LB-091300-12	9/13/00	680	42.7	2.7	417	0.02 L	0.0246
LB-13I	LB-121500-11	12/15/00	577	30.0	3.5	306	0.02 L	0.0284
LB-13I	LB-031501-20	3/15/01	NT	26.1	3.4	318	0.02 L	0.0252
LB-13I	LB-092001-8	9/20/01	NT	12.9	3.3	241	0.02 L	0.023
LB-13I	LB-032002-19	3/20/02	NT	10.2	4.7	219	0.02 L	0.016
LB-13I	LB-091802-07	9/17/02	NT	22.0	6.0	292	0.31	0.042
LB-13I	LB-031303-15	3/13/03	NT	13.2	3.4	168	0.22	0.039
LB-13I	LB-092203-7	9/22/03	NT	13.7	2.9	272	0.15	0.052
LB-13I	LB-022404-4	2/24/04	NT	9.8	2.4	232	0.09	0.028
LB-13I	LB-090104-13	9/1/04	NT	7.0	1.8	232	0.03	0.024
LB-13I	LB031005-18	3/10/05	NT	7.2	2.7	232	0.02 L	0.006
LB-13I	LB-091505-9	9/15/05	NT	5.8	3.8	202	0.03	0.014
LB-13I	LB-031506-10	3/15/06	NT	4.9	4.2	152	0.02 L	0.007
LB-13I	LB-091306-8	9/13/06	NT	5.4	4.0	182	0.02 L	0.006
LB-13I	LB-030607-17	3/5/07	NT	5.5	3.2	170	0.02 L	0.006
LB-13I	LB-091907-8	9/19/07	NT	5.6	2.9	260	0.02 L	0.005 L
LB-13I	LB-032008-12	3/20/08	NT	6.6	3.4	207	0.02 L	0.0054
LB-13I	LB-091608-5	9/16/08	NT	7.0	3.9	193	0.02 L	0.005 L
LB-13I	LB-13I	3/17/09	NT	6.9	4.3	186	0.02 L	0.005 L
LB-13I	LBLF13i091109	9/11/09	NT	6.06	4.82	192	0.02 L	0.005 L
LB-13I	LB-13I032410	3/24/10	NT	5.53	5.21	193	0.02 L	0.005 L
LB-13I	LB13I092310	9/23/10	NT	5.24	5.31	196	0.02 L	0.005 L
LB-13I	LB-13I	3/23/11	270	5.56	4.58	202	0.025 L	0.00296
LB-13I	LB-090711-02	9/7/11	NT	5.99	4.53	204	0.025 L	0.002 L
LB-13I	LB-032212-19	3/22/12	NT	6.1	4.1	200	0.025 L	0.002 L
LB-13I (Dup)	LB-032212-20	3/22/12	NT	6.1	4.0	190	0.025 L	0.002 L
LB-13I	LB-091112-03	9/11/12	NT	12	4.4	220	0.025 L	0.002 L
LB-13I	LB-020613-13	2/7/13	NT	8.8	3.6	190	0.025 L	0.0031
LB-13I	LB-082113-05	8/21/13	NT	11.0	4.3	210	0.025 L	0.0020 L
LB-13I	LB-021814-10	2/18/14	NT	10.0	2.8	190	0.025 L	0.0034
LB-13I	LB-081314-04	8/13/14	NT	8.3	4.0	220	0.025 L	0.0041
LB-13I	LB-021815-11	2/18/15	NT	11.0	3.82	210	0.025 L	0.0045
LB-13I	LB-081115-05	8/11/15	NT	7.64	4.09	198	0.040 L	0.00499
LB-13I	LB-021816-20	2/18/16	NT	7.39	3.65	193	0.040 L	0.00448
LB-13I	LB-082316-03	8/23/16	NT	6.6	4.5	190	0.040 L	0.0020 L
LB-17D	LB-989-W08	9/7/89	640	46.0	0.2 L	518	0.33	9.73
LB-17D	LB-1089-W10	10/18/89	780	58.0	0.2 L	492	0.24	10.6
LB-17D	LB-1089-W11	10/18/89	780	60.0	0.2 L	508	0.25	10.7
LB-17D	LB-1189-W12	11/15/89	644	70.0	0.2 L	479	0.02 L	10.9
LB-17D	LB-1189-W13	11/15/89	682	70.0	0.2 L	465	0.32	10.8
LB-17D	LB-1289-W28	12/20/89	740	68.0	0.2 L	532	0.33	10.8
LB-17D	LB-390-W21	3/15/90	918	70.8	0.2 L	566	0.36	11.4
LB-17D	LB-390-W22	3/15/90	922	71.0	0.2 L	594	0.35	11.5

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-17D	LB-690-W18	6/21/90	843	59.6	0.2 L	540	0.30	11
LB-17D	LB-990-W19	9/19/90	839	65.2	0.2 L	577	0.33	11.4
LB-17D	LB-990-W20	9/19/90	895	66.2	0.2 L	575	0.30	11.4
LB-17D	LB-1290-W23	12/14/90	945	65.6	0.2 L	538	0.19	11.3
LB-17D	LB-391-W19	3/21/91	870	56.2	0.2 L	653	0.21	10.9
LB-17D	LB-391-W21	3/21/91	1060	58.7	0.2 L	530	0.20	10.3
LB-17D	LB-691-W14	6/11/91	786	47.3	0.2 L	423	0.19	10.1
LB-17D	LB-691-W15	6/11/91	812	47.3	0.2 L	441	0.18	10.1
LB-17D	LB-991-10	9/25/91	895	58.5	0.2 L	489	0.26	10.4
LB-17D	LB-991-11	9/25/91	895	58.7	0.2 L	503	0.26	10.5
LB-17D	LB-1291-16	12/23/91	1020	19.6	0.2 L	593	0.44	13.3
LB-17D	LB-1291-17	12/23/91	1010	18.6	0.2 L	586	0.36	13.4
LB-17D	LB-392-11	3/23/92	934	68.0	0.2 L	570	0.34	12.6
LB-17D	LB-392-12	3/23/92	927	69.0	0.2 L	542	0.33	12.5
LB-17D	LB-63092-5	6/30/92	842	58.0	0.2 L	522	0.20	11.6
LB-17D	LB-031093-6	3/10/93	712	52.0	0.2 L	432	0.18	9.57
LB-17D	LB-060493-22	6/4/93	682	44.0	0.2 L	422	0.28	9.41
LB-17D	LB-092793-21	9/27/93	719	48.0	0.2 L	424	0.25	9.54
LB-17D	LB-121593-7	12/15/93	769	59.0	0.2 L	461	0.25	9.86
LB-17D	LB-032994-20	3/29/94	695	51.0	0.2 L	425	0.25	9.75
LB-17D	LB-062394-14	6/23/94	646	43.0	0.1	401	0.20	8.21
LB-17D	LB-090794-7	9/7/94	659	39.0	0.3	390	0.17	8.57
LB-17D	LB-121494-10	12/14/94	534	41.0	0.2 L	367	0.24	8.45
LB-17D	LB-030995-05	3/9/95	511	36.0	0.2 L	366	0.21	7.62
LB-17D	LB-062095-11	6/20/95	595	44.0	1.8	377	0.20	8.37
LB-17D	LB-092095-10	9/20/95	854	55.0	0.2 L	416	0.25	9.96
LB-17D	LB-121895-3	12/18/95	611	52.0	0.2 L	394	0.25	8.75
LB-17D	LB-031996-11	3/19/96	662	43.0	0.2 L	342	0.27	8.63
LB-17D	LB-061996-14	6/19/96	593	47.0	0.2 L	387	0.22	8.59
LB-17D	LB-032097-16	3/20/97	512	50.0	0.2 L	345	0.20	7.63
LB-17D	LB-031998-14	3/19/98	540	37.2	0.2 L	340	0.25	7.09
LB-17D	LB-031899-13	3/18/99	390	19.2	0.3	304	0.17	5.62
LB-17D	LB-031600-7	3/16/00	363	16.0	0.2 L	246	0.13	4.98
LB-17D	LB-031401-9	3/14/01	NT	12.5	0.2 L	243	0.07	4.47
LB-17D	LB-031902-07	3/19/02	NT	9.4	0.2 L	192	0.02 L	3.89
LB-17D	LB-031203-7	3/12/03	NT	10.3	0.2 L	226	0.07	4.05
LB-17D	LB-022504-10	2/25/04	NT	10.9	0.2 L	208	0.06	3.76
LB-17D	LB-030905-10	3/9/05	NT	10.3	0.2 L	264	0.06	3.70
LB-17D	LB-031506-7	3/15/06	NT	8.8	0.2 L	184	0.07	3.71
LB-17D	LB-030607-14	3/6/07	NT	11.0	0.1 L	155	0.08	3.93
LB-17D (Dup)	LB-030607-15	3/6/07	NT	11.0	0.1 L	141	0.10	3.98
LB-17D	LB-032008-11	3/20/08	NT	10.1	0.1 L	205	0.078	4.04
LB-17D	LB-17D	3/18/09	NT	7.8	0.1 L	190	0.082	3.57
LB-17D	LB-17D032410	3/24/10	NT	5.8	0.1 L	185	0.090	3.66
LB-17D	LB-17D	3/22/11	277	7.97	0.1 L	209 H	0.0623	3.38
LB-17D	LB-031212-04	3/12/12	NT	19	0.1 L	230	0.12	4.6
LB-17D	LB-020513-05	2/5/13	NT	13	0.1 L	220	0.11	4.2

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-17D	LB-021714-03	2/17/14	NT	10	0.1 L	230	0.11	4.1
LB-17D	LB-021715-05	2/17/15	NT	6.51	0.005 L	212	0.0965	3.82
LB-17D (DUP)	LB-021715-06	2/17/15	NT	6.51	0.005 L	207	0.0965	3.71
LB-17D	LB-021616-01	2/16/16	NT	5.99	0.100 L	179	0.115	3.59
LB-17I	LB-989-W04	9/6/89	1020	85.0	0.2 L	770	45.70	13.3
LB-17I	LB-1089-W14	10/19/89	1080	125.0	0.2 L	692	46.00	10.1
LB-17I	LB-1189-W14	11/15/89	872	115.0	0.2 L	613	41.50	8.07
LB-17I	LB-1289-W29	12/20/89	920	90.0	0.2	585	36.50	7.67
LB-17I	LB-1289-W30	12/20/89	910	90.0	0.2	591	34.70	8
LB-17I	LB-390-W20	3/15/90	724	26.9	0.2 L	484	29.30	4.01
LB-17I	LB-690-W17	6/21/90	1140	96.0	0.2 L	766	48.50	6.74
LB-17I	LB-990-W18	9/19/90	1090	92.0	0.2 L	710	37.30	8.09
LB-17I	LB-1290-W22	12/13/90	967	38.4	0.2 L	666	41.50	7.17
LB-17I	LB-391-W20	3/21/91	1240	36.6	0.2 L	663	46.40	6.14
LB-17I	LB-392-13	3/23/92	1010	40.0	0.2 L	545	45.90	3.86
LB-17I	LB-63092-6	6/30/92	1210	71.0	0.2 L	708	56.20	6.5
LB-17I	LB-63092-7	6/30/92	1230	71.0	0.2 L	697	56.50	6.49
LB-17I	LB-91892-3	9/18/92	1290	71.0	0.2 L	746	58.60	7.88
LB-17I	LB-91892-4	9/18/92	1380	74.0	0.2 L	781	59.90	7.73
LB-17I	LB-121192-18	12/11/92	1030	61.0	0.2 L	562	31.20	8.34
LB-17I	LB-121192-19	12/11/92	1040	62.0	0.2 L	544	31.30	8.51
LB-17I	LB-031093-5	3/10/93	896	51.0	0.2 L	501	32.30	7.34
LB-17I	LB-032994-21	3/29/94	719	35.0	0.2 L	450	25.90	4.89
LB-17I	LB-030995-06	3/9/95	562	27.0	0.2 L	361	21.00	3.58
LB-17I	LB-031996-10	3/19/96	869	48.0	0.2 L	484	27.00	1.82
LB-17I	LB-032097-17	3/20/97	557	56.0	0.2 L	366	16.60	1.08
LB-17I	LB-031998-13	3/19/98	464	30.8	0.2 L	284	14.00	0.913
LB-17I	LB-031899-12	3/18/99	418	18.4	0.2	297	14.40	0.987
LB-17I	LB-031600-6	3/16/00	304	12.8	0.2 L	220	8.90	0.776
LB-17I	LB-031401-10	3/14/01	NT	13.6	0.2 L	241	8.86	0.918
LB-17I	LB-031902-06	3/19/02	NT	15.8	0.2	252	8.96	1.1
LB-17I	LB-031203-6	3/12/03	NT	18.0	0.2	278	9.99	1.37
LB-17I	LB-022504-11	2/25/04	NT	18.0	0.2 L	242	8.73	1.12
LB-17I	LB-030905-11	3/9/05	NT	21.0	0.2	288	10.80	1.79
LB-17I	LB-031506-8	3/15/06	NT	22.8	0.2 L	344	12.00	1.59
LB-17I	LB-030607-13	3/6/07	NT	24.2	0.1 L	291	11.30	1.51
LB-17I	LB-032008-10	3/20/08	NT	19.2	0.1 L	221	8.5	1.3
LB-17I	LB-17I	3/18/09	NT	10.0	0.1 L	193	6.77	1.12
LB-17I	LB-17I032310	3/23/10	NT	11.8	0.1 L	217	8.44	1.52
LB-17I (Dup)	LBDUP1032310	3/23/10	NT	11.7	0.1 L	231	8.41	1.51
LB-17I	LB-17I	3/22/11	498	27.4	0.1 L	306 H	8.95	1.55
LB-17I	LB-031312-16	3/13/12	NT	12	0.1 L	240	6.8	0.98
LB-17I	LB-020513-06	2/5/13	NT	10	0.1 L	190	6.0	0.92
LB-17I	LB-021714-04	2/17/14	NT	12	0.1 L	230	7.2	1.10
LB-17I	LB-021815-15	2/18/15	NT	9.71	0.005 L	250	9.2	1.4
LB-17I	LB-021816-15	2/18/16	NT	10.8	0.100 L	229	9.8	1.55

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-20S	LB-991-19	9/26/81	NT	NT	NT	NT	2.81	7.64
LB-20S	LB-1289-W36	12/21/89	600	27.0	0.2 L	470	0.09	2.14
LB-20S	LB-390-W12	3/14/90	1340	45.7	0.2 L	892	2.72	13.4
LB-20S	LB-690-W08	6/19/90	1250	42.6	0.2 L	880	21.70	13.2
LB-20S	LB-690-W09	6/19/90	1220	41.8	0.2 L	832	21.00	13.3
LB-20S	LB-990-W09	9/14/90	844	22.8	0.2 L	574	0.78	6.88
LB-20S	LB-1290-W10	12/12/90	983	4.1	0.2 L	682	0.17	9
LB-20S	LB-1290-W11	12/12/90	988	21.3	0.2 L	708	0.16	9.32
LB-20S	LB-391-W08	3/20/91	667	9.9	0.2 L	374	0.09	5.07
LB-20S	LB-691-W11	6/11/91	960	NT	NT	583	4.16	9.44
LB-20S	LB-991-19	9/26/91	NT	NT	NT	620	2.81	7.64
LB-20S	LB-1291-5	12/19/91	1160	NT	NT	667	0.63	9.69
LB-20S	LB-392-18	3/24/92	778	20.0	0.2 L	485	0.10	7.34
LB-20S	LB-031593-26	3/15/93	713	10.0	0.2 L	411	1.36	5.34
LB-20S	LB-031593-27	3/15/93	720	11.0	0.2 L	415	1.30	5.28
LB-20S	LB-032994-23	3/29/94	753	20.0	0.2 L	464	2.08	6.4
LB-20S	LB-031395-19	3/13/95	933	45.0	0.2	636	0.37	5.45
LB-20S	LB-032096-20	3/20/96	1020	42.0	0.2 L	620	6.06	7.49
LB-20S	LB-032097-15	3/20/97	625	46.0	0.2 L	459	25.60	3.98
LB-20S	LB-032098-23	3/20/98	467	39.0	0.2 L	297	15.90	1.83
LB-20S	LB-031899-16	3/18/99	279	13.8	0.3	210	11.80	1.28
LB-20S	LB-031700-14	3/17/00	279	14.6	0.2	228	10.60	1.53
LB-20S	LB-031401-13	3/14/01	NT	8.8	0.2 L	278	17.30	2.21
LB-20S	LB-032002-14	3/20/02	NT	3.3	0.2	283	2.07	2.09
LB-20S	LB-031303-20	3/13/03	NT	2.4	0.2 L	194	2.99	1.3
LB-20S	LB-022604-19	2/26/04	NT	2.9	0.2 L	236	0.41	1.01
LB-20S	LB-030905-12	3/9/05	NT	3.3	0.2	388	6.79	2.290
LB-20S	LB-031406-4	3/14/06	NT	2.1	0.2 L	148	0.16	0.026
LB-20S	LB-030607-16	3/6/07	NT	7.3	0.1 L	219	0.031	0.967
LB-20S	LB-032408-16	3/24/08	NT	7.9	0.1 L	186	0.08	1.22
LB-20S	LB-20S	3/18/09	NT	9.2	0.1 L	271	0.281	1.48
LB-20S	LB-20S032410	3/24/10	NT	3.0	0.1	237	0.027	0.34
LB-20S	LB-20S	3/24/11	544	22.1	0.1 L	361	0.368	2.20
LB-20S	LB-031312-15	3/13/12	NT	6.2	0.1 L	210	0.076	2.4
LB-20S	LB-020513-10	2/5/13	NT	17	0.1 L	340	0.18	3.5
LB-20S	LB-021914-20	2/19/14	NT	13	0.1 L	250	0.075	2.4
LB-20S	LB-021915-18	2/19/15	NT	35	0.42	220	0.43	2.0
LB-20S	LB-021716-13	2/17/16	NT	3.02	0.10 L	195	0.226	2.1
LB-26D	LB-031193-14	3/11/93	307	NT	4.7	226	0.02 L	0.024
LB-26D	LB-060193-3	6/1/93	290	NT	4.7	226	0.02 L	0.017
LB-26D	LB-092493-12	9/24/93	293	NT	5.3	216	0.02 L	0.009
LB-26D	LB-121693-16	12/16/93	285	NT	5.2	240	0.14	0.007
LB-26D	LB-032594-7	3/25/94	297	8.3	5.7	223	0.02 L	0.007
LB-26D	LB-062294-6	6/22/94	277	NT	5.4	226	0.03	0.005 L
LB-26D	LB-090894-15	9/8/94	296	NT	7.0	228	0.02 L	0.005 L
LB-26D	LB-121394-5	12/13/94	274	8.5	6.5	233	0.15	0.006

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-26D	LB-031095-14	3/10/95	252	NT	6.2	199	0.02 L	0.005 L
LB-26D	LB-061995-2	6/19/95	270	NT	7.4	230	0.02 L	0.005 L
LB-26D	LB-092095-4	9/20/95	338	NT	7.5	218	0.00 L	0.005 L
LB-26D	LB-122095-15	12/20/95	325	NT	8.1	233	0.02 L	0.002 J
LB-26D	LB-031996-2	3/19/96	336	NT	8.7	241	0.02 L	0.005 L
LB-26D	LB-061896-2	6/18/96	281	NT	7.7 J	251	0.02	0.005 L
LB-26D	LB-091896-11	9/18/96	347	10.0	8.1	246	0.02 L	0.005 L
LB-26D	LB121796-4	12/17/96	391	12.0	7.9	272	0.02 L	0.005 L
LB-26D	LB-031997-6	3/19/97	306	14.0	8.4	284	0.03	0.005 L
LB-26D	LB-061797-8	6/17/97	379	12.0	7.6	256	0.02 L	0.005 L
LB-26D	LB-091697-4	9/16/97	307	12.8	8.2	251	0.02 L	0.005 L
LB-26D	LB-121697-6	12/16/97	331	12.0	9.3	244	0.02	0.005 L
LB-26D	LB-031998-9	3/19/98	358	11.8	10.0	251	0.02 L	0.005 L
LB-26D	LB-061698-9	6/16/98	247	11.5	9.2	260	0.02	0.005 L
LB-26D	LB-091798-6	9/17/98	324	10.2	8.8	230	0.02 L	0.005 L
LB-26D	LB-121798-3	12/17/98	264	10.3	9.7	272	0.02 L	0.005 L
LB-26D	LB-031899-6	3/18/99	252	10.7	8.9	241	0.02 L	0.005 L
LB-26D	LB-062399-9	6/23/99	251	9.8	9.3	235	0.02 L	0.005 L
LB-26D	LB-091699-3	9/16/99	282	9.3	9.1	234	0.02 L	0.005 L
LB-26D	LB-121599-9	12/15/99	278	8.0	9.0	191	0.04	0.005 L
LB-26D	LB-031700-13	3/17/00	236	7.5	8.4	209	0.02 L	0.005 L
LB-26D	LB-061300-5	6/13/00	240	7.6	9.5	206	0.02 L	0.005 L
LB-26D	LB-091200-4	9/12/00	258	8.1	9.3	203	0.02 L	0.005 L
LB-26D	LB-121500-7	12/15/00	262	6.7	8.2	168	0.02 L	0.005 L
LB-26D	LB-031301-5	3/13/01	NT	6.6	8.1	198	0.02 L	0.005 L
LB-26D	LB-031902-8	3/19/02	NT	5.5	7.2	165	0.02 L	0.005 L
LB-26D	LB-031203-5	3/12/03	NT	4.7	6.0	216	0.02 L	0.005 L
LB-26D	LB-022504-12	2/25/04	NT	4.3	5.1	173	0.02 L	0.005 L
LB-26D	LB-030805-7	3/8/05	NT	4.0	4.8	170	0.02 L	0.005 L
LB-26D	LB-031606-19	3/16/06	NT	3.6	4.9	190	0.02 L	0.005 L
LB-26D	LB-030507-11	3/5/07	NT	4.1	5.3	145	0.02 L	0.005 L
LB-26D	LB-031908-8	3/19/08	NT	4.0	5.2	177	0.02 L	0.005 L
LB-26D	LB-26D	3/17/09	NT	4.3	5.9	144	0.02 L	0.005 L
LB-26D	LB-26D032410	3/24/10	NT	3.9	6.5	194	0.02 L	0.005 L
LB-26D	LB-26D	3/23/11	224	4.97	6.3	196	0.025 L	0.002 L
LB-26D	LB-031212-05	3/12/12	NT	4.8	5.9	190	0.025 L	0.0034
LB-26D	LB-020713-23	2/6/13	NT	5.1	5.5	180	0.025 L	0.0020 L
LB-26D	LB-021714-05	2/17/14	NT	5.2	5.5	190	0.025 L	0.0020 L
LB-26D	LB-021715-04	2/17/15	NT	4.88	5.58	183	0.025 L	0.0020 L
LB-26D	LB-021616-04	2/16/16	NT	5.88	5.76	176	0.025 L	0.0020 L
LB-26I	LB-121092-12	12/10/92	NT	NT	0.7	NT	0.03	0.075
LB-26I	LB-031193-13	3/11/93	638	NT	0.7	380	0.02 L	0.053
LB-26I	LB-060193-1	6/1/93	577	NT	1.0	352	0.02 L	0.027
LB-26I	LB-092493-11	9/24/93	587	NT	1.0	363	0.03	0.039
LB-26I	LB-121693-15	12/16/93	531	NT	0.8	377	0.03	0.031
LB-26I	LB-032594-6	3/25/94	528	NT	1.2	326	0.02 L	0.024
LB-26I	LB-062294-5	6/22/94	488	NT	1.2	329	0.03	0.028

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-26I	LB-090894-16	9/8/94	519	NT	1.3	327	0.03	0.031
LB-26I	LB-121394-4	12/13/94	465	25.0	1.3	307	0.02 L	0.022
LB-26I	LB-031095-13	3/10/95	499	NT	1.1	311	0.02	0.023
LB-26I	LB-061995-1	6/19/95	434	NT	1.6	296	0.02	0.025
LB-26I	LB-092095-5	9/20/95	493	NT	1.8	274	0.03	0.026
LB-26I	LB-122095-14	12/20/95	458	NT	1.9	289	0.02 L	0.013
LB-26I	LB-031996-1	3/19/96	479	NT	1.7	302	0.02 L	0.02
LB-26I	LB-061896-1	6/18/96	387	NT	2.0 J	301	0.02	0.02
LB-26I	LB-091896-10	9/18/96	469	25.0	2.0	298	0.02 L	0.016
LB-26I	LB121796-5	12/17/96	498	24.0	2.2	323	0.02 L	0.014
LB-26I	LB-031997-5	3/19/97	424	30.0	3.0	329	0.04	0.014
LB-26I	LB-061797-7	6/17/97	525	30.0	2.3	323	0.02 L	0.018
LB-26I	LB-091697-5	9/16/97	436	33.4	2.1	312	0.02 L	0.019
LB-26I	LB-121697-7	12/16/97	647	26.8	3.0	444	0.03	0.032
LB-26I	LB-031998-8	3/19/98	605	34.3	3.6	379	0.02 L	0.013
LB-26I	LB-061698-8	6/16/98	406	35.7	2.7	356	0.02 L	0.015
LB-26I	LB-091798-7	9/17/98	557	34.2	2.4	304	0.03	0.014
LB-26I	LB-121798-2	12/17/98	456	35.1	2.8	368	0.04	0.013
LB-26I	LB-031799-1	3/17/99	456	33.7	2.9	347	0.02	0.014
LB-26I	LB-062399-10	6/23/99	361	22.6	5.1	280	0.02 L	0.008
LB-26I	LB-091699-4	9/16/99	535	32.9	2.2	340	0.03	0.013
LB-26I	LB-121599-8	12/15/99	499	30.7	2.9	293	0.02 L	0.01
LB-26I	LB-031700-12	3/17/00	445	28.9	2.4	298	0.02 L	0.011
LB-26I	LB-061300-4	6/13/00	440	30.0	2.6	342	0.02 L	0.01
LB-26I	LB-091200-5	9/12/00	470	26.8	2.7	304	0.02 L	0.0131
LB-26I	LB-121500-8	12/15/00	376	15.2	5.0	217	0.02 L	0.005 L
LB-26I	LB-031301-6	3/13/01	NT	18.3	2.8	284	0.02 L	0.0069
LB-26I	LB-092001-3	9/20/01	NT	15.3	3.4	251	0.02 L	0.011
LB-26I	LB-092001-4	9/20/01	NT	15.5	3.5	266	0.02 L	0.011
LB-26I	LB-031902-09	3/19/02	NT	13.0	3.2	230	0.02 L	0.006
LB-26I	LB-091802-04	9/17/02	NT	11.0	4.0	237	0.02 L	0.014
LB-26I	LB-031203-4	3/12/03	NT	10.0	2.6	238	0.02 L	0.008
LB-26I	LB-092203-4	9/22/03	NT	9.5	2.0	248	0.03	0.015
LB-26I	LB-022504-13	2/25/04	NT	8.3	2.5	192	0.02 L	0.005
LB-26I	LB-090104-26	9/1/04	NT	6.7	2.2	190	0.02 L	0.009
LB-26I	LB-030805-8	3/8/05	NT	8.5	2.3	206	0.02 L	0.006
LB-26I	LB-091405-5	9/14/05	NT	7.4	2.7	190	0.02 L	0.005 L
LB-26I	LB-031606-20	3/16/06	NT	7.1	2.7	230	0.02 L	0.009
LB-26I	LB-091206	9/12/06	NT	6.6	3.2	199	0.02 L	0.010
LB-26I	LB-030507-10	3/5/07	NT	6.7	2.6	193	0.02 L	0.009
LB-26I	LB-091907-5	9/19/07	NT	7.7	2.3	207	0.02 L	0.011
LB-26I	LB-031908-7	3/19/08	NT	10.1	2.1	213	0.02 L	0.011
LB-26I	LB-091608-6	9/16/08	NT	4.1	5.6	168	0.02 L	0.005 L
LB-26I	LB-26I	3/17/09	NT	11.6	2.5	202	0.02 L	0.0057
LB-26I	LB-26I	9/11/09	NT	4.05	5.85	173	0.02 L	0.005 L
LB-26I	LB-26I032410	3/24/10	NT	8.52	3.41	211	0.02 L	0.010
LB-26I	LB26092310	9/23/10	NT	7.71	3.76	229	0.02 L	0.010

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-26I	LB-26I	3/23/11	226	7.97	3.71	226	0.025 L	0.00743
LB-26I	LB-090711--3	9/7/11	NT	6.22	5.02	200	0.0392	0.00356
LB-26I	LB-032212-21	3/22/12	NT	8.4	4.8	200	0.037	0.0026
LB-26I	LB-091112-04	9/11/12	NT	5.8	5.2	200	0.025 L	0.0020
LB-26I	LB-020613-14	2/6/13	NT	6.0	4.9	200	0.064	0.0020 L
LB-26I	LB-082113-06	8/21/13	NT	7.5	5.0	200	0.025 L	0.0020 L
LB-26I	LB-021714-06	2/17/14	NT	6.8	4.6	200	0.036	0.0020 L
LB-26I (Dup)	LB-021714-07	2/17/14	NT	6.9	4.6	200	0.025 L	0.0020 L
LB-26I	LB-081314-05	8/13/14	NT	6.5	5.1	190	0.025 L	0.0040
LB-26I	LB-021815-12	2/18/15	NT	11.0	3.87	210	0.025 L	0.0024
LB-26I	LB-081115-06	8/11/15	NT	8.12	4.10	204	0.040 L	0.0020 L
LB-26I	LB-021616-05	2/16/16	NT	7.53	4.27	190	0.040 L	0.0020 L
LB-26I	LB-082316-04	8/23/16	NT	7.5	4.2	180	0.040 L	0.0026
LB-27D	LB-031193-16	3/11/93	309	NT	1.6	217	0.02 L	0.034
LB-27D	LB-060193-4	6/1/93	302	NT	1.7	196	0.02 L	0.005 L
LB-27D	LB-092493-16	9/24/93	297	NT	1.9	205	0.02 L	0.005 L
LB-27D	LB-092493-17	9/24/93	296	NT	1.8	202	0.02 L	0.005 L
LB-27D	LB-121693-17	12/16/93	270	NT	2.0	235	0.04	0.005 L
LB-27D	LB-121693-18	12/16/93	282	NT	1.9	225	0.02	0.005 L
LB-27D	LB-032494-4	3/24/94	290	NT	0.2 L	210	0.02 L	0.005 L
LB-27D	LB-032494-5	3/24/94	293	NT	0.2 L	209	0.02 L	0.005 L
LB-27D	LB-062294-10	6/22/94	291	NT	1.9	219	0.02 L	0.005 L
LB-27D	LB-062294-9	6/22/94	284	NT	1.9	214	0.02 L	0.005 L
LB-27D	LB-090894-12	9/8/94	303	NT	2.3	214	0.02 L	0.005 L
LB-27D	LB-090894-13	9/8/94	299	NT	2.1	214	0.02 L	0.005 L
LB-27D	LB-121394-2	12/13/94	264	12.0	1.9	215	0.02 L	0.005 L
LB-27D	LB-121394-3	12/13/94	259	12.0	1.9	222	0.02 L	0.005 L
LB-27D	LB-031095-7	3/10/95	274	NT	0.7	193	0.02 L	0.005 L
LB-27D	LB-031095-9	3/10/95	265	NT	1.9	190	0.02	0.005 L
LB-27D	LB-061995-4	6/19/95	272	NT	2.3	217	0.02 L	0.005 L
LB-27D	LB-061995-5	6/19/95	277	NT	2.2	208	0.02 L	0.005 L
LB-27D	LB-092095-1	9/20/95	334	NT	2.1	195	0.00 L	0.005 L
LB-27D	LB-092095-2	9/20/95	326	NT	2.0	205	0.00 L	0.005 L
LB-27D	LB-122095-17	12/20/95	306	NT	2.1	209	0.02 L	0.005 L
LB-27D	LB-122095-18	12/20/95	302	NT	2.1	210	0.06	0.001 J
LB-27D	LB-031996-3	3/19/96	302	NT	2.1	208	0.02 L	0.005 L
LB-27D	LB-061896-4	6/18/96	260	NT	2.2	220	0.10	0.005 L
LB-27D	LB-061896-5	6/18/96	251	NT	NT	217	0.09	0.005 L
LB-27D	LB-091796-9	9/17/96	286	11.0	2.1	214	0.02 L	0.005 L
LB-27D	LB121796-8	12/17/96	303	11.0	2.1	204	0.02 L	0.005 L
LB-27D	LB-031997-12	3/19/97	235	13.0	2.2	221	0.02	0.005 L
LB-27D	LB-061797-11	6/17/97	283	10.0	1.8	210	0.03	0.005 L
LB-27D	LB-091697-8	9/16/97	235	8.4	2.3	216	0.02 L	0.005 L
LB-27D	LB-121797-14	12/17/97	231	11.0	2.2	160	0.02 L	0.005 L
LB-27D	LB-031998-12	3/19/98	301	11.2	2.2	214	0.02 L	0.005 L
LB-27D	LB-061798-10	6/17/98	286	11.1	2.1	218	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27D	LB-091798-8	9/17/98	286	10.8	2.2	172	0.02 L	0.005 L
LB-27D	LB-121798-6	12/17/98	251	12.6	2.6	240	0.21	0.008
LB-27D	LB-031899-9	3/18/99	226	11.4	2.1	213	0.02 L	0.005 L
LB-27D	LB-062399-7	6/23/99	231	10.4	2.3	193	0.02	0.005 L
LB-27D	LB-091599-1	9/15/99	206	11.1	2.4	216	0.16	0.005 L
LB-27D	LB-121599-7	12/15/99	270	10.7	2.5	195	0.02 L	0.005 L
LB-27D	LB-031600-3	3/16/00	248	10.2	2.4	221	0.02 L	0.005 L
LB-27D	LB-061300-3	6/13/00	249	11.4	2.5	225	0.02 L	0.005 L
LB-27D	LB-091300-8	9/13/00	283	11.9	2.8	198	0.02 L	0.005 L
LB-27D	LB-091300-9	9/13/00	272	11.2	2.6	209	0.02 L	0.005 L
LB-27D	LB-121500-5	12/15/00	294	11.4	2.5	207	0.02 L	0.005 L
LB-27D	LB-031301-3	3/13/01	NT	12.2	2.7	226	0.02 L	0.005 L
LB-27D	LB-031902-11	3/19/02	NT	13.5	2.8	187	0.02 L	0.005 L
LB-27D	LB-031203-3	3/12/03	NT	12.7	3.0	218	0.02 L	0.005 L
LB-27D	LB-022604-15	2/26/04	NT	12.7	2.9	236	0.02 L	0.005 L
LB-27D (Dup)	LB-022604-16	2/26/04	NT	12.5	2.9	238	0.02 L	0.005 L
LB-27D	LB-030805-6	3/8/05	NT	13.6	3.0	248	0.02 L	0.017
LB-27D	LB-031606-17	3/16/06	NT	12.4	3.2	242	0.02 L	0.005 L
LB-27D	LB-030507-9	3/5/07	NT	11.5	3.3	209	0.02 L	0.005 L
LB-27D	LB-031908-5	3/19/08	NT	11.1	3.4	241	0.02 L	0.005 L
LB-27D	LB-031908-6	3/19/08	NT	11.9	1.4	364	0.02 L	0.285
LB-27D	LB-27D	3/18/09	NT	10.7	3.5	217	0.02 L	0.005 L
LB-27D	LB-27D032410	3/24/10	NT	9.8	3.9	238	0.02 L	0.005 L
LB-27D	LB-27D	3/25/11	307	10.4	3.77	245	0.025 L	0.002 L
LB-27D	LB-031212-02	3/12/12	NT	10	4.0	220	0.033	0.0054
LB-27D	LB-020713-21	2/7/13	NT	10	4.2	230	0.083	0.018
LB-27D	LB-021814-13	2/18/14	NT	13	4.1	230	0.057	0.0075
LB-27D	LB-021715-02	2/17/15	NT	8.88	4.09	265	0.228	0.0127
LB-27D	LB-021816-18	2/18/16	NT	8.86	4.11	216	0.040 L	0.0020 L
LB-27I	LB-121192-20	12/11/92	NT	NT	6.2	NT	0.04	0.471
LB-27I	LB-031293-21	3/12/93	729	NT	4.5	459	0.02 L	0.343
LB-27I	LB-060193-2	6/1/93	706	NT	3.8	436	0.02 L	0.283
LB-27I	LB-092493-14	9/24/93	785	NT	21.0	526	0.07	0.413
LB-27I	LB-092493-15	9/24/93	771	NT	20.0	504	0.08	0.381
LB-27I	LB-121693-19	12/16/93	676	NT	22.0	499	0.03	0.284
LB-27I	LB-121693-20	12/16/93	711	NT	22.0	506	0.04	0.28
LB-27I	LB-032494-3	3/24/94	685	NT	NT	469	0.02 L	0.276
LB-27I	LB-062294-8	6/22/94	582	NT	5.3	397	0.02	0.213
LB-27I	LB-090894-11	9/8/94	573	NT	6.2	402	0.03	0.238
LB-27I	LB-121394-1	12/13/94	519	13.0	16.0	410	0.02	0.267
LB-27I	LB-031095-7	3/10/95	573	NT	9.0	346	0.02	0.198
LB-27I	LB-061995-3	6/19/95	566	NT	7.5	394	0.02	0.188
LB-27I	LB-092095-3	9/20/95	651	NT	1.2	377	0.03	0.247
LB-27I	LB-122095-16	12/20/95	584	NT	0.8	353	0.02 L	0.236
LB-27I	LB-031996-4	3/19/96	653	NT	0.2 L	392	0.10	0.273
LB-27I	LB-061896-3	6/18/96	532	NT	0.0 J	414	0.03	0.282

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Leichner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27I	LB-091796-7	9/17/96	859	38.0	0.2 L	555	0.08	0.352
LB-27I	LB-091796-8	9/17/96	874	39.0	0.2 L	552	0.03	0.356
LB-27I	LB121796-6	12/17/96	1150	30.0	30.0	650	0.04	0.373
LB-27I	LB121796-7	12/17/96	1140	29.0	60.0	650	0.02 L	0.364
LB-27I	LB-031997-10	3/19/97	681	49.0	1.1	530	0.04	0.312
LB-27I	LB-031997-11	3/19/97	747	49.0	1.1	523	0.04	0.288
LB-27I	LB-061797-10	6/17/97	762	44.0	0.1	459	0.03	0.277
LB-27I	LB-061797-9	6/17/97	764	43.0	0.1	459	0.03	0.273
LB-27I	LB-091697-6	9/16/97	844	48.9	0.2 L	690	0.03	0.396
LB-27I	LB-091697-7	9/16/97	860	49.3	0.2 L	671	0.03	0.396
LB-27I	LB-121797-11	12/17/97	720	30.7	0.2 L	609	0.03	0.406
LB-27I	LB-121797-12	12/17/97	738	30.5	0.2 L	589	0.03	0.397
LB-27I	LB-031998-10	3/19/98	877	25.9	0.2 L	576	0.04	0.381
LB-27I	LB-031998-11	3/19/98	896	26.6	0.2 L	573	0.03	0.373
LB-27I	LB-061798-11	6/17/98	869	37.0	0.4	602	0.04	0.342
LB-27I	LB-061798-12	6/17/98	729	36.7	0.4	599	0.04	0.342
LB-27I	LB-091798-10	9/17/98	1030	47.0	0.2	620	0.04	0.375
LB-27I	LB-091798-9	9/17/98	1030	46.5	0.2 L	586	0.04	0.388
LB-27I	LB-121798-4	12/17/98	714	36.0	0.2 L	545	0.04	0.354
LB-27I	LB-121798-5	12/17/98	710	36.3	0.2 L	522	0.04	0.36
LB-27I	LB-031899-7	3/18/99	712	39.3	0.7	565	0.04	0.335
LB-27I	LB-031899-8	3/18/99	707	39.5	0.7	565	0.04	0.29
LB-27I	LB-062399-8	6/23/99	693	46.4	1.0	502	0.03	0.305
LB-27I	LB-091599-2	9/15/99	691	56.7	0.3	602	0.03	0.336
LB-27I	LB-121599-6	12/15/99	910	81.4	0.2	553	0.04	3.72
LB-27I	LB-031600-1	3/16/00	803	69.4	0.2 L	675	0.02 L	0.356
LB-27I	LB-031600-2	3/16/00	810	69.1	0.2 L	598	0.21	0.349
LB-27I	LB-061300-1	6/13/00	743	70.9	0.1 L	532	0.03	0.305
LB-27I	LB-061300-2	6/13/00	738	70.5	0.1 L	662	0.02	0.322
LB-27I	LB-091300-10	9/13/00	819	47.5	0.7	368	0.02	0.289
LB-27I	LB-121500-6	12/15/00	885	66.0	1.2	504	0.02 L	0.0851
LB-27I	LB-031301-4	3/13/01	NT	42.8	0.1 L	226	0.02 L	0.268
LB-27I	LB-092001-2	9/20/01	NT	39.7	0.1 L	378	0.02 L	0.186
LB-27I	LB-031902-10	3/19/02	NT	42.1	0.6	403	0.02 L	0.277
LB-27I	LB-091802-05	9/17/02	NT	25.0	8.0	382	0.02 L	0.243
LB-27I	LB-031203-1	3/12/03	NT	23.0	1.4	384	0.02 L	0.187
LB-27I	LB-031203-2	3/12/03	NT	23.0	1.4	312	0.02 L	0.206
LB-27I	LB-092203-2	9/22/03	NT	26.0	1.2	424	0.02 L	0.516
LB-27I	LB-092203-3	9/22/03	NT	25.0	1.2	388	0.02 L	0.545
LB-27I	LB-022604-17	2/26/04	NT	18.5	0.2 L	288	0.02 L	0.193
LB-27I	LB-090104-27	9/1/04	NT	20.4	1.1	268	0.02 L	0.217
LB-27I	LB-030805-5	3/8/05	NT	10.9	2.8	312	0.02 L	0.195
LB-27I	LB-091405-3	9/14/05	NT	12.4	2.4	316	0.02 L	0.131
LB-27I	LB-031606-18	3/16/06	NT	9.7	4.2	346	0.02 L	0.121
LB-27I	LB-091206-2	9/12/06	NT	14.8	1.9	346	0.02 L	0.185
LB-27I	LB-030507-8	3/5/07	NT	14.2	2.2	363	0.02 L	0.238
LB-27I	LB-091907-4	9/19/07	NT	16.7	0.1 L	295	0.04	0.530

Table B-3
Groundwater Chemistry, Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
1987 through 2016
Lechner Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27I	LB-031908-4	3/19/08	NT	11.9	1.4	340	0.02 L	0.282
LB-27I	LB-091608-7	9/16/08	NT	17.0	1.0	311	0.02 L	0.196
LB-27I	LB-27I	3/18/09	NT	14.3	2.1	322	0.02 L	0.186
LB-27I	LBLF27i091109	9/11/09	NT	19.3	0.86	309	0.02 L	0.173
LB-27I	LB-27I032410	3/24/10	NT	7.7	1.82	266	0.02 L	0.121
LB-27I	LB27I092310	9/23/10	NT	19.4	0.62	311	0.02 L	0.196
LB-27I	LB-27I	3/25/11	512	20.1	0.14	335	0.025 L	0.191
LB-27I	LB-090711-01	9/7/11	NT	41.2	0.10 L	464	0.050 L	0.456
LB-27I	LB-032212-18	3/22/12	NT	23	0.2	370	0.025 L	0.38
LB-27I	LB-091112-02	9/11/12	NT	32	0.2 L, H	420	0.032	0.54
LB-27I	LB-020613-11	2/6/13	NT	41	0.22	380	0.025 L	0.52
LB-27I (Dup)	LB-020613-12	2/6/13	NT	42	0.21	380	0.025 L	0.52
LB-27I	LB-082113-03	8/21/13	NT	51	0.10 L	420	0.025 L	0.41
LB-27I (Dup)	LB-082113-05	8/21/13	NT	51	0.10 L	420	0.025 L	0.42
LB-27I	LB-021814-14	2/18/14	NT	30	0.40	340	0.025 L	0.43
LB-27I	LB-081314-03	8/13/14	NT	34	0.10 L	360	0.025 L	0.33
LB-27I	LB-021815-10	2/18/15	NT	36	0.30	390	0.025 L	0.46
LB-27I	LB-081215-09	8/12/15	NT	35.1	0.20 L	352	0.040 L	0.328
LB-27I	LB-021816-19	2/18/16	NT	21.7	0.91	329	0.040 L	0.253
LB-27I	LB-082316-02	8/23/16	NT	29.0	0.20 L	350	0.040 L	0.310
FIELDQC	LB-021716-07	2/17/16	NT	0.20 L	0.100 L	10	0.040 L	0.0020 L
FIELDQC	LB-082416-06	8/24/16	NT	0.20 L	0.100 L	10	0.040 L	0.0020 L
Notes:								
Conductivity = umhos/cm; B = analyte detected above the MDL but below the MRL; L = not detected at or above method reporting limit; J = estimated concentration; H = due to laboratory error, sample was extracted and analyzed past the recommended 7-day hold time; NT = not tested.								

APPENDIX C

**2016 Laboratory Analytical Data
(Provided on attached CD only)**

First Quarter (February) 2016 Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-57302-1

Client Project/Site: Leichner Landfill - Wash.

For:

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

Attn: Mr. Jason Davendonis



Authorized for release by:
3/9/2016 4:11:56 PM

Sarah Murphy, Project Manager I
(253)922-2310
sarah.murphy@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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Case Narrative

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

TestAmerica Job ID: 580-57302-1

Job ID: 580-57302-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 2/16/2016 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.7° C.

Receipt Exceptions

The following samples was received at the laboratory outside the required temperature criteria: LB-021616-01 (580-57302-1), LB-021616-02 (580-57302-2), LB-021616-03 (580-57302-3), LB-021616-04 (580-57302-4), LB-021616-05 (580-57302-5), LB-021616-06 (580-57302-6) and Trip Blanks (580-57302-7). The sample(s) are considered acceptable since they were collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

CoC indicates that there are field filtered samples. However, none of the containers received are specifically labeled as field filtered. It was assumed at login and confirmed with the client that all HNO₃ containers were field filtered, and containers were logged in as such. LB-021616-01 (580-57302-1), LB-021616-02 (580-57302-2), LB-021616-03 (580-57302-3), LB-021616-04 (580-57302-4), LB-021616-05 (580-57302-5), LB-021616-06 (580-57302-6) and Trip Blanks (580-57302-7)

GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 580-211711 recovered above the upper control limit for multi analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: LB-021616-01 (580-57302-1), LB-021616-02 (580-57302-2), LB-021616-03 (580-57302-3), LB-021616-04 (580-57302-4), LB-021616-05 (580-57302-5), LB-021616-06 (580-57302-6), Trip Blanks (580-57302-7) and (CCVIS 580-211711/2).

Method(s) 8260B: The laboratory control sample (LCS) for batch analytical batch 580-211711 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane and Chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample duplicate (LCSD) for batch analytical batch 580-211711 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane, cis-1,3-Dichloropropene and Chlorodibromomethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) 300.0: The following samples in Anion batch 160-239571 were diluted to bring the concentrations of target analytes within the calibration range: LB-021616-01 (580-57302-1), LB-021616-02 (580-57302-2), LB-021616-03 (580-57302-3), LB-021616-04 (580-57302-4), LB-021616-05 (580-57302-5) and LB-021616-06 (580-57302-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Method 300.0 Nitrogen, Nitrate: This method was subcontracted to Pixis Laboratories, LLC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Definitions/Glossary

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

TestAmerica Job ID: 580-57302-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-01

Lab Sample ID: 580-57302-1

Date Collected: 02/16/16 10:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 14:13	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 14:13	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 14:13	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 14:13	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 14:13	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 14:13	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:13	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 14:13	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 14:13	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:13	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 14:13	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:13	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 14:13	1
2-Butanone	ND		20.0		ug/L			02/22/16 14:13	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 14:13	1
2-Hexanone	ND		20.0		ug/L			02/22/16 14:13	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 14:13	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 14:13	1
Acetone	ND		20.0		ug/L			02/22/16 14:13	1
Benzene	ND		0.500		ug/L			02/22/16 14:13	1
Bromobenzene	ND		2.00		ug/L			02/22/16 14:13	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 14:13	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 14:13	1
Bromoform	ND		0.500		ug/L			02/22/16 14:13	1
Bromomethane	ND		1.00		ug/L			02/22/16 14:13	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 14:13	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 14:13	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 14:13	1
Chloroethane	ND		0.500		ug/L			02/22/16 14:13	1
Chloroform	ND		0.500		ug/L			02/22/16 14:13	1
Chloromethane	ND		0.500		ug/L			02/22/16 14:13	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 14:13	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 14:13	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 14:13	1
Dibromomethane	ND		0.500		ug/L			02/22/16 14:13	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 14:13	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 14:13	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 14:13	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 14:13	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 14:13	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 14:13	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-01

Lab Sample ID: 580-57302-1

Date Collected: 02/16/16 10:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 14:13	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
o-Xylene	ND		0.500		ug/L			02/22/16 14:13	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 14:13	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
Styrene	ND		0.500		ug/L			02/22/16 14:13	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 14:13	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 14:13	1
Toluene	ND		0.500		ug/L			02/22/16 14:13	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 14:13	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 14:13	1
Trichloroethene	ND		0.500		ug/L			02/22/16 14:13	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 128		02/22/16 14:13	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/22/16 14:13	1
Dibromofluoromethane (Surr)	93		85 - 115		02/22/16 14:13	1
Toluene-d8 (Surr)	105		75 - 125		02/22/16 14:13	1
Trifluorotoluene (Surr)	97		80 - 127		02/22/16 14:13	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.99		1.00		mg/L			03/08/16 15:38	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.115		0.0400		mg/L		02/19/16 14:39	02/22/16 16:18	1
Manganese	3.59		0.00200		mg/L		02/19/16 14:39	02/22/16 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	179		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-02

Lab Sample ID: 580-57302-2

Date Collected: 02/16/16 11:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 14:40	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 14:40	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 14:40	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 14:40	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 14:40	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 14:40	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:40	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 14:40	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 14:40	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:40	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 14:40	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 14:40	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 14:40	1
2-Butanone	ND		20.0		ug/L			02/22/16 14:40	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 14:40	1
2-Hexanone	ND		20.0		ug/L			02/22/16 14:40	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 14:40	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 14:40	1
Acetone	ND		20.0		ug/L			02/22/16 14:40	1
Benzene	ND		0.500		ug/L			02/22/16 14:40	1
Bromobenzene	ND		2.00		ug/L			02/22/16 14:40	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 14:40	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 14:40	1
Bromoform	ND		0.500		ug/L			02/22/16 14:40	1
Bromomethane	ND		1.00		ug/L			02/22/16 14:40	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 14:40	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 14:40	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 14:40	1
Chloroethane	ND		0.500		ug/L			02/22/16 14:40	1
Chloroform	ND		0.500		ug/L			02/22/16 14:40	1
Chloromethane	ND		0.500		ug/L			02/22/16 14:40	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 14:40	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 14:40	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 14:40	1
Dibromomethane	ND		0.500		ug/L			02/22/16 14:40	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 14:40	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 14:40	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 14:40	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 14:40	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 14:40	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 14:40	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-02

Lab Sample ID: 580-57302-2

Date Collected: 02/16/16 11:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 14:40	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
o-Xylene	ND		0.500		ug/L			02/22/16 14:40	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 14:40	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
Styrene	ND		0.500		ug/L			02/22/16 14:40	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 14:40	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 14:40	1
Toluene	ND		0.500		ug/L			02/22/16 14:40	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 14:40	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 14:40	1
Trichloroethene	ND		0.500		ug/L			02/22/16 14:40	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128		02/22/16 14:40	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/22/16 14:40	1
Dibromofluoromethane (Surr)	93		85 - 115		02/22/16 14:40	1
Toluene-d8 (Surr)	106		75 - 125		02/22/16 14:40	1
Trifluorotoluene (Surr)	99		80 - 127		02/22/16 14:40	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.03		1.00		mg/L			03/08/16 16:26	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 16:23	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-03

Lab Sample ID: 580-57302-3

Date Collected: 02/16/16 11:00

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 15:07	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 15:07	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 15:07	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 15:07	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 15:07	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 15:07	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:07	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 15:07	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 15:07	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:07	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 15:07	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:07	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 15:07	1
2-Butanone	ND		20.0		ug/L			02/22/16 15:07	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 15:07	1
2-Hexanone	ND		20.0		ug/L			02/22/16 15:07	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 15:07	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 15:07	1
Acetone	ND		20.0		ug/L			02/22/16 15:07	1
Benzene	ND		0.500		ug/L			02/22/16 15:07	1
Bromobenzene	ND		2.00		ug/L			02/22/16 15:07	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 15:07	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 15:07	1
Bromoform	ND		0.500		ug/L			02/22/16 15:07	1
Bromomethane	ND		1.00		ug/L			02/22/16 15:07	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 15:07	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 15:07	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 15:07	1
Chloroethane	ND		0.500		ug/L			02/22/16 15:07	1
Chloroform	ND		0.500		ug/L			02/22/16 15:07	1
Chloromethane	ND		0.500		ug/L			02/22/16 15:07	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 15:07	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 15:07	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 15:07	1
Dibromomethane	ND		0.500		ug/L			02/22/16 15:07	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 15:07	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 15:07	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 15:07	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 15:07	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 15:07	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 15:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-03

Lab Sample ID: 580-57302-3

Date Collected: 02/16/16 11:00

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 15:07	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
o-Xylene	ND		0.500		ug/L			02/22/16 15:07	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 15:07	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
Styrene	ND		0.500		ug/L			02/22/16 15:07	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 15:07	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 15:07	1
Toluene	ND		0.500		ug/L			02/22/16 15:07	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 15:07	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 15:07	1
Trichloroethene	ND		0.500		ug/L			02/22/16 15:07	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 128		02/22/16 15:07	1
4-Bromofluorobenzene (Surr)	96		75 - 120		02/22/16 15:07	1
Dibromofluoromethane (Surr)	96		85 - 115		02/22/16 15:07	1
Toluene-d8 (Surr)	105		75 - 125		02/22/16 15:07	1
Trifluorotoluene (Surr)	97		80 - 127		02/22/16 15:07	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.03		1.00		mg/L			03/08/16 16:42	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 16:28	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	176		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-04

Lab Sample ID: 580-57302-4

Date Collected: 02/16/16 12:55

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 15:34	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 15:34	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 15:34	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 15:34	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 15:34	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 15:34	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:34	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 15:34	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 15:34	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:34	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 15:34	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 15:34	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 15:34	1
2-Butanone	ND		20.0		ug/L			02/22/16 15:34	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 15:34	1
2-Hexanone	ND		20.0		ug/L			02/22/16 15:34	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 15:34	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 15:34	1
Acetone	ND		20.0		ug/L			02/22/16 15:34	1
Benzene	ND		0.500		ug/L			02/22/16 15:34	1
Bromobenzene	ND		2.00		ug/L			02/22/16 15:34	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 15:34	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 15:34	1
Bromoform	ND		0.500		ug/L			02/22/16 15:34	1
Bromomethane	ND		1.00		ug/L			02/22/16 15:34	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 15:34	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 15:34	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 15:34	1
Chloroethane	ND		0.500		ug/L			02/22/16 15:34	1
Chloroform	ND		0.500		ug/L			02/22/16 15:34	1
Chloromethane	ND		0.500		ug/L			02/22/16 15:34	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 15:34	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 15:34	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 15:34	1
Dibromomethane	ND		0.500		ug/L			02/22/16 15:34	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 15:34	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 15:34	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 15:34	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 15:34	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 15:34	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 15:34	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-04

Lab Sample ID: 580-57302-4

Date Collected: 02/16/16 12:55

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 15:34	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
o-Xylene	ND		0.500		ug/L			02/22/16 15:34	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 15:34	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
Styrene	ND		0.500		ug/L			02/22/16 15:34	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 15:34	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 15:34	1
Toluene	ND		0.500		ug/L			02/22/16 15:34	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 15:34	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 15:34	1
Trichloroethene	ND		0.500		ug/L			02/22/16 15:34	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 128		02/22/16 15:34	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/22/16 15:34	1
Dibromofluoromethane (Surr)	95		85 - 115		02/22/16 15:34	1
Toluene-d8 (Surr)	105		75 - 125		02/22/16 15:34	1
Trifluorotoluene (Surr)	97		80 - 127		02/22/16 15:34	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.88		1.00		mg/L			03/08/16 16:58	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 16:32	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	176		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-05

Lab Sample ID: 580-57302-5

Date Collected: 02/16/16 12:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 16:01	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 16:01	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 16:01	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 16:01	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 16:01	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 16:01	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:01	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 16:01	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 16:01	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:01	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 16:01	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:01	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 16:01	1
2-Butanone	ND		20.0		ug/L			02/22/16 16:01	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 16:01	1
2-Hexanone	ND		20.0		ug/L			02/22/16 16:01	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 16:01	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 16:01	1
Acetone	ND		20.0		ug/L			02/22/16 16:01	1
Benzene	ND		0.500		ug/L			02/22/16 16:01	1
Bromobenzene	ND		2.00		ug/L			02/22/16 16:01	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 16:01	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 16:01	1
Bromoform	ND		0.500		ug/L			02/22/16 16:01	1
Bromomethane	ND		1.00		ug/L			02/22/16 16:01	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 16:01	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 16:01	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 16:01	1
Chloroethane	ND		0.500		ug/L			02/22/16 16:01	1
Chloroform	ND		0.500		ug/L			02/22/16 16:01	1
Chloromethane	ND		0.500		ug/L			02/22/16 16:01	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 16:01	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 16:01	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 16:01	1
Dibromomethane	ND		0.500		ug/L			02/22/16 16:01	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 16:01	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 16:01	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 16:01	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 16:01	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 16:01	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 16:01	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-05

Lab Sample ID: 580-57302-5

Date Collected: 02/16/16 12:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 16:01	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
o-Xylene	ND		0.500		ug/L			02/22/16 16:01	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 16:01	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
Styrene	ND		0.500		ug/L			02/22/16 16:01	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 16:01	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 16:01	1
Toluene	ND		0.500		ug/L			02/22/16 16:01	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 16:01	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 16:01	1
Trichloroethene	ND		0.500		ug/L			02/22/16 16:01	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128		02/22/16 16:01	1
4-Bromofluorobenzene (Surr)	95		75 - 120		02/22/16 16:01	1
Dibromofluoromethane (Surr)	96		85 - 115		02/22/16 16:01	1
Toluene-d8 (Surr)	107		75 - 125		02/22/16 16:01	1
Trifluorotoluene (Surr)	99		80 - 127		02/22/16 16:01	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.53		1.00		mg/L			03/08/16 17:14	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 16:37	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-06

Lab Sample ID: 580-57302-6

Date Collected: 02/16/16 14:00

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 16:27	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 16:27	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 16:27	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 16:27	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 16:27	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 16:27	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:27	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 16:27	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 16:27	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:27	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 16:27	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 16:27	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 16:27	1
2-Butanone	ND		20.0		ug/L			02/22/16 16:27	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 16:27	1
2-Hexanone	ND		20.0		ug/L			02/22/16 16:27	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 16:27	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 16:27	1
Acetone	ND		20.0		ug/L			02/22/16 16:27	1
Benzene	ND		0.500		ug/L			02/22/16 16:27	1
Bromobenzene	ND		2.00		ug/L			02/22/16 16:27	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 16:27	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 16:27	1
Bromoform	ND		0.500		ug/L			02/22/16 16:27	1
Bromomethane	ND		1.00		ug/L			02/22/16 16:27	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 16:27	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 16:27	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 16:27	1
Chloroethane	ND		0.500		ug/L			02/22/16 16:27	1
Chloroform	ND		0.500		ug/L			02/22/16 16:27	1
Chloromethane	ND		0.500		ug/L			02/22/16 16:27	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 16:27	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 16:27	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 16:27	1
Dibromomethane	ND		0.500		ug/L			02/22/16 16:27	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 16:27	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 16:27	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 16:27	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 16:27	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 16:27	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 16:27	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-06

Lab Sample ID: 580-57302-6

Date Collected: 02/16/16 14:00

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 16:27	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
o-Xylene	ND		0.500		ug/L			02/22/16 16:27	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 16:27	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
Styrene	ND		0.500		ug/L			02/22/16 16:27	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 16:27	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 16:27	1
Toluene	ND		0.500		ug/L			02/22/16 16:27	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 16:27	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 16:27	1
Trichloroethene	ND		0.500		ug/L			02/22/16 16:27	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 128		02/22/16 16:27	1
4-Bromofluorobenzene (Surr)	95		75 - 120		02/22/16 16:27	1
Dibromofluoromethane (Surr)	100		85 - 115		02/22/16 16:27	1
Toluene-d8 (Surr)	105		75 - 125		02/22/16 16:27	1
Trifluorotoluene (Surr)	96		80 - 127		02/22/16 16:27	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.32		1.00		mg/L			03/08/16 17:29	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 16:41	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	166		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-57302-7

Date Collected: 02/16/16 10:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 12:52	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 12:52	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/22/16 12:52	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 12:52	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 12:52	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 12:52	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 12:52	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 12:52	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 12:52	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 12:52	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 12:52	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 12:52	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 12:52	1
2-Butanone	ND		20.0		ug/L			02/22/16 12:52	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 12:52	1
2-Hexanone	ND		20.0		ug/L			02/22/16 12:52	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 12:52	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 12:52	1
Acetone	ND		20.0		ug/L			02/22/16 12:52	1
Benzene	ND		0.500		ug/L			02/22/16 12:52	1
Bromobenzene	ND		2.00		ug/L			02/22/16 12:52	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 12:52	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 12:52	1
Bromoform	ND		0.500		ug/L			02/22/16 12:52	1
Bromomethane	ND		1.00		ug/L			02/22/16 12:52	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 12:52	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 12:52	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 12:52	1
Chloroethane	ND		0.500		ug/L			02/22/16 12:52	1
Chloroform	ND		0.500		ug/L			02/22/16 12:52	1
Chloromethane	ND		0.500		ug/L			02/22/16 12:52	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 12:52	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/22/16 12:52	1
Dibromochloromethane	ND	*	0.500		ug/L			02/22/16 12:52	1
Dibromomethane	ND		0.500		ug/L			02/22/16 12:52	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 12:52	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 12:52	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 12:52	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 12:52	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 12:52	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 12:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-57302-7

Date Collected: 02/16/16 10:05

Matrix: Water

Date Received: 02/16/16 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/22/16 12:52	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
o-Xylene	ND		0.500		ug/L			02/22/16 12:52	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 12:52	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
Styrene	ND		0.500		ug/L			02/22/16 12:52	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 12:52	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 12:52	1
Toluene	ND		0.500		ug/L			02/22/16 12:52	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 12:52	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 12:52	1
Trichloroethene	ND		0.500		ug/L			02/22/16 12:52	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 128		02/22/16 12:52	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/22/16 12:52	1
Dibromofluoromethane (Surr)	93		85 - 115		02/22/16 12:52	1
Toluene-d8 (Surr)	106		75 - 125		02/22/16 12:52	1
Trifluorotoluene (Surr)	99		80 - 127		02/22/16 12:52	1

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: MB 580-211711/4

Matrix: Water

Analysis Batch: 211711

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,1-Dichloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,1-Dichloropropene	ND		0.500		ug/L			02/22/16 09:42	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/22/16 09:42	1
1,2,3-Trichloropropane	ND		0.500		ug/L			02/22/16 09:42	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/22/16 09:42	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/22/16 09:42	1
1,2-Dibromoethane	ND		2.00		ug/L			02/22/16 09:42	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/22/16 09:42	1
1,2-Dichloroethane	ND		0.500		ug/L			02/22/16 09:42	1
1,2-Dichloropropane	ND		0.500		ug/L			02/22/16 09:42	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/22/16 09:42	1
1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 09:42	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/22/16 09:42	1
2,2-Dichloropropane	ND		0.500		ug/L			02/22/16 09:42	1
2-Butanone	ND		20.0		ug/L			02/22/16 09:42	1
2-Chlorotoluene	ND		2.00		ug/L			02/22/16 09:42	1
2-Hexanone	ND		20.0		ug/L			02/22/16 09:42	1
4-Chlorotoluene	ND		2.00		ug/L			02/22/16 09:42	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/22/16 09:42	1
Acetone	ND		20.0		ug/L			02/22/16 09:42	1
Benzene	ND		0.500		ug/L			02/22/16 09:42	1
Bromobenzene	ND		2.00		ug/L			02/22/16 09:42	1
Bromochloromethane	ND		0.500		ug/L			02/22/16 09:42	1
Bromodichloromethane	ND		0.500		ug/L			02/22/16 09:42	1
Bromoform	ND		0.500		ug/L			02/22/16 09:42	1
Bromomethane	ND		1.00		ug/L			02/22/16 09:42	1
Carbon disulfide	ND		0.500		ug/L			02/22/16 09:42	1
Carbon tetrachloride	ND		0.500		ug/L			02/22/16 09:42	1
Chlorobenzene	ND		0.500		ug/L			02/22/16 09:42	1
Chloroethane	ND		0.500		ug/L			02/22/16 09:42	1
Chloroform	ND		0.500		ug/L			02/22/16 09:42	1
Chloromethane	ND		0.500		ug/L			02/22/16 09:42	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 09:42	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/22/16 09:42	1
Dibromochloromethane	ND		0.500		ug/L			02/22/16 09:42	1
Dibromomethane	ND		0.500		ug/L			02/22/16 09:42	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/22/16 09:42	1
Ethylbenzene	ND		0.500		ug/L			02/22/16 09:42	1
Hexachlorobutadiene	ND		2.00		ug/L			02/22/16 09:42	1
Isopropylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/22/16 09:42	1
Methylene Chloride	ND		2.00		ug/L			02/22/16 09:42	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: MB 580-211711/4
Matrix: Water
Analysis Batch: 211711

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.500		ug/L			02/22/16 09:42	1
Naphthalene	ND		2.00		ug/L			02/22/16 09:42	1
n-Butylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
N-Propylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
o-Xylene	ND		0.500		ug/L			02/22/16 09:42	1
p-Isopropyltoluene	ND		2.00		ug/L			02/22/16 09:42	1
sec-Butylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
Styrene	ND		0.500		ug/L			02/22/16 09:42	1
tert-Butylbenzene	ND		2.00		ug/L			02/22/16 09:42	1
Tetrachloroethene	ND		0.500		ug/L			02/22/16 09:42	1
Toluene	ND		0.500		ug/L			02/22/16 09:42	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/22/16 09:42	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/22/16 09:42	1
Trichloroethene	ND		0.500		ug/L			02/22/16 09:42	1
Trichlorofluoromethane	ND		0.500		ug/L			02/22/16 09:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 128		02/22/16 09:42	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/22/16 09:42	1
Dibromofluoromethane (Surr)	93		85 - 115		02/22/16 09:42	1
Toluene-d8 (Surr)	106		75 - 125		02/22/16 09:42	1
Trifluorotoluene (Surr)	97		80 - 127		02/22/16 09:42	1

Lab Sample ID: LCS 580-211711/5
Matrix: Water
Analysis Batch: 211711

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	5.02	5.402		ug/L		108	75 - 125
1,1,1-Trichloroethane	5.02	5.960		ug/L		119	80 - 140
1,1,2,2-Tetrachloroethane	5.01	5.162		ug/L		103	75 - 125
1,1,2-Trichloroethane	5.02	5.374		ug/L		107	80 - 130
1,1-Dichloroethane	5.00	5.085		ug/L		102	75 - 135
1,1-Dichloropropene	5.00	5.855		ug/L		117	80 - 130
1,2,3-Trichlorobenzene	5.01	5.223		ug/L		104	60 - 125
1,2,3-Trichloropropane	5.01	6.185 *		ug/L		124	75 - 120
1,2,4-Trichlorobenzene	5.00	5.224		ug/L		104	60 - 125
1,2,4-Trimethylbenzene	5.00	5.556		ug/L		111	80 - 125
1,2-Dibromo-3-Chloropropane	5.01	5.649		ug/L		113	55 - 120
1,2-Dibromoethane	5.01	5.538		ug/L		111	70 - 130
1,2-Dichlorobenzene	5.00	4.808		ug/L		96	80 - 130
1,2-Dichloroethane	5.00	6.229		ug/L		124	80 - 140
1,2-Dichloropropane	5.00	4.705		ug/L		94	80 - 120
1,3,5-Trimethylbenzene	5.01	5.592		ug/L		112	80 - 125
1,3-Dichlorobenzene	5.01	4.731		ug/L		94	80 - 120
1,3-Dichloropropane	5.01	5.330		ug/L		106	80 - 130
1,4-Dichlorobenzene	5.01	4.656		ug/L		93	80 - 120
2,2-Dichloropropane	5.00	5.729		ug/L		115	60 - 150

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: LCS 580-211711/5

Matrix: Water

Analysis Batch: 211711

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone	20.0	19.45	J	ug/L		97	20 - 200
2-Chlorotoluene	5.00	5.221		ug/L		104	75 - 130
2-Hexanone	20.0	26.16		ug/L		131	52 - 160
4-Chlorotoluene	5.01	5.196		ug/L		104	75 - 130
4-Methyl-2-pentanone	20.0	24.58		ug/L		123	55 - 135
Acetone	20.0	14.34	J	ug/L		72	30 - 200
Benzene	5.02	4.621		ug/L		92	80 - 120
Bromobenzene	5.00	5.047		ug/L		101	80 - 130
Bromochloromethane	5.01	5.137		ug/L		103	80 - 125
Bromodichloromethane	5.02	5.754		ug/L		115	80 - 125
Bromoform	5.02	5.108		ug/L		102	65 - 130
Bromomethane	5.01	4.567		ug/L		91	70 - 135
Carbon disulfide	5.02	4.812		ug/L		96	65 - 160
Carbon tetrachloride	5.01	6.028		ug/L		120	75 - 140
Chlorobenzene	5.02	4.656		ug/L		93	80 - 120
Chloroethane	5.02	4.282		ug/L		85	75 - 140
Chloroform	5.00	5.192		ug/L		104	80 - 130
Chloromethane	5.02	6.249		ug/L		124	50 - 140
cis-1,2-Dichloroethene	5.01	4.715		ug/L		94	80 - 130
cis-1,3-Dichloropropene	5.01	5.986		ug/L		119	70 - 120
Dibromochloromethane	5.01	6.320	*	ug/L		126	70 - 120
Dibromomethane	5.02	5.279		ug/L		105	80 - 130
Dichlorodifluoromethane	5.01	4.191		ug/L		84	30 - 180
Ethylbenzene	5.02	5.239		ug/L		104	80 - 125
Hexachlorobutadiene	5.00	5.972		ug/L		119	75 - 135
Isopropylbenzene	5.01	5.365		ug/L		107	75 - 120
Methyl tert-butyl ether	5.01	5.653		ug/L		113	75 - 120
Methylene Chloride	5.02	4.459		ug/L		89	60 - 145
m-Xylene & p-Xylene	5.01	5.450		ug/L		109	80 - 130
Naphthalene	5.01	5.826		ug/L		116	45 - 130
n-Butylbenzene	5.01	4.883		ug/L		98	75 - 125
N-Propylbenzene	5.00	5.569		ug/L		111	80 - 120
o-Xylene	5.01	5.561		ug/L		111	80 - 120
p-Isopropyltoluene	5.00	5.162		ug/L		103	80 - 120
sec-Butylbenzene	5.01	5.402		ug/L		108	80 - 125
Styrene	5.01	5.326		ug/L		106	75 - 130
tert-Butylbenzene	5.00	5.787		ug/L		116	80 - 130
Tetrachloroethene	5.01	4.859		ug/L		97	40 - 180
Toluene	5.00	4.994		ug/L		100	80 - 120
trans-1,2-Dichloroethene	5.01	4.848		ug/L		97	80 - 140
trans-1,3-Dichloropropene	5.00	6.103		ug/L		122	60 - 140
Trichloroethene	5.01	4.724		ug/L		94	80 - 130
Trichlorofluoromethane	5.00	5.039		ug/L		101	30 - 180

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 128
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	96		85 - 115

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: LCS 580-211711/5
Matrix: Water
Analysis Batch: 211711

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		75 - 125
Trifluorotoluene (Surr)	96		80 - 127

Lab Sample ID: LCSD 580-211711/6
Matrix: Water
Analysis Batch: 211711

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	5.02	5.555		ug/L		111	75 - 125	3	20
1,1,1-Trichloroethane	5.02	5.830		ug/L		116	80 - 140	2	20
1,1,2,2-Tetrachloroethane	5.01	5.026		ug/L		100	75 - 125	3	20
1,1,2-Trichloroethane	5.02	5.399		ug/L		108	80 - 130	0	20
1,1-Dichloroethane	5.00	5.107		ug/L		102	75 - 135	0	20
1,1-Dichloropropene	5.00	5.600		ug/L		112	80 - 130	4	20
1,2,3-Trichlorobenzene	5.01	5.343		ug/L		107	60 - 125	2	20
1,2,3-Trichloropropane	5.01	6.049	*	ug/L		121	75 - 120	2	20
1,2,4-Trichlorobenzene	5.00	5.277		ug/L		105	60 - 125	1	20
1,2,4-Trimethylbenzene	5.00	5.604		ug/L		112	80 - 125	1	20
1,2-Dibromo-3-Chloropropane	5.01	5.713		ug/L		114	55 - 120	1	20
1,2-Dibromoethane	5.01	5.628		ug/L		112	70 - 130	2	20
1,2-Dichlorobenzene	5.00	4.848		ug/L		97	80 - 130	1	20
1,2-Dichloroethane	5.00	5.915		ug/L		118	80 - 140	5	20
1,2-Dichloropropane	5.00	4.684		ug/L		94	80 - 120	0	20
1,3,5-Trimethylbenzene	5.01	5.657		ug/L		113	80 - 125	1	20
1,3-Dichlorobenzene	5.01	4.844		ug/L		97	80 - 120	2	20
1,3-Dichloropropane	5.01	5.307		ug/L		106	80 - 130	0	20
1,4-Dichlorobenzene	5.01	4.689		ug/L		94	80 - 120	1	20
2,2-Dichloropropane	5.00	5.546		ug/L		111	60 - 150	3	20
2-Butanone	20.0	19.88	J	ug/L		99	20 - 200	2	20
2-Chlorotoluene	5.00	5.134		ug/L		103	75 - 130	2	20
2-Hexanone	20.0	27.81		ug/L		139	52 - 160	6	20
4-Chlorotoluene	5.01	5.313		ug/L		106	75 - 130	2	20
4-Methyl-2-pentanone	20.0	25.94		ug/L		130	55 - 135	5	20
Acetone	20.0	13.51	J	ug/L		68	30 - 200	6	20
Benzene	5.02	4.610		ug/L		92	80 - 120	0	20
Bromobenzene	5.00	5.036		ug/L		101	80 - 130	0	20
Bromochloromethane	5.01	5.023		ug/L		100	80 - 125	2	20
Bromodichloromethane	5.02	5.650		ug/L		113	80 - 125	2	20
Bromoform	5.02	5.213		ug/L		104	65 - 130	2	20
Bromomethane	5.01	5.055		ug/L		101	70 - 135	10	20
Carbon disulfide	5.02	4.712		ug/L		94	65 - 160	2	20
Carbon tetrachloride	5.01	5.773		ug/L		115	75 - 140	4	20
Chlorobenzene	5.02	4.790		ug/L		95	80 - 120	3	20
Chloroethane	5.02	4.477		ug/L		89	75 - 140	4	20
Chloroform	5.00	5.078		ug/L		102	80 - 130	2	20
Chloromethane	5.02	6.729		ug/L		134	50 - 140	7	20
cis-1,2-Dichloroethene	5.01	4.760		ug/L		95	80 - 130	1	20
cis-1,3-Dichloropropene	5.01	6.245	*	ug/L		125	70 - 120	4	20

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: LCSD 580-211711/6
Matrix: Water
Analysis Batch: 211711

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
Dibromochloromethane	5.01	6.342	*	ug/L		127	70 - 120	0	20
Dibromomethane	5.02	5.222		ug/L		104	80 - 130	1	20
Dichlorodifluoromethane	5.01	4.554		ug/L		91	30 - 180	8	20
Ethylbenzene	5.02	5.248		ug/L		105	80 - 125	0	20
Hexachlorobutadiene	5.00	5.824		ug/L		116	75 - 135	3	20
Isopropylbenzene	5.01	5.366		ug/L		107	75 - 120	0	20
Methyl tert-butyl ether	5.01	5.637		ug/L		113	75 - 120	0	20
Methylene Chloride	5.02	4.802		ug/L		96	60 - 145	7	20
m-Xylene & p-Xylene	5.01	5.577		ug/L		111	80 - 130	2	20
Naphthalene	5.01	5.981		ug/L		119	45 - 130	3	20
n-Butylbenzene	5.01	5.043		ug/L		101	75 - 125	3	20
N-Propylbenzene	5.00	5.464		ug/L		109	80 - 120	2	20
o-Xylene	5.01	5.565		ug/L		111	80 - 120	0	20
p-Isopropyltoluene	5.00	4.982		ug/L		100	80 - 120	4	20
sec-Butylbenzene	5.01	5.425		ug/L		108	80 - 125	0	20
Styrene	5.01	5.517		ug/L		110	75 - 130	4	20
tert-Butylbenzene	5.00	5.714		ug/L		114	80 - 130	1	20
Tetrachloroethene	5.01	4.926		ug/L		98	40 - 180	1	20
Toluene	5.00	5.122		ug/L		102	80 - 120	3	20
trans-1,2-Dichloroethene	5.01	4.786		ug/L		96	80 - 140	1	20
trans-1,3-Dichloropropene	5.00	6.260		ug/L		125	60 - 140	3	20
Trichloroethene	5.01	4.853		ug/L		97	80 - 130	3	20
Trichlorofluoromethane	5.00	5.467		ug/L		109	30 - 180	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 128
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115
Toluene-d8 (Surr)	105		75 - 125
Trifluorotoluene (Surr)	94		80 - 127

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-239571/9
Matrix: Water
Analysis Batch: 239571

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.200		mg/L			03/08/16 15:06	1

Lab Sample ID: LCS 160-239571/10
Matrix: Water
Analysis Batch: 239571

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.916		mg/L		96	90 - 110

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 580-57302-1 MS
Matrix: Water
Analysis Batch: 239571

Client Sample ID: LB-021616-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	5.99		10.0	16.14		mg/L		102	90 - 110

Lab Sample ID: 580-57302-1 DU
Matrix: Water
Analysis Batch: 239571

Client Sample ID: LB-021616-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	5.99		6.051		mg/L		1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-211657/21-A
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 211657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 14:39	02/22/16 15:23	1
Manganese	ND		0.00200		mg/L		02/19/16 14:39	02/22/16 15:23	1

Lab Sample ID: LCS 580-211657/22-A
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 211657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	22.0	23.29		mg/L		106	80 - 120
Manganese	1.00	1.028		mg/L		103	80 - 120

Lab Sample ID: LCSD 580-211657/23-A
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 211657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	22.0	23.49		mg/L		107	80 - 120	1	20
Manganese	1.00	1.038		mg/L		104	80 - 120	1	20

Lab Sample ID: 580-57236-A-1-C MS
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 211657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.346		22.0	23.91		mg/L		107	80 - 120
Manganese	0.0228		1.00	1.086		mg/L		106	80 - 120

Lab Sample ID: 580-57236-A-1-D MSD
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 211657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.346		22.0	24.58		mg/L		110	80 - 120	3	20

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57302-1

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

Lab Sample ID: 580-57236-A-1-D MSD
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 211657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	0.0228		1.00	1.104		mg/L		108	80 - 120	2	20

Lab Sample ID: 580-57236-A-1-B DU
Matrix: Water
Analysis Batch: 211778

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 211657

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	0.346		0.3424		mg/L		1	20
Manganese	0.0228		0.02191		mg/L		4	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-211600/1
Matrix: Water
Analysis Batch: 211600

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		10.0		mg/L			02/18/16 18:48	1

Lab Sample ID: LCS 580-211600/2
Matrix: Water
Analysis Batch: 211600

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	1000	964.0		mg/L		96	80 - 120

Lab Sample ID: 580-57302-1 DU
Matrix: Water
Analysis Batch: 211600

Client Sample ID: LB-021616-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	179		189.0		mg/L		5	20

Lab Chronicle

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-01

Lab Sample ID: 580-57302-1

Date Collected: 02/16/16 10:05

Matrix: Water

Date Received: 02/16/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 14:13	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 15:38	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:18	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021616-02

Lab Sample ID: 580-57302-2

Date Collected: 02/16/16 11:05

Matrix: Water

Date Received: 02/16/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 14:40	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 16:26	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:23	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021616-03

Lab Sample ID: 580-57302-3

Date Collected: 02/16/16 11:00

Matrix: Water

Date Received: 02/16/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 15:07	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 16:42	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:28	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021616-04

Lab Sample ID: 580-57302-4

Date Collected: 02/16/16 12:55

Matrix: Water

Date Received: 02/16/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 15:34	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 16:58	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:32	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-57302-1

Client Sample ID: LB-021616-05

Date Collected: 02/16/16 12:05

Date Received: 02/16/16 15:30

Lab Sample ID: 580-57302-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 16:01	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 17:14	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:37	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021616-06

Date Collected: 02/16/16 14:00

Date Received: 02/16/16 15:30

Lab Sample ID: 580-57302-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 16:27	TL1	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 17:29	JCB	TAL SL
Dissolved	Prep	3005A			211657	02/19/16 14:39	MKN	TAL SEA
Dissolved	Analysis	6020		1	211778	02/22/16 16:41	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: Trip Blanks

Date Collected: 02/16/16 10:05

Date Received: 02/16/16 15:30

Lab Sample ID: 580-57302-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211711	02/22/16 12:52	TL1	TAL SEA

Laboratory References:

Pixis Labo = Pixis Laboratories, LLC, 12423 NE Whitaker Way, Portland, OR 97230, TEL (503)254-1794

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

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Certification Summary

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

TestAmerica Job ID: 580-57302-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-16
California	ELAP	9	2886	03-31-16 *
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	05-31-16
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-10-16 *
Louisiana	NELAP	6	04080	06-30-16
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16
Nevada	State Program	9	MO000542016-1	07-31-16
New Jersey	NELAP	2	MO002	06-30-16
New York	NELAP	2	11616	03-31-16 *
North Dakota	State Program	8	R207	06-30-16
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-16
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16
Texas	NELAP	6	T104704193-15-9	07-31-16
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.

Sample Summary

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

TestAmerica Job ID: 580-57302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-57302-1	LB-021616-01	Water	02/16/16 10:05	02/16/16 15:30
580-57302-2	LB-021616-02	Water	02/16/16 11:05	02/16/16 15:30
580-57302-3	LB-021616-03	Water	02/16/16 11:00	02/16/16 15:30
580-57302-4	LB-021616-04	Water	02/16/16 12:55	02/16/16 15:30
580-57302-5	LB-021616-05	Water	02/16/16 12:05	02/16/16 15:30
580-57302-6	LB-021616-06	Water	02/16/16 14:00	02/16/16 15:30
580-57302-7	Trip Blanks	Water	02/16/16 10:05	02/16/16 15:30

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PIXIS Labs

Accurate. Reliable. On Time.
Pixis Labs

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Job Number: 6021710
Report Date: 02/19/2016
ORELAP #: OR100028
Project Name: 580-57302
Project No: Leichner Landfill

Cover Letter

Kelsey DeVries
Test America Portland
9405 SW Nimbus Ave.
BEAVERTON, OR 97008

Dear Kelsey DeVries,

Enclosed please find Pixis Labs analytical report for samples received as order number 6021710 on 02/17/2016. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Pixis quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be kept a maximum of 15 days from the report date unless prior arrangements have been made.

Thank you for allowing Pixis to be of service to you, we appreciate your business.

Sincerely,

Signed
Richard Reid
Project Manager

Sample Results

Sample: LB-021616-01 (580-57302-1)		Collected: 02/16/16 10:05		Temp: 4 C		Matrix: General Water		
Lab ID: 101248		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	ND	mg/L	0.100	2	27335-5		02/17/16 16:03	
Sample: LB-021616-02 (580-57302-2)		Collected: 02/16/16 11:05		Temp: 4 C		Matrix: General Water		
Lab ID: 101249		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	5.23	mg/L	0.100	2	27335-6		02/17/16 16:35	
Sample: LB-021616-03 (580-57302-3)		Collected: 02/16/16 11:00		Temp: 4 C		Matrix: General Water		
Lab ID: 101250		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	5.06	mg/L	0.100	2	27335-7		02/17/16 17:08	
Sample: LB-021616-04 (580-57302-4)		Collected: 02/17/16		Temp: 4 C		Matrix: General Water		
Lab ID: 101251		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	5.76	mg/L	0.100	2	27335-8		02/17/16 17:41	
Sample: LB-021616-05 (580-57302-5)		Collected: 02/16/16 12:05		Temp: 4 C		Matrix: General Water		
Lab ID: 101252		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	4.27	mg/L	0.100	2	27335-9		02/17/16 18:13	
Sample: LB-021616-06 (580-57302-6)		Collected: 02/16/16 14:00		Temp: 4 C		Matrix: General Water		
Lab ID: 101253		Received: 02/17/16 11:30		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	4.81	mg/L	0.100	2	27335-10		02/17/16 18:46	

Laboratory Quality Control Results

EPA 300.0

QC - Initial Calibration Verif. -

Batch ID: 27335-1

Analyte	Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.513	0.500	mg/L	103 %	90-110	---	---	

QC - Continuing Calibration Verif. - A

Batch ID: 27335-14

Analyte	Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.237	0.226	mg/L	105 %	90-110	---	---	

QC - Initial Calibration Blank -

Batch ID: 27335-2

Analyte	Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	ND		mg/L	---	---	---	---	

QC - Matrix Spike Duplicate - of Sample 27335 - 11

Batch ID: 27335-13

Analyte	Result	Org.Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	7.55	7.06	0.500	mg/L	98 %	80-120	0	20	

Abbreviations

MRL	Method Reporting Limit
ND	None Detected at or above the MRL
RPD	Relative Percent Difference

Units of Measure:

mg/L	Milligrams Per Liter
------	----------------------





Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler: Lab Pk: Murphy, Sarah A		Carrier Tracking No(s):		COC No: 580-35941.1	
Client Contact: Shipping/Receiving		Phone: E-Mail: sarah.murphy@testamericainc.com		Page: Page 1 of 1		Job #: 580-57302-1	
Company: Pixis Laboratories, LLC		Analysis Requested					
Address: 12423 NE Whitaker Way,		Due Date Requested: 2/26/2016		Preservation Codes:			
City: Portland		TAT Requested (days):		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)			
PO #: 503-254-1794(Tel)		Project #: 58008309		Other:			
WO #: 58008309		SSOW#:		Special Instructions/Note:			
Project Name: Leichter Landfill - Wash.		Site:		6021710			
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Whichever, Smallest, Or Smallest)	Field Filtered Sample (Yes or No)	Sub (300.0 Nitrogen, Nitrate-Pixis Analytical) / 300.0 Nitrogen, Nitrate-Pixis Analytical	Special Instructions/Note
LB-021616-01 (580-57302-1)	2/16/16	10:05 Pacific	Water	Water	X		
LB-021616-02 (580-57302-2)	2/16/16	11:05 Pacific	Water	Water	X		
LB-021616-03 (580-57302-3)	2/16/16	11:00 Pacific	Water	Water	X		
LB-021616-04 (580-57302-4)	2/16/16	12:55 Pacific	Water	Water	X		
LB-021616-05 (580-57302-5)	2/16/16	12:05 Pacific	Water	Water	X		
LB-021616-06 (580-57302-6)	2/16/16	14:00 Pacific	Water	Water	X		
Possible Hazard Identification							
Unconfirmed							
Deliverable Requested: I, II, III, IV, Other (specify)							
Empty Kit Relinquished by:							
Relinquished by: <i>[Signature]</i>		Date: 2/17/16 10:20		Company: M.E.		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date: 2/17/16 11:30		Company: P.A.S		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Relinquished by: <i>[Signature]</i>		Date: 2/17/16 11:35		Company: M.E.		Special Instructions/QC Requirements:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Received by: <i>[Signature]</i> Date: 2/17/16 10:20 Company: M.E.	

3/9/16



TestAmerica Seattle
 5755 8th Street East
 Tacoma, WA 98424
 Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



estAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

580-57302 Chain of Custody

Client Information
 Client Contact: Mr. Brian McMullen
 Company: SCS Engineers
 Address: 14945 SW Sequoia Parkway Suite 180
 City: Portland
 State, Zip: OR, 97224
 Phone: 503-639-9548(Tel)
 Email: bmcullen@scsengineers.com
 Project Name: Leichter Landfill - Wash.
 Site:

Lab File: Murphy, Sarah A
 E-mail: sarah.murphy@testamericainc.com
 Due Date Requested:
 TAT Requested (days):
 PO #: PSO# 1426298
 WO#:
 Project #: 58008309
 SSO#:
 Field Filtered Sample (Year or No):

JC No: 80-18345-5565.3
 Page 1 of 1
 Job #:
 Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2OAS
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - ph 4-5
 Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=organics)	Field Filtered Sample (Year or No)		300.0 28D, 300.48HR		6020A - (MOD) 6020, Dissolved Fe and Mn Field F		8260B LL - (MOD) Local Method		160.1 Calcd - Total Dissolved Solids		Total Number of Containers	Special Instructions/Note:
					N	D	N	D	N	D	N	D	N	D		
LB-021616-01	2/16/16	1005	G	Water	X		X		X		X		X		7	
LR-021616-02	2/16/16	1105	G	Water	X		X		X		X		X		7	
LB-021616-03	2/16/16	1100	G	Water	X		X		X		X		X		7	
LB-021616-04	2/16/16	1355	G	Water	X		X		X		X		X		7	
LB-021616-05	2/16/16	1205	G	Water	X		X		X		X		X		7	
LB-021616-06	2/16/16	1400	G	Water	X		X		X		X		X		7	
Trip Blanks	2/16/16	1005	-	Water	X		X		X		X		X		3	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: Brian McMullen Date: 2/16/16 1530 Company: SCS
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____
 Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks: 8.7 RR-1



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57302-1

Login Number: 57302

List Source: TestAmerica Seattle

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57302-1

Login Number: 57302

List Number: 2

Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

List Creation: 03/03/16 03:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	3.7
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
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 Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-57335-1

Client Project/Site: Leichner Landfill - Wash.

For:

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

Attn: Mr. Jason Davendonis



Authorized for release by:
3/9/2016 4:30:45 PM

Sarah Murphy, Project Manager I
(253)922-2310
sarah.murphy@testamericainc.com

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www.testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 580-57335-1

Job ID: 580-57335-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 2/17/2016 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 3.5° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-211854 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane, cis-1,3-Dichloropropene and 4-Methyl-2-pentanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following analyte(s) recovered outside control limits for the LCSD associated with analytical batch 580-211854: Bromomethane. This is not indicative of a systematic control problem as this qualifies as a random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) 300.0: The following samples in Anion batch 160-239571 were diluted to bring the concentrations of target analytes within the calibration range: LB-021716-08 (580-57335-2), LB-021716-09 (580-57335-3), LB-021716-10 (580-57335-4), LB-021716-11 (580-57335-5) and LB-021716-14 (580-57335-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Method 300.0 Nitrogen, Nitrate: This method was subcontracted to Pixis Laboratories, LLC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Definitions/Glossary

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

TestAmerica Job ID: 580-57335-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-07

Lab Sample ID: 580-57335-1

Date Collected: 02/17/16 08:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 16:11	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 16:11	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 16:11	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 16:11	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 16:11	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 16:11	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:11	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 16:11	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 16:11	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:11	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 16:11	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:11	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 16:11	1
2-Butanone	ND		20.0		ug/L			02/24/16 16:11	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 16:11	1
2-Hexanone	ND		20.0		ug/L			02/24/16 16:11	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 16:11	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 16:11	1
Acetone	ND		20.0		ug/L			02/24/16 16:11	1
Benzene	ND		0.500		ug/L			02/24/16 16:11	1
Bromobenzene	ND		2.00		ug/L			02/24/16 16:11	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 16:11	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 16:11	1
Bromoform	ND		0.500		ug/L			02/24/16 16:11	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 16:11	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 16:11	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 16:11	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 16:11	1
Chloroethane	ND		0.500		ug/L			02/24/16 16:11	1
Chloroform	ND		0.500		ug/L			02/24/16 16:11	1
Chloromethane	ND		0.500		ug/L			02/24/16 16:11	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 16:11	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 16:11	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 16:11	1
Dibromomethane	ND		0.500		ug/L			02/24/16 16:11	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 16:11	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 16:11	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 16:11	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 16:11	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 16:11	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 16:11	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-07

Lab Sample ID: 580-57335-1

Date Collected: 02/17/16 08:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 16:11	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
o-Xylene	ND		0.500		ug/L			02/24/16 16:11	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 16:11	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
Styrene	ND		0.500		ug/L			02/24/16 16:11	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 16:11	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 16:11	1
Toluene	ND		0.500		ug/L			02/24/16 16:11	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 16:11	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 16:11	1
Trichloroethene	ND		0.500		ug/L			02/24/16 16:11	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 128		02/24/16 16:11	1
4-Bromofluorobenzene (Surr)	91		75 - 120		02/24/16 16:11	1
Dibromofluoromethane (Surr)	95		85 - 115		02/24/16 16:11	1
Toluene-d8 (Surr)	104		75 - 125		02/24/16 16:11	1
Trifluorotoluene (Surr)	100		80 - 127		02/24/16 16:11	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.200		mg/L			03/08/16 18:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 11:22	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-08

Lab Sample ID: 580-57335-2

Date Collected: 02/17/16 09:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 16:38	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 16:38	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 16:38	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 16:38	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 16:38	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 16:38	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:38	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 16:38	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 16:38	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:38	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 16:38	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 16:38	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 16:38	1
2-Butanone	ND		20.0		ug/L			02/24/16 16:38	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 16:38	1
2-Hexanone	ND		20.0		ug/L			02/24/16 16:38	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 16:38	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 16:38	1
Acetone	ND		20.0		ug/L			02/24/16 16:38	1
Benzene	ND		0.500		ug/L			02/24/16 16:38	1
Bromobenzene	ND		2.00		ug/L			02/24/16 16:38	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 16:38	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 16:38	1
Bromoform	ND		0.500		ug/L			02/24/16 16:38	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 16:38	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 16:38	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 16:38	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 16:38	1
Chloroethane	ND		0.500		ug/L			02/24/16 16:38	1
Chloroform	ND		0.500		ug/L			02/24/16 16:38	1
Chloromethane	ND		0.500		ug/L			02/24/16 16:38	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 16:38	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 16:38	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 16:38	1
Dibromomethane	ND		0.500		ug/L			02/24/16 16:38	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 16:38	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 16:38	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 16:38	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 16:38	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 16:38	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 16:38	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-08

Lab Sample ID: 580-57335-2

Date Collected: 02/17/16 09:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 16:38	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
o-Xylene	ND		0.500		ug/L			02/24/16 16:38	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 16:38	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
Styrene	ND		0.500		ug/L			02/24/16 16:38	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 16:38	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 16:38	1
Toluene	ND		0.500		ug/L			02/24/16 16:38	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 16:38	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 16:38	1
Trichloroethene	ND		0.500		ug/L			02/24/16 16:38	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 128		02/24/16 16:38	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/24/16 16:38	1
Dibromofluoromethane (Surr)	95		85 - 115		02/24/16 16:38	1
Toluene-d8 (Surr)	104		75 - 125		02/24/16 16:38	1
Trifluorotoluene (Surr)	99		80 - 127		02/24/16 16:38	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.13		1.00		mg/L			03/08/16 18:33	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 11:58	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	183		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-09

Lab Sample ID: 580-57335-3

Date Collected: 02/17/16 10:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 17:06	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 17:06	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 17:06	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 17:06	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 17:06	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 17:06	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:06	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 17:06	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 17:06	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:06	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 17:06	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:06	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 17:06	1
2-Butanone	ND		20.0		ug/L			02/24/16 17:06	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 17:06	1
2-Hexanone	ND		20.0		ug/L			02/24/16 17:06	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 17:06	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 17:06	1
Acetone	ND		20.0		ug/L			02/24/16 17:06	1
Benzene	ND		0.500		ug/L			02/24/16 17:06	1
Bromobenzene	ND		2.00		ug/L			02/24/16 17:06	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 17:06	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 17:06	1
Bromoform	ND		0.500		ug/L			02/24/16 17:06	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 17:06	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 17:06	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 17:06	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 17:06	1
Chloroethane	ND		0.500		ug/L			02/24/16 17:06	1
Chloroform	ND		0.500		ug/L			02/24/16 17:06	1
Chloromethane	ND		0.500		ug/L			02/24/16 17:06	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 17:06	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 17:06	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 17:06	1
Dibromomethane	ND		0.500		ug/L			02/24/16 17:06	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 17:06	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 17:06	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 17:06	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 17:06	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 17:06	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 17:06	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-09

Lab Sample ID: 580-57335-3

Date Collected: 02/17/16 10:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 17:06	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
o-Xylene	ND		0.500		ug/L			02/24/16 17:06	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 17:06	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
Styrene	ND		0.500		ug/L			02/24/16 17:06	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 17:06	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 17:06	1
Toluene	ND		0.500		ug/L			02/24/16 17:06	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 17:06	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 17:06	1
Trichloroethene	ND		0.500		ug/L			02/24/16 17:06	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 128		02/24/16 17:06	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/24/16 17:06	1
Dibromofluoromethane (Surr)	96		85 - 115		02/24/16 17:06	1
Toluene-d8 (Surr)	102		75 - 125		02/24/16 17:06	1
Trifluorotoluene (Surr)	97		80 - 127		02/24/16 17:06	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.2		2.00		mg/L			03/08/16 18:49	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 12:03	1
Manganese	0.00217		0.00200		mg/L		02/19/16 17:31	02/22/16 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	258		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-10

Lab Sample ID: 580-57335-4

Date Collected: 02/17/16 10:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 17:33	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 17:33	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 17:33	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 17:33	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 17:33	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 17:33	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:33	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 17:33	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 17:33	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:33	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 17:33	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 17:33	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 17:33	1
2-Butanone	ND		20.0		ug/L			02/24/16 17:33	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 17:33	1
2-Hexanone	ND		20.0		ug/L			02/24/16 17:33	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 17:33	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 17:33	1
Acetone	ND		20.0		ug/L			02/24/16 17:33	1
Benzene	ND		0.500		ug/L			02/24/16 17:33	1
Bromobenzene	ND		2.00		ug/L			02/24/16 17:33	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 17:33	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 17:33	1
Bromoform	ND		0.500		ug/L			02/24/16 17:33	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 17:33	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 17:33	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 17:33	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 17:33	1
Chloroethane	ND		0.500		ug/L			02/24/16 17:33	1
Chloroform	ND		0.500		ug/L			02/24/16 17:33	1
Chloromethane	ND		0.500		ug/L			02/24/16 17:33	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 17:33	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 17:33	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 17:33	1
Dibromomethane	ND		0.500		ug/L			02/24/16 17:33	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 17:33	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 17:33	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 17:33	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 17:33	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 17:33	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 17:33	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-10

Lab Sample ID: 580-57335-4

Date Collected: 02/17/16 10:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 17:33	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
o-Xylene	ND		0.500		ug/L			02/24/16 17:33	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 17:33	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
Styrene	ND		0.500		ug/L			02/24/16 17:33	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 17:33	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 17:33	1
Toluene	ND		0.500		ug/L			02/24/16 17:33	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 17:33	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 17:33	1
Trichloroethene	ND		0.500		ug/L			02/24/16 17:33	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 128		02/24/16 17:33	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/24/16 17:33	1
Dibromofluoromethane (Surr)	95		85 - 115		02/24/16 17:33	1
Toluene-d8 (Surr)	103		75 - 125		02/24/16 17:33	1
Trifluorotoluene (Surr)	98		80 - 127		02/24/16 17:33	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.1		2.00		mg/L			03/08/16 19:05	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 12:07	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	264		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-11

Lab Sample ID: 580-57335-5

Date Collected: 02/17/16 11:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 18:00	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:00	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 18:00	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:00	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 18:00	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 18:00	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:00	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 18:00	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:00	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:00	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 18:00	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:00	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:00	1
2-Butanone	ND		20.0		ug/L			02/24/16 18:00	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:00	1
2-Hexanone	ND		20.0		ug/L			02/24/16 18:00	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:00	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 18:00	1
Acetone	ND		20.0		ug/L			02/24/16 18:00	1
Benzene	ND		0.500		ug/L			02/24/16 18:00	1
Bromobenzene	ND		2.00		ug/L			02/24/16 18:00	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 18:00	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 18:00	1
Bromoform	ND		0.500		ug/L			02/24/16 18:00	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 18:00	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 18:00	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 18:00	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 18:00	1
Chloroethane	ND		0.500		ug/L			02/24/16 18:00	1
Chloroform	ND		0.500		ug/L			02/24/16 18:00	1
Chloromethane	ND		0.500		ug/L			02/24/16 18:00	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:00	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 18:00	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 18:00	1
Dibromomethane	ND		0.500		ug/L			02/24/16 18:00	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 18:00	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 18:00	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 18:00	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 18:00	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 18:00	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 18:00	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-11

Lab Sample ID: 580-57335-5

Date Collected: 02/17/16 11:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 18:00	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
o-Xylene	ND		0.500		ug/L			02/24/16 18:00	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 18:00	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
Styrene	ND		0.500		ug/L			02/24/16 18:00	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 18:00	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 18:00	1
Toluene	ND		0.500		ug/L			02/24/16 18:00	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:00	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 18:00	1
Trichloroethene	ND		0.500		ug/L			02/24/16 18:00	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 128		02/24/16 18:00	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/24/16 18:00	1
Dibromofluoromethane (Surr)	94		85 - 115		02/24/16 18:00	1
Toluene-d8 (Surr)	103		75 - 125		02/24/16 18:00	1
Trifluorotoluene (Surr)	97		80 - 127		02/24/16 18:00	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.4		2.00		mg/L			03/08/16 19:21	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 12:12	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 12:12	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	260		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-12

Lab Sample ID: 580-57335-6

Date Collected: 02/17/16 12:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 18:27	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:27	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 18:27	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:27	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 18:27	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 18:27	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:27	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 18:27	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:27	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:27	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 18:27	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:27	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:27	1
2-Butanone	ND		20.0		ug/L			02/24/16 18:27	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:27	1
2-Hexanone	ND		20.0		ug/L			02/24/16 18:27	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:27	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 18:27	1
Acetone	ND		20.0		ug/L			02/24/16 18:27	1
Benzene	ND		0.500		ug/L			02/24/16 18:27	1
Bromobenzene	ND		2.00		ug/L			02/24/16 18:27	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 18:27	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 18:27	1
Bromoform	ND		0.500		ug/L			02/24/16 18:27	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 18:27	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 18:27	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 18:27	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 18:27	1
Chloroethane	ND		0.500		ug/L			02/24/16 18:27	1
Chloroform	ND		0.500		ug/L			02/24/16 18:27	1
Chloromethane	ND		0.500		ug/L			02/24/16 18:27	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:27	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 18:27	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 18:27	1
Dibromomethane	ND		0.500		ug/L			02/24/16 18:27	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 18:27	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 18:27	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 18:27	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 18:27	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 18:27	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 18:27	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-12

Lab Sample ID: 580-57335-6

Date Collected: 02/17/16 12:40

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 18:27	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
o-Xylene	ND		0.500		ug/L			02/24/16 18:27	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 18:27	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
Styrene	ND		0.500		ug/L			02/24/16 18:27	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 18:27	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 18:27	1
Toluene	ND		0.500		ug/L			02/24/16 18:27	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:27	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 18:27	1
Trichloroethene	ND		0.500		ug/L			02/24/16 18:27	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128		02/24/16 18:27	1
4-Bromofluorobenzene (Surr)	95		75 - 120		02/24/16 18:27	1
Dibromofluoromethane (Surr)	97		85 - 115		02/24/16 18:27	1
Toluene-d8 (Surr)	104		75 - 125		02/24/16 18:27	1
Trifluorotoluene (Surr)	94		80 - 127		02/24/16 18:27	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.14		0.200		mg/L			03/08/16 19:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 12:17	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 12:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	155		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-13

Lab Sample ID: 580-57335-7

Date Collected: 02/17/16 13:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 18:54	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:54	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 18:54	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 18:54	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 18:54	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 18:54	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:54	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 18:54	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:54	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:54	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 18:54	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 18:54	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 18:54	1
2-Butanone	ND		20.0		ug/L			02/24/16 18:54	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:54	1
2-Hexanone	ND		20.0		ug/L			02/24/16 18:54	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 18:54	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 18:54	1
Acetone	ND		20.0		ug/L			02/24/16 18:54	1
Benzene	ND		0.500		ug/L			02/24/16 18:54	1
Bromobenzene	ND		2.00		ug/L			02/24/16 18:54	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 18:54	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 18:54	1
Bromoform	ND		0.500		ug/L			02/24/16 18:54	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 18:54	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 18:54	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 18:54	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 18:54	1
Chloroethane	ND		0.500		ug/L			02/24/16 18:54	1
Chloroform	ND		0.500		ug/L			02/24/16 18:54	1
Chloromethane	ND		0.500		ug/L			02/24/16 18:54	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:54	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 18:54	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 18:54	1
Dibromomethane	ND		0.500		ug/L			02/24/16 18:54	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 18:54	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 18:54	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 18:54	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 18:54	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 18:54	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 18:54	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-13

Lab Sample ID: 580-57335-7

Date Collected: 02/17/16 13:35

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 18:54	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
o-Xylene	ND		0.500		ug/L			02/24/16 18:54	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 18:54	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
Styrene	ND		0.500		ug/L			02/24/16 18:54	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 18:54	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 18:54	1
Toluene	ND		0.500		ug/L			02/24/16 18:54	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 18:54	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 18:54	1
Trichloroethene	ND		0.500		ug/L			02/24/16 18:54	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 128		02/24/16 18:54	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/24/16 18:54	1
Dibromofluoromethane (Surr)	95		85 - 115		02/24/16 18:54	1
Toluene-d8 (Surr)	103		75 - 125		02/24/16 18:54	1
Trifluorotoluene (Surr)	97		80 - 127		02/24/16 18:54	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.02		0.200		mg/L			03/08/16 19:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.226		0.0400		mg/L		02/19/16 17:31	02/22/16 12:21	1
Manganese	2.10		0.00200		mg/L		02/19/16 17:31	02/22/16 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	195		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-14

Lab Sample ID: 580-57335-8

Date Collected: 02/17/16 14:30

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 19:21	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 19:21	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 19:21	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 19:21	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 19:21	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 19:21	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 19:21	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 19:21	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 19:21	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 19:21	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 19:21	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 19:21	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 19:21	1
2-Butanone	ND		20.0		ug/L			02/24/16 19:21	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 19:21	1
2-Hexanone	ND		20.0		ug/L			02/24/16 19:21	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 19:21	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 19:21	1
Acetone	ND		20.0		ug/L			02/24/16 19:21	1
Benzene	ND		0.500		ug/L			02/24/16 19:21	1
Bromobenzene	ND		2.00		ug/L			02/24/16 19:21	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 19:21	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 19:21	1
Bromoform	ND		0.500		ug/L			02/24/16 19:21	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 19:21	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 19:21	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 19:21	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 19:21	1
Chloroethane	ND		0.500		ug/L			02/24/16 19:21	1
Chloroform	ND		0.500		ug/L			02/24/16 19:21	1
Chloromethane	ND		0.500		ug/L			02/24/16 19:21	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 19:21	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 19:21	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 19:21	1
Dibromomethane	ND		0.500		ug/L			02/24/16 19:21	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 19:21	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 19:21	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 19:21	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 19:21	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 19:21	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 19:21	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-14

Lab Sample ID: 580-57335-8

Date Collected: 02/17/16 14:30

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 19:21	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
o-Xylene	ND		0.500		ug/L			02/24/16 19:21	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 19:21	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
Styrene	ND		0.500		ug/L			02/24/16 19:21	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 19:21	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 19:21	1
Toluene	ND		0.500		ug/L			02/24/16 19:21	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 19:21	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 19:21	1
Trichloroethene	ND		0.500		ug/L			02/24/16 19:21	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 128		02/24/16 19:21	1
4-Bromofluorobenzene (Surr)	95		75 - 120		02/24/16 19:21	1
Dibromofluoromethane (Surr)	97		85 - 115		02/24/16 19:21	1
Toluene-d8 (Surr)	104		75 - 125		02/24/16 19:21	1
Trifluorotoluene (Surr)	94		80 - 127		02/24/16 19:21	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.19		1.00		mg/L			03/08/16 20:09	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 12:26	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	194		10.0		mg/L			02/18/16 18:48	1

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-57335-9

Date Collected: 02/17/16 00:00

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 12:05	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 12:05	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/24/16 12:05	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 12:05	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 12:05	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 12:05	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 12:05	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 12:05	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 12:05	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 12:05	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 12:05	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 12:05	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 12:05	1
2-Butanone	ND		20.0		ug/L			02/24/16 12:05	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 12:05	1
2-Hexanone	ND		20.0		ug/L			02/24/16 12:05	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 12:05	1
4-Methyl-2-pentanone	ND	*	20.0		ug/L			02/24/16 12:05	1
Acetone	ND		20.0		ug/L			02/24/16 12:05	1
Benzene	ND		0.500		ug/L			02/24/16 12:05	1
Bromobenzene	ND		2.00		ug/L			02/24/16 12:05	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 12:05	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 12:05	1
Bromoform	ND		0.500		ug/L			02/24/16 12:05	1
Bromomethane	ND	*	1.00		ug/L			02/24/16 12:05	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 12:05	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 12:05	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 12:05	1
Chloroethane	ND		0.500		ug/L			02/24/16 12:05	1
Chloroform	ND		0.500		ug/L			02/24/16 12:05	1
Chloromethane	ND		0.500		ug/L			02/24/16 12:05	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 12:05	1
cis-1,3-Dichloropropane	ND	*	0.500		ug/L			02/24/16 12:05	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 12:05	1
Dibromomethane	ND		0.500		ug/L			02/24/16 12:05	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 12:05	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 12:05	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 12:05	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 12:05	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 12:05	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 12:05	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-57335-9

Date Collected: 02/17/16 00:00

Matrix: Water

Date Received: 02/17/16 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/24/16 12:05	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
o-Xylene	ND		0.500		ug/L			02/24/16 12:05	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 12:05	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
Styrene	ND		0.500		ug/L			02/24/16 12:05	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 12:05	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 12:05	1
Toluene	ND		0.500		ug/L			02/24/16 12:05	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 12:05	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 12:05	1
Trichloroethene	ND		0.500		ug/L			02/24/16 12:05	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 12:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 128		02/24/16 12:05	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/24/16 12:05	1
Dibromofluoromethane (Surr)	89		85 - 115		02/24/16 12:05	1
Toluene-d8 (Surr)	106		75 - 125		02/24/16 12:05	1
Trifluorotoluene (Surr)	99		80 - 127		02/24/16 12:05	1

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: MB 580-211854/4

Matrix: Water

Analysis Batch: 211854

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,1-Dichloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,1-Dichloropropene	ND		0.500		ug/L			02/24/16 09:49	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/24/16 09:49	1
1,2,3-Trichloropropane	ND		0.500		ug/L			02/24/16 09:49	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/24/16 09:49	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/24/16 09:49	1
1,2-Dibromoethane	ND		2.00		ug/L			02/24/16 09:49	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/24/16 09:49	1
1,2-Dichloroethane	ND		0.500		ug/L			02/24/16 09:49	1
1,2-Dichloropropane	ND		0.500		ug/L			02/24/16 09:49	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/24/16 09:49	1
1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 09:49	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/24/16 09:49	1
2,2-Dichloropropane	ND		0.500		ug/L			02/24/16 09:49	1
2-Butanone	ND		20.0		ug/L			02/24/16 09:49	1
2-Chlorotoluene	ND		2.00		ug/L			02/24/16 09:49	1
2-Hexanone	ND		20.0		ug/L			02/24/16 09:49	1
4-Chlorotoluene	ND		2.00		ug/L			02/24/16 09:49	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/24/16 09:49	1
Acetone	ND		20.0		ug/L			02/24/16 09:49	1
Benzene	ND		0.500		ug/L			02/24/16 09:49	1
Bromobenzene	ND		2.00		ug/L			02/24/16 09:49	1
Bromochloromethane	ND		0.500		ug/L			02/24/16 09:49	1
Bromodichloromethane	ND		0.500		ug/L			02/24/16 09:49	1
Bromoform	ND		0.500		ug/L			02/24/16 09:49	1
Bromomethane	ND		1.00		ug/L			02/24/16 09:49	1
Carbon disulfide	ND		0.500		ug/L			02/24/16 09:49	1
Carbon tetrachloride	ND		0.500		ug/L			02/24/16 09:49	1
Chlorobenzene	ND		0.500		ug/L			02/24/16 09:49	1
Chloroethane	ND		0.500		ug/L			02/24/16 09:49	1
Chloroform	ND		0.500		ug/L			02/24/16 09:49	1
Chloromethane	ND		0.500		ug/L			02/24/16 09:49	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 09:49	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/24/16 09:49	1
Dibromochloromethane	ND		0.500		ug/L			02/24/16 09:49	1
Dibromomethane	ND		0.500		ug/L			02/24/16 09:49	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/24/16 09:49	1
Ethylbenzene	ND		0.500		ug/L			02/24/16 09:49	1
Hexachlorobutadiene	ND		2.00		ug/L			02/24/16 09:49	1
Isopropylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/24/16 09:49	1
Methylene Chloride	ND		2.00		ug/L			02/24/16 09:49	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: MB 580-211854/4
Matrix: Water
Analysis Batch: 211854

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.500		ug/L			02/24/16 09:49	1
Naphthalene	ND		2.00		ug/L			02/24/16 09:49	1
n-Butylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
N-Propylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
o-Xylene	ND		0.500		ug/L			02/24/16 09:49	1
p-Isopropyltoluene	ND		2.00		ug/L			02/24/16 09:49	1
sec-Butylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
Styrene	ND		0.500		ug/L			02/24/16 09:49	1
tert-Butylbenzene	ND		2.00		ug/L			02/24/16 09:49	1
Tetrachloroethene	ND		0.500		ug/L			02/24/16 09:49	1
Toluene	ND		0.500		ug/L			02/24/16 09:49	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/24/16 09:49	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/24/16 09:49	1
Trichloroethene	ND		0.500		ug/L			02/24/16 09:49	1
Trichlorofluoromethane	ND		0.500		ug/L			02/24/16 09:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 128		02/24/16 09:49	1
4-Bromofluorobenzene (Surr)	93		75 - 120		02/24/16 09:49	1
Dibromofluoromethane (Surr)	91		85 - 115		02/24/16 09:49	1
Toluene-d8 (Surr)	104		75 - 125		02/24/16 09:49	1
Trifluorotoluene (Surr)	97		80 - 127		02/24/16 09:49	1

Lab Sample ID: LCS 580-211854/5
Matrix: Water
Analysis Batch: 211854

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	5.02	5.194		ug/L		103	75 - 125
1,1,1-Trichloroethane	5.02	5.033		ug/L		100	80 - 140
1,1,2,2-Tetrachloroethane	5.01	5.253		ug/L		105	75 - 125
1,1,2-Trichloroethane	5.02	5.417		ug/L		108	80 - 130
1,1-Dichloroethane	5.00	4.875		ug/L		98	75 - 135
1,1-Dichloropropene	5.00	5.115		ug/L		102	80 - 130
1,2,3-Trichlorobenzene	5.01	5.299		ug/L		106	60 - 125
1,2,3-Trichloropropane	5.01	6.176 *		ug/L		123	75 - 120
1,2,4-Trichlorobenzene	5.00	5.367		ug/L		107	60 - 125
1,2,4-Trimethylbenzene	5.00	5.259		ug/L		105	80 - 125
1,2-Dibromo-3-Chloropropane	5.01	5.827		ug/L		116	55 - 120
1,2-Dibromoethane	5.01	5.453		ug/L		109	70 - 130
1,2-Dichlorobenzene	5.00	4.735		ug/L		95	80 - 130
1,2-Dichloroethane	5.00	5.474		ug/L		109	80 - 140
1,2-Dichloropropane	5.00	4.772		ug/L		95	80 - 120
1,3,5-Trimethylbenzene	5.01	5.403		ug/L		108	80 - 125
1,3-Dichlorobenzene	5.01	4.616		ug/L		92	80 - 120
1,3-Dichloropropane	5.01	5.259		ug/L		105	80 - 130
1,4-Dichlorobenzene	5.01	4.598		ug/L		92	80 - 120
2,2-Dichloropropane	5.00	4.949		ug/L		99	60 - 150

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: LCS 580-211854/5

Matrix: Water

Analysis Batch: 211854

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone	20.0	22.19		ug/L		111	20 - 200
2-Chlorotoluene	5.00	5.113		ug/L		102	75 - 130
2-Hexanone	20.0	28.90		ug/L		144	52 - 160
4-Chlorotoluene	5.01	5.075		ug/L		101	75 - 130
4-Methyl-2-pentanone	20.0	27.21	*	ug/L		136	55 - 135
Acetone	20.0	14.90	J	ug/L		75	30 - 200
Benzene	5.02	4.561		ug/L		91	80 - 120
Bromobenzene	5.00	4.903		ug/L		98	80 - 130
Bromochloromethane	5.01	4.970		ug/L		99	80 - 125
Bromodichloromethane	5.02	5.378		ug/L		107	80 - 125
Bromoform	5.02	4.989		ug/L		99	65 - 130
Bromomethane	5.01	4.318		ug/L		86	70 - 135
Carbon disulfide	5.02	4.662		ug/L		93	65 - 160
Carbon tetrachloride	5.01	5.054		ug/L		101	75 - 140
Chlorobenzene	5.02	4.607		ug/L		92	80 - 120
Chloroethane	5.02	4.547		ug/L		91	75 - 140
Chloroform	5.00	4.741		ug/L		95	80 - 130
Chloromethane	5.02	6.193		ug/L		123	50 - 140
cis-1,2-Dichloroethene	5.01	4.675		ug/L		93	80 - 130
cis-1,3-Dichloropropene	5.01	5.944		ug/L		119	70 - 120
Dibromochloromethane	5.01	5.910		ug/L		118	70 - 120
Dibromomethane	5.02	5.208		ug/L		104	80 - 130
Dichlorodifluoromethane	5.01	3.474		ug/L		69	30 - 180
Ethylbenzene	5.02	4.871		ug/L		97	80 - 125
Hexachlorobutadiene	5.00	5.420		ug/L		108	75 - 135
Isopropylbenzene	5.01	5.078		ug/L		101	75 - 120
Methyl tert-butyl ether	5.01	5.868		ug/L		117	75 - 120
Methylene Chloride	5.02	4.825		ug/L		96	60 - 145
m-Xylene & p-Xylene	5.01	5.160		ug/L		103	80 - 130
Naphthalene	5.01	5.963		ug/L		119	45 - 130
n-Butylbenzene	5.01	4.915		ug/L		98	75 - 125
N-Propylbenzene	5.00	5.217		ug/L		104	80 - 120
o-Xylene	5.01	5.305		ug/L		106	80 - 120
p-Isopropyltoluene	5.00	4.873		ug/L		97	80 - 120
sec-Butylbenzene	5.01	5.135		ug/L		103	80 - 125
Styrene	5.01	5.101		ug/L		102	75 - 130
tert-Butylbenzene	5.00	5.529		ug/L		111	80 - 130
Tetrachloroethene	5.01	4.637		ug/L		92	40 - 180
Toluene	5.00	4.935		ug/L		99	80 - 120
trans-1,2-Dichloroethene	5.01	4.672		ug/L		93	80 - 140
trans-1,3-Dichloropropene	5.00	6.040		ug/L		121	60 - 140
Trichloroethene	5.01	4.652		ug/L		93	80 - 130
Trichlorofluoromethane	5.00	4.645		ug/L		93	30 - 180

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		70 - 128
4-Bromofluorobenzene (Surr)	90		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: LCS 580-211854/5
Matrix: Water
Analysis Batch: 211854

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	102		75 - 125
Trifluorotoluene (Surr)	94		80 - 127

Lab Sample ID: LCSD 580-211854/6
Matrix: Water
Analysis Batch: 211854

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	5.02	5.165		ug/L		103	75 - 125	1	20
1,1,1-Trichloroethane	5.02	5.049		ug/L		101	80 - 140	0	20
1,1,2,2-Tetrachloroethane	5.01	5.254		ug/L		105	75 - 125	0	20
1,1,2-Trichloroethane	5.02	5.616		ug/L		112	80 - 130	4	20
1,1-Dichloroethane	5.00	5.035		ug/L		101	75 - 135	3	20
1,1-Dichloropropene	5.00	5.312		ug/L		106	80 - 130	4	20
1,2,3-Trichlorobenzene	5.01	5.548		ug/L		111	60 - 125	5	20
1,2,3-Trichloropropane	5.01	6.056	*	ug/L		121	75 - 120	2	20
1,2,4-Trichlorobenzene	5.00	5.401		ug/L		108	60 - 125	1	20
1,2,4-Trimethylbenzene	5.00	5.455		ug/L		109	80 - 125	4	20
1,2-Dibromo-3-Chloropropane	5.01	5.658		ug/L		113	55 - 120	3	20
1,2-Dibromoethane	5.01	5.835		ug/L		117	70 - 130	7	20
1,2-Dichlorobenzene	5.00	4.789		ug/L		96	80 - 130	1	20
1,2-Dichloroethane	5.00	5.522		ug/L		110	80 - 140	1	20
1,2-Dichloropropane	5.00	4.879		ug/L		97	80 - 120	2	20
1,3,5-Trimethylbenzene	5.01	5.380		ug/L		107	80 - 125	0	20
1,3-Dichlorobenzene	5.01	4.638		ug/L		93	80 - 120	0	20
1,3-Dichloropropane	5.01	5.274		ug/L		105	80 - 130	0	20
1,4-Dichlorobenzene	5.01	4.695		ug/L		94	80 - 120	2	20
2,2-Dichloropropane	5.00	4.632		ug/L		93	60 - 150	7	20
2-Butanone	20.0	25.45		ug/L		127	20 - 200	14	20
2-Chlorotoluene	5.00	5.099		ug/L		102	75 - 130	0	20
2-Hexanone	20.0	30.22		ug/L		151	52 - 160	4	20
4-Chlorotoluene	5.01	5.059		ug/L		101	75 - 130	0	20
4-Methyl-2-pentanone	20.0	28.41	*	ug/L		142	55 - 135	4	20
Acetone	20.0	16.27	J	ug/L		81	30 - 200	9	20
Benzene	5.02	4.578		ug/L		91	80 - 120	0	20
Bromobenzene	5.00	4.989		ug/L		100	80 - 130	2	20
Bromochloromethane	5.01	5.224		ug/L		104	80 - 125	5	20
Bromodichloromethane	5.02	5.417		ug/L		108	80 - 125	1	20
Bromoform	5.02	5.118		ug/L		102	65 - 130	3	20
Bromomethane	5.01	3.245	*	ug/L		65	70 - 135	28	20
Carbon disulfide	5.02	4.626		ug/L		92	65 - 160	1	20
Carbon tetrachloride	5.01	4.976		ug/L		99	75 - 140	2	20
Chlorobenzene	5.02	4.725		ug/L		94	80 - 120	3	20
Chloroethane	5.02	3.775		ug/L		75	75 - 140	19	20
Chloroform	5.00	4.797		ug/L		96	80 - 130	1	20
Chloromethane	5.02	6.377		ug/L		127	50 - 140	3	20
cis-1,2-Dichloroethene	5.01	4.718		ug/L		94	80 - 130	1	20
cis-1,3-Dichloropropene	5.01	6.282	*	ug/L		125	70 - 120	6	20

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: LCSD 580-211854/6
Matrix: Water
Analysis Batch: 211854

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
Dibromochloromethane	5.01	6.021		ug/L		120	70 - 120	2	20
Dibromomethane	5.02	5.310		ug/L		106	80 - 130	2	20
Dichlorodifluoromethane	5.01	3.515		ug/L		70	30 - 180	1	20
Ethylbenzene	5.02	4.971		ug/L		99	80 - 125	2	20
Hexachlorobutadiene	5.00	5.433		ug/L		109	75 - 135	0	20
Isopropylbenzene	5.01	5.049		ug/L		101	75 - 120	1	20
Methyl tert-butyl ether	5.01	5.857		ug/L		117	75 - 120	0	20
Methylene Chloride	5.02	4.706		ug/L		94	60 - 145	2	20
m-Xylene & p-Xylene	5.01	5.249		ug/L		105	80 - 130	2	20
Naphthalene	5.01	6.324		ug/L		126	45 - 130	6	20
n-Butylbenzene	5.01	4.920		ug/L		98	75 - 125	0	20
N-Propylbenzene	5.00	5.256		ug/L		105	80 - 120	1	20
o-Xylene	5.01	5.255		ug/L		105	80 - 120	1	20
p-Isopropyltoluene	5.00	4.855		ug/L		97	80 - 120	0	20
sec-Butylbenzene	5.01	5.172		ug/L		103	80 - 125	1	20
Styrene	5.01	5.342		ug/L		107	75 - 130	5	20
tert-Butylbenzene	5.00	5.398		ug/L		108	80 - 130	2	20
Tetrachloroethene	5.01	4.820		ug/L		96	40 - 180	4	20
Toluene	5.00	5.004		ug/L		100	80 - 120	1	20
trans-1,2-Dichloroethene	5.01	4.760		ug/L		95	80 - 140	2	20
trans-1,3-Dichloropropene	5.00	6.269		ug/L		125	60 - 140	4	20
Trichloroethene	5.01	4.701		ug/L		94	80 - 130	1	20
Trichlorofluoromethane	5.00	4.554		ug/L		91	30 - 180	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 128
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115
Toluene-d8 (Surr)	104		75 - 125
Trifluorotoluene (Surr)	98		80 - 127

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-239571/9
Matrix: Water
Analysis Batch: 239571

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.200		mg/L			03/08/16 15:06	1

Lab Sample ID: LCS 160-239571/10
Matrix: Water
Analysis Batch: 239571

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.916		mg/L		96	90 - 110

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 580-57335-8 MS

Matrix: Water

Analysis Batch: 239571

Client Sample ID: LB-021716-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	7.19		10.0	17.12		mg/L		99	90 - 110

Lab Sample ID: 580-57302-C-1 DU

Matrix: Water

Analysis Batch: 239571

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	5.99		6.051		mg/L		1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-211676/13-A

Matrix: Water

Analysis Batch: 211732

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 211676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/19/16 17:31	02/22/16 11:04	1
Manganese	ND		0.00200		mg/L		02/19/16 17:31	02/22/16 11:04	1

Lab Sample ID: LCS 580-211676/14-A

Matrix: Water

Analysis Batch: 211732

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 211676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	22.0	23.27		mg/L		106	80 - 120
Manganese	1.00	1.024		mg/L		102	80 - 120

Lab Sample ID: LCSD 580-211676/15-A

Matrix: Water

Analysis Batch: 211732

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 211676

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	22.0	23.43		mg/L		107	80 - 120	1	20
Manganese	1.00	1.018		mg/L		102	80 - 120	1	20

Lab Sample ID: 580-57335-1 MS

Matrix: Water

Analysis Batch: 211732

Client Sample ID: LB-021716-07

Prep Type: Dissolved

Prep Batch: 211676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		22.0	23.69		mg/L		108	80 - 120
Manganese	ND		1.00	1.053		mg/L		105	80 - 120

Lab Sample ID: 580-57335-1 MSD

Matrix: Water

Analysis Batch: 211732

Client Sample ID: LB-021716-07

Prep Type: Dissolved

Prep Batch: 211676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		22.0	24.24		mg/L		110	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57335-1

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

Lab Sample ID: 580-57335-1 MSD
Matrix: Water
Analysis Batch: 211732

Client Sample ID: LB-021716-07
Prep Type: Dissolved
Prep Batch: 211676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	ND		1.00	1.060		mg/L		106	80 - 120	1	20

Lab Sample ID: 580-57335-1 DU
Matrix: Water
Analysis Batch: 211732

Client Sample ID: LB-021716-07
Prep Type: Dissolved
Prep Batch: 211676

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 580-211600/1
Matrix: Water
Analysis Batch: 211600

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		10.0		mg/L			02/18/16 18:48	1

Lab Sample ID: LCS 580-211600/2
Matrix: Water
Analysis Batch: 211600

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	1000	964.0		mg/L		96	80 - 120

Lab Sample ID: 580-57335-8 DU
Matrix: Water
Analysis Batch: 211600

Client Sample ID: LB-021716-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	194		197.0		mg/L		NC	20

Lab Chronicle

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-07

Date Collected: 02/17/16 08:40

Date Received: 02/17/16 16:00

Lab Sample ID: 580-57335-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 16:11	CJ	TAL SEA
Total/NA	Analysis	300.0		1	239571	03/08/16 18:17	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 11:22	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-08

Date Collected: 02/17/16 09:35

Date Received: 02/17/16 16:00

Lab Sample ID: 580-57335-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 16:38	CJ	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 18:33	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 11:58	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-09

Date Collected: 02/17/16 10:40

Date Received: 02/17/16 16:00

Lab Sample ID: 580-57335-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 17:06	CJ	TAL SEA
Total/NA	Analysis	300.0	DL	10	239571	03/08/16 18:49	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:03	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-10

Date Collected: 02/17/16 10:35

Date Received: 02/17/16 16:00

Lab Sample ID: 580-57335-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 17:33	CJ	TAL SEA
Total/NA	Analysis	300.0	DL	10	239571	03/08/16 19:05	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:07	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: LB-021716-11

Lab Sample ID: 580-57335-5

Date Collected: 02/17/16 11:35

Matrix: Water

Date Received: 02/17/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 18:00	CJ	TAL SEA
Total/NA	Analysis	300.0	DL	10	239571	03/08/16 19:21	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:12	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-12

Lab Sample ID: 580-57335-6

Date Collected: 02/17/16 12:40

Matrix: Water

Date Received: 02/17/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 18:27	CJ	TAL SEA
Total/NA	Analysis	300.0		1	239571	03/08/16 19:37	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:17	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-13

Lab Sample ID: 580-57335-7

Date Collected: 02/17/16 13:35

Matrix: Water

Date Received: 02/17/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 18:54	CJ	TAL SEA
Total/NA	Analysis	300.0		1	239571	03/08/16 19:53	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:21	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Client Sample ID: LB-021716-14

Lab Sample ID: 580-57335-8

Date Collected: 02/17/16 14:30

Matrix: Water

Date Received: 02/17/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 19:21	CJ	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 20:09	JCB	TAL SL
Dissolved	Prep	3005A			211676	02/19/16 17:31	PAB	TAL SEA
Dissolved	Analysis	6020		1	211732	02/22/16 12:26	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211600	02/18/16 18:48	JSM	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-57335-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-57335-9

Date Collected: 02/17/16 00:00

Matrix: Water

Date Received: 02/17/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211854	02/24/16 12:05	CJ	TAL SEA

Laboratory References:

Pixis Labo = Pixis Laboratories, LLC, 12423 NE Whitaker Way, Portland, OR 97230, TEL (503)254-1794

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

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Certification Summary

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

TestAmerica Job ID: 580-57335-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-16
California	ELAP	9	2886	03-31-16 *
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	05-31-16
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-10-16 *
Louisiana	NELAP	6	04080	06-30-16
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16
Nevada	State Program	9	MO000542016-1	07-31-16
New Jersey	NELAP	2	MO002	06-30-16
New York	NELAP	2	11616	03-31-16 *
North Dakota	State Program	8	R207	06-30-16
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-16
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16
Texas	NELAP	6	T104704193-15-9	07-31-16
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Seattle

Sample Summary

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

TestAmerica Job ID: 580-57335-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-57335-1	LB-021716-07	Water	02/17/16 08:40	02/17/16 16:00
580-57335-2	LB-021716-08	Water	02/17/16 09:35	02/17/16 16:00
580-57335-3	LB-021716-09	Water	02/17/16 10:40	02/17/16 16:00
580-57335-4	LB-021716-10	Water	02/17/16 10:35	02/17/16 16:00
580-57335-5	LB-021716-11	Water	02/17/16 11:35	02/17/16 16:00
580-57335-6	LB-021716-12	Water	02/17/16 12:40	02/17/16 16:00
580-57335-7	LB-021716-13	Water	02/17/16 13:35	02/17/16 16:00
580-57335-8	LB-021716-14	Water	02/17/16 14:30	02/17/16 16:00
580-57335-9	Trip Blanks	Water	02/17/16 00:00	02/17/16 16:00

PIXIS Labs

Accurate. Reliable. On Time.

PIXIS Labs

12423 NE Whitaker Way

Portland, OR 97230

503-254-1794

Job Number: 6021831

Report Date: 02/23/2016

ORELAP #: OR100028

Project Name: 58008309

Project No: Leichner Landfill - Wash.

Cover Letter

Kelsey DeVries
Test America Portland
9405 SW Nimbus Ave.
BEAVERTON, OR 97008

Dear Kelsey DeVries,

Enclosed please find Pixis Labs analytical report for samples received as order number 6021831 on 02/18/2016. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Pixis quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be kept a maximum of 15 days from the report date unless prior arrangements have been made.

Thank you for allowing Pixis to be of service to you, we appreciate your business.

Sincerely,

Signed
Richard Reid
Project Manager



Sample Results

Sample: LB-021716-07 (580-57335-1)		Collected: 02/17/16 08:40		Temp: 5 C		Matrix: General Water	
Lab ID: 101334		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	ND	mg/L	0.100	2	27350-7		02/18/16 19:10	

Sample: LB-021716-08 (580-57335-2)		Collected: 02/17/16 09:35		Temp: 5 C		Matrix: General Water	
Lab ID: 101335		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	6.15	mg/L	0.100	2	27350-8		02/18/16 19:42	

Sample: LB-021716-09 (580-57335-3)		Collected: 02/17/16 10:40		Temp: 5 C		Matrix: General Water	
Lab ID: 101336		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	2.02	mg/L	0.100	2	27350-9		02/18/16 20:15	

Sample: LB-021716-10 (580-57335-4)		Collected: 02/17/16 10:35		Temp: 5 C		Matrix: General Water	
Lab ID: 101337		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	2.05	mg/L	0.100	2	27350-10		02/18/16 20:48	

Sample: LB-021716-11 (580-57335-5)		Collected: 02/17/16 11:35		Temp: 5 C		Matrix: General Water	
Lab ID: 101338		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	2.19	mg/L	0.100	2	27350-11		02/18/16 21:21	

Sample: LB-021716-12 (580-57335-6)		Collected: 02/17/16 12:40		Temp: 5 C		Matrix: General Water	
Lab ID: 101339		Received: 02/18/16 11:10		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	3.44	mg/L	0.100	2	27350-12		02/18/16 21:53	

								Matrix:
--	--	--	--	--	--	--	--	---------



Sample: LB-021716-13 (580-57335-7)		Collected: 02/17/16 13:35		Temp: 5 C		General Water		
Lab ID: 101340		Received: 02/18/16 11:10		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	ND	mg/L	0.100	2	27350-17		02/19/16 00:37	

Sample: LB-021716-14 (580-57335-8)		Collected: 02/17/16 14:30		Temp: 5 C		Matrix: General Water		
Lab ID: 101341		Received: 02/18/16 11:10		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	4.86	mg/L	0.100	2	27350-18		02/19/16 01:10	

Laboratory Quality Control Results

EPA 300.0									
QC - Initial Calibration Verif. -						Batch ID: 27350-3			
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.521		0.500	mg/L	104 %	90-110	---	---	
QC - Continuing Calibration Verif. - B						Batch ID: 27350-16			
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.234		0.226	mg/L	104 %	90-110	---	---	
QC - Continuing Calibration Verif. - A						Batch ID: 27350-24			
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.239		0.226	mg/L	106 %	90-110	---	---	
QC - Initial Calibration Blank -						Batch ID: 27350-2			
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	ND			mg/L	---	---	---	---	
QC - Matrix Spike - of Sample 27350 - 13						Batch ID: 27350-14			
Analyte	Result	Org.Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	1.10	0.550	0.500	mg/L	109 %	80-120	---	---	
QC - Matrix Spike Duplicate - of Sample 27350 - 13						Batch ID: 27350-15			
Analyte	Result	Org.Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	1.06	0.550	0.500	mg/L	102 %	80-120	3	20	

Abbreviations

MRL Method Reporting Limit
 ND None Detected at or above the MRL
 RPD Relative Percent Difference

Units of Measure:

mg/L Milligrams Per Liter



Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Shipping/Receiving		Murphy, Sarah A		Murphy, Sarah A		580-36004.1		6071831	
Company: Pixis Laboratories, LLC		E-Mail: sarah.murphy@testamericainc.com		E-Mail: sarah.murphy@testamericainc.com		Page: Page 1 of 1		Job #: 580-57335-1	
Address: 12423 NE Whitaker Way, City: Portland State, Zip: OR, 97230 Phone: 503-254-1794(Tel) Email:		Due Date Requested: 2/29/2016 TAT Requested (days):		Analysis Requested		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - ASN902 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Project Name: Leichter Landfill - Wash. Site:		Project #: 58008309 SSOW#:		SUB (300.0 Nitrogen, Nitrate - PIXIS ANALYTICAL) / 300.0 Nitrogen, Nitrate - PIXIS ANALYTICAL		Special Instructions/Note:			
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Specific, Orchestral, etc.)	Analysis Requested	Special Instructions/Note	Analysis Requested	Special Instructions/Note	Analysis Requested
LB-021716-07 (580-57335-1)	2/17/16	08:40 Pacific	Water	Water	X				
LB-021716-08 (580-57335-2)	2/17/16	09:35 Pacific	Water	Water	X				
LB-021716-09 (580-57335-3)	2/17/16	10:40 Pacific	Water	Water	X				
LB-021716-10 (580-57335-4)	2/17/16	10:35 Pacific	Water	Water	X				
LB-021716-11 (580-57335-5)	2/17/16	11:35 Pacific	Water	Water	X				
LB-021716-12 (580-57335-6)	2/17/16	12:40 Pacific	Water	Water	X				
LB-021716-13 (580-57335-7)	2/17/16	13:35 Pacific	Water	Water	X				
LB-021716-14 (580-57335-8)	2/17/16	14:30 Pacific	Water	Water	X				
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements:									
Empty Kit Relinquished by:									
Date:									
Relinquished by:									
Date/Time:									
Relinquished by:									
Date/Time:									
Relinquished by:									
Date/Time:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Custody Seal No.:									

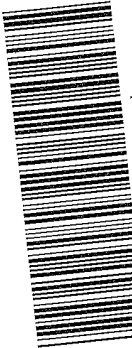
20-54



Chain of Custody Record



LEADER IN ENVIRONMENTAL TESTING



Client Information
 Client Contact: Mr. Brian McMullen
 Company: SCS Engineers
 Address: 14945 SW Sequoia Parkway Suite 180
 City: Portland
 State, Zip: OR, 97224
 Phone: 503-639-9548 (Tel)
 Email: bmcullen@scsengineers.com
 Project Name: Leichter Landfill - Wash.
 Site:

Sample Information
 Sample: B McMullen
 Lab P/M: Murphy, Sarah A
 Phone: 503 716 2740
 E-Mail: sarah.murphy@testamerica.com
 Chain of Custody

Analysis Requested
 Due Date Requested:
 TAT Requested (days):
 PO #: 1426298
 W/O #:
 Project #: 56008309
 SSOV#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Soil, Other)	Field Filtered Samples (Yes or No)		8260B_LL - (MOD) 6020, Dissolved Fe and Mn (Field F)		1601_Caled - Total Dissolved Solids		Special Instructions/Note:
					Field Filtered (Yes or No)	Field Filtered (Yes or No)	8260B_LL - (MOD) 6020, Dissolved Fe and Mn (Field F)	1601_Caled - Total Dissolved Solids			
LB-021716-07	2/17/16	0840	G	Water	X	X	X	X	X		
LB-021716-08	2/17/16	0835	G	Water	X	X	X	X	X		
LB-021716-09	2/17/16	1040	G	Water	X	X	X	X	X		
LB-021716-10	2/17/16	1035	G	Water	X	X	X	X	X		
LB-021716-11	2/17/16	1135	G	Water	X	X	X	X	X		
LB-021716-12	2/17/16	1240	G	Water	X	X	X	X	X		
LB-021716-13	2/17/16	1335	G	Water	X	X	X	X	X		
LB-021716-14	2/17/16	1430	G	Water	X	X	X	X	X		
Trip Blanks	2/17/16	0840	-	Water							
				Water							
				Water							

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: B McMullen Date/Time: 2/17/16 1600
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____

Company: SCS Date/Time: 2/17/16 1600
 Company: TAI
 Company: _____
 Company: _____

Custody Seal No.: _____
 A. Yes A No

Cooler Temperature(s) °C and Other Remarks: 3.5 2.0 VP-C



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57335-1

Login Number: 57335

List Source: TestAmerica Seattle

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57335-1

Login Number: 57335

List Number: 2

Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

List Creation: 03/03/16 03:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	3.7
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
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 Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-57367-1

Client Project/Site: Leichner Landfill - Wash.

For:

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

Attn: Mr. Jason Davendonis



Authorized for release by:
3/14/2016 2:22:15 PM

Sarah Murphy, Project Manager I
(253)922-2310
sarah.murphy@testamericainc.com

LINKS

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results through
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Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 580-57367-1

Job ID: 580-57367-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 2/18/2016 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.3° C and 1.5° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-211994 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane and Chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

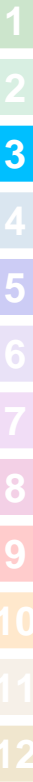
General Chemistry

Method(s) 300.0: The following samples in Anion batches 160-239571 and 160-239768 were diluted to bring the concentrations of target analytes within the calibration range: LB-021816-15 (580-57367-1), LB-021816-16 (580-57367-2), LB-021816-17 (580-57367-3), LB-021816-18 (580-57367-4), LB-021816-19 (580-57367-5), LB-021816-20 (580-57367-6) and LB-021816-21 (580-57367-7). . Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Method 300.0 Nitrogen, Nitrate: This method was subcontracted to Pixis Laboratories, LLC. The subcontract laboratory certification is different from that of the facility issuing the final report.



Definitions/Glossary

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

TestAmerica Job ID: 580-57367-1

Qualifiers

GC/MS VOA

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

HPLC/IC

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-15

Lab Sample ID: 580-57367-1

Date Collected: 02/18/16 08:40

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 12:19	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 12:19	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 12:19	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 12:19	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 12:19	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 12:19	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:19	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 12:19	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 12:19	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:19	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 12:19	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:19	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 12:19	1
2-Butanone	ND		20.0		ug/L			02/26/16 12:19	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 12:19	1
2-Hexanone	ND		20.0		ug/L			02/26/16 12:19	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 12:19	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 12:19	1
Acetone	ND		20.0		ug/L			02/26/16 12:19	1
Benzene	ND		0.500		ug/L			02/26/16 12:19	1
Bromobenzene	ND		2.00		ug/L			02/26/16 12:19	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 12:19	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 12:19	1
Bromoform	ND		0.500		ug/L			02/26/16 12:19	1
Bromomethane	ND		1.00		ug/L			02/26/16 12:19	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 12:19	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 12:19	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 12:19	1
Chloroethane	ND		0.500		ug/L			02/26/16 12:19	1
Chloroform	ND		0.500		ug/L			02/26/16 12:19	1
Chloromethane	ND		0.500		ug/L			02/26/16 12:19	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 12:19	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 12:19	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 12:19	1
Dibromomethane	ND		0.500		ug/L			02/26/16 12:19	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 12:19	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 12:19	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 12:19	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 12:19	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 12:19	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 12:19	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-15

Lab Sample ID: 580-57367-1

Date Collected: 02/18/16 08:40

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 12:19	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
o-Xylene	ND		0.500		ug/L			02/26/16 12:19	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 12:19	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
Styrene	ND		0.500		ug/L			02/26/16 12:19	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 12:19	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 12:19	1
Toluene	ND		0.500		ug/L			02/26/16 12:19	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 12:19	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 12:19	1
Trichloroethene	ND		0.500		ug/L			02/26/16 12:19	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 128		02/26/16 12:19	1
4-Bromofluorobenzene (Surr)	93		75 - 120		02/26/16 12:19	1
Dibromofluoromethane (Surr)	92		85 - 115		02/26/16 12:19	1
Toluene-d8 (Surr)	103		75 - 125		02/26/16 12:19	1
Trifluorotoluene (Surr)	100		80 - 127		02/26/16 12:19	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.8		1.00		mg/L			03/08/16 21:44	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	9.80		0.0400		mg/L		02/26/16 13:28	02/29/16 18:02	1
Manganese	1.55		0.00200		mg/L		02/26/16 13:28	02/29/16 18:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	229		10.0		mg/L			02/22/16 19:17	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-16

Lab Sample ID: 580-57367-2

Date Collected: 02/18/16 09:30

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 13:12	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 13:12	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 13:12	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 13:12	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 13:12	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 13:12	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:12	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 13:12	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 13:12	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:12	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 13:12	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:12	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 13:12	1
2-Butanone	ND		20.0		ug/L			02/26/16 13:12	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 13:12	1
2-Hexanone	ND		20.0		ug/L			02/26/16 13:12	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 13:12	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 13:12	1
Acetone	ND		20.0		ug/L			02/26/16 13:12	1
Benzene	ND		0.500		ug/L			02/26/16 13:12	1
Bromobenzene	ND		2.00		ug/L			02/26/16 13:12	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 13:12	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 13:12	1
Bromoform	ND		0.500		ug/L			02/26/16 13:12	1
Bromomethane	ND		1.00		ug/L			02/26/16 13:12	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 13:12	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 13:12	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 13:12	1
Chloroethane	ND		0.500		ug/L			02/26/16 13:12	1
Chloroform	ND		0.500		ug/L			02/26/16 13:12	1
Chloromethane	ND		0.500		ug/L			02/26/16 13:12	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 13:12	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 13:12	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 13:12	1
Dibromomethane	ND		0.500		ug/L			02/26/16 13:12	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 13:12	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 13:12	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 13:12	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 13:12	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 13:12	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 13:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-16

Lab Sample ID: 580-57367-2

Date Collected: 02/18/16 09:30

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 13:12	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
o-Xylene	ND		0.500		ug/L			02/26/16 13:12	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 13:12	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
Styrene	ND		0.500		ug/L			02/26/16 13:12	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 13:12	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 13:12	1
Toluene	ND		0.500		ug/L			02/26/16 13:12	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 13:12	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 13:12	1
Trichloroethene	ND		0.500		ug/L			02/26/16 13:12	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 128		02/26/16 13:12	1
4-Bromofluorobenzene (Surr)	93		75 - 120		02/26/16 13:12	1
Dibromofluoromethane (Surr)	99		85 - 115		02/26/16 13:12	1
Toluene-d8 (Surr)	103		75 - 125		02/26/16 13:12	1
Trifluorotoluene (Surr)	99		80 - 127		02/26/16 13:12	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.10		1.00		mg/L			03/08/16 22:32	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:06	1
Manganese	ND		0.00200		mg/L		02/26/16 13:28	02/29/16 18:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	214		10.0		mg/L			02/22/16 19:17	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-17

Lab Sample ID: 580-57367-3

Date Collected: 02/18/16 10:20

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 13:40	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 13:40	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 13:40	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 13:40	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 13:40	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 13:40	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:40	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 13:40	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 13:40	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:40	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 13:40	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 13:40	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 13:40	1
2-Butanone	ND		20.0		ug/L			02/26/16 13:40	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 13:40	1
2-Hexanone	ND		20.0		ug/L			02/26/16 13:40	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 13:40	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 13:40	1
Acetone	ND		20.0		ug/L			02/26/16 13:40	1
Benzene	ND		0.500		ug/L			02/26/16 13:40	1
Bromobenzene	ND		2.00		ug/L			02/26/16 13:40	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 13:40	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 13:40	1
Bromoform	ND		0.500		ug/L			02/26/16 13:40	1
Bromomethane	ND		1.00		ug/L			02/26/16 13:40	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 13:40	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 13:40	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 13:40	1
Chloroethane	ND		0.500		ug/L			02/26/16 13:40	1
Chloroform	ND		0.500		ug/L			02/26/16 13:40	1
Chloromethane	ND		0.500		ug/L			02/26/16 13:40	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 13:40	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 13:40	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 13:40	1
Dibromomethane	ND		0.500		ug/L			02/26/16 13:40	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 13:40	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 13:40	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 13:40	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 13:40	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 13:40	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 13:40	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-17

Lab Sample ID: 580-57367-3

Date Collected: 02/18/16 10:20

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 13:40	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
o-Xylene	ND		0.500		ug/L			02/26/16 13:40	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 13:40	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
Styrene	ND		0.500		ug/L			02/26/16 13:40	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 13:40	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 13:40	1
Toluene	ND		0.500		ug/L			02/26/16 13:40	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 13:40	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 13:40	1
Trichloroethene	ND		0.500		ug/L			02/26/16 13:40	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 13:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 128		02/26/16 13:40	1
4-Bromofluorobenzene (Surr)	90		75 - 120		02/26/16 13:40	1
Dibromofluoromethane (Surr)	94		85 - 115		02/26/16 13:40	1
Toluene-d8 (Surr)	108		75 - 125		02/26/16 13:40	1
Trifluorotoluene (Surr)	105		80 - 127		02/26/16 13:40	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.67		0.400		mg/L			03/08/16 22:48	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:11	1
Manganese	ND		0.00200		mg/L		02/26/16 13:28	02/29/16 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	168		10.0		mg/L			02/22/16 19:17	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-18

Lab Sample ID: 580-57367-4

Date Collected: 02/18/16 11:05

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 15:00	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 15:00	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 15:00	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 15:00	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 15:00	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 15:00	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 15:00	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 15:00	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 15:00	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 15:00	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 15:00	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 15:00	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 15:00	1
2-Butanone	ND		20.0		ug/L			02/26/16 15:00	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 15:00	1
2-Hexanone	ND		20.0		ug/L			02/26/16 15:00	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 15:00	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 15:00	1
Acetone	ND		20.0		ug/L			02/26/16 15:00	1
Benzene	ND		0.500		ug/L			02/26/16 15:00	1
Bromobenzene	ND		2.00		ug/L			02/26/16 15:00	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 15:00	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 15:00	1
Bromoform	ND		0.500		ug/L			02/26/16 15:00	1
Bromomethane	ND		1.00		ug/L			02/26/16 15:00	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 15:00	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 15:00	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 15:00	1
Chloroethane	ND		0.500		ug/L			02/26/16 15:00	1
Chloroform	ND		0.500		ug/L			02/26/16 15:00	1
Chloromethane	ND		0.500		ug/L			02/26/16 15:00	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 15:00	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 15:00	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 15:00	1
Dibromomethane	ND		0.500		ug/L			02/26/16 15:00	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 15:00	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 15:00	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 15:00	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 15:00	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 15:00	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 15:00	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-18

Lab Sample ID: 580-57367-4

Date Collected: 02/18/16 11:05

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 15:00	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
o-Xylene	ND		0.500		ug/L			02/26/16 15:00	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 15:00	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
Styrene	ND		0.500		ug/L			02/26/16 15:00	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 15:00	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 15:00	1
Toluene	ND		0.500		ug/L			02/26/16 15:00	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 15:00	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 15:00	1
Trichloroethene	ND		0.500		ug/L			02/26/16 15:00	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128		02/26/16 15:00	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/26/16 15:00	1
Dibromofluoromethane (Surr)	97		85 - 115		02/26/16 15:00	1
Toluene-d8 (Surr)	105		75 - 125		02/26/16 15:00	1
Trifluorotoluene (Surr)	100		80 - 127		02/26/16 15:00	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.86		1.00		mg/L			03/08/16 23:04	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:15	1
Manganese	ND		0.00200		mg/L		02/26/16 13:28	02/29/16 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	216		10.0		mg/L			02/24/16 19:08	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-19

Lab Sample ID: 580-57367-5

Date Collected: 02/18/16 12:00

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 14:33	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 14:33	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 14:33	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 14:33	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 14:33	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 14:33	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:33	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 14:33	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 14:33	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:33	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 14:33	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:33	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 14:33	1
2-Butanone	ND		20.0		ug/L			02/26/16 14:33	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 14:33	1
2-Hexanone	ND		20.0		ug/L			02/26/16 14:33	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 14:33	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 14:33	1
Acetone	ND		20.0		ug/L			02/26/16 14:33	1
Benzene	ND		0.500		ug/L			02/26/16 14:33	1
Bromobenzene	ND		2.00		ug/L			02/26/16 14:33	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 14:33	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 14:33	1
Bromoform	ND		0.500		ug/L			02/26/16 14:33	1
Bromomethane	ND		1.00		ug/L			02/26/16 14:33	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 14:33	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 14:33	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 14:33	1
Chloroethane	ND		0.500		ug/L			02/26/16 14:33	1
Chloroform	ND		0.500		ug/L			02/26/16 14:33	1
Chloromethane	ND		0.500		ug/L			02/26/16 14:33	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 14:33	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 14:33	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 14:33	1
Dibromomethane	ND		0.500		ug/L			02/26/16 14:33	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 14:33	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 14:33	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 14:33	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 14:33	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 14:33	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 14:33	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-19

Lab Sample ID: 580-57367-5

Date Collected: 02/18/16 12:00

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 14:33	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
o-Xylene	ND		0.500		ug/L			02/26/16 14:33	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 14:33	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
Styrene	ND		0.500		ug/L			02/26/16 14:33	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 14:33	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 14:33	1
Toluene	ND		0.500		ug/L			02/26/16 14:33	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 14:33	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 14:33	1
Trichloroethene	ND		0.500		ug/L			02/26/16 14:33	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 128		02/26/16 14:33	1
4-Bromofluorobenzene (Surr)	91		75 - 120		02/26/16 14:33	1
Dibromofluoromethane (Surr)	97		85 - 115		02/26/16 14:33	1
Toluene-d8 (Surr)	102		75 - 125		02/26/16 14:33	1
Trifluorotoluene (Surr)	93		80 - 127		02/26/16 14:33	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7		2.00		mg/L			03/08/16 23:20	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:20	1
Manganese	0.253		0.00200		mg/L		02/26/16 13:28	02/29/16 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	329		10.0		mg/L			02/24/16 19:08	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-20

Lab Sample ID: 580-57367-6

Date Collected: 02/18/16 13:25

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 14:07	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 14:07	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 14:07	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 14:07	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 14:07	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 14:07	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:07	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 14:07	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 14:07	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:07	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 14:07	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 14:07	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 14:07	1
2-Butanone	ND		20.0		ug/L			02/26/16 14:07	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 14:07	1
2-Hexanone	ND		20.0		ug/L			02/26/16 14:07	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 14:07	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 14:07	1
Acetone	ND		20.0		ug/L			02/26/16 14:07	1
Benzene	ND		0.500		ug/L			02/26/16 14:07	1
Bromobenzene	ND		2.00		ug/L			02/26/16 14:07	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 14:07	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 14:07	1
Bromoform	ND		0.500		ug/L			02/26/16 14:07	1
Bromomethane	ND		1.00		ug/L			02/26/16 14:07	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 14:07	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 14:07	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 14:07	1
Chloroethane	ND		0.500		ug/L			02/26/16 14:07	1
Chloroform	ND		0.500		ug/L			02/26/16 14:07	1
Chloromethane	ND		0.500		ug/L			02/26/16 14:07	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 14:07	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 14:07	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 14:07	1
Dibromomethane	ND		0.500		ug/L			02/26/16 14:07	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 14:07	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 14:07	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 14:07	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 14:07	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 14:07	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 14:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-20

Lab Sample ID: 580-57367-6

Date Collected: 02/18/16 13:25

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 14:07	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
o-Xylene	ND		0.500		ug/L			02/26/16 14:07	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 14:07	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
Styrene	ND		0.500		ug/L			02/26/16 14:07	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 14:07	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 14:07	1
Toluene	ND		0.500		ug/L			02/26/16 14:07	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 14:07	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 14:07	1
Trichloroethene	ND		0.500		ug/L			02/26/16 14:07	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 128		02/26/16 14:07	1
4-Bromofluorobenzene (Surr)	94		75 - 120		02/26/16 14:07	1
Dibromofluoromethane (Surr)	95		85 - 115		02/26/16 14:07	1
Toluene-d8 (Surr)	103		75 - 125		02/26/16 14:07	1
Trifluorotoluene (Surr)	97		80 - 127		02/26/16 14:07	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.39		0.400		mg/L			03/09/16 12:25	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:24	1
Manganese	0.00448		0.00200		mg/L		02/26/16 13:28	02/29/16 18:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	193		10.0		mg/L			02/24/16 19:08	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-21

Lab Sample ID: 580-57367-7

Date Collected: 02/18/16 14:20

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 12:46	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 12:46	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 12:46	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 12:46	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 12:46	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 12:46	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:46	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 12:46	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 12:46	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:46	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 12:46	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 12:46	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 12:46	1
2-Butanone	ND		20.0		ug/L			02/26/16 12:46	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 12:46	1
2-Hexanone	ND		20.0		ug/L			02/26/16 12:46	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 12:46	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 12:46	1
Acetone	ND		20.0		ug/L			02/26/16 12:46	1
Benzene	ND		0.500		ug/L			02/26/16 12:46	1
Bromobenzene	ND		2.00		ug/L			02/26/16 12:46	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 12:46	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 12:46	1
Bromoform	ND		0.500		ug/L			02/26/16 12:46	1
Bromomethane	ND		1.00		ug/L			02/26/16 12:46	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 12:46	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 12:46	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 12:46	1
Chloroethane	ND		0.500		ug/L			02/26/16 12:46	1
Chloroform	ND		0.500		ug/L			02/26/16 12:46	1
Chloromethane	ND		0.500		ug/L			02/26/16 12:46	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 12:46	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 12:46	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 12:46	1
Dibromomethane	ND		0.500		ug/L			02/26/16 12:46	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 12:46	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 12:46	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 12:46	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 12:46	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 12:46	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 12:46	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-21

Lab Sample ID: 580-57367-7

Date Collected: 02/18/16 14:20

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 12:46	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
o-Xylene	ND		0.500		ug/L			02/26/16 12:46	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 12:46	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
Styrene	ND		0.500		ug/L			02/26/16 12:46	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 12:46	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 12:46	1
Toluene	ND		0.500		ug/L			02/26/16 12:46	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 12:46	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 12:46	1
Trichloroethene	ND		0.500		ug/L			02/26/16 12:46	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128		02/26/16 12:46	1
4-Bromofluorobenzene (Surr)	92		75 - 120		02/26/16 12:46	1
Dibromofluoromethane (Surr)	97		85 - 115		02/26/16 12:46	1
Toluene-d8 (Surr)	104		75 - 125		02/26/16 12:46	1
Trifluorotoluene (Surr)	97		80 - 127		02/26/16 12:46	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.15		0.400		mg/L			03/09/16 13:13	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 18:29	1
Manganese	ND		0.00200		mg/L		02/26/16 13:28	02/29/16 18:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	162		10.0		mg/L			02/24/16 19:08	1

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-57367-8

Date Collected: 02/18/16 00:00

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 11:51	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 11:51	1
1,2,3-Trichloropropane	ND	*	0.500		ug/L			02/26/16 11:51	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 11:51	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 11:51	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 11:51	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 11:51	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 11:51	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 11:51	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 11:51	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 11:51	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 11:51	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 11:51	1
2-Butanone	ND		20.0		ug/L			02/26/16 11:51	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 11:51	1
2-Hexanone	ND		20.0		ug/L			02/26/16 11:51	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 11:51	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 11:51	1
Acetone	ND		20.0		ug/L			02/26/16 11:51	1
Benzene	ND		0.500		ug/L			02/26/16 11:51	1
Bromobenzene	ND		2.00		ug/L			02/26/16 11:51	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 11:51	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 11:51	1
Bromoform	ND		0.500		ug/L			02/26/16 11:51	1
Bromomethane	ND		1.00		ug/L			02/26/16 11:51	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 11:51	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 11:51	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 11:51	1
Chloroethane	ND		0.500		ug/L			02/26/16 11:51	1
Chloroform	ND		0.500		ug/L			02/26/16 11:51	1
Chloromethane	ND		0.500		ug/L			02/26/16 11:51	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 11:51	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 11:51	1
Dibromochloromethane	ND	*	0.500		ug/L			02/26/16 11:51	1
Dibromomethane	ND		0.500		ug/L			02/26/16 11:51	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 11:51	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 11:51	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 11:51	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 11:51	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 11:51	1
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 11:51	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-57367-8

Date Collected: 02/18/16 00:00

Matrix: Water

Date Received: 02/18/16 15:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			02/26/16 11:51	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
o-Xylene	ND		0.500		ug/L			02/26/16 11:51	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 11:51	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
Styrene	ND		0.500		ug/L			02/26/16 11:51	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 11:51	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 11:51	1
Toluene	ND		0.500		ug/L			02/26/16 11:51	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 11:51	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 11:51	1
Trichloroethene	ND		0.500		ug/L			02/26/16 11:51	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 11:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 128		02/26/16 11:51	1
4-Bromofluorobenzene (Surr)	91		75 - 120		02/26/16 11:51	1
Dibromofluoromethane (Surr)	95		85 - 115		02/26/16 11:51	1
Toluene-d8 (Surr)	105		75 - 125		02/26/16 11:51	1
Trifluorotoluene (Surr)	103		80 - 127		02/26/16 11:51	1

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: MB 580-211994/4

Matrix: Water

Analysis Batch: 211994

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,1,1-Trichloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,1,2-Trichloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,1-Dichloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,1-Dichloropropene	ND		0.500		ug/L			02/26/16 09:36	1
1,2,3-Trichlorobenzene	ND		2.00		ug/L			02/26/16 09:36	1
1,2,3-Trichloropropane	ND		0.500		ug/L			02/26/16 09:36	1
1,2,4-Trichlorobenzene	ND		2.00		ug/L			02/26/16 09:36	1
1,2,4-Trimethylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			02/26/16 09:36	1
1,2-Dibromoethane	ND		2.00		ug/L			02/26/16 09:36	1
1,2-Dichlorobenzene	ND		0.500		ug/L			02/26/16 09:36	1
1,2-Dichloroethane	ND		0.500		ug/L			02/26/16 09:36	1
1,2-Dichloropropane	ND		0.500		ug/L			02/26/16 09:36	1
1,3,5-Trimethylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
1,3-Dichlorobenzene	ND		0.500		ug/L			02/26/16 09:36	1
1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 09:36	1
1,4-Dichlorobenzene	ND		0.500		ug/L			02/26/16 09:36	1
2,2-Dichloropropane	ND		0.500		ug/L			02/26/16 09:36	1
2-Butanone	ND		20.0		ug/L			02/26/16 09:36	1
2-Chlorotoluene	ND		2.00		ug/L			02/26/16 09:36	1
2-Hexanone	ND		20.0		ug/L			02/26/16 09:36	1
4-Chlorotoluene	ND		2.00		ug/L			02/26/16 09:36	1
4-Methyl-2-pentanone	ND		20.0		ug/L			02/26/16 09:36	1
Acetone	ND		20.0		ug/L			02/26/16 09:36	1
Benzene	ND		0.500		ug/L			02/26/16 09:36	1
Bromobenzene	ND		2.00		ug/L			02/26/16 09:36	1
Bromochloromethane	ND		0.500		ug/L			02/26/16 09:36	1
Bromodichloromethane	ND		0.500		ug/L			02/26/16 09:36	1
Bromoform	ND		0.500		ug/L			02/26/16 09:36	1
Bromomethane	ND		1.00		ug/L			02/26/16 09:36	1
Carbon disulfide	ND		0.500		ug/L			02/26/16 09:36	1
Carbon tetrachloride	ND		0.500		ug/L			02/26/16 09:36	1
Chlorobenzene	ND		0.500		ug/L			02/26/16 09:36	1
Chloroethane	ND		0.500		ug/L			02/26/16 09:36	1
Chloroform	ND		0.500		ug/L			02/26/16 09:36	1
Chloromethane	ND		0.500		ug/L			02/26/16 09:36	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 09:36	1
cis-1,3-Dichloropropane	ND		0.500		ug/L			02/26/16 09:36	1
Dibromochloromethane	ND		0.500		ug/L			02/26/16 09:36	1
Dibromomethane	ND		0.500		ug/L			02/26/16 09:36	1
Dichlorodifluoromethane	ND		0.500		ug/L			02/26/16 09:36	1
Ethylbenzene	ND		0.500		ug/L			02/26/16 09:36	1
Hexachlorobutadiene	ND		2.00		ug/L			02/26/16 09:36	1
Isopropylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/26/16 09:36	1
Methylene Chloride	ND		2.00		ug/L			02/26/16 09:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: MB 580-211994/4
Matrix: Water
Analysis Batch: 211994

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.500		ug/L			02/26/16 09:36	1
Naphthalene	ND		2.00		ug/L			02/26/16 09:36	1
n-Butylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
N-Propylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
o-Xylene	ND		0.500		ug/L			02/26/16 09:36	1
p-Isopropyltoluene	ND		2.00		ug/L			02/26/16 09:36	1
sec-Butylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
Styrene	ND		0.500		ug/L			02/26/16 09:36	1
tert-Butylbenzene	ND		2.00		ug/L			02/26/16 09:36	1
Tetrachloroethene	ND		0.500		ug/L			02/26/16 09:36	1
Toluene	ND		0.500		ug/L			02/26/16 09:36	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			02/26/16 09:36	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			02/26/16 09:36	1
Trichloroethene	ND		0.500		ug/L			02/26/16 09:36	1
Trichlorofluoromethane	ND		0.500		ug/L			02/26/16 09:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 128		02/26/16 09:36	1
4-Bromofluorobenzene (Surr)	91		75 - 120		02/26/16 09:36	1
Dibromofluoromethane (Surr)	96		85 - 115		02/26/16 09:36	1
Toluene-d8 (Surr)	106		75 - 125		02/26/16 09:36	1
Trifluorotoluene (Surr)	99		80 - 127		02/26/16 09:36	1

Lab Sample ID: LCS 580-211994/5
Matrix: Water
Analysis Batch: 211994

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	5.02	5.406		ug/L		108	75 - 125
1,1,1-Trichloroethane	5.02	6.025		ug/L		120	80 - 140
1,1,2,2-Tetrachloroethane	5.01	5.041		ug/L		101	75 - 125
1,1,2-Trichloroethane	5.02	5.440		ug/L		108	80 - 130
1,1-Dichloroethane	5.00	4.952		ug/L		99	75 - 135
1,1-Dichloropropene	5.00	5.575		ug/L		111	80 - 130
1,2,3-Trichlorobenzene	5.01	5.105		ug/L		102	60 - 125
1,2,3-Trichloropropane	5.01	6.110	*	ug/L		122	75 - 120
1,2,4-Trichlorobenzene	5.00	5.330		ug/L		107	60 - 125
1,2,4-Trimethylbenzene	5.00	5.496		ug/L		110	80 - 125
1,2-Dibromo-3-Chloropropane	5.01	5.600		ug/L		112	55 - 120
1,2-Dibromoethane	5.01	5.858		ug/L		117	70 - 130
1,2-Dichlorobenzene	5.00	4.765		ug/L		95	80 - 130
1,2-Dichloroethane	5.00	6.149		ug/L		123	80 - 140
1,2-Dichloropropane	5.00	4.546		ug/L		91	80 - 120
1,3,5-Trimethylbenzene	5.01	5.625		ug/L		112	80 - 125
1,3-Dichlorobenzene	5.01	4.774		ug/L		95	80 - 120
1,3-Dichloropropane	5.01	5.246		ug/L		105	80 - 130
1,4-Dichlorobenzene	5.01	4.681		ug/L		93	80 - 120
2,2-Dichloropropane	5.00	5.709		ug/L		114	60 - 150

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: LCS 580-211994/5
Matrix: Water
Analysis Batch: 211994

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone	20.0	20.05		ug/L		100	20 - 200
2-Chlorotoluene	5.00	5.009		ug/L		100	75 - 130
2-Hexanone	20.0	27.49		ug/L		137	52 - 160
4-Chlorotoluene	5.01	5.247		ug/L		105	75 - 130
4-Methyl-2-pentanone	20.0	25.70		ug/L		129	55 - 135
Acetone	20.0	16.21	J	ug/L		81	30 - 200
Benzene	5.02	4.608		ug/L		92	80 - 120
Bromobenzene	5.00	4.919		ug/L		98	80 - 130
Bromochloromethane	5.01	5.013		ug/L		100	80 - 125
Bromodichloromethane	5.02	5.866		ug/L		117	80 - 125
Bromoform	5.02	5.114		ug/L		102	65 - 130
Bromomethane	5.01	3.887		ug/L		78	70 - 135
Carbon disulfide	5.02	4.515		ug/L		90	65 - 160
Carbon tetrachloride	5.01	5.778		ug/L		115	75 - 140
Chlorobenzene	5.02	4.646		ug/L		93	80 - 120
Chloroethane	5.02	3.931		ug/L		78	75 - 140
Chloroform	5.00	5.157		ug/L		103	80 - 130
Chloromethane	5.02	5.760		ug/L		115	50 - 140
cis-1,2-Dichloroethene	5.01	4.480		ug/L		89	80 - 130
cis-1,3-Dichloropropene	5.01	5.928		ug/L		118	70 - 120
Dibromochloromethane	5.01	6.084	*	ug/L		122	70 - 120
Dibromomethane	5.02	5.388		ug/L		107	80 - 130
Dichlorodifluoromethane	5.01	3.556		ug/L		71	30 - 180
Ethylbenzene	5.02	5.069		ug/L		101	80 - 125
Hexachlorobutadiene	5.00	5.913		ug/L		118	75 - 135
Isopropylbenzene	5.01	5.283		ug/L		106	75 - 120
Methyl tert-butyl ether	5.01	5.858		ug/L		117	75 - 120
Methylene Chloride	5.02	4.323		ug/L		86	60 - 145
m-Xylene & p-Xylene	5.01	5.374		ug/L		107	80 - 130
Naphthalene	5.01	5.750		ug/L		115	45 - 130
n-Butylbenzene	5.01	4.922		ug/L		98	75 - 125
N-Propylbenzene	5.00	5.404		ug/L		108	80 - 120
o-Xylene	5.01	5.453		ug/L		109	80 - 120
p-Isopropyltoluene	5.00	5.077		ug/L		101	80 - 120
sec-Butylbenzene	5.01	5.262		ug/L		105	80 - 125
Styrene	5.01	5.274		ug/L		105	75 - 130
tert-Butylbenzene	5.00	5.676		ug/L		114	80 - 130
Tetrachloroethene	5.01	4.864		ug/L		97	40 - 180
Toluene	5.00	4.971		ug/L		99	80 - 120
trans-1,2-Dichloroethene	5.01	4.641		ug/L		93	80 - 140
trans-1,3-Dichloropropene	5.00	6.255		ug/L		125	60 - 140
Trichloroethene	5.01	4.750		ug/L		95	80 - 130
Trichlorofluoromethane	5.00	4.782		ug/L		96	30 - 180

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		70 - 128
4-Bromofluorobenzene (Surr)	91		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: LCS 580-211994/5
Matrix: Water
Analysis Batch: 211994

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		75 - 125
Trifluorotoluene (Surr)	95		80 - 127

Lab Sample ID: LCSD 580-211994/6
Matrix: Water
Analysis Batch: 211994

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	5.02	5.451		ug/L		109	75 - 125	1	20
1,1,1-Trichloroethane	5.02	5.674		ug/L		113	80 - 140	6	20
1,1,2,2-Tetrachloroethane	5.01	5.071		ug/L		101	75 - 125	1	20
1,1,2-Trichloroethane	5.02	5.336		ug/L		106	80 - 130	2	20
1,1-Dichloroethane	5.00	4.971		ug/L		99	75 - 135	0	20
1,1-Dichloropropene	5.00	5.381		ug/L		108	80 - 130	4	20
1,2,3-Trichlorobenzene	5.01	5.527		ug/L		110	60 - 125	8	20
1,2,3-Trichloropropane	5.01	6.542	*	ug/L		131	75 - 120	7	20
1,2,4-Trichlorobenzene	5.00	5.538		ug/L		111	60 - 125	4	20
1,2,4-Trimethylbenzene	5.00	5.550		ug/L		111	80 - 125	1	20
1,2-Dibromo-3-Chloropropane	5.01	5.830		ug/L		116	55 - 120	4	20
1,2-Dibromoethane	5.01	5.859		ug/L		117	70 - 130	0	20
1,2-Dichlorobenzene	5.00	4.872		ug/L		97	80 - 130	2	20
1,2-Dichloroethane	5.00	6.096		ug/L		122	80 - 140	1	20
1,2-Dichloropropane	5.00	4.470		ug/L		89	80 - 120	2	20
1,3,5-Trimethylbenzene	5.01	5.754		ug/L		115	80 - 125	2	20
1,3-Dichlorobenzene	5.01	4.896		ug/L		98	80 - 120	3	20
1,3-Dichloropropane	5.01	5.299		ug/L		106	80 - 130	1	20
1,4-Dichlorobenzene	5.01	4.683		ug/L		93	80 - 120	0	20
2,2-Dichloropropane	5.00	5.439		ug/L		109	60 - 150	5	20
2-Butanone	20.0	22.63		ug/L		113	20 - 200	12	20
2-Chlorotoluene	5.00	5.210		ug/L		104	75 - 130	4	20
2-Hexanone	20.0	28.55		ug/L		143	52 - 160	4	20
4-Chlorotoluene	5.01	5.216		ug/L		104	75 - 130	1	20
4-Methyl-2-pentanone	20.0	27.04		ug/L		135	55 - 135	5	20
Acetone	20.0	16.25	J	ug/L		81	30 - 200	0	20
Benzene	5.02	4.569		ug/L		91	80 - 120	1	20
Bromobenzene	5.00	5.022		ug/L		100	80 - 130	2	20
Bromochloromethane	5.01	4.987		ug/L		100	80 - 125	1	20
Bromodichloromethane	5.02	5.669		ug/L		113	80 - 125	3	20
Bromoform	5.02	5.148		ug/L		103	65 - 130	1	20
Bromomethane	5.01	3.985		ug/L		80	70 - 135	2	20
Carbon disulfide	5.02	4.580		ug/L		91	65 - 160	1	20
Carbon tetrachloride	5.01	5.724		ug/L		114	75 - 140	1	20
Chlorobenzene	5.02	4.619		ug/L		92	80 - 120	1	20
Chloroethane	5.02	3.918		ug/L		78	75 - 140	0	20
Chloroform	5.00	5.058		ug/L		101	80 - 130	2	20
Chloromethane	5.02	5.888		ug/L		117	50 - 140	2	20
cis-1,2-Dichloroethene	5.01	4.617		ug/L		92	80 - 130	3	20
cis-1,3-Dichloropropene	5.01	5.857		ug/L		117	70 - 120	1	20

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: LCSD 580-211994/6
Matrix: Water
Analysis Batch: 211994

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
Dibromochloromethane	5.01	6.378	*	ug/L		127	70 - 120	5	20
Dibromomethane	5.02	5.269		ug/L		105	80 - 130	2	20
Dichlorodifluoromethane	5.01	3.564		ug/L		71	30 - 180	0	20
Ethylbenzene	5.02	5.053		ug/L		101	80 - 125	0	20
Hexachlorobutadiene	5.00	6.078		ug/L		121	75 - 135	3	20
Isopropylbenzene	5.01	5.281		ug/L		106	75 - 120	0	20
Methyl tert-butyl ether	5.01	5.806		ug/L		116	75 - 120	1	20
Methylene Chloride	5.02	4.587		ug/L		91	60 - 145	6	20
m-Xylene & p-Xylene	5.01	5.320		ug/L		106	80 - 130	1	20
Naphthalene	5.01	6.381		ug/L		127	45 - 130	10	20
n-Butylbenzene	5.01	5.110		ug/L		102	75 - 125	4	20
N-Propylbenzene	5.00	5.500		ug/L		110	80 - 120	2	20
o-Xylene	5.01	5.331		ug/L		106	80 - 120	2	20
p-Isopropyltoluene	5.00	5.224		ug/L		104	80 - 120	3	20
sec-Butylbenzene	5.01	5.418		ug/L		108	80 - 125	3	20
Styrene	5.01	5.359		ug/L		107	75 - 130	2	20
tert-Butylbenzene	5.00	5.769		ug/L		115	80 - 130	2	20
Tetrachloroethene	5.01	4.882		ug/L		97	40 - 180	0	20
Toluene	5.00	5.067		ug/L		101	80 - 120	2	20
trans-1,2-Dichloroethene	5.01	4.807		ug/L		96	80 - 140	4	20
trans-1,3-Dichloropropene	5.00	6.184		ug/L		124	60 - 140	1	20
Trichloroethene	5.01	4.739		ug/L		95	80 - 130	0	20
Trichlorofluoromethane	5.00	4.954		ug/L		99	30 - 180	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 128
4-Bromofluorobenzene (Surr)	90		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115
Toluene-d8 (Surr)	104		75 - 125
Trifluorotoluene (Surr)	101		80 - 127

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-239571/32
Matrix: Water
Analysis Batch: 239571

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.200		mg/L			03/08/16 21:12	1

Lab Sample ID: LCS 160-239571/33
Matrix: Water
Analysis Batch: 239571

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.913		mg/L		96	90 - 110

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 160-239768/3
Matrix: Water
Analysis Batch: 239768

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.200		mg/L			03/09/16 11:54	1

Lab Sample ID: LCS 160-239768/4
Matrix: Water
Analysis Batch: 239768

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.880		mg/L		94	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 580-57367-1 MS
Matrix: Water
Analysis Batch: 239571

Client Sample ID: LB-021816-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	10.8		10.0	21.14		mg/L		104	90 - 110

Lab Sample ID: 580-57367-1 DU
Matrix: Water
Analysis Batch: 239571

Client Sample ID: LB-021816-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	10.8		10.91		mg/L		1	20

Lab Sample ID: 580-57367-6 MS
Matrix: Water
Analysis Batch: 239768

Client Sample ID: LB-021816-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	7.39		4.00	11.46	E	mg/L		102	90 - 110

Lab Sample ID: 580-57367-6 DU
Matrix: Water
Analysis Batch: 239768

Client Sample ID: LB-021816-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	7.39		7.323		mg/L		0.8	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-212024/20-A
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 212024

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0400		mg/L		02/26/16 13:28	02/29/16 14:18	1
Manganese	ND		0.00200		mg/L		02/26/16 13:28	02/29/16 14:18	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

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

Lab Sample ID: LCS 580-212024/21-A
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 212024

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	22.0	23.36		mg/L		106	80 - 120
Manganese	1.00	1.019		mg/L		102	80 - 120

Lab Sample ID: LCSD 580-212024/22-A
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 212024

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	22.0	22.42		mg/L		102	80 - 120	4	20
Manganese	1.00	0.9674		mg/L		97	80 - 120	5	20

Lab Sample ID: 580-57337-I-1-D MS
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 212024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	28.5		22.0	50.69		mg/L		101	80 - 120
Manganese	1.27		1.00	2.261		mg/L		99	80 - 120

Lab Sample ID: 580-57337-I-1-E MSD
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 212024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	28.5		22.0	49.48		mg/L		95	80 - 120	2	20
Manganese	1.27		1.00	2.208		mg/L		94	80 - 120	2	20

Lab Sample ID: 580-57337-I-1-C DU
Matrix: Water
Analysis Batch: 212125

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 212024

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Iron	28.5		27.82		mg/L		2	20
Manganese	1.27		1.240		mg/L		3	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-211773/1
Matrix: Water
Analysis Batch: 211773

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		10.0		mg/L			02/22/16 19:17	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-57367-1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 580-211773/2
Matrix: Water
Analysis Batch: 211773

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	1000	978.0		mg/L		98	80 - 120

Lab Sample ID: 580-57410-F-11 DU
Matrix: Water
Analysis Batch: 211773

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	265		275.0		mg/L		4	20

Lab Sample ID: MB 580-211916/1
Matrix: Water
Analysis Batch: 211916

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		10.0		mg/L			02/24/16 19:08	1

Lab Sample ID: LCS 580-211916/2
Matrix: Water
Analysis Batch: 211916

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	1000	986.0		mg/L		99	80 - 120

Lab Sample ID: 580-57420-C-1 DU
Matrix: Water
Analysis Batch: 211916

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1200		1204		mg/L		0	20

Lab Chronicle

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-15

Date Collected: 02/18/16 08:40

Date Received: 02/18/16 15:50

Lab Sample ID: 580-57367-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 12:19	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 21:44	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:02	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211773	02/22/16 19:17	JSM	TAL SEA

Client Sample ID: LB-021816-16

Date Collected: 02/18/16 09:30

Date Received: 02/18/16 15:50

Lab Sample ID: 580-57367-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 13:12	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 22:32	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:06	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211773	02/22/16 19:17	JSM	TAL SEA

Client Sample ID: LB-021816-17

Date Collected: 02/18/16 10:20

Date Received: 02/18/16 15:50

Lab Sample ID: 580-57367-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 13:40	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	2	239571	03/08/16 22:48	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:11	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211773	02/22/16 19:17	JSM	TAL SEA

Client Sample ID: LB-021816-18

Date Collected: 02/18/16 11:05

Date Received: 02/18/16 15:50

Lab Sample ID: 580-57367-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 15:00	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	5	239571	03/08/16 23:04	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:15	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211916	02/24/16 19:08	JSM	TAL SEA

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-57367-1

Client Sample ID: LB-021816-19

Lab Sample ID: 580-57367-5

Date Collected: 02/18/16 12:00

Matrix: Water

Date Received: 02/18/16 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 14:33	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	10	239571	03/08/16 23:20	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:20	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211916	02/24/16 19:08	JSM	TAL SEA

Client Sample ID: LB-021816-20

Lab Sample ID: 580-57367-6

Date Collected: 02/18/16 13:25

Matrix: Water

Date Received: 02/18/16 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 14:07	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	2	239768	03/09/16 12:25	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:24	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211916	02/24/16 19:08	JSM	TAL SEA

Client Sample ID: LB-021816-21

Lab Sample ID: 580-57367-7

Date Collected: 02/18/16 14:20

Matrix: Water

Date Received: 02/18/16 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 12:46	D1R	TAL SEA
Total/NA	Analysis	300.0	DL	2	239768	03/09/16 13:13	JCB	TAL SL
Dissolved	Prep	3005A			212024	02/26/16 13:28	PAB	TAL SEA
Dissolved	Analysis	6020		1	212149	02/29/16 18:29	FCW	TAL SEA
Total/NA	Analysis	160.1		1	211916	02/24/16 19:08	JSM	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-57367-8

Date Collected: 02/18/16 00:00

Matrix: Water

Date Received: 02/18/16 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	211994	02/26/16 11:51	D1R	TAL SEA

Laboratory References:

Pixis Labo = Pixis Laboratories, LLC, 12423 NE Whitaker Way, Portland, OR 97230, TEL (503)254-1794

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

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Certification Summary

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

TestAmerica Job ID: 580-57367-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-16
California	ELAP	9	2886	03-31-16 *
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	05-31-16
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-10-16 *
Louisiana	NELAP	6	04080	06-30-16
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16
Nevada	State Program	9	MO000542016-1	07-31-16
New Jersey	NELAP	2	MO002	06-30-16
New York	NELAP	2	11616	03-31-16 *
North Dakota	State Program	8	R207	06-30-16
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-16
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16
Texas	NELAP	6	T104704193-15-9	07-31-16
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.

Sample Summary

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

TestAmerica Job ID: 580-57367-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-57367-1	LB-021816-15	Water	02/18/16 08:40	02/18/16 15:50
580-57367-2	LB-021816-16	Water	02/18/16 09:30	02/18/16 15:50
580-57367-3	LB-021816-17	Water	02/18/16 10:20	02/18/16 15:50
580-57367-4	LB-021816-18	Water	02/18/16 11:05	02/18/16 15:50
580-57367-5	LB-021816-19	Water	02/18/16 12:00	02/18/16 15:50
580-57367-6	LB-021816-20	Water	02/18/16 13:25	02/18/16 15:50
580-57367-7	LB-021816-21	Water	02/18/16 14:20	02/18/16 15:50
580-57367-8	Trip Blank	Water	02/18/16 00:00	02/18/16 15:50

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- 12

PIXIS Labs

Accurate. Reliable. On Time.
Pixis Labs

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Job Number: 6021918
Report Date: 02/23/2016
ORELAP #: OR100028
Project Name: 58008309
Project No: Leichner Landfill

Cover Letter

Kelsey DeVries
Test America Portland
9405 SW Nimbus Ave.
BEAVERTON, OR 97008

Dear Kelsey DeVries,

Enclosed please find Pixis Labs analytical report for samples received as order number 6021918 on 02/19/2016. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Pixis quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be kept a maximum of 15 days from the report date unless prior arrangements have been made.

Thank you for allowing Pixis to be of service to you, we appreciate your business.

Sincerely,

Signed
Richard Reid
Project Manager

Sample Results

Sample: LB-021816-15 (580-57367-1)		Collected: 02/18/16 08:40		Temp: 5 C		Matrix: General Water	
Lab ID: 101409		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	ND	mg/L	0.100	2	27359-7		02/19/16 15:48	

Sample: LB-021816-16 (580-57367-2)		Collected: 02/18/16 09:30		Temp: 5 C		Matrix: General Water	
Lab ID: 101411		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	0.834	mg/L	0.100	2	27359-8		02/19/16 16:21	

Sample: LB-021816-17 (580-57367-3)		Collected: 02/18/16 10:20		Temp: 5 C		Matrix: General Water	
Lab ID: 101412		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	6.36	mg/L	0.100	2	27359-9		02/19/16 16:53	

Sample: LB-021816-18 (580-57367-4)		Collected: 02/18/16 11:05		Temp: 5 C		Matrix: General Water	
Lab ID: 101413		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	4.11	mg/L	0.100	2	27359-10		02/19/16 17:26	

Sample: LB-021816-19 (580-57367-5)		Collected: 02/18/16 12:00		Temp: 5 C		Matrix: General Water	
Lab ID: 101414		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	0.910	mg/L	0.100	2	27359-11		02/19/16 17:59	

Sample: LB-021816-20 (580-57367-6)		Collected: 02/18/16 13:25		Temp: 5 C		Matrix: General Water	
Lab ID: 101415		Received: 02/19/16 11:41		Evidence of Cooling:Y			

Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	3.65	mg/L	0.100	2	27359-12		02/19/16 18:31	

Matrix:

Sample: LB-021816-21 (580-57367-7)		Collected: 02/18/16 14:20		Temp: 5 C		General Water		
Lab ID: 101416		Received: 02/19/16 11:41		Evidence of Cooling:Y				
Analyte	Result	Units	MRL	Dil.	Batch	Start/Extract	Analyzed	Notes
Method: EPA 300.0								
Nitrate	ND	mg/L	0.100	2	27359-13		02/19/16 19:04	

Laboratory Quality Control Results

EPA 300.0

QC - Initial Calibration Verif. -							Batch ID: 27359-5		
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.514		0.500	mg/L	103 %	90-110	---	---	
QC - Continuing Calibration Verif. - A							Batch ID: 27359-20		
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.220		0.226	mg/L	97 %	90-110	---	---	
QC - Initial Calibration Blank -							Batch ID: 27359-4		
Analyte	Result		Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	ND			mg/L	---	---	---	---	
QC - Matrix Spike - of Sample 27359 - 2							Batch ID: 27359-15		
Analyte	Result	Org.Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.522	0.0200	0.500	mg/L	100 %	80-120	---	---	H
QC - Matrix Spike Duplicate - of Sample 27359 - 2							Batch ID: 27359-16		
Analyte	Result	Org.Result	Spike	Units	Recovery	Limits	RPD	Limit	Notes
Nitrate	0.499	0.0200	0.500	mg/L	96 %	80-120	5	20	H

Abbreviations

MRL	Method Reporting Limit
ND	None Detected at or above the MRL
RPD	Relative Percent Difference

Data Qualifiers

H	Holding time exceeded
---	-----------------------

Units of Measure:

mg/L	Milligrams Per Liter
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Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)
 Client Contact: **Murphy, Sarah A**
 Shipping/Receiving: **sarah.murphy@testamericainc.com**
 Company: **Pixis Laboratories, LLC**
 Address: **12423 NE Whitaker Way, Portland, OR, 97230**
 Phone: **503-254-1794(Tel)**
 Email: **6021918**
 Project Name: **Leichner Landfill - Wash.**
 Site:

Lab Pk: **Murphy, Sarah A**
 E-Mail: **sarah.murphy@testamericainc.com**
 Carrier Tracking No(s):
 Page: **1 of 1**
 Job #: **580-57367-1**

Analysis Requested
 Due Date Requested: **3/1/2016**
 TAT Requested (days):
 PO #: **6021918**
 WO #: **6021918**
 Project #: **58008309**
 SSO#:

Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, T=tissue, A=air)	Special Instructions/Note:
LB-021816-15 (580-57367-1)	2/18/16	08:40 Pacific	Water	Water	2021918 Special Instructions/Note:
LB-021816-16 (580-57367-2)	2/18/16	09:30 Pacific	Water	Water	
LB-021816-17 (580-57367-3)	2/18/16	10:20 Pacific	Water	Water	
LB-021816-18 (580-57367-4)	2/18/16	11:05 Pacific	Water	Water	
LB-021816-19 (580-57367-5)	2/18/16	12:00 Pacific	Water	Water	
LB-021816-20 (580-57367-6)	2/18/16	13:25 Pacific	Water	Water	
LB-021816-21 (580-57367-7)	2/18/16	14:20 Pacific	Water	Water	

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by:
 Relinquished by: **[Signature]** Date: **2/19/16** Time: **1000** Company: **M.E.**
 Relinquished by: **[Signature]** Date: **2/19/16** Time: **1140** Company: **M.E.**
 Relinquished by: **[Signature]** Date: **2/19/16** Time: **1141** Company: **Pixis Lab**
 Relinquished by:

Cooler Temperature(s) °C and Other Remarks: **5C on ice**
 Custody Seal No.:
 Δ Yes Δ No



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57367-1

Login Number: 57367

List Source: TestAmerica Seattle

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-57367-1

Login Number: 57367

List Number: 2

Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

List Creation: 03/03/16 03:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	3.7
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Third Quarter (August) 2016 Laboratory Data Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-61940-1

Client Project/Site: Leichner Landfill - Semi-Annual
Revision: 1

For:

SCS Engineers
15940 SW 72nd Avenue
Portland, Oregon 97224

Attn: Mr. Jason Davendonis



Authorized for release by:
9/29/2016 7:07:13 AM

Robert Greer, Project Manager II
(253)922-2310
robert.greer@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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Case Narrative

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Job ID: 580-61940-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-61940-1

Comments

No additional comments.

Receipt

The samples were received on 8/23/2016 4:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

GC/MS VOA

Method(s) 8260B: The method blank for analytical batch 580-226481 contained N-Propylbenzene, Bromoform and Methylene Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: The surrogate recovery of 4-Bromofluorobenzene and Trifluorobenzene for the method blank associated with analytical batch 580-226481 was outside control limits. All other samples and QC were either in control or biased high and non-detect/result was below reporting limit; therefore, the data has been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 580-226481 recovered outside control limits for the following analytes: 1,2-Dichlorobenzene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 580-226481 recovered outside control limits for the following analytes: 2-Butanone, Chlorobromomethane, cis-1,2-Dichloroethene, Chloroform and Hexachlorobutadiene. Spike recovery for the LCS and LCSD for these analytes were within control limits. These analytes were either non-detect or had results below the reporting limit.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 580-226481 recovered above the upper control limit for 1,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: LB-082316-01 (580-61940-1), LB-082316-03 (580-61940-2), LB-082316-04 (580-61940-3), LB-082316-02 (580-61940-4), Trip Blank (580-61940-5) and (CCVIS 580-226481/3).

Method(s) 8260B: Surrogate recovery for the following samples was outside the upper control limit: LB-082316-04 (580-61940-3) and Trip Blank (580-61940-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6020: The method blank for analytical batch 580-226062 contained Iron above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Qualifiers

GC/MS VOA

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

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-01

Lab Sample ID: 580-61940-1

Date Collected: 08/23/16 12:00

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 22:25	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 22:25	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 22:25	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 22:25	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 22:25	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 22:25	1
1,2-Dichlorobenzene	ND	*	0.50		ug/L			09/01/16 22:25	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 22:25	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 22:25	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 22:25	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 22:25	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 22:25	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 22:25	1
2-Butanone	ND	*	20		ug/L			09/01/16 22:25	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 22:25	1
2-Hexanone	ND		20		ug/L			09/01/16 22:25	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 22:25	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 22:25	1
Acetone	ND		20		ug/L			09/01/16 22:25	1
Benzene	ND		0.50		ug/L			09/01/16 22:25	1
Bromobenzene	ND		2.0		ug/L			09/01/16 22:25	1
Bromochloromethane	ND	*	0.50		ug/L			09/01/16 22:25	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 22:25	1
Bromoform	ND		0.50		ug/L			09/01/16 22:25	1
Bromomethane	ND		1.0		ug/L			09/01/16 22:25	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 22:25	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 22:25	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 22:25	1
Chloroethane	ND		0.50		ug/L			09/01/16 22:25	1
Chloroform	ND	*	0.50		ug/L			09/01/16 22:25	1
Chloromethane	ND		0.50		ug/L			09/01/16 22:25	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/01/16 22:25	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 22:25	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 22:25	1
Dibromomethane	ND		0.50		ug/L			09/01/16 22:25	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 22:25	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 22:25	1
Hexachlorobutadiene	ND	*	2.0		ug/L			09/01/16 22:25	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 22:25	1
Methylene Chloride	ND		2.0		ug/L			09/01/16 22:25	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 22:25	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-01

Lab Sample ID: 580-61940-1

Date Collected: 08/23/16 12:00

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L			09/01/16 22:25	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
o-Xylene	ND		0.50		ug/L			09/01/16 22:25	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 22:25	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
Styrene	ND		0.50		ug/L			09/01/16 22:25	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 22:25	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 22:25	1
Toluene	ND		0.50		ug/L			09/01/16 22:25	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 22:25	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 22:25	1
Trichloroethene	ND		0.50		ug/L			09/01/16 22:25	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 22:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		46 - 150		09/01/16 22:25	1
4-Bromofluorobenzene (Surr)	99		81 - 120		09/01/16 22:25	1
Dibromofluoromethane (Surr)	95		42 - 132		09/01/16 22:25	1
Toluene-d8 (Surr)	98		75 - 125		09/01/16 22:25	1
Trifluorotoluene (Surr)	100		74 - 118		09/01/16 22:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/24/16 11:32	08/27/16 00:17	1
Manganese	ND		0.0020		mg/L		08/24/16 11:32	08/27/16 00:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.1	F1	0.90		mg/L			08/24/16 13:00	1
Nitrogen, Nitrate	6.6	F1	0.20		mg/L			08/24/16 13:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10		mg/L			08/26/16 14:36	1

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-03

Lab Sample ID: 580-61940-2

Date Collected: 08/23/16 14:05

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 22:51	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 22:51	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 22:51	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 22:51	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 22:51	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 22:51	1
1,2-Dichlorobenzene	ND	*	0.50		ug/L			09/01/16 22:51	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 22:51	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 22:51	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 22:51	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 22:51	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 22:51	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 22:51	1
2-Butanone	ND	*	20		ug/L			09/01/16 22:51	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 22:51	1
2-Hexanone	ND		20		ug/L			09/01/16 22:51	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 22:51	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 22:51	1
Acetone	ND		20		ug/L			09/01/16 22:51	1
Benzene	ND		0.50		ug/L			09/01/16 22:51	1
Bromobenzene	ND		2.0		ug/L			09/01/16 22:51	1
Bromochloromethane	ND	*	0.50		ug/L			09/01/16 22:51	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 22:51	1
Bromoform	ND		0.50		ug/L			09/01/16 22:51	1
Bromomethane	ND		1.0		ug/L			09/01/16 22:51	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 22:51	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 22:51	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 22:51	1
Chloroethane	ND		0.50		ug/L			09/01/16 22:51	1
Chloroform	ND	*	0.50		ug/L			09/01/16 22:51	1
Chloromethane	ND		0.50		ug/L			09/01/16 22:51	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/01/16 22:51	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 22:51	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 22:51	1
Dibromomethane	ND		0.50		ug/L			09/01/16 22:51	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 22:51	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 22:51	1
Hexachlorobutadiene	ND	*	2.0		ug/L			09/01/16 22:51	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 22:51	1
Methylene Chloride	ND		2.0		ug/L			09/01/16 22:51	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 22:51	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-03

Lab Sample ID: 580-61940-2

Date Collected: 08/23/16 14:05

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L			09/01/16 22:51	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
o-Xylene	ND		0.50		ug/L			09/01/16 22:51	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 22:51	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
Styrene	ND		0.50		ug/L			09/01/16 22:51	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 22:51	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 22:51	1
Toluene	ND		0.50		ug/L			09/01/16 22:51	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 22:51	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 22:51	1
Trichloroethene	ND		0.50		ug/L			09/01/16 22:51	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 22:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		46 - 150		09/01/16 22:51	1
4-Bromofluorobenzene (Surr)	98		81 - 120		09/01/16 22:51	1
Dibromofluoromethane (Surr)	128		42 - 132		09/01/16 22:51	1
Toluene-d8 (Surr)	98		75 - 125		09/01/16 22:51	1
Trifluorotoluene (Surr)	99		74 - 118		09/01/16 22:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/24/16 11:32	08/27/16 00:22	1
Manganese	ND		0.0020		mg/L		08/24/16 11:32	08/27/16 00:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.6		0.90		mg/L			08/24/16 13:56	1
Nitrogen, Nitrate	4.5		0.20		mg/L			08/24/16 13:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			08/26/16 14:36	1

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-04

Lab Sample ID: 580-61940-3

Date Collected: 08/23/16 15:10

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 23:17	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 23:17	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 23:17	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 23:17	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 23:17	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 23:17	1
1,2-Dichlorobenzene	ND	*	0.50		ug/L			09/01/16 23:17	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 23:17	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 23:17	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 23:17	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 23:17	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 23:17	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 23:17	1
2-Butanone	ND	*	20		ug/L			09/01/16 23:17	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 23:17	1
2-Hexanone	ND		20		ug/L			09/01/16 23:17	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 23:17	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 23:17	1
Acetone	ND		20		ug/L			09/01/16 23:17	1
Benzene	ND		0.50		ug/L			09/01/16 23:17	1
Bromobenzene	ND		2.0		ug/L			09/01/16 23:17	1
Bromochloromethane	ND	*	0.50		ug/L			09/01/16 23:17	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 23:17	1
Bromoform	ND		0.50		ug/L			09/01/16 23:17	1
Bromomethane	ND		1.0		ug/L			09/01/16 23:17	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 23:17	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 23:17	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 23:17	1
Chloroethane	ND		0.50		ug/L			09/01/16 23:17	1
Chloroform	ND	*	0.50		ug/L			09/01/16 23:17	1
Chloromethane	ND		0.50		ug/L			09/01/16 23:17	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/01/16 23:17	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 23:17	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 23:17	1
Dibromomethane	ND		0.50		ug/L			09/01/16 23:17	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 23:17	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 23:17	1
Hexachlorobutadiene	ND	*	2.0		ug/L			09/01/16 23:17	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 23:17	1
Methylene Chloride	ND		2.0		ug/L			09/01/16 23:17	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 23:17	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-04

Lab Sample ID: 580-61940-3

Date Collected: 08/23/16 15:10

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L			09/01/16 23:17	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
o-Xylene	ND		0.50		ug/L			09/01/16 23:17	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 23:17	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
Styrene	ND		0.50		ug/L			09/01/16 23:17	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 23:17	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 23:17	1
Toluene	ND		0.50		ug/L			09/01/16 23:17	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 23:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 23:17	1
Trichloroethene	ND		0.50		ug/L			09/01/16 23:17	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150		09/01/16 23:17	1
4-Bromofluorobenzene (Surr)	129	X	81 - 120		09/01/16 23:17	1
Dibromofluoromethane (Surr)	94		42 - 132		09/01/16 23:17	1
Toluene-d8 (Surr)	99		75 - 125		09/01/16 23:17	1
Trifluorotoluene (Surr)	79		74 - 118		09/01/16 23:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/24/16 11:32	08/27/16 00:26	1
Manganese	0.0026		0.0020		mg/L		08/24/16 11:32	08/27/16 00:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.5		0.90		mg/L			08/24/16 14:14	1
Nitrogen, Nitrate	4.2		0.20		mg/L			08/24/16 14:14	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10		mg/L			08/26/16 14:36	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-02

Lab Sample ID: 580-61940-4

Date Collected: 08/23/16 13:05

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 23:44	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 23:44	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 23:44	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 23:44	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 23:44	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 23:44	1
1,2-Dichlorobenzene	ND	*	0.50		ug/L			09/01/16 23:44	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 23:44	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 23:44	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 23:44	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 23:44	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 23:44	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 23:44	1
2-Butanone	ND	*	20		ug/L			09/01/16 23:44	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 23:44	1
2-Hexanone	ND		20		ug/L			09/01/16 23:44	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 23:44	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 23:44	1
Acetone	ND		20		ug/L			09/01/16 23:44	1
Benzene	ND		0.50		ug/L			09/01/16 23:44	1
Bromobenzene	ND		2.0		ug/L			09/01/16 23:44	1
Bromochloromethane	ND	*	0.50		ug/L			09/01/16 23:44	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 23:44	1
Bromoform	ND		0.50		ug/L			09/01/16 23:44	1
Bromomethane	ND		1.0		ug/L			09/01/16 23:44	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 23:44	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 23:44	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 23:44	1
Chloroethane	ND		0.50		ug/L			09/01/16 23:44	1
Chloroform	ND	*	0.50		ug/L			09/01/16 23:44	1
Chloromethane	ND		0.50		ug/L			09/01/16 23:44	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/01/16 23:44	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 23:44	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 23:44	1
Dibromomethane	ND		0.50		ug/L			09/01/16 23:44	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 23:44	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 23:44	1
Hexachlorobutadiene	ND	*	2.0		ug/L			09/01/16 23:44	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 23:44	1
Methylene Chloride	ND		2.0		ug/L			09/01/16 23:44	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 23:44	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-02

Lab Sample ID: 580-61940-4

Date Collected: 08/23/16 13:05

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L			09/01/16 23:44	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
o-Xylene	ND		0.50		ug/L			09/01/16 23:44	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 23:44	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
Styrene	ND		0.50		ug/L			09/01/16 23:44	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 23:44	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 23:44	1
Toluene	ND		0.50		ug/L			09/01/16 23:44	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 23:44	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 23:44	1
Trichloroethene	ND		0.50		ug/L			09/01/16 23:44	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		09/01/16 23:44	1
4-Bromofluorobenzene (Surr)	98		81 - 120		09/01/16 23:44	1
Dibromofluoromethane (Surr)	94		42 - 132		09/01/16 23:44	1
Toluene-d8 (Surr)	97		75 - 125		09/01/16 23:44	1
Trifluorotoluene (Surr)	99		74 - 118		09/01/16 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/24/16 11:32	08/27/16 00:31	1
Manganese	0.31		0.0020		mg/L		08/24/16 11:32	08/27/16 00:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		0.90		mg/L			08/24/16 14:33	1
Nitrogen, Nitrate	ND		0.20		mg/L			08/24/16 14:33	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10		mg/L			08/26/16 14:36	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-61940-5

Date Collected: 08/23/16 00:00

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 16:41	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 16:41	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 16:41	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 16:41	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 16:41	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 16:41	1
1,2-Dichlorobenzene	ND	*	0.50		ug/L			09/01/16 16:41	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 16:41	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 16:41	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 16:41	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 16:41	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 16:41	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 16:41	1
2-Butanone	ND	*	20		ug/L			09/01/16 16:41	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 16:41	1
2-Hexanone	ND		20		ug/L			09/01/16 16:41	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 16:41	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 16:41	1
Acetone	ND		20		ug/L			09/01/16 16:41	1
Benzene	ND		0.50		ug/L			09/01/16 16:41	1
Bromobenzene	ND		2.0		ug/L			09/01/16 16:41	1
Bromochloromethane	ND	*	0.50		ug/L			09/01/16 16:41	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 16:41	1
Bromoform	ND		0.50		ug/L			09/01/16 16:41	1
Bromomethane	ND		1.0		ug/L			09/01/16 16:41	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 16:41	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 16:41	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 16:41	1
Chloroethane	ND		0.50		ug/L			09/01/16 16:41	1
Chloroform	ND	*	0.50		ug/L			09/01/16 16:41	1
Chloromethane	ND		0.50		ug/L			09/01/16 16:41	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/01/16 16:41	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 16:41	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 16:41	1
Dibromomethane	ND		0.50		ug/L			09/01/16 16:41	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 16:41	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 16:41	1
Hexachlorobutadiene	ND	*	2.0		ug/L			09/01/16 16:41	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 16:41	1
Methylene Chloride	2.3		2.0		ug/L			09/01/16 16:41	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 16:41	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-61940-5

Date Collected: 08/23/16 00:00

Matrix: Water

Date Received: 08/23/16 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L			09/01/16 16:41	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
o-Xylene	ND		0.50		ug/L			09/01/16 16:41	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 16:41	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
Styrene	ND		0.50		ug/L			09/01/16 16:41	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 16:41	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 16:41	1
Toluene	ND		0.50		ug/L			09/01/16 16:41	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 16:41	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 16:41	1
Trichloroethene	ND		0.50		ug/L			09/01/16 16:41	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	71		46 - 150		09/01/16 16:41	1
4-Bromofluorobenzene (Surr)	99		81 - 120		09/01/16 16:41	1
Dibromofluoromethane (Surr)	72		42 - 132		09/01/16 16:41	1
Toluene-d8 (Surr)	109		75 - 125		09/01/16 16:41	1
Trifluorotoluene (Surr)	124	X	74 - 118		09/01/16 16:41	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

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

Lab Sample ID: MB 580-226481/5

Matrix: Water

Analysis Batch: 226481

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,1-Dichloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,1-Dichloropropene	ND		0.50		ug/L			09/01/16 14:30	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/01/16 14:30	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/01/16 14:30	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/01/16 14:30	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/01/16 14:30	1
1,2-Dibromoethane	ND		2.0		ug/L			09/01/16 14:30	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/01/16 14:30	1
1,2-Dichloroethane	ND		0.50		ug/L			09/01/16 14:30	1
1,2-Dichloropropane	ND		0.50		ug/L			09/01/16 14:30	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/01/16 14:30	1
1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 14:30	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/01/16 14:30	1
2,2-Dichloropropane	ND		0.50		ug/L			09/01/16 14:30	1
2-Butanone	ND		20		ug/L			09/01/16 14:30	1
2-Chlorotoluene	ND		2.0		ug/L			09/01/16 14:30	1
2-Hexanone	ND		20		ug/L			09/01/16 14:30	1
4-Chlorotoluene	ND		2.0		ug/L			09/01/16 14:30	1
4-Methyl-2-pentanone	ND		20		ug/L			09/01/16 14:30	1
Acetone	ND		20		ug/L			09/01/16 14:30	1
Benzene	ND		0.50		ug/L			09/01/16 14:30	1
Bromobenzene	ND		2.0		ug/L			09/01/16 14:30	1
Bromochloromethane	ND		0.50		ug/L			09/01/16 14:30	1
Bromodichloromethane	ND		0.50		ug/L			09/01/16 14:30	1
Bromoform	ND		0.50		ug/L			09/01/16 14:30	1
Bromomethane	ND		1.0		ug/L			09/01/16 14:30	1
Carbon disulfide	ND		0.50		ug/L			09/01/16 14:30	1
Carbon tetrachloride	ND		0.50		ug/L			09/01/16 14:30	1
Chlorobenzene	ND		0.50		ug/L			09/01/16 14:30	1
Chloroethane	ND		0.50		ug/L			09/01/16 14:30	1
Chloroform	ND		0.50		ug/L			09/01/16 14:30	1
Chloromethane	ND		0.50		ug/L			09/01/16 14:30	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 14:30	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/01/16 14:30	1
Dibromochloromethane	ND		0.50		ug/L			09/01/16 14:30	1
Dibromomethane	ND		0.50		ug/L			09/01/16 14:30	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/01/16 14:30	1
Ethylbenzene	ND		0.50		ug/L			09/01/16 14:30	1
Hexachlorobutadiene	ND		2.0		ug/L			09/01/16 14:30	1
Isopropylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/01/16 14:30	1
Methylene Chloride	ND		2.0		ug/L			09/01/16 14:30	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

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

Lab Sample ID: MB 580-226481/5
Matrix: Water
Analysis Batch: 226481

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.50		ug/L			09/01/16 14:30	1
Naphthalene	ND		2.0		ug/L			09/01/16 14:30	1
n-Butylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
N-Propylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
o-Xylene	ND		0.50		ug/L			09/01/16 14:30	1
p-Isopropyltoluene	ND		2.0		ug/L			09/01/16 14:30	1
sec-Butylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
Styrene	ND		0.50		ug/L			09/01/16 14:30	1
tert-Butylbenzene	ND		2.0		ug/L			09/01/16 14:30	1
Tetrachloroethene	ND		0.50		ug/L			09/01/16 14:30	1
Toluene	ND		0.50		ug/L			09/01/16 14:30	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/01/16 14:30	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/01/16 14:30	1
Trichloroethene	ND		0.50		ug/L			09/01/16 14:30	1
Trichlorofluoromethane	ND		0.50		ug/L			09/01/16 14:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		46 - 150		09/01/16 14:30	1
4-Bromofluorobenzene (Surr)	79	X	81 - 120		09/01/16 14:30	1
Dibromofluoromethane (Surr)	79		42 - 132		09/01/16 14:30	1
Toluene-d8 (Surr)	96		75 - 125		09/01/16 14:30	1
Trifluorotoluene (Surr)	119	X	74 - 118		09/01/16 14:30	1

Lab Sample ID: LCS 580-226481/6
Matrix: Water
Analysis Batch: 226481

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	5.02	5.08		ug/L		101	68 - 139
1,1,1-Trichloroethane	5.02	5.26		ug/L		105	56 - 150
1,1,2,2-Tetrachloroethane	5.01	4.50		ug/L		90	60 - 134
1,1,2-Trichloroethane	5.02	4.87		ug/L		97	62 - 137
1,1-Dichloroethane	5.00	3.87		ug/L		77	68 - 135
1,1-Dichloropropene	5.00	4.65		ug/L		93	64 - 146
1,2,3-Trichlorobenzene	5.01	4.99		ug/L		100	60 - 137
1,2,3-Trichloropropane	5.01	4.72		ug/L		94	45 - 150
1,2,4-Trichlorobenzene	5.00	5.06		ug/L		101	60 - 138
1,2,4-Trimethylbenzene	5.00	4.76		ug/L		95	70 - 142
1,2-Dibromo-3-Chloropropane	5.01	4.43		ug/L		88	34 - 150
1,2-Dibromoethane	5.01	4.88		ug/L		98	56 - 146
1,2-Dichlorobenzene	5.00	5.10		ug/L		102	73 - 120
1,2-Dichloroethane	5.00	4.77		ug/L		95	63 - 150
1,2-Dichloropropane	5.00	4.72		ug/L		94	72 - 120
1,3,5-Trimethylbenzene	5.01	4.71		ug/L		94	70 - 145
1,3-Dichlorobenzene	5.01	4.75		ug/L		95	76 - 120
1,3-Dichloropropane	5.01	4.53		ug/L		90	61 - 130
1,4-Dichlorobenzene	5.01	4.99		ug/L		100	77 - 120
2,2-Dichloropropane	5.00	4.77		ug/L		95	60 - 150

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Leichter Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

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

Lab Sample ID: LCS 580-226481/6

Matrix: Water

Analysis Batch: 226481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone	25.0	26.3		ug/L		105	30 - 150
2-Chlorotoluene	5.00	4.80		ug/L		96	68 - 130
2-Hexanone	25.0	23.1		ug/L		93	25 - 150
4-Chlorotoluene	5.01	4.86		ug/L		97	75 - 130
4-Methyl-2-pentanone	25.0	24.0		ug/L		96	36 - 150
Acetone	25.0	19.0	J	ug/L		76	20 - 138
Benzene	5.02	4.56		ug/L		91	73 - 120
Bromobenzene	5.00	4.83		ug/L		97	68 - 130
Bromochloromethane	5.01	5.02		ug/L		100	71 - 131
Bromodichloromethane	5.02	4.38		ug/L		87	62 - 150
Bromoform	5.02	4.25		ug/L		85	51 - 137
Bromomethane	5.00	3.81		ug/L		76	61 - 135
Carbon disulfide	5.02	3.39		ug/L		68	65 - 128
Carbon tetrachloride	5.01	4.66		ug/L		93	54 - 150
Chlorobenzene	5.02	4.69		ug/L		93	74 - 114
Chloroethane	5.00	3.60		ug/L		72	58 - 130
Chloroform	5.00	5.02		ug/L		100	71 - 130
Chloromethane	5.00	4.05		ug/L		81	40 - 150
cis-1,2-Dichloroethene	5.01	4.99		ug/L		100	73 - 130
cis-1,3-Dichloropropene	5.01	4.37		ug/L		87	54 - 150
Dibromochloromethane	5.01	4.56		ug/L		91	46 - 150
Dibromomethane	5.02	4.34		ug/L		86	65 - 137
Dichlorodifluoromethane	5.00	4.06		ug/L		81	45 - 150
Ethylbenzene	5.02	4.81		ug/L		96	74 - 125
Hexachlorobutadiene	5.00	4.97		ug/L		99	38 - 150
Isopropylbenzene	5.01	5.17		ug/L		103	75 - 137
Methyl tert-butyl ether	5.01	3.80		ug/L		76	56 - 150
Methylene Chloride	5.02	5.73		ug/L		114	58 - 134
m-Xylene & p-Xylene	5.01	4.82		ug/L		96	73 - 130
Naphthalene	5.01	5.14		ug/L		103	26 - 150
n-Butylbenzene	5.01	5.02		ug/L		100	66 - 125
N-Propylbenzene	5.00	4.79		ug/L		96	61 - 142
o-Xylene	5.01	4.64		ug/L		93	80 - 139
p-Isopropyltoluene	5.00	4.77		ug/L		95	72 - 127
sec-Butylbenzene	5.01	4.70		ug/L		94	62 - 140
Styrene	5.01	4.52		ug/L		90	68 - 136
tert-Butylbenzene	5.00	4.62		ug/L		92	55 - 150
Tetrachloroethene	5.01	4.85		ug/L		97	67 - 123
Toluene	5.00	4.52		ug/L		90	70 - 126
trans-1,2-Dichloroethene	5.01	3.69		ug/L		74	69 - 124
trans-1,3-Dichloropropene	5.00	4.31		ug/L		86	40 - 150
Trichloroethene	5.01	4.60		ug/L		92	72 - 123
Trichlorofluoromethane	5.00	4.07		ug/L		81	60 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		46 - 150
4-Bromofluorobenzene (Surr)	100		81 - 120
Dibromofluoromethane (Surr)	96		42 - 132

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

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

Lab Sample ID: LCS 580-226481/6
Matrix: Water
Analysis Batch: 226481

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		75 - 125
Trifluorotoluene (Surr)	116		74 - 118

Lab Sample ID: LCSD 580-226481/7
Matrix: Water
Analysis Batch: 226481

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	5.02	5.23		ug/L		104	68 - 139	3	20
1,1,1-Trichloroethane	5.02	4.13		ug/L		82	56 - 150	24	29
1,1,2,2-Tetrachloroethane	5.01	4.24		ug/L		85	60 - 134	6	25
1,1,2-Trichloroethane	5.02	4.81		ug/L		96	62 - 137	1	30
1,1-Dichloroethane	5.00	3.84		ug/L		77	68 - 135	1	27
1,1-Dichloropropene	5.00	4.96		ug/L		99	64 - 146	6	20
1,2,3-Trichlorobenzene	5.01	5.96		ug/L		119	60 - 137	18	20
1,2,3-Trichloropropane	5.01	4.35		ug/L		87	45 - 150	8	20
1,2,4-Trichlorobenzene	5.00	6.03		ug/L		120	60 - 138	18	20
1,2,4-Trimethylbenzene	5.00	4.73		ug/L		95	70 - 142	1	20
1,2-Dibromo-3-Chloropropane	5.01	4.78		ug/L		95	34 - 150	7	20
1,2-Dibromoethane	5.01	4.60		ug/L		92	56 - 146	6	20
1,2-Dichlorobenzene	5.00	6.24	*	ug/L		125	73 - 120	20	14
1,2-Dichloroethane	5.00	3.74		ug/L		75	63 - 150	24	29
1,2-Dichloropropane	5.00	4.67		ug/L		93	72 - 120	1	20
1,3,5-Trimethylbenzene	5.01	4.76		ug/L		95	70 - 145	1	20
1,3-Dichlorobenzene	5.01	4.68		ug/L		93	76 - 120	1	12
1,3-Dichloropropane	5.01	4.48		ug/L		89	61 - 130	1	29
1,4-Dichlorobenzene	5.01	5.28		ug/L		105	77 - 120	6	11
2,2-Dichloropropane	5.00	3.79		ug/L		76	60 - 150	23	29
2-Butanone	25.0	16.1	J *	ug/L		65	30 - 150	48	35
2-Chlorotoluene	5.00	4.83		ug/L		97	68 - 130	0	20
2-Hexanone	25.0	21.7		ug/L		87	25 - 150	6	28
4-Chlorotoluene	5.01	4.73		ug/L		94	75 - 130	3	20
4-Methyl-2-pentanone	25.0	23.3		ug/L		93	36 - 150	3	34
Acetone	25.0	16.9	J	ug/L		68	20 - 138	11	35
Benzene	5.02	4.93		ug/L		98	73 - 120	8	20
Bromobenzene	5.00	4.62		ug/L		92	68 - 130	4	20
Bromochloromethane	5.01	3.83	*	ug/L		77	71 - 131	27	20
Bromodichloromethane	5.02	4.26		ug/L		85	62 - 150	3	20
Bromoform	5.02	4.08		ug/L		81	51 - 137	4	20
Bromomethane	5.00	3.74		ug/L		75	61 - 135	2	31
Carbon disulfide	5.02	3.36		ug/L		67	65 - 128	1	32
Carbon tetrachloride	5.01	4.74		ug/L		95	54 - 150	2	30
Chlorobenzene	5.02	4.80		ug/L		96	74 - 114	2	12
Chloroethane	5.00	3.65		ug/L		73	58 - 130	1	35
Chloroform	5.00	4.02	*	ug/L		80	71 - 130	22	20
Chloromethane	5.00	4.61		ug/L		92	40 - 150	13	31
cis-1,2-Dichloroethene	5.01	3.75	*	ug/L		75	73 - 130	28	20
cis-1,3-Dichloropropene	5.01	4.45		ug/L		89	54 - 150	2	28

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

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

Lab Sample ID: LCSD 580-226481/7

Matrix: Water

Analysis Batch: 226481

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
Dibromochloromethane	5.01	4.41		ug/L		88	46 - 150	3	20
Dibromomethane	5.02	4.26		ug/L		85	65 - 137	2	20
Dichlorodifluoromethane	5.00	3.94		ug/L		79	45 - 150	3	29
Ethylbenzene	5.02	4.78		ug/L		95	74 - 125	1	20
Hexachlorobutadiene	5.00	6.13	*	ug/L		123	38 - 150	21	20
Isopropylbenzene	5.01	5.23		ug/L		105	75 - 137	1	20
Methyl tert-butyl ether	5.01	3.66		ug/L		73	56 - 150	4	26
Methylene Chloride	5.02	5.66		ug/L		113	58 - 134	1	29
m-Xylene & p-Xylene	5.01	4.77		ug/L		95	73 - 130	1	20
Naphthalene	5.01	6.31		ug/L		126	26 - 150	20	20
n-Butylbenzene	5.01	6.14		ug/L		123	66 - 125	20	20
N-Propylbenzene	5.00	4.73		ug/L		95	61 - 142	1	20
o-Xylene	5.01	4.65		ug/L		93	80 - 139	0	20
p-Isopropyltoluene	5.00	5.25		ug/L		105	72 - 127	10	14
sec-Butylbenzene	5.01	4.68		ug/L		93	62 - 140	0	20
Styrene	5.01	4.60		ug/L		92	68 - 136	2	20
tert-Butylbenzene	5.00	4.66		ug/L		93	55 - 150	1	20
Tetrachloroethene	5.01	4.92		ug/L		98	67 - 123	1	20
Toluene	5.00	4.70		ug/L		94	70 - 126	4	20
trans-1,2-Dichloroethene	5.01	3.71		ug/L		74	69 - 124	1	27
trans-1,3-Dichloropropene	5.00	4.38		ug/L		87	40 - 150	2	30
Trichloroethene	5.01	4.62		ug/L		92	72 - 123	0	20
Trichlorofluoromethane	5.00	4.15		ug/L		83	60 - 150	2	31

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	73		46 - 150
4-Bromofluorobenzene (Surr)	98		81 - 120
Dibromofluoromethane (Surr)	77		42 - 132
Toluene-d8 (Surr)	101		75 - 125
Trifluorotoluene (Surr)	113		74 - 118

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-225777/16-A

Matrix: Water

Analysis Batch: 226062

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 225777

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/24/16 11:32	08/26/16 22:39	1
Manganese	ND		0.0020		mg/L		08/24/16 11:32	08/26/16 22:39	1

Lab Sample ID: LCS 580-225777/17-A

Matrix: Water

Analysis Batch: 226062

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 225777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	22.0	24.4		mg/L		111	80 - 120
Manganese	1.00	1.06		mg/L		106	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Lab Sample ID: LCSD 580-225777/18-A
Matrix: Water
Analysis Batch: 226062

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 225777

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	22.0	24.4		mg/L		111	80 - 120	0	20
Manganese	1.00	1.07		mg/L		107	80 - 120	2	20

Lab Sample ID: 580-61867-B-3-C MS
Matrix: Water
Analysis Batch: 226062

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 225777

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		22.0	24.3		mg/L		110	80 - 120		
Manganese	0.075		1.00	1.13		mg/L		106	80 - 120		

Lab Sample ID: 580-61867-B-3-D MSD
Matrix: Water
Analysis Batch: 226062

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 225777

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		22.0	24.3		mg/L		110	80 - 120	0	20
Manganese	0.075		1.00	1.13		mg/L		105	80 - 120	0	20

Lab Sample ID: 580-61867-B-3-B DU
Matrix: Water
Analysis Batch: 226062

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 225777

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	ND		ND		mg/L		NC	20
Manganese	0.075		0.0714		mg/L		5	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-226028/1
Matrix: Water
Analysis Batch: 226028

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			08/26/16 14:36	1

Lab Sample ID: LCS 580-226028/2
Matrix: Water
Analysis Batch: 226028

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	1000	1030		mg/L		103	80 - 120

Lab Sample ID: 580-61908-B-1 DU
Matrix: Water
Analysis Batch: 226028

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2000		2000		mg/L		1	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-225890/3
Matrix: Water
Analysis Batch: 225890

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.20		mg/L			08/24/16 09:47	1

Lab Sample ID: LCS 580-225890/4
Matrix: Water
Analysis Batch: 225890

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	5.17		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-225890/5
Matrix: Water
Analysis Batch: 225890

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
Nitrogen, Nitrate	5.00	5.23		mg/L		105	90 - 110	1	15

Lab Sample ID: 580-61940-1 MS
Matrix: Water
Analysis Batch: 225890

Client Sample ID: LB-082316-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	6.6	F1	5.00	13.1	F1	mg/L		130	90 - 110

Lab Sample ID: 580-61940-1 MSD
Matrix: Water
Analysis Batch: 225890

Client Sample ID: LB-082316-01
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	6.6	F1	5.00	14.2	F1	mg/L		152	90 - 110	8	15

Lab Sample ID: MB 580-225893/3
Matrix: Water
Analysis Batch: 225893

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			08/24/16 09:47	1

Lab Sample ID: LCS 580-225893/4
Matrix: Water
Analysis Batch: 225893

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-225893/5
Matrix: Water
Analysis Batch: 225893

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
Chloride	50.0	50.6		mg/L		101	90 - 110	1	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Lab Sample ID: 580-61940-1 MS
Matrix: Water
Analysis Batch: 225893

Client Sample ID: LB-082316-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.1	F1	50.0	65.4	F1	mg/L		121	90 - 110

Lab Sample ID: 580-61940-1 MSD
Matrix: Water
Analysis Batch: 225893

Client Sample ID: LB-082316-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.1	F1	50.0	75.7	F1	mg/L		141	90 - 110	15	15



Lab Chronicle

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-01
Date Collected: 08/23/16 12:00
Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226481	09/01/16 22:25	TL1	TAL SEA
Dissolved	Prep	3005A			225777	08/24/16 11:32		TAL SEA
Dissolved	Analysis	6020		1	226062	08/27/16 00:17	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225890	08/24/16 13:00	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225893	08/24/16 13:00	RSB	TAL SEA

Client Sample ID: LB-082316-03
Date Collected: 08/23/16 14:05
Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226481	09/01/16 22:51	TL1	TAL SEA
Dissolved	Prep	3005A			225777	08/24/16 11:32		TAL SEA
Dissolved	Analysis	6020		1	226062	08/27/16 00:22	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225890	08/24/16 13:56	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225893	08/24/16 13:56	RSB	TAL SEA

Client Sample ID: LB-082316-04
Date Collected: 08/23/16 15:10
Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226481	09/01/16 23:17	TL1	TAL SEA
Dissolved	Prep	3005A			225777	08/24/16 11:32		TAL SEA
Dissolved	Analysis	6020		1	226062	08/27/16 00:26	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225890	08/24/16 14:14	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225893	08/24/16 14:14	RSB	TAL SEA

Client Sample ID: LB-082316-02
Date Collected: 08/23/16 13:05
Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226481	09/01/16 23:44	TL1	TAL SEA
Dissolved	Prep	3005A			225777	08/24/16 11:32		TAL SEA
Dissolved	Analysis	6020		1	226062	08/27/16 00:31	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225890	08/24/16 14:33	RSB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Client Sample ID: LB-082316-02

Date Collected: 08/23/16 13:05

Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	225893	08/24/16 14:33	RSB	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 08/23/16 00:00

Date Received: 08/23/16 16:25

Lab Sample ID: 580-61940-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226481	09/01/16 16:41	TL1	TAL SEA

Laboratory References:

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

Certification Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Sample Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61940-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-61940-1	LB-082316-01	Water	08/23/16 12:00	08/23/16 16:25
580-61940-2	LB-082316-03	Water	08/23/16 14:05	08/23/16 16:25
580-61940-3	LB-082316-04	Water	08/23/16 15:10	08/23/16 16:25
580-61940-4	LB-082316-02	Water	08/23/16 13:05	08/23/16 16:25
580-61940-5	Trip Blank	Water	08/23/16 00:00	08/23/16 16:25

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580-61940 Chain of Custody

Rush

Short Hold

Chain of Custody Record

Client: **SCS Engineers** Chain of Custody Number: **29397**

Address: **15940 SW 72nd Ave** Telephone Number (Area Code)/Fax Number: **503 639-9601** Lab Number: **8/23/16** Page **1** of **1**

City: **Portland** State: **OR** Zip Code: **97224** Lab Contact: **503 724-0112**

Project Name and Location (State): **Leichner Landfill** Billing Contact: **Sarah Murphy**

Contract/Purchase Order/Quote-No.: **(04216030.13)**

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)

Sample I.D. and Location/Description	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt		
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH				
LB-082316-01	8/23/16	1300	X					3	1	3					Dissolved Mn	Samples are Field Filtered
LB-082316-03	8/23/16	1405	X					3	1	3				Dissolved Fe		
LB-082316-04	8/23/16	1516	X					3	1	3				U. trace (300g)		
LB-082316-02	8/23/16	1305	X					3	1	3				TDS (160.1)		
Trip Blank			X											8460 VOCs		

QC Requirements (Specify)

Cooler: Yes No Cooler Temp: _____

Possible Hazard Identification: Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Archive For _____ Months

Sample Disposal: Disposal By Lab Return To Client Archive For _____ Months

Turn Around Time Required (business days): 24 Hours 48 Hours 5 Days 10 Days 15 Days Other _____

1. Relinquished By: *[Signature]* Date: **8/23/16** Time: **1625**

2. Relinquished By: *[Signature]* Date: _____ Time: _____

3. Relinquished By: *[Signature]* Date: _____ Time: _____

Comments: **3.5 IR (PL)**



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-61940-1

Login Number: 61940

List Number: 1

Creator: Gonzales, Steve

List Source: TestAmerica Seattle

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-61962-1

Client Project/Site: Leichner Landfill - Semi-Annual
Revision: 1

For:

SCS Engineers
15940 SW 72nd Avenue
Portland, Oregon 97224

Attn: Mr. Jason Davendonis



Authorized for release by:
9/29/2016 7:14:47 AM

Robert Greer, Project Manager II
(253)922-2310
robert.greer@testamericainc.com

LINKS

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results through
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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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Case Narrative

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Job ID: 580-61962-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-61962-1

Comments

No additional comments.

Receipt

The samples were received on 8/24/2016 1:58 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0° C.

Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA

Method(s) 8260B: The method blank for analytical batch 580-226522 contained Acetone above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: The method blank for analytical batch 580-226522 contained Methylene Chloride above the reporting limit (RL). The associated laboratory samples with this method blank did not contain the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-226522 recovered outside control limits for the following analytes: Methylene Chloride, 1,1-Dichloroethane, Carbon disulfide, cis-1,2-Dichloroethene and 2-Butanone. These analytes were biased high in the LCS and were not detected above the reporting in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 580-226522 recovered outside control limits for the following analytes: Bromochloromethane, Naphthalene, Chloroform, 2-Butanone, and cis-1,2-Dichloroethene.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 580-226522 recovered outside acceptance criteria, low biased, for Toluene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte or had results between the reporting limit and method detection limit, the data have been reported.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 580-226522 recovered above the upper control limit for 2-Chlorotoluene, 1,2,3-Trichloropropane, Acetone, N-Propylbenzene, 1,1,2,2-Tetrachloroethane, 1,3,5-Trimethylbenzene, 4-Chlorotoluene, Methylene Chloride and Bromobenzene. The samples associated with this CCV were non-detects or had results between the reporting limit and method detection limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: LB-082416-05 (580-61962-1), LB-082416-08 (580-61962-2), LB-082416-09 (580-61962-3), LB-082416-07 (580-61962-4), LB-082416-06 (580-61962-5), Trip Blanks (580-61962-6) and (CCVIS 580-226522/3).

Method(s) 8260B: Surrogate recovery for the following samples was outside the upper control limit: LB-082416-08 (580-61962-2), LB-082416-09 (580-61962-3), LB-082416-07 (580-61962-4) and LB-082416-06 (580-61962-5). This sample did not contain any target analytes or had results between the reporting limit and method detection limit; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Methylene Chloride is biased high in all QC and it was detected in the Trip Blank (580-61962-6). This is likely due to common lab contamination since all associated laboratory samples were non-detect for the analyte.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6020: The method blank for preparation batch 580-225970 and analytical batch 580-226117 contained above the method

Case Narrative

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Job ID: 580-61962-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

detection limit. These target analytes concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Definitions/Glossary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.

Metals

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

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance 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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-05

Lab Sample ID: 580-61962-1

Date Collected: 08/24/16 10:10

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 08:32	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 08:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 08:32	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 08:32	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 08:32	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 08:32	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 08:32	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 08:32	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 08:32	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 08:32	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 08:32	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:32	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 08:32	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 08:32	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:32	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 08:32	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:32	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 08:32	1
2-Butanone	ND	*	20		ug/L			09/02/16 08:32	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 08:32	1
2-Hexanone	ND		20		ug/L			09/02/16 08:32	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 08:32	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 08:32	1
Acetone	ND		20		ug/L			09/02/16 08:32	1
Benzene	ND		0.50		ug/L			09/02/16 08:32	1
Bromobenzene	ND		2.0		ug/L			09/02/16 08:32	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 08:32	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 08:32	1
Bromoform	ND		0.50		ug/L			09/02/16 08:32	1
Bromomethane	ND		1.0		ug/L			09/02/16 08:32	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 08:32	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 08:32	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 08:32	1
Chloroethane	ND		0.50		ug/L			09/02/16 08:32	1
Chloroform	ND	*	0.50		ug/L			09/02/16 08:32	1
Chloromethane	ND		0.50		ug/L			09/02/16 08:32	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 08:32	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 08:32	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 08:32	1
Dibromomethane	ND		0.50		ug/L			09/02/16 08:32	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 08:32	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 08:32	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 08:32	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 08:32	1
Methylene Chloride	ND	*	2.0		ug/L			09/02/16 08:32	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 08:32	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-05

Lab Sample ID: 580-61962-1

Date Collected: 08/24/16 10:10

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 08:32	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
o-Xylene	ND		0.50		ug/L			09/02/16 08:32	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 08:32	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
Styrene	ND		0.50		ug/L			09/02/16 08:32	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 08:32	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 08:32	1
Toluene	ND		0.50		ug/L			09/02/16 08:32	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 08:32	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 08:32	1
Trichloroethene	ND		0.50		ug/L			09/02/16 08:32	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 08:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		46 - 150		09/02/16 08:32	1
4-Bromofluorobenzene (Surr)	98		81 - 120		09/02/16 08:32	1
Dibromofluoromethane (Surr)	93		42 - 132		09/02/16 08:32	1
Toluene-d8 (Surr)	98		75 - 125		09/02/16 08:32	1
Trifluorotoluene (Surr)	77		74 - 118		09/02/16 08:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 14:51	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10		mg/L			08/26/16 14:36	1
Chloride	11	F1	0.90		mg/L			08/25/16 14:45	1
Nitrogen, Nitrate	5.4	F1	0.20		mg/L			08/25/16 14:45	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-08

Lab Sample ID: 580-61962-2

Date Collected: 08/24/16 12:15

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 08:59	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 08:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 08:59	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 08:59	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 08:59	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 08:59	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 08:59	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 08:59	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 08:59	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 08:59	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 08:59	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:59	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 08:59	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 08:59	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:59	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 08:59	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 08:59	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 08:59	1
2-Butanone	ND	*	20		ug/L			09/02/16 08:59	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 08:59	1
2-Hexanone	ND		20		ug/L			09/02/16 08:59	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 08:59	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 08:59	1
Acetone	ND		20		ug/L			09/02/16 08:59	1
Benzene	ND		0.50		ug/L			09/02/16 08:59	1
Bromobenzene	ND		2.0		ug/L			09/02/16 08:59	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 08:59	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 08:59	1
Bromoform	ND		0.50		ug/L			09/02/16 08:59	1
Bromomethane	ND		1.0		ug/L			09/02/16 08:59	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 08:59	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 08:59	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 08:59	1
Chloroethane	ND		0.50		ug/L			09/02/16 08:59	1
Chloroform	ND	*	0.50		ug/L			09/02/16 08:59	1
Chloromethane	ND		0.50		ug/L			09/02/16 08:59	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 08:59	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 08:59	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 08:59	1
Dibromomethane	ND		0.50		ug/L			09/02/16 08:59	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 08:59	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 08:59	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 08:59	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 08:59	1
Methylene Chloride	ND	*	2.0		ug/L			09/02/16 08:59	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 08:59	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-08

Lab Sample ID: 580-61962-2

Date Collected: 08/24/16 12:15

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 08:59	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
o-Xylene	ND		0.50		ug/L			09/02/16 08:59	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 08:59	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
Styrene	ND		0.50		ug/L			09/02/16 08:59	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 08:59	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 08:59	1
Toluene	ND		0.50		ug/L			09/02/16 08:59	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 08:59	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 08:59	1
Trichloroethene	ND		0.50		ug/L			09/02/16 08:59	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 08:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150		09/02/16 08:59	1
4-Bromofluorobenzene (Surr)	97		81 - 120		09/02/16 08:59	1
Dibromofluoromethane (Surr)	75		42 - 132		09/02/16 08:59	1
Toluene-d8 (Surr)	98		75 - 125		09/02/16 08:59	1
Trifluorotoluene (Surr)	120	X	74 - 118		09/02/16 08:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 14:55	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		10		mg/L			08/26/16 14:36	1
Chloride	4.8		0.90		mg/L			08/25/16 15:41	1
Nitrogen, Nitrate	1.7		0.20		mg/L			08/25/16 15:41	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-09

Lab Sample ID: 580-61962-3

Date Collected: 08/24/16 12:20

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 09:25	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 09:25	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 09:25	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 09:25	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 09:25	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 09:25	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 09:25	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 09:25	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 09:25	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 09:25	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 09:25	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:25	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 09:25	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 09:25	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:25	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 09:25	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:25	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 09:25	1
2-Butanone	ND	*	20		ug/L			09/02/16 09:25	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 09:25	1
2-Hexanone	ND		20		ug/L			09/02/16 09:25	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 09:25	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 09:25	1
Acetone	ND		20		ug/L			09/02/16 09:25	1
Benzene	ND		0.50		ug/L			09/02/16 09:25	1
Bromobenzene	ND		2.0		ug/L			09/02/16 09:25	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 09:25	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 09:25	1
Bromoform	ND		0.50		ug/L			09/02/16 09:25	1
Bromomethane	ND		1.0		ug/L			09/02/16 09:25	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 09:25	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 09:25	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 09:25	1
Chloroethane	ND		0.50		ug/L			09/02/16 09:25	1
Chloroform	ND	*	0.50		ug/L			09/02/16 09:25	1
Chloromethane	ND		0.50		ug/L			09/02/16 09:25	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 09:25	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 09:25	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 09:25	1
Dibromomethane	ND		0.50		ug/L			09/02/16 09:25	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 09:25	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 09:25	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 09:25	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 09:25	1
Methylene Chloride	ND	*	2.0		ug/L			09/02/16 09:25	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 09:25	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-09

Lab Sample ID: 580-61962-3

Date Collected: 08/24/16 12:20

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 09:25	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
o-Xylene	ND		0.50		ug/L			09/02/16 09:25	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 09:25	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
Styrene	ND		0.50		ug/L			09/02/16 09:25	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 09:25	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 09:25	1
Toluene	ND		0.50		ug/L			09/02/16 09:25	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 09:25	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 09:25	1
Trichloroethene	ND		0.50		ug/L			09/02/16 09:25	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 09:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150		09/02/16 09:25	1
4-Bromofluorobenzene (Surr)	99		81 - 120		09/02/16 09:25	1
Dibromofluoromethane (Surr)	93		42 - 132		09/02/16 09:25	1
Toluene-d8 (Surr)	129	X	75 - 125		09/02/16 09:25	1
Trifluorotoluene (Surr)	99		74 - 118		09/02/16 09:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 15:00	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10		mg/L			08/26/16 14:36	1
Chloride	4.9		0.90		mg/L			08/25/16 15:59	1
Nitrogen, Nitrate	1.6		0.20		mg/L			08/25/16 15:59	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-07

Lab Sample ID: 580-61962-4

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 09:51	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 09:51	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 09:51	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 09:51	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 09:51	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 09:51	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 09:51	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 09:51	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 09:51	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 09:51	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 09:51	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:51	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 09:51	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 09:51	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:51	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 09:51	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:51	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 09:51	1
2-Butanone	ND	*	20		ug/L			09/02/16 09:51	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 09:51	1
2-Hexanone	ND		20		ug/L			09/02/16 09:51	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 09:51	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 09:51	1
Acetone	ND		20		ug/L			09/02/16 09:51	1
Benzene	ND		0.50		ug/L			09/02/16 09:51	1
Bromobenzene	ND		2.0		ug/L			09/02/16 09:51	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 09:51	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 09:51	1
Bromoform	ND		0.50		ug/L			09/02/16 09:51	1
Bromomethane	ND		1.0		ug/L			09/02/16 09:51	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 09:51	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 09:51	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 09:51	1
Chloroethane	ND		0.50		ug/L			09/02/16 09:51	1
Chloroform	ND	*	0.50		ug/L			09/02/16 09:51	1
Chloromethane	ND		0.50		ug/L			09/02/16 09:51	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 09:51	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 09:51	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 09:51	1
Dibromomethane	ND		0.50		ug/L			09/02/16 09:51	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 09:51	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 09:51	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 09:51	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 09:51	1
Methylene Chloride	ND	*	2.0		ug/L			09/02/16 09:51	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 09:51	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-07

Lab Sample ID: 580-61962-4

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 09:51	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
o-Xylene	ND		0.50		ug/L			09/02/16 09:51	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 09:51	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
Styrene	ND		0.50		ug/L			09/02/16 09:51	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 09:51	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 09:51	1
Toluene	ND		0.50		ug/L			09/02/16 09:51	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 09:51	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 09:51	1
Trichloroethene	ND		0.50		ug/L			09/02/16 09:51	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 09:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		46 - 150		09/02/16 09:51	1
4-Bromofluorobenzene (Surr)	128	X	81 - 120		09/02/16 09:51	1
Dibromofluoromethane (Surr)	94		42 - 132		09/02/16 09:51	1
Toluene-d8 (Surr)	98		75 - 125		09/02/16 09:51	1
Trifluorotoluene (Surr)	79		74 - 118		09/02/16 09:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 15:04	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10		mg/L			08/26/16 14:36	1
Chloride	26		0.90		mg/L			08/25/16 16:17	1
Nitrogen, Nitrate	1.1		0.20		mg/L			08/25/16 16:17	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-06

Lab Sample ID: 580-61962-5

Date Collected: 08/24/16 10:50

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 10:17	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 10:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 10:17	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 10:17	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 10:17	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 10:17	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 10:17	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 10:17	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 10:17	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 10:17	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 10:17	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 10:17	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 10:17	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 10:17	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 10:17	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 10:17	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 10:17	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 10:17	1
2-Butanone	ND	*	20		ug/L			09/02/16 10:17	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 10:17	1
2-Hexanone	ND		20		ug/L			09/02/16 10:17	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 10:17	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 10:17	1
Acetone	ND		20		ug/L			09/02/16 10:17	1
Benzene	ND		0.50		ug/L			09/02/16 10:17	1
Bromobenzene	ND		2.0		ug/L			09/02/16 10:17	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 10:17	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 10:17	1
Bromoform	ND		0.50		ug/L			09/02/16 10:17	1
Bromomethane	ND		1.0		ug/L			09/02/16 10:17	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 10:17	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 10:17	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 10:17	1
Chloroethane	ND		0.50		ug/L			09/02/16 10:17	1
Chloroform	ND	*	0.50		ug/L			09/02/16 10:17	1
Chloromethane	ND		0.50		ug/L			09/02/16 10:17	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 10:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 10:17	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 10:17	1
Dibromomethane	ND		0.50		ug/L			09/02/16 10:17	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 10:17	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 10:17	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 10:17	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 10:17	1
Methylene Chloride	ND	*	2.0		ug/L			09/02/16 10:17	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 10:17	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-06

Lab Sample ID: 580-61962-5

Date Collected: 08/24/16 10:50

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 10:17	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
o-Xylene	ND		0.50		ug/L			09/02/16 10:17	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 10:17	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
Styrene	ND		0.50		ug/L			09/02/16 10:17	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 10:17	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 10:17	1
Toluene	ND		0.50		ug/L			09/02/16 10:17	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 10:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 10:17	1
Trichloroethene	ND		0.50		ug/L			09/02/16 10:17	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 10:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		46 - 150		09/02/16 10:17	1
4-Bromofluorobenzene (Surr)	98		81 - 120		09/02/16 10:17	1
Dibromofluoromethane (Surr)	101		42 - 132		09/02/16 10:17	1
Toluene-d8 (Surr)	99		75 - 125		09/02/16 10:17	1
Trifluorotoluene (Surr)	122	X	74 - 118		09/02/16 10:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 15:09	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			08/26/16 14:36	1
Chloride	ND		0.90		mg/L			08/25/16 16:36	1
Nitrogen, Nitrate	ND		0.20		mg/L			08/25/16 16:36	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-61962-6

Date Collected: 08/24/16 00:00

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 04:35	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 04:35	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 04:35	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 04:35	1
1,1-Dichloroethane	ND	*	0.50		ug/L			09/02/16 04:35	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 04:35	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 04:35	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 04:35	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 04:35	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 04:35	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 04:35	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 04:35	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 04:35	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 04:35	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 04:35	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 04:35	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 04:35	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 04:35	1
2-Butanone	ND	*	20		ug/L			09/02/16 04:35	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 04:35	1
2-Hexanone	ND		20		ug/L			09/02/16 04:35	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 04:35	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 04:35	1
Acetone	ND		20		ug/L			09/02/16 04:35	1
Benzene	ND		0.50		ug/L			09/02/16 04:35	1
Bromobenzene	ND		2.0		ug/L			09/02/16 04:35	1
Bromochloromethane	ND	*	0.50		ug/L			09/02/16 04:35	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 04:35	1
Bromoform	ND		0.50		ug/L			09/02/16 04:35	1
Bromomethane	ND		1.0		ug/L			09/02/16 04:35	1
Carbon disulfide	ND	*	0.50		ug/L			09/02/16 04:35	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 04:35	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 04:35	1
Chloroethane	ND		0.50		ug/L			09/02/16 04:35	1
Chloroform	ND	*	0.50		ug/L			09/02/16 04:35	1
Chloromethane	ND		0.50		ug/L			09/02/16 04:35	1
cis-1,2-Dichloroethene	ND	*	0.50		ug/L			09/02/16 04:35	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 04:35	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 04:35	1
Dibromomethane	ND		0.50		ug/L			09/02/16 04:35	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 04:35	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 04:35	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 04:35	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 04:35	1
Methylene Chloride	5.3	B *	2.0		ug/L			09/02/16 04:35	1
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 04:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
 Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: Trip Blanks

Lab Sample ID: 580-61962-6

Date Collected: 08/24/16 00:00

Matrix: Water

Date Received: 08/24/16 13:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*	2.0		ug/L			09/02/16 04:35	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
o-Xylene	ND		0.50		ug/L			09/02/16 04:35	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 04:35	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
Styrene	ND		0.50		ug/L			09/02/16 04:35	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 04:35	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 04:35	1
Toluene	ND		0.50		ug/L			09/02/16 04:35	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 04:35	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 04:35	1
Trichloroethene	ND		0.50		ug/L			09/02/16 04:35	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 04:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		09/02/16 04:35	1
4-Bromofluorobenzene (Surr)	98		81 - 120		09/02/16 04:35	1
Dibromofluoromethane (Surr)	98		42 - 132		09/02/16 04:35	1
Toluene-d8 (Surr)	99		75 - 125		09/02/16 04:35	1
Trifluorotoluene (Surr)	97		74 - 118		09/02/16 04:35	1

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

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

Lab Sample ID: MB 580-226522/5

Matrix: Water

Analysis Batch: 226522

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,1-Dichloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 02:22	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/02/16 02:22	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/02/16 02:22	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/02/16 02:22	1
1,2,4-Trimethylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/02/16 02:22	1
1,2-Dibromoethane	ND		2.0		ug/L			09/02/16 02:22	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 02:22	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 02:22	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 02:22	1
1,3,5-Trimethylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 02:22	1
1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 02:22	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 02:22	1
2,2-Dichloropropane	ND		0.50		ug/L			09/02/16 02:22	1
2-Butanone	ND		20		ug/L			09/02/16 02:22	1
2-Chlorotoluene	ND		2.0		ug/L			09/02/16 02:22	1
2-Hexanone	ND		20		ug/L			09/02/16 02:22	1
4-Chlorotoluene	ND		2.0		ug/L			09/02/16 02:22	1
4-Methyl-2-pentanone	ND		20		ug/L			09/02/16 02:22	1
Acetone	ND		20		ug/L			09/02/16 02:22	1
Benzene	ND		0.50		ug/L			09/02/16 02:22	1
Bromobenzene	ND		2.0		ug/L			09/02/16 02:22	1
Bromochloromethane	ND		0.50		ug/L			09/02/16 02:22	1
Bromodichloromethane	ND		0.50		ug/L			09/02/16 02:22	1
Bromoform	ND		0.50		ug/L			09/02/16 02:22	1
Bromomethane	ND		1.0		ug/L			09/02/16 02:22	1
Carbon disulfide	ND		0.50		ug/L			09/02/16 02:22	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 02:22	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 02:22	1
Chloroethane	ND		0.50		ug/L			09/02/16 02:22	1
Chloroform	ND		0.50		ug/L			09/02/16 02:22	1
Chloromethane	ND		0.50		ug/L			09/02/16 02:22	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 02:22	1
cis-1,3-Dichloropropane	ND		0.50		ug/L			09/02/16 02:22	1
Dibromochloromethane	ND		0.50		ug/L			09/02/16 02:22	1
Dibromomethane	ND		0.50		ug/L			09/02/16 02:22	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 02:22	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 02:22	1
Hexachlorobutadiene	ND		2.0		ug/L			09/02/16 02:22	1
Isopropylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 02:22	1
Methylene Chloride	8.45		2.0		ug/L			09/02/16 02:22	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

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

Lab Sample ID: MB 580-226522/5

Matrix: Water

Analysis Batch: 226522

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.50		ug/L			09/02/16 02:22	1
Naphthalene	ND		2.0		ug/L			09/02/16 02:22	1
n-Butylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
N-Propylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
o-Xylene	ND		0.50		ug/L			09/02/16 02:22	1
p-Isopropyltoluene	ND		2.0		ug/L			09/02/16 02:22	1
sec-Butylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
Styrene	ND		0.50		ug/L			09/02/16 02:22	1
tert-Butylbenzene	ND		2.0		ug/L			09/02/16 02:22	1
Tetrachloroethene	ND		0.50		ug/L			09/02/16 02:22	1
Toluene	ND		0.50		ug/L			09/02/16 02:22	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 02:22	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 02:22	1
Trichloroethene	ND		0.50		ug/L			09/02/16 02:22	1
Trichlorofluoromethane	ND		0.50		ug/L			09/02/16 02:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		09/02/16 02:22	1
4-Bromofluorobenzene (Surr)	99		81 - 120		09/02/16 02:22	1
Dibromofluoromethane (Surr)	101		42 - 132		09/02/16 02:22	1
Toluene-d8 (Surr)	100		75 - 125		09/02/16 02:22	1
Trifluorotoluene (Surr)	79		74 - 118		09/02/16 02:22	1

Lab Sample ID: LCS 580-226522/6

Matrix: Water

Analysis Batch: 226522

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	5.02	4.78		ug/L		95	68 - 139
1,1,1-Trichloroethane	5.02	4.91		ug/L		98	56 - 150
1,1,2,2-Tetrachloroethane	5.01	4.63		ug/L		92	60 - 134
1,1,2-Trichloroethane	5.02	5.38		ug/L		107	62 - 137
1,1-Dichloroethane	5.00	6.99	*	ug/L		140	68 - 135
1,1-Dichloropropene	5.00	4.37		ug/L		87	64 - 146
1,2,3-Trichlorobenzene	5.01	6.58		ug/L		131	60 - 137
1,2,3-Trichloropropane	5.01	5.37		ug/L		107	45 - 150
1,2,4-Trichlorobenzene	5.00	5.07		ug/L		101	60 - 138
1,2,4-Trimethylbenzene	5.00	4.65		ug/L		93	70 - 142
1,2-Dibromo-3-Chloropropane	5.01	4.94		ug/L		99	34 - 150
1,2-Dibromoethane	5.01	5.26		ug/L		105	56 - 146
1,2-Dichlorobenzene	5.00	5.33		ug/L		106	73 - 120
1,2-Dichloroethane	5.00	5.42		ug/L		108	63 - 150
1,2-Dichloropropane	5.00	4.77		ug/L		95	72 - 120
1,3,5-Trimethylbenzene	5.01	4.64		ug/L		93	70 - 145
1,3-Dichlorobenzene	5.01	4.83		ug/L		96	76 - 120
1,3-Dichloropropane	5.01	5.28		ug/L		105	61 - 130
1,4-Dichlorobenzene	5.01	5.00		ug/L		100	77 - 120
2,2-Dichloropropane	5.00	3.19		ug/L		64	60 - 150

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Leichter Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

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

Lab Sample ID: LCS 580-226522/6

Matrix: Water

Analysis Batch: 226522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone	25.0	25.8		ug/L		103	30 - 150
2-Chlorotoluene	5.00	4.91		ug/L		98	68 - 130
2-Hexanone	25.0	28.9		ug/L		116	25 - 150
4-Chlorotoluene	5.01	4.90		ug/L		98	75 - 130
4-Methyl-2-pentanone	25.0	26.5		ug/L		106	36 - 150
Acetone	25.0	25.7		ug/L		103	20 - 138
Benzene	5.02	4.49		ug/L		89	73 - 120
Bromobenzene	5.00	5.18		ug/L		104	68 - 130
Bromochloromethane	5.01	4.69		ug/L		94	71 - 131
Bromodichloromethane	5.02	5.17		ug/L		103	62 - 150
Bromoform	5.02	4.41		ug/L		88	51 - 137
Bromomethane	5.00	3.78		ug/L		76	61 - 135
Carbon disulfide	5.02	5.44		ug/L		108	65 - 128
Carbon tetrachloride	5.01	4.80		ug/L		96	54 - 150
Chlorobenzene	5.02	4.67		ug/L		93	74 - 114
Chloroethane	5.00	3.69		ug/L		74	58 - 130
Chloroform	5.00	4.84		ug/L		97	71 - 130
Chloromethane	5.00	4.48		ug/L		90	40 - 150
cis-1,2-Dichloroethene	5.01	4.49		ug/L		90	73 - 130
cis-1,3-Dichloropropene	5.01	4.65		ug/L		93	54 - 150
Dibromochloromethane	5.01	4.88		ug/L		97	46 - 150
Dibromomethane	5.02	4.97		ug/L		99	65 - 137
Dichlorodifluoromethane	5.00	4.34		ug/L		87	45 - 150
Ethylbenzene	5.02	4.53		ug/L		90	74 - 125
Hexachlorobutadiene	5.00	5.52		ug/L		110	38 - 150
Isopropylbenzene	5.01	4.64		ug/L		93	75 - 137
Methyl tert-butyl ether	5.01	5.99		ug/L		120	56 - 150
Methylene Chloride	5.02	16.1 *		ug/L		321	58 - 134
m-Xylene & p-Xylene	5.01	4.54		ug/L		91	73 - 130
Naphthalene	5.01	7.40		ug/L		148	26 - 150
n-Butylbenzene	5.01	4.53		ug/L		90	66 - 125
N-Propylbenzene	5.00	4.67		ug/L		93	61 - 142
o-Xylene	5.01	4.20		ug/L		84	80 - 139
p-Isopropyltoluene	5.00	4.56		ug/L		91	72 - 127
sec-Butylbenzene	5.01	4.52		ug/L		90	62 - 140
Styrene	5.01	4.52		ug/L		90	68 - 136
tert-Butylbenzene	5.00	4.60		ug/L		92	55 - 150
Tetrachloroethene	5.01	4.65		ug/L		93	67 - 123
Toluene	5.00	4.58		ug/L		92	70 - 126
trans-1,2-Dichloroethene	5.01	5.75		ug/L		115	69 - 124
trans-1,3-Dichloropropene	5.00	4.88		ug/L		98	40 - 150
Trichloroethene	5.01	5.37		ug/L		107	72 - 123
Trichlorofluoromethane	5.00	4.34		ug/L		87	60 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		46 - 150
4-Bromofluorobenzene (Surr)	98		81 - 120
Dibromofluoromethane (Surr)	97		42 - 132

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

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

Lab Sample ID: LCS 580-226522/6
Matrix: Water
Analysis Batch: 226522

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	99		74 - 118

Lab Sample ID: LCSD 580-226522/7
Matrix: Water
Analysis Batch: 226522

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	5.02	5.12		ug/L		102	68 - 139	7	20
1,1,1-Trichloroethane	5.02	5.16		ug/L		103	56 - 150	5	29
1,1,2,2-Tetrachloroethane	5.01	4.62		ug/L		92	60 - 134	0	25
1,1,2-Trichloroethane	5.02	5.31		ug/L		106	62 - 137	1	30
1,1-Dichloroethane	5.00	6.62		ug/L		132	68 - 135	5	27
1,1-Dichloropropene	5.00	4.67		ug/L		93	64 - 146	7	20
1,2,3-Trichlorobenzene	5.01	5.52		ug/L		110	60 - 137	17	20
1,2,3-Trichloropropane	5.01	5.27		ug/L		105	45 - 150	2	20
1,2,4-Trichlorobenzene	5.00	5.39		ug/L		108	60 - 138	6	20
1,2,4-Trimethylbenzene	5.00	4.67		ug/L		93	70 - 142	0	20
1,2-Dibromo-3-Chloropropane	5.01	4.90		ug/L		98	34 - 150	1	20
1,2-Dibromoethane	5.01	5.08		ug/L		101	56 - 146	4	20
1,2-Dichlorobenzene	5.00	5.30		ug/L		106	73 - 120	1	14
1,2-Dichloroethane	5.00	5.48		ug/L		110	63 - 150	1	29
1,2-Dichloropropane	5.00	4.67		ug/L		93	72 - 120	2	20
1,3,5-Trimethylbenzene	5.01	4.63		ug/L		93	70 - 145	0	20
1,3-Dichlorobenzene	5.01	4.80		ug/L		96	76 - 120	1	12
1,3-Dichloropropane	5.01	4.94		ug/L		99	61 - 130	7	29
1,4-Dichlorobenzene	5.01	5.07		ug/L		101	77 - 120	1	11
2,2-Dichloropropane	5.00	3.45		ug/L		69	60 - 150	8	29
2-Butanone	25.0	40.5	*	ug/L		162	30 - 150	44	35
2-Chlorotoluene	5.00	4.81		ug/L		96	68 - 130	2	20
2-Hexanone	25.0	28.7		ug/L		115	25 - 150	1	28
4-Chlorotoluene	5.01	4.91		ug/L		98	75 - 130	0	20
4-Methyl-2-pentanone	25.0	26.9		ug/L		108	36 - 150	2	34
Acetone	25.0	26.2		ug/L		105	20 - 138	2	35
Benzene	5.02	4.59		ug/L		91	73 - 120	2	20
Bromobenzene	5.00	4.98		ug/L		100	68 - 130	4	20
Bromochloromethane	5.01	6.18	*	ug/L		123	71 - 131	28	20
Bromodichloromethane	5.02	5.04		ug/L		101	62 - 150	3	20
Bromoform	5.02	4.32		ug/L		86	51 - 137	2	20
Bromomethane	5.00	4.30		ug/L		86	61 - 135	13	31
Carbon disulfide	5.02	6.65	*	ug/L		132	65 - 128	20	32
Carbon tetrachloride	5.01	5.05		ug/L		101	54 - 150	5	30
Chlorobenzene	5.02	4.79		ug/L		95	74 - 114	3	12
Chloroethane	5.00	4.25		ug/L		85	58 - 130	14	35
Chloroform	5.00	6.23	*	ug/L		125	71 - 130	25	20
Chloromethane	5.00	4.71		ug/L		94	40 - 150	5	31
cis-1,2-Dichloroethene	5.01	6.70	*	ug/L		134	73 - 130	39	20
cis-1,3-Dichloropropene	5.01	4.63		ug/L		92	54 - 150	1	28

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

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

Lab Sample ID: LCSD 580-226522/7
Matrix: Water
Analysis Batch: 226522

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
Dibromochloromethane	5.01	4.88		ug/L		97	46 - 150	0	20
Dibromomethane	5.02	5.16		ug/L		103	65 - 137	4	20
Dichlorodifluoromethane	5.00	4.93		ug/L		99	45 - 150	13	29
Ethylbenzene	5.02	4.65		ug/L		93	74 - 125	2	20
Hexachlorobutadiene	5.00	4.80		ug/L		96	38 - 150	14	20
Isopropylbenzene	5.01	4.83		ug/L		96	75 - 137	4	20
Methyl tert-butyl ether	5.01	7.30		ug/L		146	56 - 150	20	26
Methylene Chloride	5.02	16.7	*	ug/L		332	58 - 134	3	29
m-Xylene & p-Xylene	5.01	4.61		ug/L		92	73 - 130	2	20
Naphthalene	5.01	5.99	*	ug/L		120	26 - 150	21	20
n-Butylbenzene	5.01	4.67		ug/L		93	66 - 125	3	20
N-Propylbenzene	5.00	4.64		ug/L		93	61 - 142	1	20
o-Xylene	5.01	4.49		ug/L		90	80 - 139	7	20
p-Isopropyltoluene	5.00	4.68		ug/L		94	72 - 127	3	14
sec-Butylbenzene	5.01	4.60		ug/L		92	62 - 140	2	20
Styrene	5.01	4.50		ug/L		90	68 - 136	0	20
tert-Butylbenzene	5.00	4.66		ug/L		93	55 - 150	1	20
Tetrachloroethene	5.01	4.89		ug/L		98	67 - 123	5	20
Toluene	5.00	4.63		ug/L		93	70 - 126	1	20
trans-1,2-Dichloroethene	5.01	6.09		ug/L		122	69 - 124	6	27
trans-1,3-Dichloropropene	5.00	4.79		ug/L		96	40 - 150	2	30
Trichloroethene	5.01	5.55		ug/L		111	72 - 123	3	20
Trichlorofluoromethane	5.00	4.76		ug/L		95	60 - 150	9	31

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	104		46 - 150
4-Bromofluorobenzene (Surr)	97		81 - 120
Dibromofluoromethane (Surr)	101		42 - 132
Toluene-d8 (Surr)	98		75 - 125
Trifluorotoluene (Surr)	97		74 - 118

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-225970/15-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.040		mg/L		08/26/16 10:42	08/27/16 14:02	1
Manganese	ND		0.0020		mg/L		08/26/16 10:42	08/27/16 14:02	1

Lab Sample ID: LCS 580-225970/16-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	22.0	24.6		mg/L		112	80 - 120
Manganese	1.00	1.07		mg/L		107	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Lab Sample ID: LCSD 580-225970/17-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	22.0	25.8		mg/L		117	80 - 120	5	20
Manganese	1.00	1.09		mg/L		109	80 - 120	2	20

Lab Sample ID: 580-61939-B-10-C MS
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	31		22.0	54.4		mg/L		106	80 - 120		
Manganese	19		1.00	19.8	4	mg/L		94	80 - 120		

Lab Sample ID: 580-61939-B-10-D MSD
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	31		22.0	54.3		mg/L		106	80 - 120	0	20
Manganese	19		1.00	19.7	4	mg/L		90	80 - 120	0	20

Lab Sample ID: 580-61939-B-10-B DU
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Duplicate
Prep Type: Total Recoverable
Prep Batch: 225970

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	31		29.7		mg/L		5	20
Manganese	19		18.0		mg/L		4	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-226028/1
Matrix: Water
Analysis Batch: 226028

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			08/26/16 14:36	1

Lab Sample ID: LCS 580-226028/2
Matrix: Water
Analysis Batch: 226028

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	1000	1030		mg/L		103	80 - 120

Lab Sample ID: 580-61908-B-1 DU
Matrix: Water
Analysis Batch: 226028

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2000		2000		mg/L		1	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-225948/3
Matrix: Water
Analysis Batch: 225948

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate	ND		0.20		mg/L			08/25/16 13:50	1

Lab Sample ID: LCS 580-225948/4
Matrix: Water
Analysis Batch: 225948

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	5.39		mg/L		108	90 - 110

Lab Sample ID: LCSD 580-225948/5
Matrix: Water
Analysis Batch: 225948

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
Nitrogen, Nitrate	5.00	5.37		mg/L		107	90 - 110	0	15

Lab Sample ID: 580-61962-1 MS
Matrix: Water
Analysis Batch: 225948

Client Sample ID: LB-082416-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate	5.4	F1	5.00	11.7	F1	mg/L		127	90 - 110

Lab Sample ID: 580-61962-1 MSD
Matrix: Water
Analysis Batch: 225948

Client Sample ID: LB-082416-05
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	5.4	F1	5.00	11.5	F1	mg/L		123	90 - 110	2	15

Lab Sample ID: MB 580-225949/3
Matrix: Water
Analysis Batch: 225949

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			08/25/16 13:50	1

Lab Sample ID: LCS 580-225949/4
Matrix: Water
Analysis Batch: 225949

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.3		mg/L		105	90 - 110

Lab Sample ID: LCSD 580-225949/5
Matrix: Water
Analysis Batch: 225949

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
Chloride	50.0	52.1		mg/L		104	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
 Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Lab Sample ID: 580-61962-1 MS
Matrix: Water
Analysis Batch: 225949

Client Sample ID: LB-082416-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11	F1	50.0	72.2	F1	mg/L		122	90 - 110

Lab Sample ID: 580-61962-1 MSD
Matrix: Water
Analysis Batch: 225949

Client Sample ID: LB-082416-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11	F1	50.0	70.2	F1	mg/L		118	90 - 110	3	15

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Lab Chronicle

Client: SCS Engineers
Project/Site: Lechner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-05

Date Collected: 08/24/16 10:10

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 08:32	TL1	TAL SEA
Dissolved	Prep	3005A			225970	08/26/16 10:42		TAL SEA
Dissolved	Analysis	6020		1	226117	08/27/16 14:51	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225948	08/25/16 14:45	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225949	08/25/16 14:45	RSB	TAL SEA

Client Sample ID: LB-082416-08

Date Collected: 08/24/16 12:15

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 08:59	TL1	TAL SEA
Dissolved	Prep	3005A			225970	08/26/16 10:42		TAL SEA
Dissolved	Analysis	6020		1	226117	08/27/16 14:55	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225948	08/25/16 15:41	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225949	08/25/16 15:41	RSB	TAL SEA

Client Sample ID: LB-082416-09

Date Collected: 08/24/16 12:20

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 09:25	TL1	TAL SEA
Dissolved	Prep	3005A			225970	08/26/16 10:42		TAL SEA
Dissolved	Analysis	6020		1	226117	08/27/16 15:00	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225948	08/25/16 15:59	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225949	08/25/16 15:59	RSB	TAL SEA

Client Sample ID: LB-082416-07

Date Collected: 08/24/16 11:20

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 09:51	TL1	TAL SEA
Dissolved	Prep	3005A			225970	08/26/16 10:42		TAL SEA
Dissolved	Analysis	6020		1	226117	08/27/16 15:04	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225948	08/25/16 16:17	RSB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Client Sample ID: LB-082416-07

Date Collected: 08/24/16 11:20

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	225949	08/25/16 16:17	RSB	TAL SEA

Client Sample ID: LB-082416-06

Date Collected: 08/24/16 10:50

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 10:17	TL1	TAL SEA
Dissolved	Prep	3005A			225970	08/26/16 10:42		TAL SEA
Dissolved	Analysis	6020		1	226117	08/27/16 15:09	HJM	TAL SEA
Total/NA	Analysis	160.1		1	226028	08/26/16 14:36	EMM	TAL SEA
Total/NA	Analysis	300.0		1	225948	08/25/16 16:36	RSB	TAL SEA
Total/NA	Analysis	300.0		1	225949	08/25/16 16:36	RSB	TAL SEA

Client Sample ID: Trip Blanks

Date Collected: 08/24/16 00:00

Date Received: 08/24/16 13:58

Lab Sample ID: 580-61962-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	226522	09/02/16 04:35	TL1	TAL SEA

Laboratory References:

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

Certification Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Sample Summary

Client: SCS Engineers
Project/Site: Leichner Landfill - Semi-Annual

TestAmerica Job ID: 580-61962-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-61962-1	LB-082416-05	Water	08/24/16 10:10	08/24/16 13:58
580-61962-2	LB-082416-08	Water	08/24/16 12:15	08/24/16 13:58
580-61962-3	LB-082416-09	Water	08/24/16 12:20	08/24/16 13:58
580-61962-4	LB-082416-07	Water	08/24/16 11:20	08/24/16 13:58
580-61962-5	LB-082416-06	Water	08/24/16 10:50	08/24/16 13:58
580-61962-6	Trip Blanks	Water	08/24/16 00:00	08/24/16 13:58

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Chain of Custody Record

115180

Regulatory Program: DW NPDES RCRA Other:

Client Contact
Company Name: SCS Engineers
Address: 15940 SW J72nd Ave
City/State/Zip: Portland, OR 97224
Phone: 503 639-1960
Fax:

Project Name: Leichter Landfill
P O #

Project Manager: J Davenport
Tel/Fax: 503 639-9548

Site Contact: T Andros
Lab Contact: S Murphy

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Date: 8/24/16
Carrier:

COC No.: _____ of _____ COCs

Sampler: _____
For Lab Use Only: _____



Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)		Sample Specific Notes:
						Perform MS / MSD (Y/N)	8260 VOC	
LB-082416-05	8/24/16	1010	G	W	7	X	X	Samples are Field Filtered for dissolved Metals
LB-082416-08	8/24/16	1215	G	W	7	X	X	
LB-082416-09	8/24/16	1220	G	W	7	X	X	
LB-082416-07	8/24/16	1120	G	W	7	X	X	
LB-082416-06	8/24/16	1050	G	W	7	X	X	
Trp Blanks	-	-	-	W	2	X	X	

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No.: _____

Cooler Temp. (°C): Obs'd: _____ Corr'd: 1.0

Relinquished by: [Signature] Company: SCS Date/Time: 8/27/16 1358

Relinquished by: [Signature] Company: TAP Date/Time: 8/24/16 1358

Relinquished by: _____ Company: _____ Date/Time: _____



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-61962-1

Login Number: 61962

List Source: TestAmerica Seattle

List Number: 1

Creator: Svabik-Seror, Philip M

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



APPENDIX D

2016 Groundwater Elevation Data And Groundwater Elevation Hydrographs

Table D-1
2016 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-R2	2/15/2016	222.27	44.61	177.66
LB-R2	8/22/2016	222.27	45.65	176.62
LB-1S	2/15/2016	210.12	32.65	177.47
LB-1S	8/22/2016	210.12	33.70	176.42
LB-1D	2/15/2016	209.74	35.20	174.54
LB-1D	8/22/2016	209.74	37.12	172.62
LB-3S	2/15/2016	218.25	38.06	180.19
LB-3S	8/22/2016	218.25	39.07	179.18
LB-3D	2/15/2016	219.29	39.10	180.19
LB-3D	8/22/2016	219.29	40.08	179.21
LB-5S	2/15/2016	206.89	15.10	191.79
LB-5S	8/22/2016	206.89	15.95	190.94
LB-5C	2/15/2016	206.70	31.91	174.79
LB-5C	8/22/2016	206.70	33.29	173.41
LB-5D	2/15/2016	207.56	36.63	170.93
LB-5D	8/22/2016	207.56	38.13	169.43
LB-6S	2/15/2016	202.80	26.39	176.41
LB-6S	8/22/2016	202.80	27.47	175.33
LB-9S(R)	2/15/2016	217.94	34.63	183.31
LB-9S(R)	8/22/2016	217.94	35.88	182.06
LB-10SR	2/15/2016	204.04	29.90	174.14
LB-10SR	8/22/2016	204.04	31.39	172.65
LB-10CR	2/15/2016	203.05	28.82	174.23
LB-10CR	8/22/2016	203.05	30.31	172.74
LB-10DR	2/15/2016	203.36	41.91	161.45
LB-10DR	8/22/2016	203.36	43.35	160.01
LB-13I	2/15/2016	202.36	27.03	175.33
LB-13I	8/22/2016	202.36	28.15	174.21
LB-13C	2/15/2016	202.68	27.42	175.26
LB-13C	8/22/2016	202.68	28.55	174.13
LB-13D	2/15/2016	202.96	27.72	175.24
LB-13D	8/22/2016	202.96	28.90	174.06

**Table D-1
2016 Groundwater Elevation Data
Leichner Landfill**

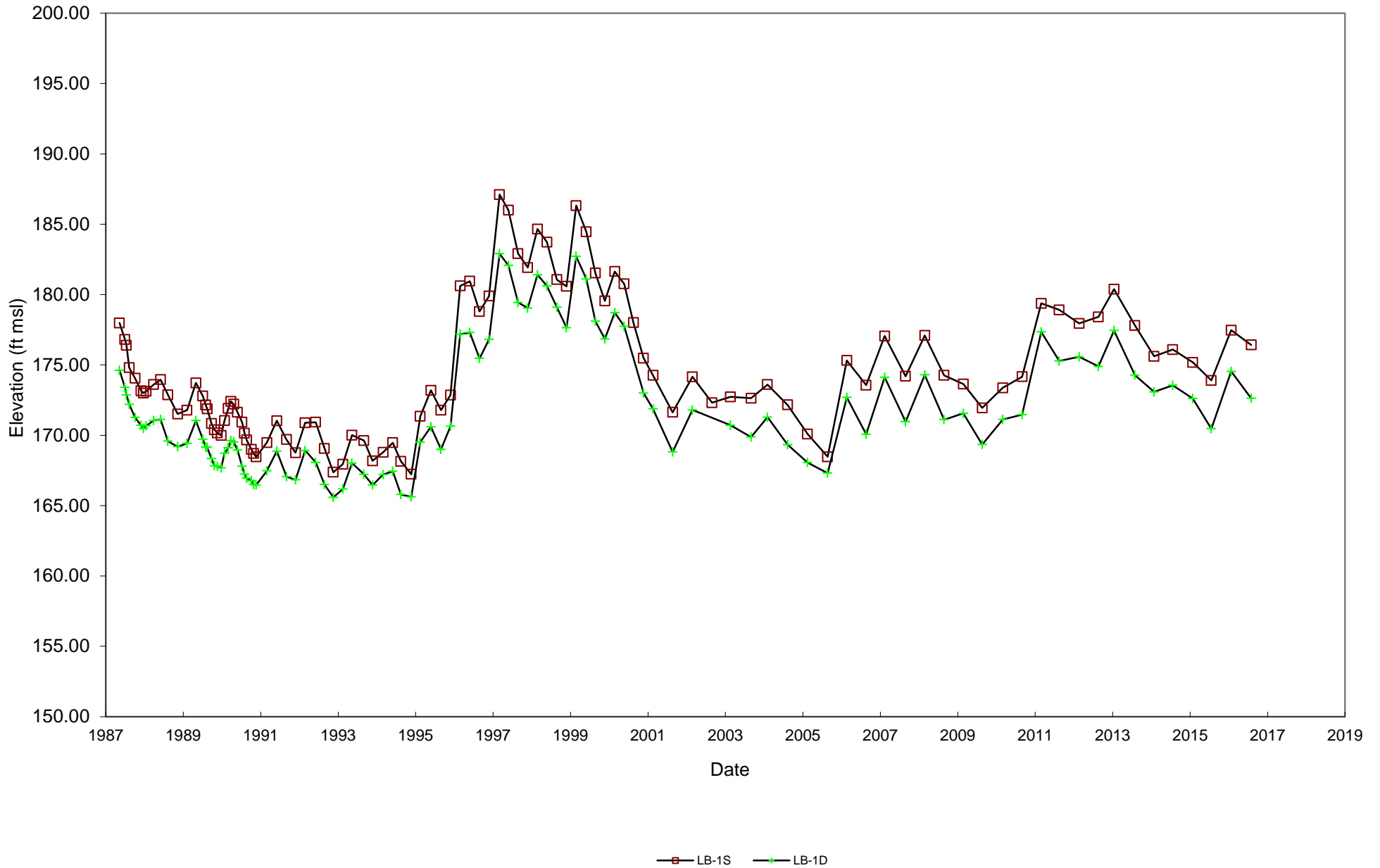
Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-17S	2/15/2016	208.18	30.42	177.76
LB-17S	8/22/2016	208.18	31.45	176.73
LB-17I	2/15/2016	213.14	35.54	177.60
LB-17I	8/22/2016	212.96	36.60	176.36
LB-17C	2/15/2016	206.55	29.21	177.34
LB-17C	8/22/2016	207.97	30.27	177.70
LB-17D	2/15/2016	213.17	36.41	176.76
LB-17D	8/22/2016	213.17	37.51	175.66
LB-20S	2/15/2016	221.22	39.55	181.67
LB-20S	8/22/2016	221.22	40.21	181.01
LB-21S	2/15/2016	223.35	38.60	184.75
LB-21S	8/22/2016	223.35	37.79	185.56
LB-21C	2/15/2016	223.32	37.25	186.07
LB-21C	8/22/2016	223.32	38.19	185.13
LB-21D	2/15/2016	223.63	40.05	183.58
LB-21D	8/22/2016	223.63	41.37	182.26
LB-22S	2/15/2016	208.42	5.55	202.87
LB-22S	8/22/2016	208.42	6.64	201.78
LB-23S	2/15/2016	229.19	30.18	199.01
LB-23S	8/22/2016	229.19	31.01	198.18
LB-24S	2/15/2016	235.13	37.90	197.23
LB-24S	8/22/2016	235.13	38.81	196.32
LB-26I	2/15/2016	200.22	24.40	175.82
LB-26I	8/22/2016	200.22	25.48	174.74
LB-26D	2/15/2016	200.75	24.16	176.59
LB-26D	8/22/2016	200.75	25.24	175.51
LB-27I	2/15/2016	205.35	30.29	175.06
LB-27I	8/22/2016	205.35	31.51	173.84
LB-27D	2/15/2016	204.63	36.82	167.81
LB-27D	8/22/2016	204.63	38.39	166.24
MW-1 N	2/15/2016	216.58	Dry	NA
MW-1 N	8/22/2016	216.58	NR	NA

**Table D-1
2016 Groundwater Elevation Data
Leichner Landfill**

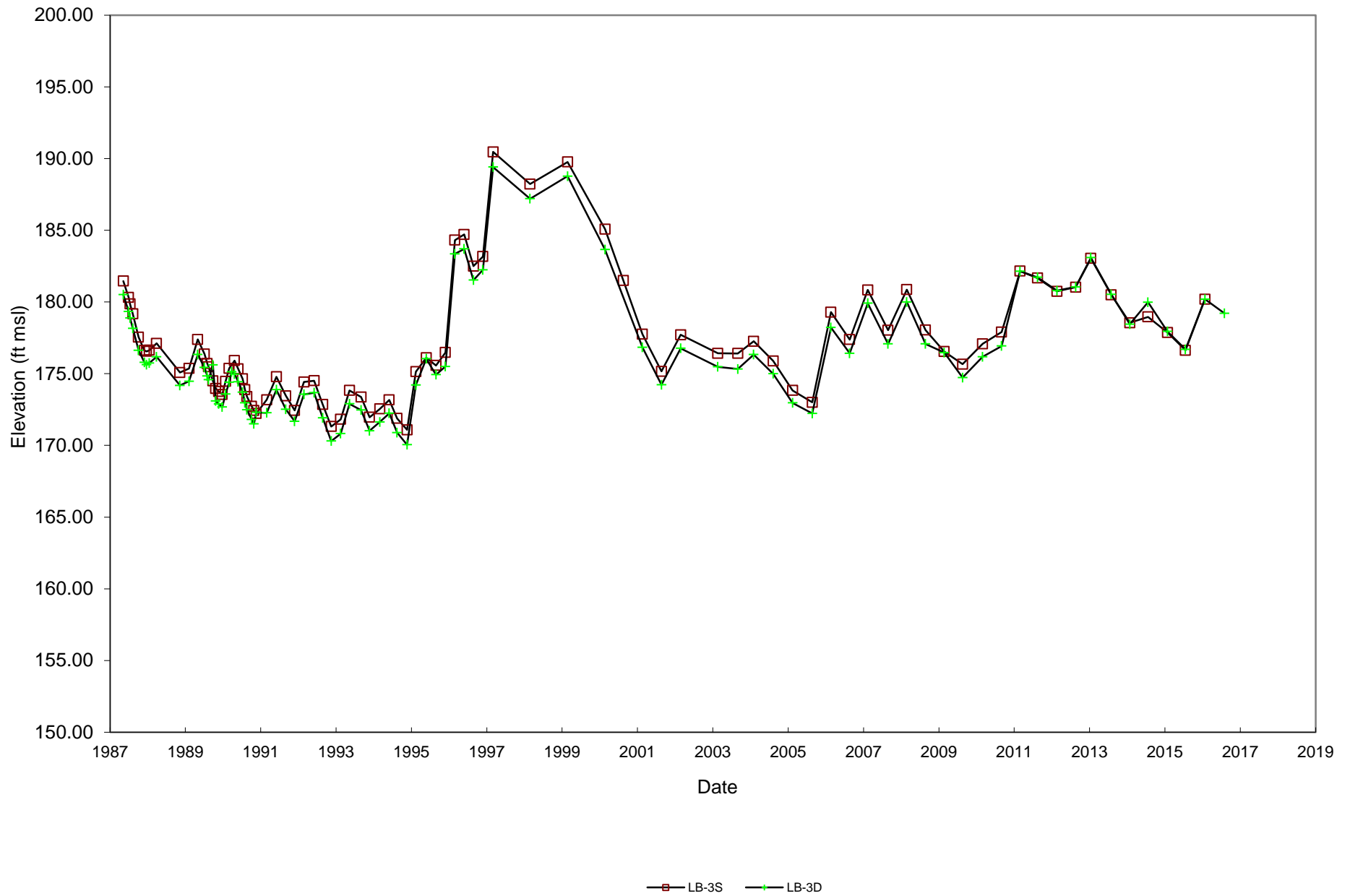
Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
MW-1 S	2/15/2016	216.13	37.10	179.03
MW-1 S	8/22/2016	216.13	NR	NA
MW-1 E	2/15/2016	216.45	Dry	NA
MW-1 E	8/22/2016	216.45	NR	NA
MW-NE	2/15/2016	220.06	13.02	207.04
MW-NE	8/22/2016	220.06	14.20	205.86

Notes:
AMSL = above mean sea level; BTOC = below top of casing; NA = not applicable; NR = no reading.

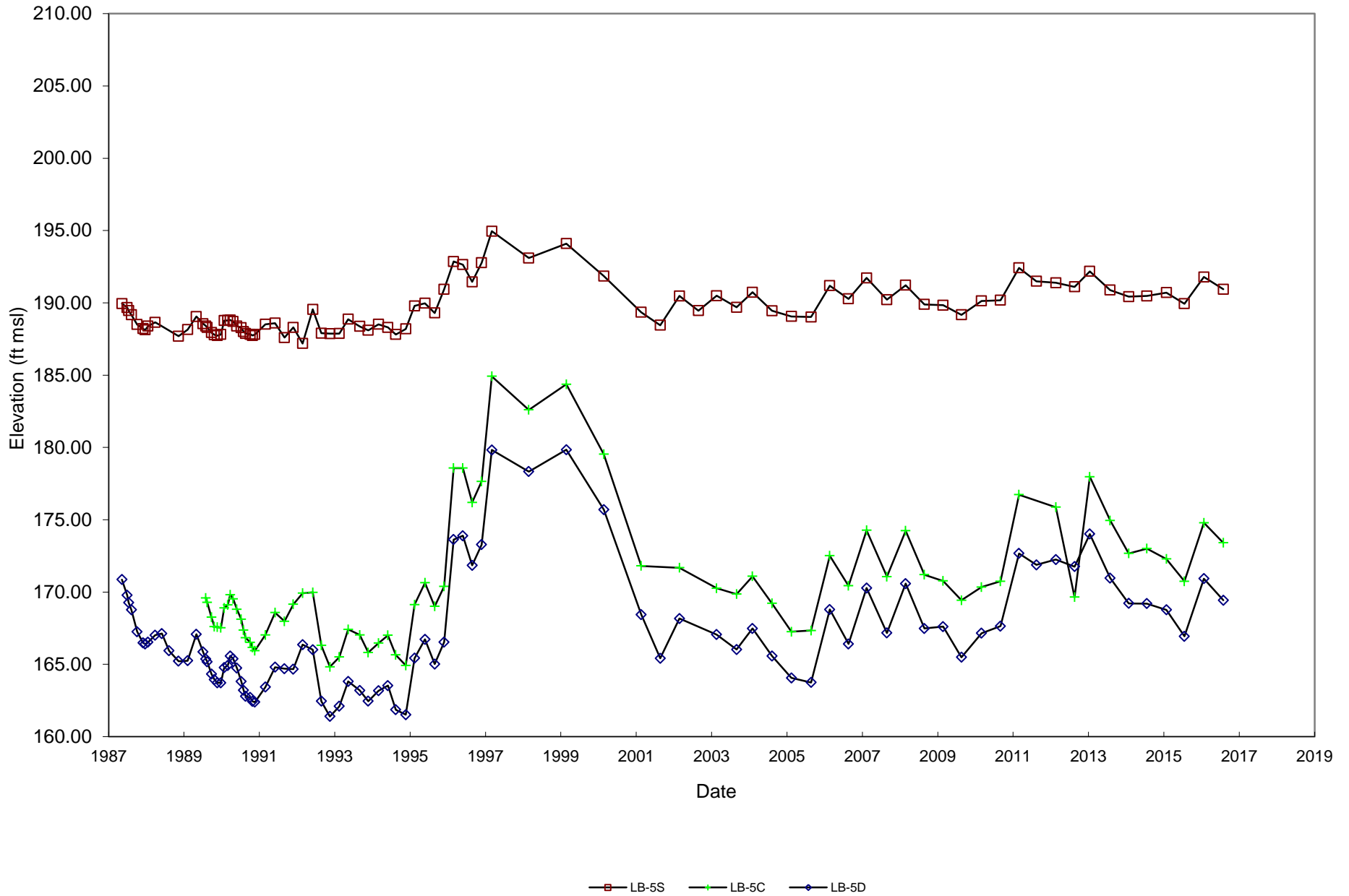
LB-1S and LB-1D Hydrographs Leichner Landfill



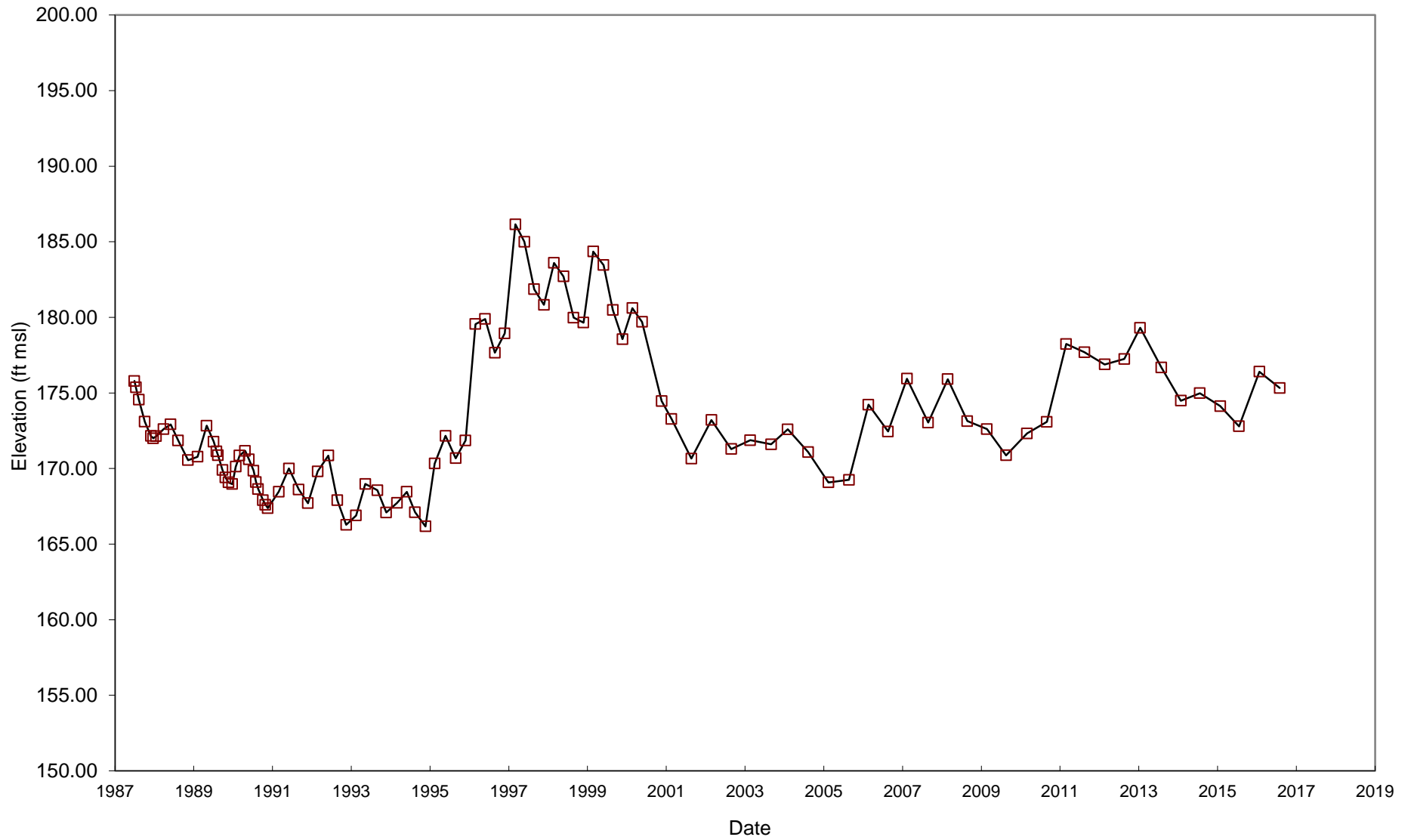
LB-3S and LB-3D Hydrographs Leichner Landfill



LB 5S, LB-5C, and LB-5D Hydrographs Leichner Landfill

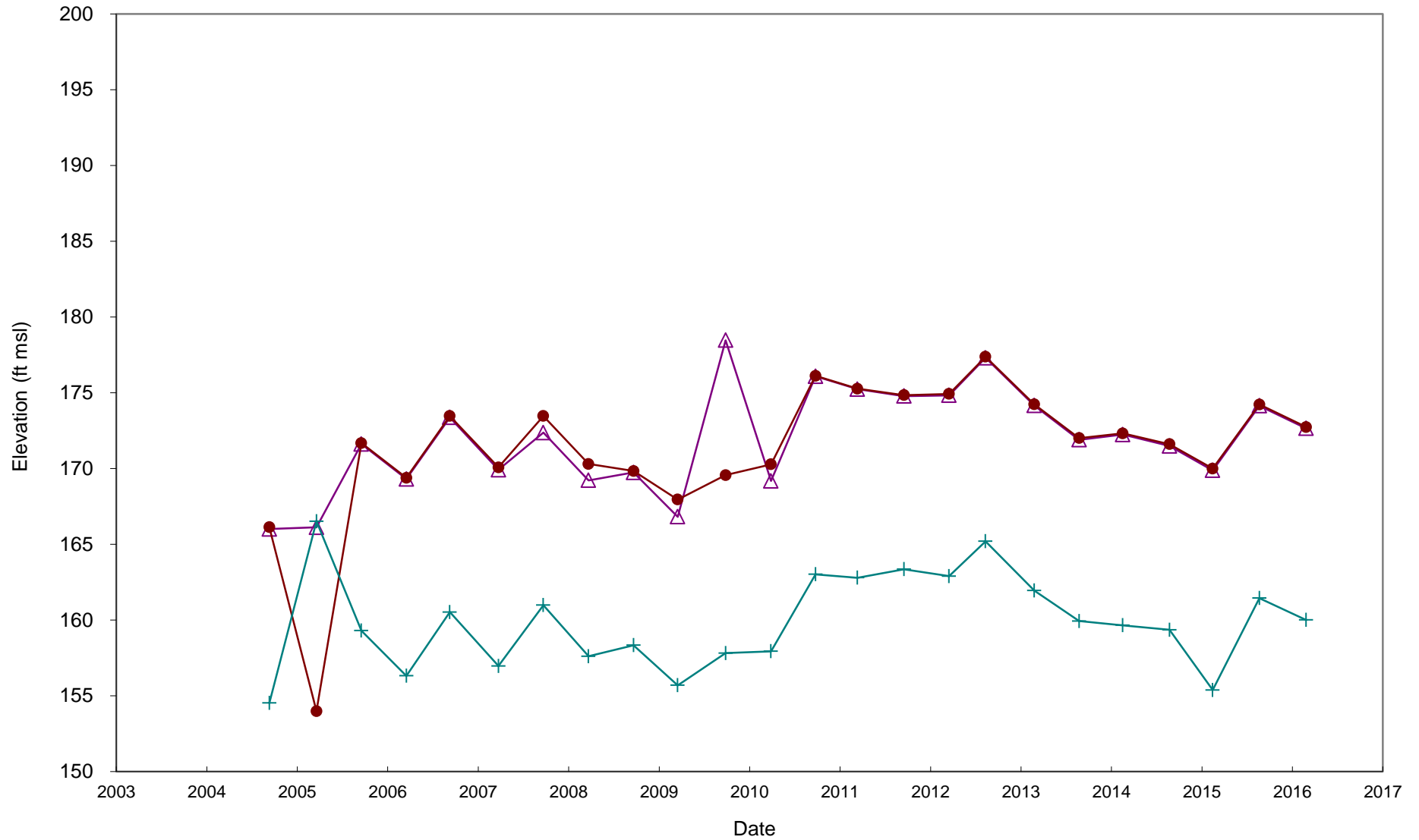


LB-6S Hydrograph Leichner Landfill



—■— LB-6S

LB-10SR, LB-10CR, and LB-10DR Hydrographs Leichner Landfill

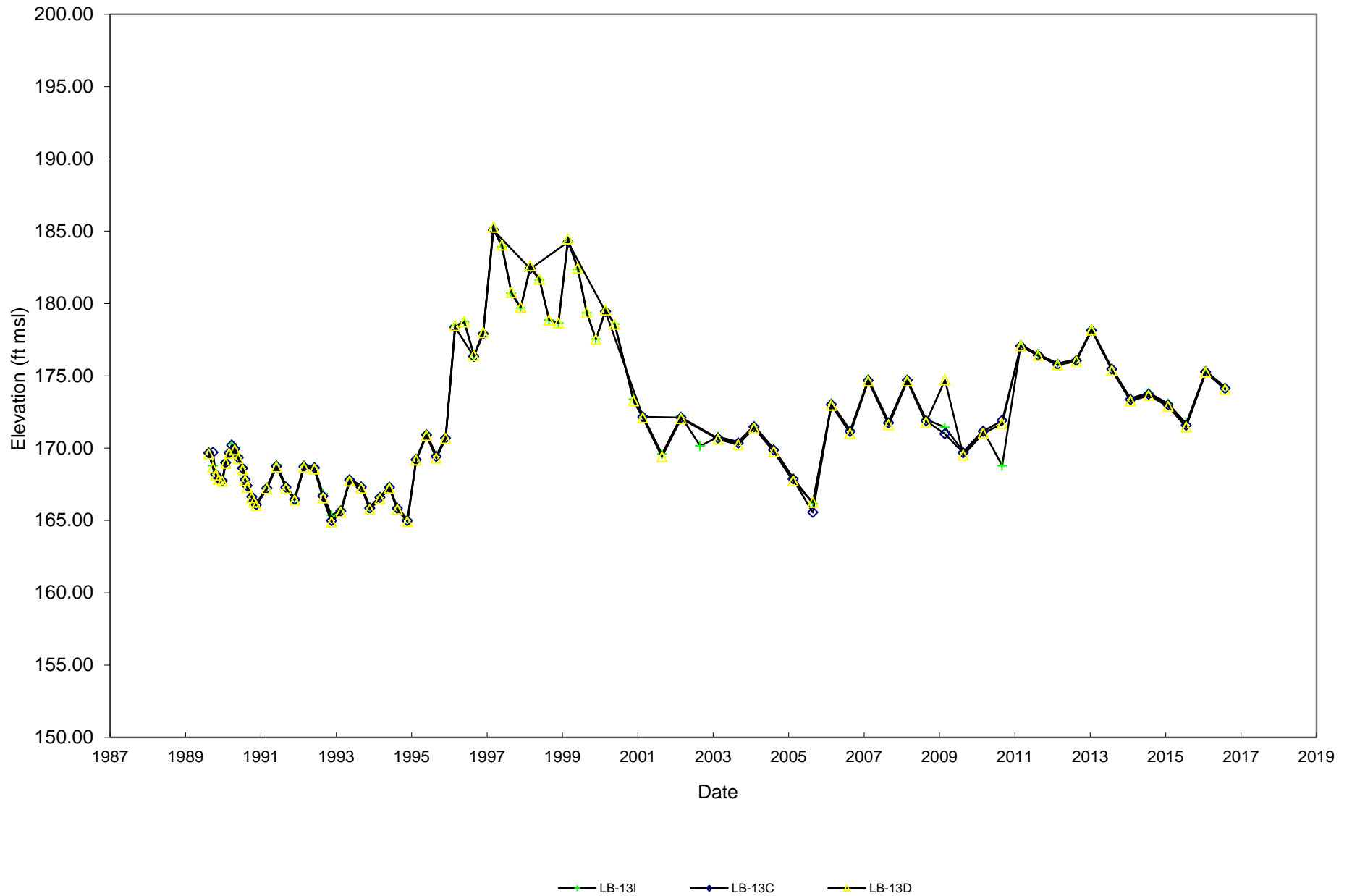


—▲— LB-10SR

—●— LB-10CR

—+— LB-10DR

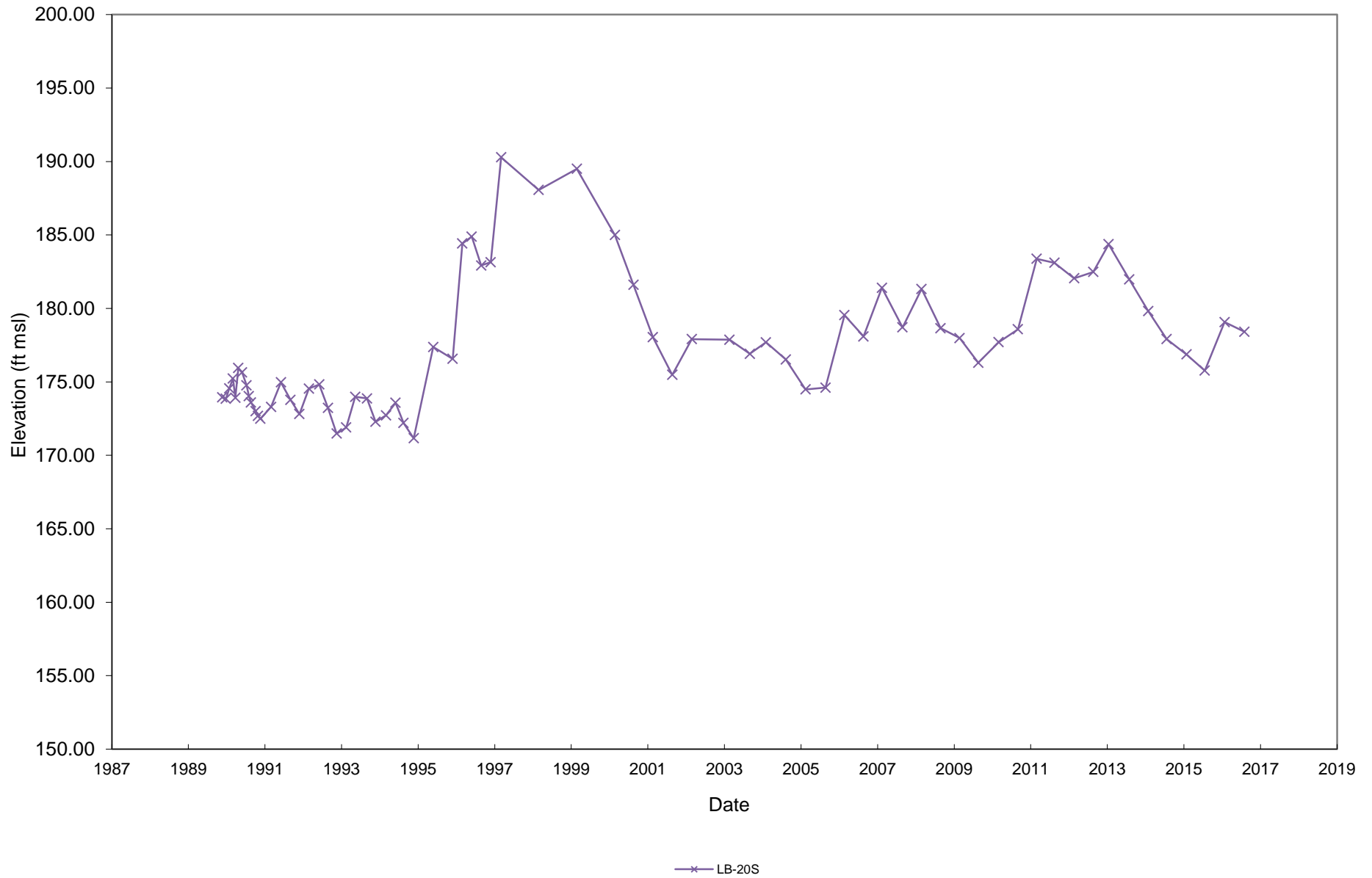
LB-13I, LB-13C, and LB-13D Hydrographs Leichner Landfill



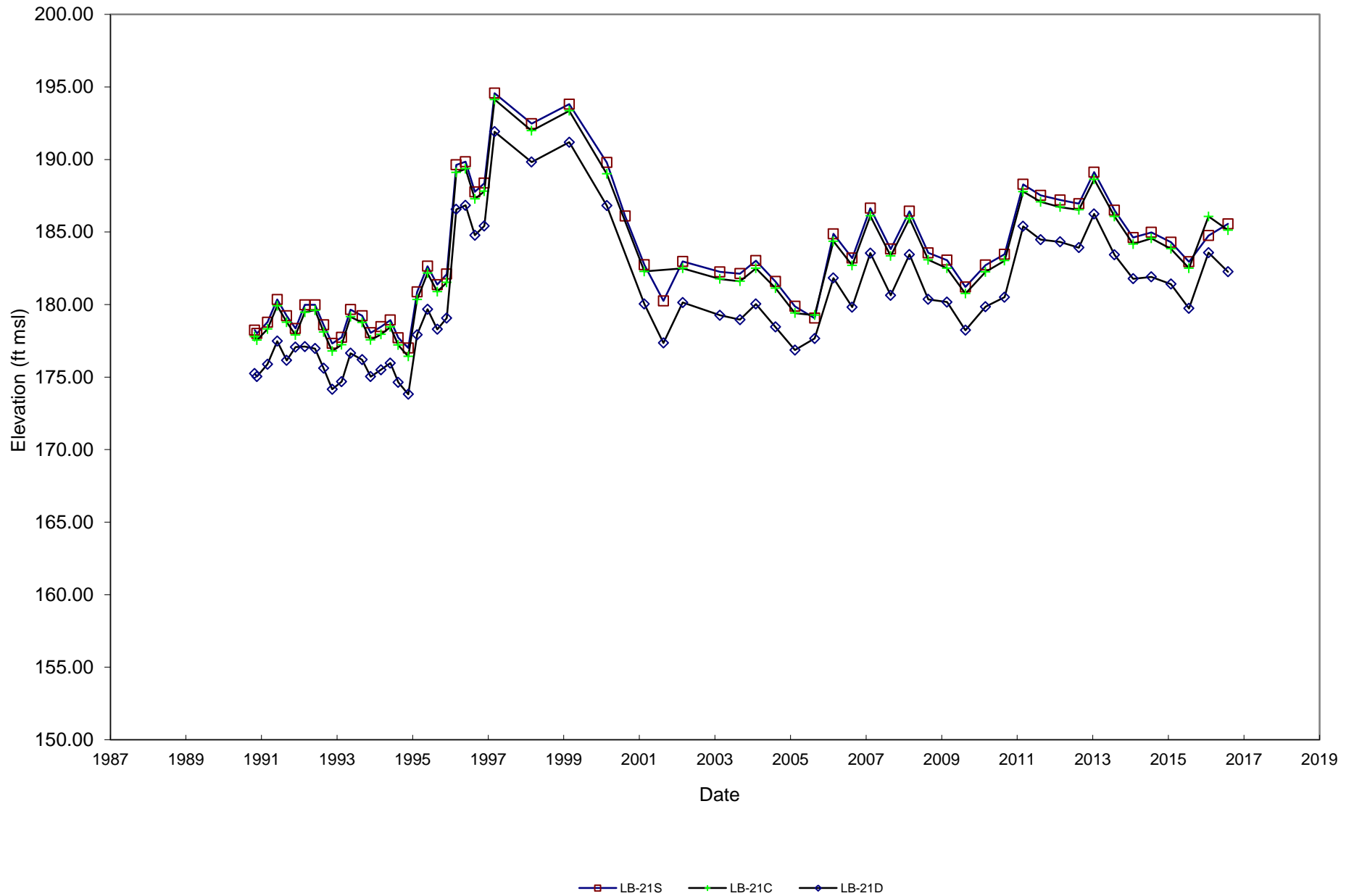
LB-17I and LB-17D Hydrographs Leichner Landfill



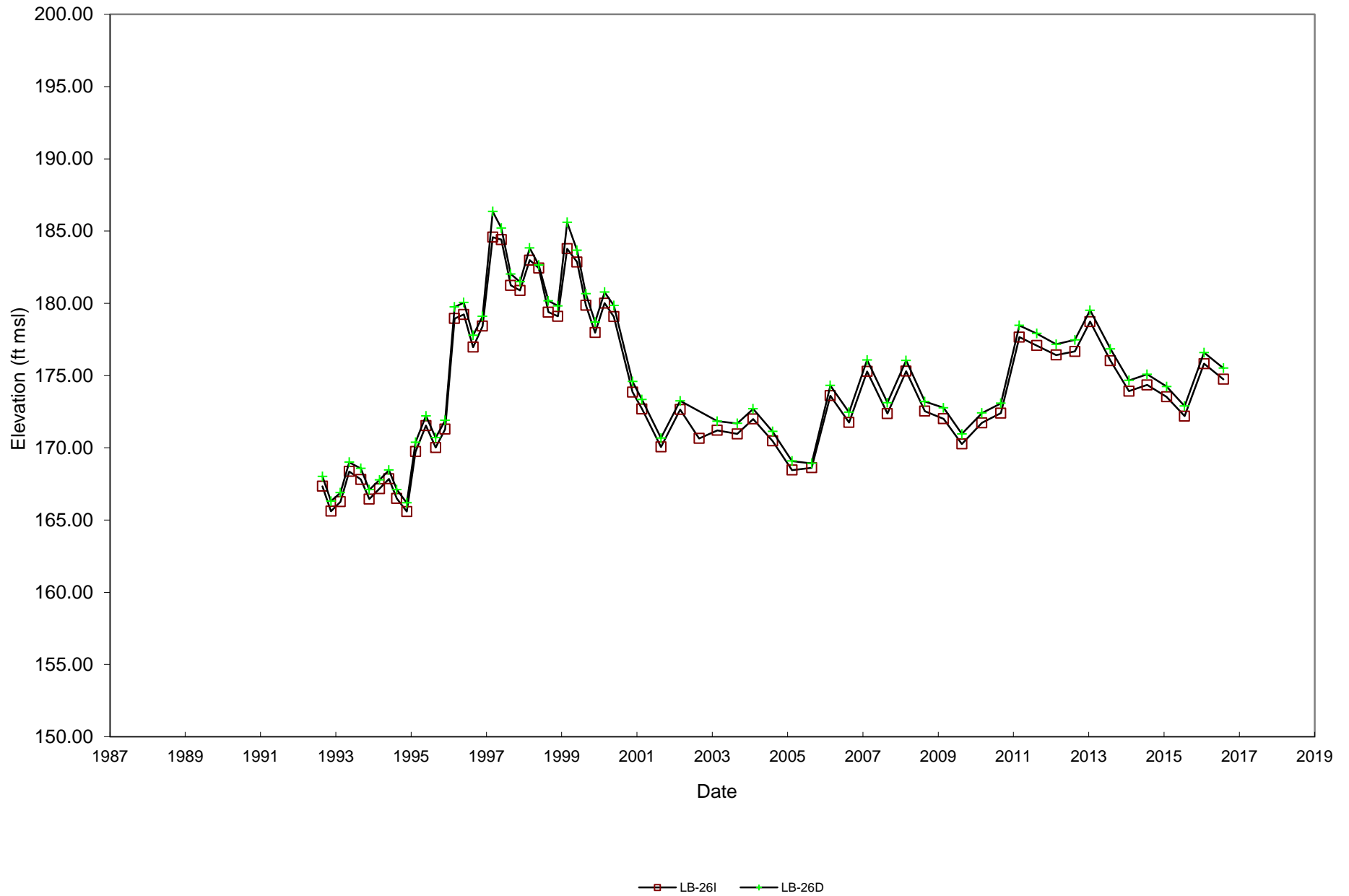
LB-20S Hydrograph Leichner Landfill



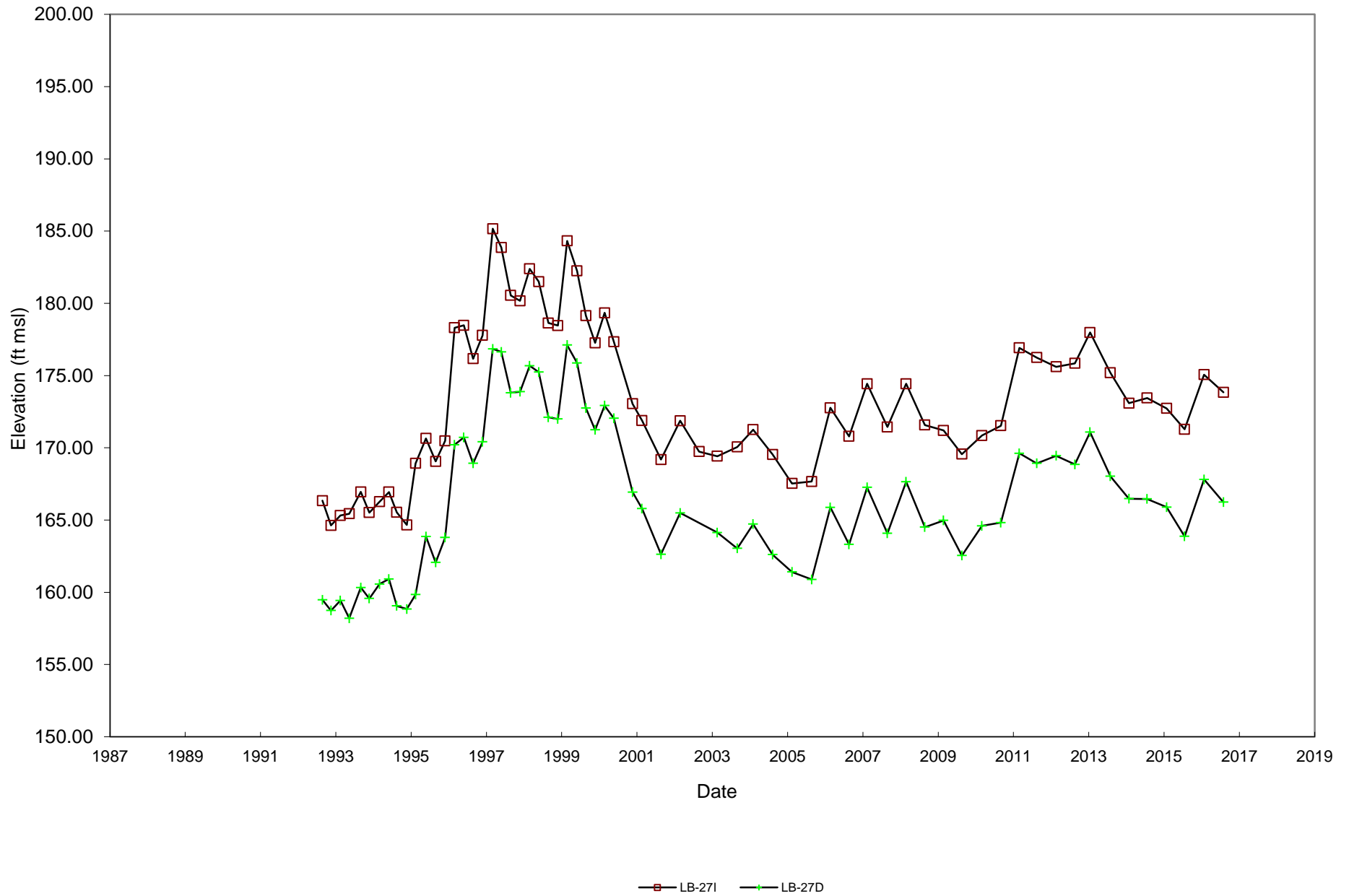
LB-21S, LB-21C, and LB-21D Hydrographs Leichner Landfill



LB-26I and LB-26D Hydrographs Leichner Landfill



LB-27I and LB-27D Hydrographs Leichner Landfill



APPENDIX E

Quality Assurance/Quality Control Reviews of 2016 Laboratory Analytical Data

First Quarter (February) 2016 QA/QC Reviews

**SCS Engineers QA/QC Review
Groundwater - 1Q 2016 Groundwater Monitoring Event
Leichner Brothers Landfill
Test America-Beaverton Report No. 250-57302-1**

Samples: LB-021616-01 (LB-17D), LB-021616-02 (LB-13D), LB-021616-03 (LB-13D/DUP1), LB-021616-04 (LB-26D), LB-021616-05 (LB-26I), and LB-021616-06 (LB-3D).

Sample Date: 02/16/2016

Laboratory Sample Received Date: 02/16/2016

Sample Receipt Temperature: 8.7°C

Laboratory Data Received Date: 03/09/2016

QA/QC Review Date: 03/21/2016 (TMA)

VOCs

Method Blanks	All analytes were reported as non-detect.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits except for 1,2,3-trichloropropane and chlorodibromoethane in batch 580-211711 (* Flags). These are noted and qualified in the case narrative.
LCSD	All relative percent differences (RPDs) were within QC limits except for 1,2,3-trichloropropane, chlorodibromoethane, and cis-1,2-dichloropropene in batch 580-211711 (* Flags). These are noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

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

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All project-specific reporting limits were met except for chloride which was diluted to bring concentrations within calibration range.

Field QA/OC

Field Duplicate

A field duplicate sample LB-021616-03 (DUP1) was collected at monitoring well LB-13D (LB-021616-02) on 02/16/2016. All calculated RPDs were within 20%.

Trip Blank

A laboratory supplied trip blank was carried into the field on 02/16/2016 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect, and all surrogate recoveries were within control limits.

Notes

The continuing calibration verification (CCV) associated with batch 580-211711 recovered above the upper control limit multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The Nitrate Method 300.0 analysis was subcontracted to Pixis Laboratories, LLC.

Data Validation

Upon final review of lab report 250-57302-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/21/2016; TMA).

**SCS Engineers QA/QC Review
Groundwater - 1Q 2016 Groundwater Monitoring Event
Leichner Brothers Landfill
Test America-Beaverton Report No. 250-57335-1**

Samples: LB-021716-07 (FB1), LB-021716-08 (LB-1D), LB-021716-09 (LB-10DR), LB-021716-10 (LB-10DR/DUP2), LB-021716-11 (LB-10SR), LB-021716-12 (LB-3S), LB-021716-13 (LB-20S), and LB-021716-14 (LB-1S).

Sample Date: 02/17/2016
Laboratory Sample Received Date: 02/17/2016
Sample Receipt Temperature: 2.0 and 3.5°C
Laboratory Data Received Date: 03/09/2016
QA/QC Review Date: 03/21/2016 (TMA)

VOCs

Method Blanks	All analytes were reported as non-detect.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits except for 1,2,3-trichloropropane and 4-methyl-2-pentanone in batch 580-211854 (* Flags). These are noted and qualified in the case narrative.
LCSD	All relative percent differences (RPDs) were within QC limits except for 1,2,3-trichloropropane, 4-methyl-2-pentanone, cis-1,2-dichloropropene, bromomethane in batch 580-211854 (* Flags). These are noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

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

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All project-specific reporting limits were met except for chloride which was diluted to bring concentrations within calibration range.

Field QA/QC

Field/Equipment Blank

An equipment blank sample (LB-021716-07) was collected near monitoring well LB-1D on 02/17/2016 using lab supplied deionized water. All analytes were reported as non-detect except for total dissolved solids at 10.0 mg/L (RP = 10 mg/L).

Field Duplicate

A field duplicate sample LB-021716-10 (DUP2) was collected at monitoring well LB-10DR (LB-021716-09) on 02/16/2016. All calculated RPDs were within 20%.

Trip Blank

A laboratory supplied trip blank was carried into the field on 02/17/2016 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect, and all surrogate recoveries were within control limits.

Notes

The Nitrate Method 300.0 analysis was subcontracted to Pixis Laboratories, LLC.

Data Validation

Upon final review of lab report 250-57335-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/21/2016; TMA).

**SCS Engineers QA/QC Review
Groundwater - 1Q 2016 Groundwater Monitoring Event
Leichner Brothers Landfill
Test America-Beaverton Report No. 250-57367-1**

Samples: LB-021816-15 (LB-17I), LB-021816-16 (LB-5D), LB-021816-17 (LB-5S), LB-021816-18 (LB-27D), LB-021816-19 (LB-27I), LB-021816-20 (LB-13I), and LB-021816-21 (LB-6S).

Sample Date: 02/18/2016

Laboratory Sample Received Date: 02/18/2016

Sample Receipt Temperature: 1.3 and 1.5°C

Laboratory Data Received Date: 03/14/2016

QA/QC Review Date: 03/21/2016 (TMA)

VOCs

Method Blanks	All analytes were reported as non-detect.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits except for 1,2,3-trichloropropane and dibromochloromethane in batch 580-211994 (* Flags). These are noted and qualified in the case narrative.
LCSD	All relative percent differences (RPDs) were within QC limits except for 1,2,3-trichloropropane and dibromochloromethane in batch 580-211994 in batch 580-211854 (* Flags). These are noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

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

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All project-specific reporting limits were met except for chloride which was diluted to bring concentrations within calibration range.

Field QA/QC

Trip Blank

A laboratory supplied trip blank was carried into the field on 02/18/2016 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect, and all surrogate recoveries were within control limits.

Notes

The Nitrate Method 300.0 analysis was subcontracted to Pixis Laboratories, LLC.

Data Validation

Upon final review of lab report 250-57367-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/21/2016; TMA).

Third Quarter (August) 2016 QA/QC Reviews

**SCS Engineers QA/QC Review
Groundwater - 3Q 2016 Groundwater Monitoring Event
Leichner Brothers Landfill
Test America-Beaverton Report No. 580-61940-1**

Samples: LB-082316-01 (LB-5S), LB-082316-03 (LB-13I), LB-082316-04 (LB-26I), LB-082316-02 (LB-27I), and trip blank.

Sample Date: 08/23/2016
Laboratory Sample Received Date: 08/23/2016
Sample Receipt Temperature: 3.5°C
Laboratory Data Received Date: 09/06/2016
QA/QC Review Date: 09/20/2016 (TMA)

VOCs

Method Blanks	All non-detect, surrogate recoveries within control limits except 4-bromofluorobenzene and trifluorotoluene (X Flags). These are noted and qualified in the case narrative.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries and surrogates were within QC limits except for 1,2-dichlorobenzene in batch 580-226481 (* Flag). This is noted and qualified in the case narrative.
Matrix Spikes	All % recoveries were within QC limits and all surrogates within limits.
MSD	All relative percent differences (RPDs) were within QC limits except for 2-butanone, bromochloromethane, chloroform, cis-1,2-dichloroethene, and hexachlorobutadiene in batch 580-226481 (* Flags). These are noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits except for nitrate and chloride in batch 580-225893 (F1 Flags). These are noted and qualified in the case narrative.
MSD	All RPDs were within QC limits.
Duplicates	All RPDs were within QC limits.

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All project-specific reporting limits were met except for chloride which was diluted to bring concentrations within calibration range.

Field QA/QC

Trip Blank

A laboratory supplied trip blank was carried into the field on 08/23/2016 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect except for methylene chloride at 2.3 ug/L (RL = 2.0 ug/L). All surrogate recoveries were within control limits except for trifluorotoluene (X Flag). These are noted and qualified in the case narrative.

Notes

Several of the Continuing Calibrations Verification Samples were outside of the control criteria. These are noted and qualified in the case narrative.

Data Validation

Upon final review of lab report 580-61940-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (09/30/2016; TMA).

**SCS Engineers QA/QC Review
Groundwater -3Q 2016 Groundwater Monitoring Event
Leichner Brothers Landfill
Test America-Beaverton Report No. 580-61692-1**

Samples: LB-082416-05 (LB-1S), LB-082416-08 (LB-6S), LB-082416-09 (LB-6S/DUP1), LB-082416-07 (LB-10SR), LB-082416-06 (FB1), and trip blank.

Sample Date: 08/24/2016
Laboratory Sample Received Date: 08/24/2016
Sample Receipt Temperature: 1.0°C
Laboratory Data Received Date: 09/08/2016
QA/QC Review Date: 08/20/2016 (TMA)

VOCs

Method Blanks	All analytes were reported as non-detect except for acetone and methylene chloride. This is noted and qualified in the case narrative.
Surrogates	All sample surrogates were within QC limits except for trifluorotoluene for samples LB-082416-08 and LB-082416-06, toluene-d8 for sample LB-082416-09, 4-bromofluorobenzene for sample LB-082416-07 (X Flags).
LCS	All % recoveries and surrogates were within QC limits except for 1,1-dichloroethane, methylene chloride, carbon disulfide, cis-1-2-dichloroethene, and 2-butanone in batch 580-226522 (* Flags). This is noted and qualified in the case narrative.
LCSD	All RPDs within QC limits except for cis-1-2-dichloroethene, 2-butanone, bromochloromethane, naphthalene, and chlorform in batch 580-226522 (* Flags). These are noted and qualified in the case narrative.

Dissolved Metals

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

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
Matrix Spikes	All % recoveries were within QC limits except for nitrate in batch 580-225948 and chloride in batch 580-225949 (F1 Flags). These are noted and qualified in the case narrative.
MSD	All RPDs were within QC limits.
Duplicates	All RPDs were within QC limits.

Hold Times

All analytical hold times were met.

Reporting Limit Exceedances

All project-specific reporting limits were met.

Field QA/QC

Field/Equipment Blank

An equipment blank sample (LB-082416-06) was collected near monitoring well LB-10SR on 08/24/2016 using lab supplied deionized water. All analytes were reported as non-detect.

Field Duplicate

A field duplicate sample LB-082416-09 (DUP1) was collected at monitoring well LB-6S (LB-082416-08) on 08/24/2016. All calculated RPDs were within 20%.

Trip Blank

A laboratory supplied trip blank was carried into the field on 08/24/2016 with all samples collected on the same date and returned to the lab for volatile organic compound (VOC) analysis. All trip blank analytes were reported as non-detect except for methylene chloride at 5.3 ug/L. It should be noted that methylene chloride is a known laboratory contaminate and was detected in the method blank (B Flag). All surrogate recoveries were within control limits.

Notes

The continuing calibration verification (CCV) associated with batch 580-211711 recovered above the upper control limit multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The Nitrate Method 300.0 analysis was subcontracted to Pixis Laboratories, LLC.

Data Validation

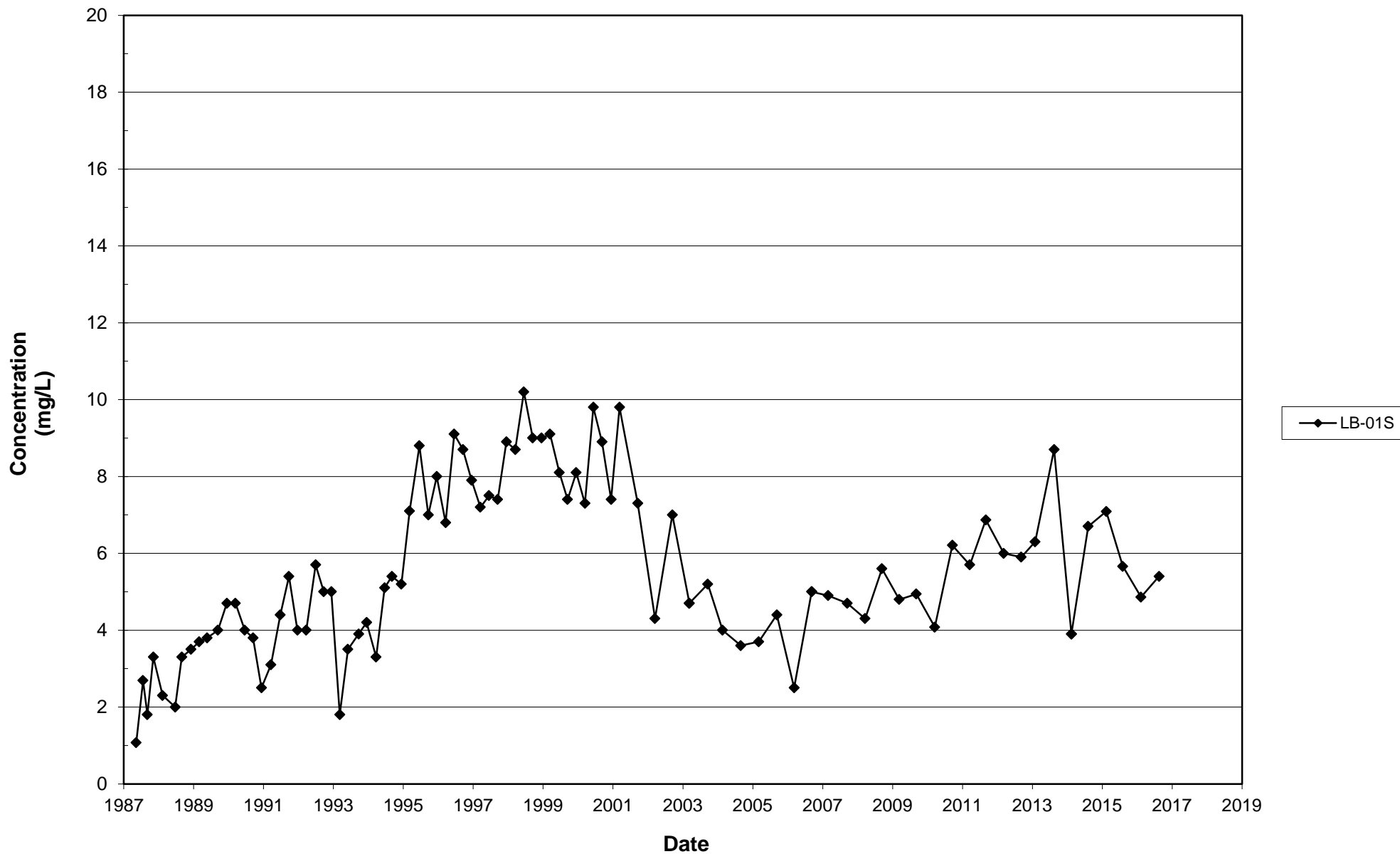
Upon final review of lab report 580-61692-1 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (09/30/2016; TMA).

APPENDIX F

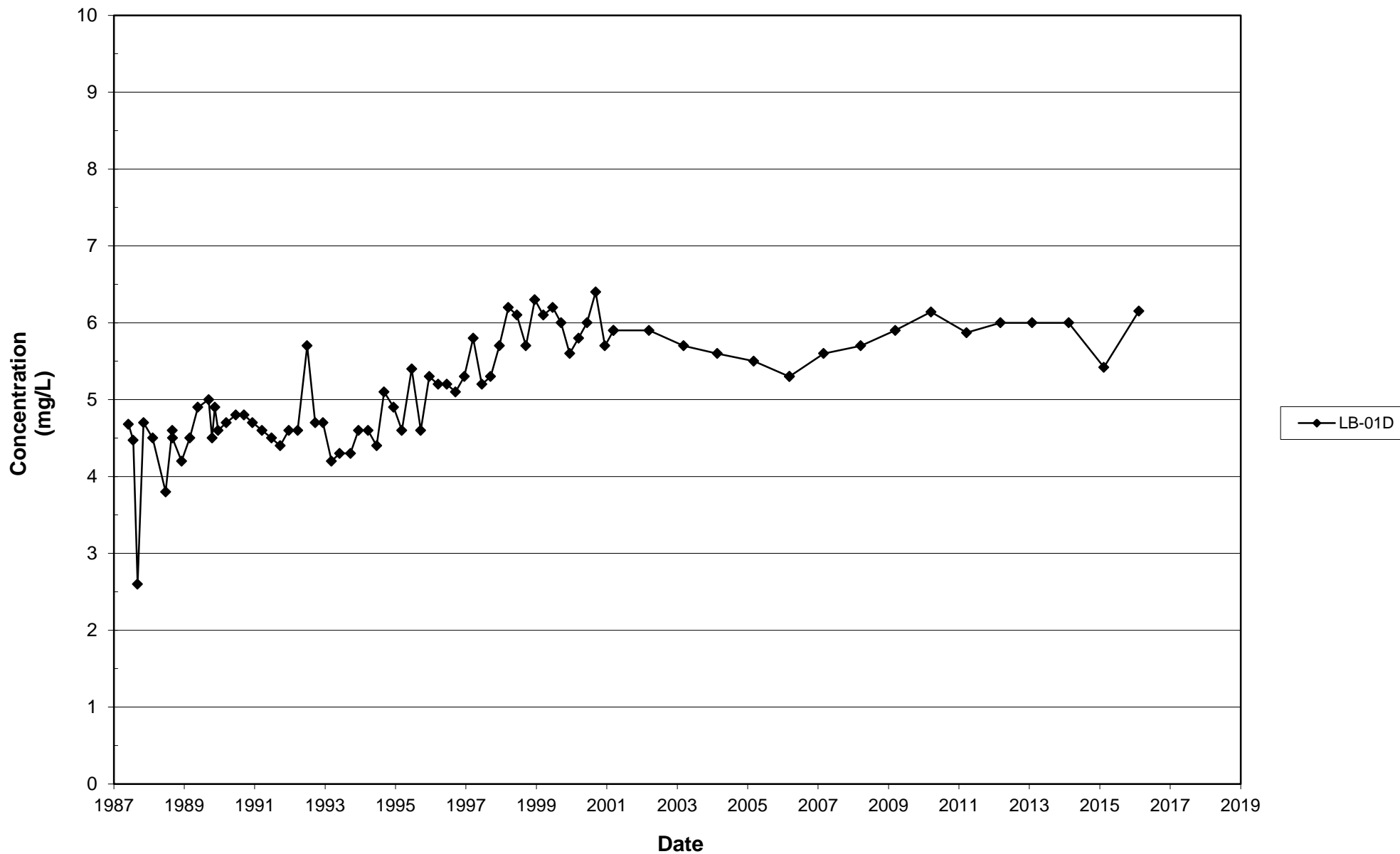
Groundwater Time-Concentration Graphs

Nitrate

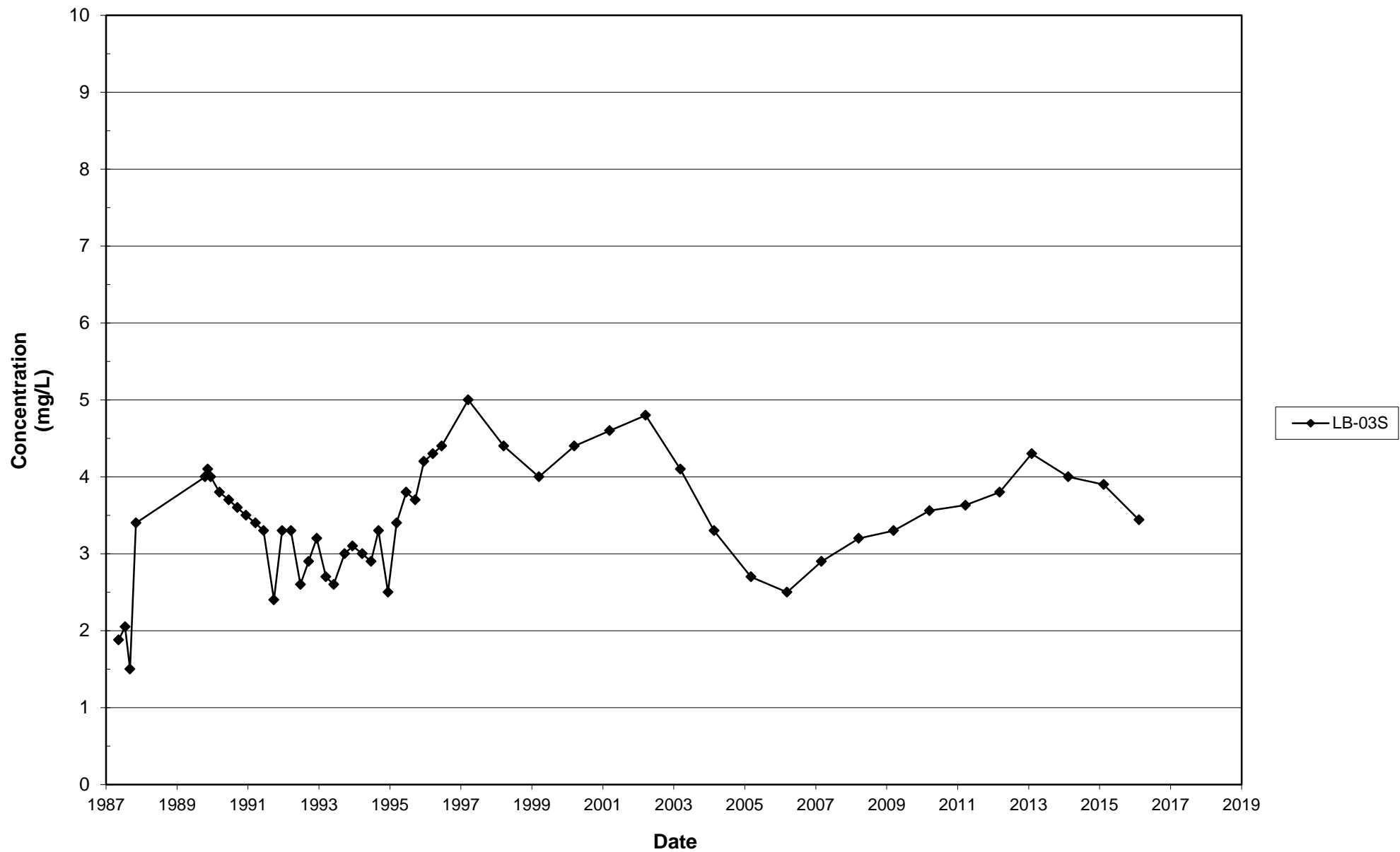
Leichner Landfill
Nitrate, LB-01S
1987 - 2016



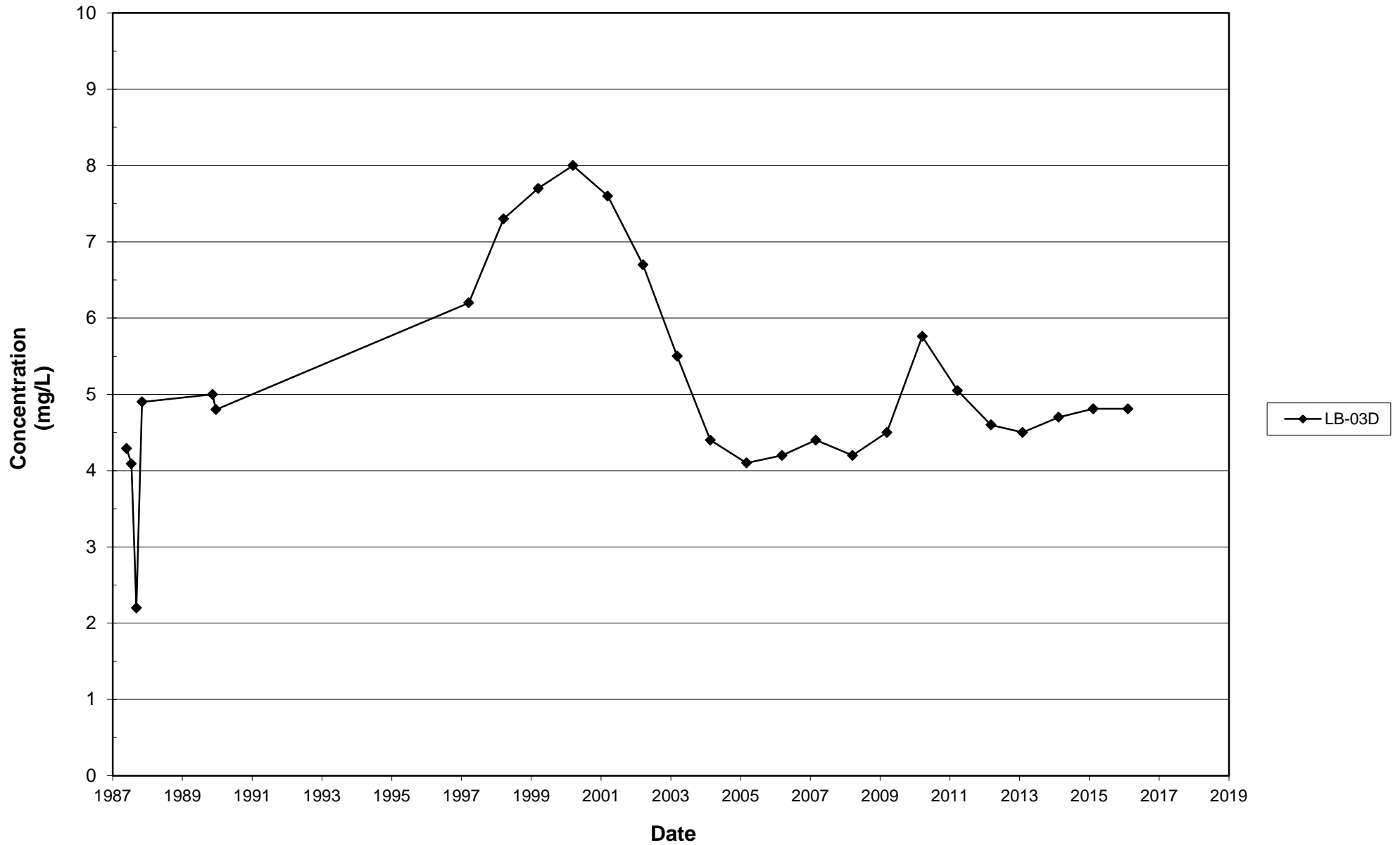
Leichner Landfill
Nitrate, LB-01D
1987 - 2016



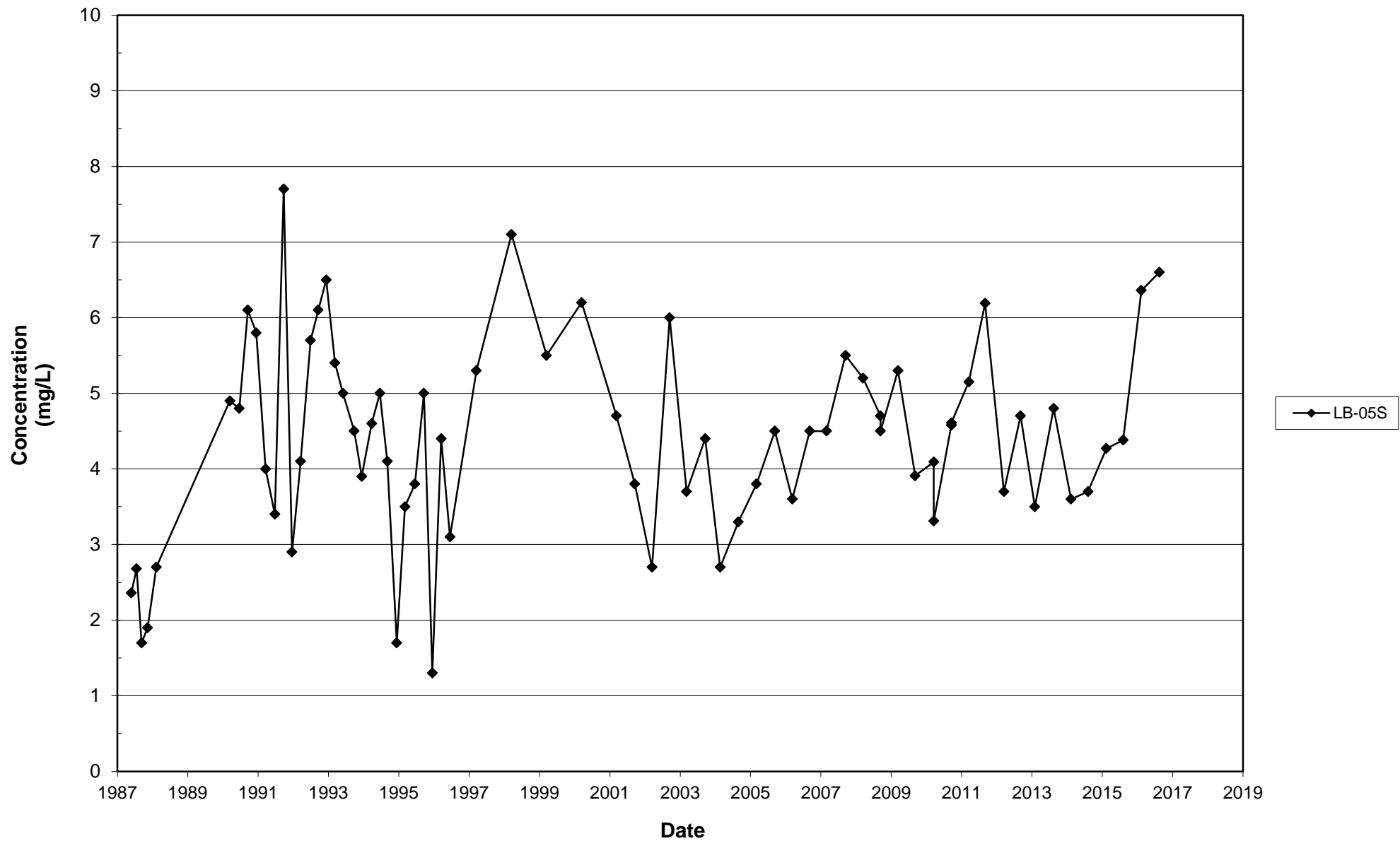
Leichner Landfill
Nitrate, LB-03S
1987 - 2016



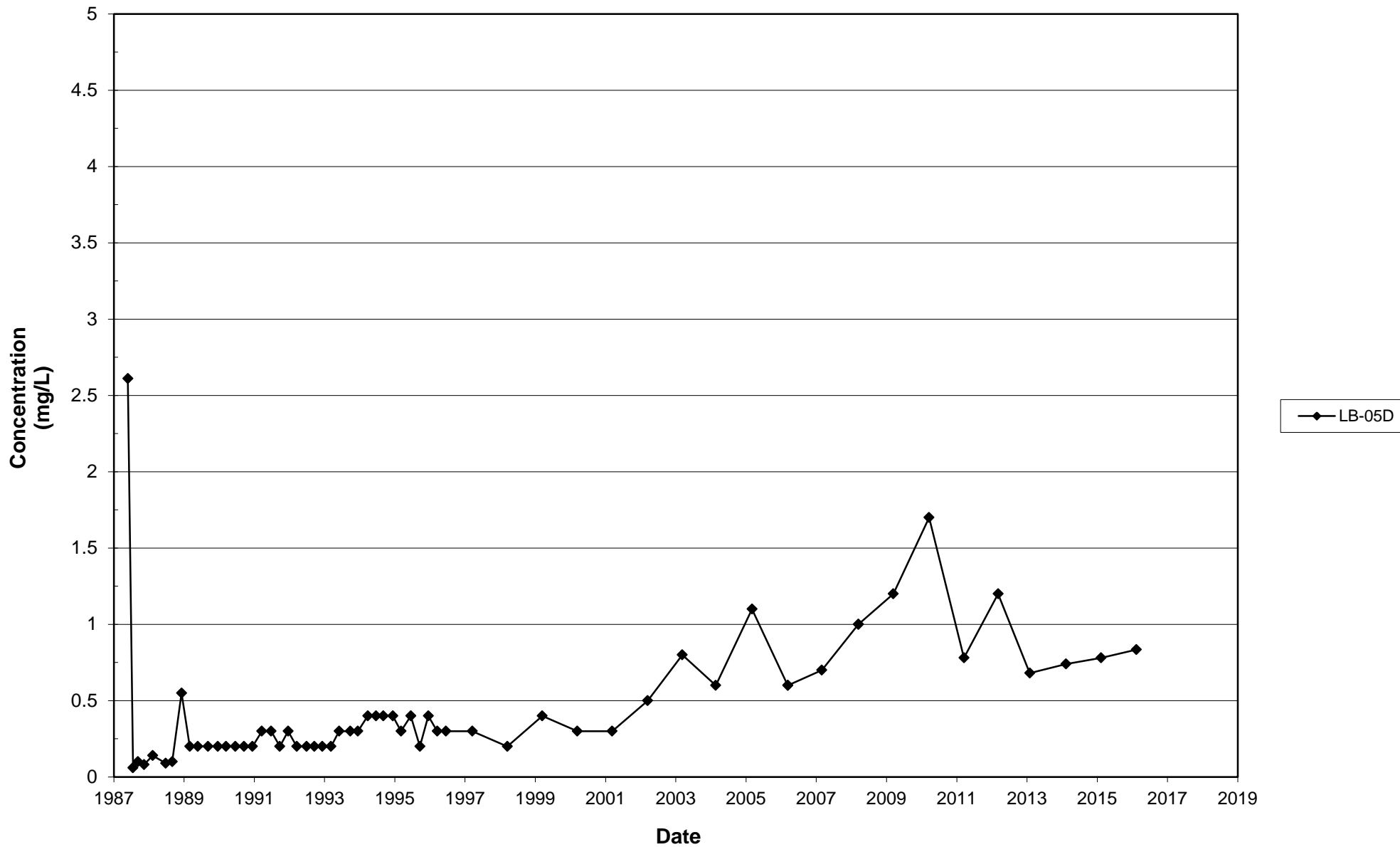
Leichner Landfill
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1987 - 2016



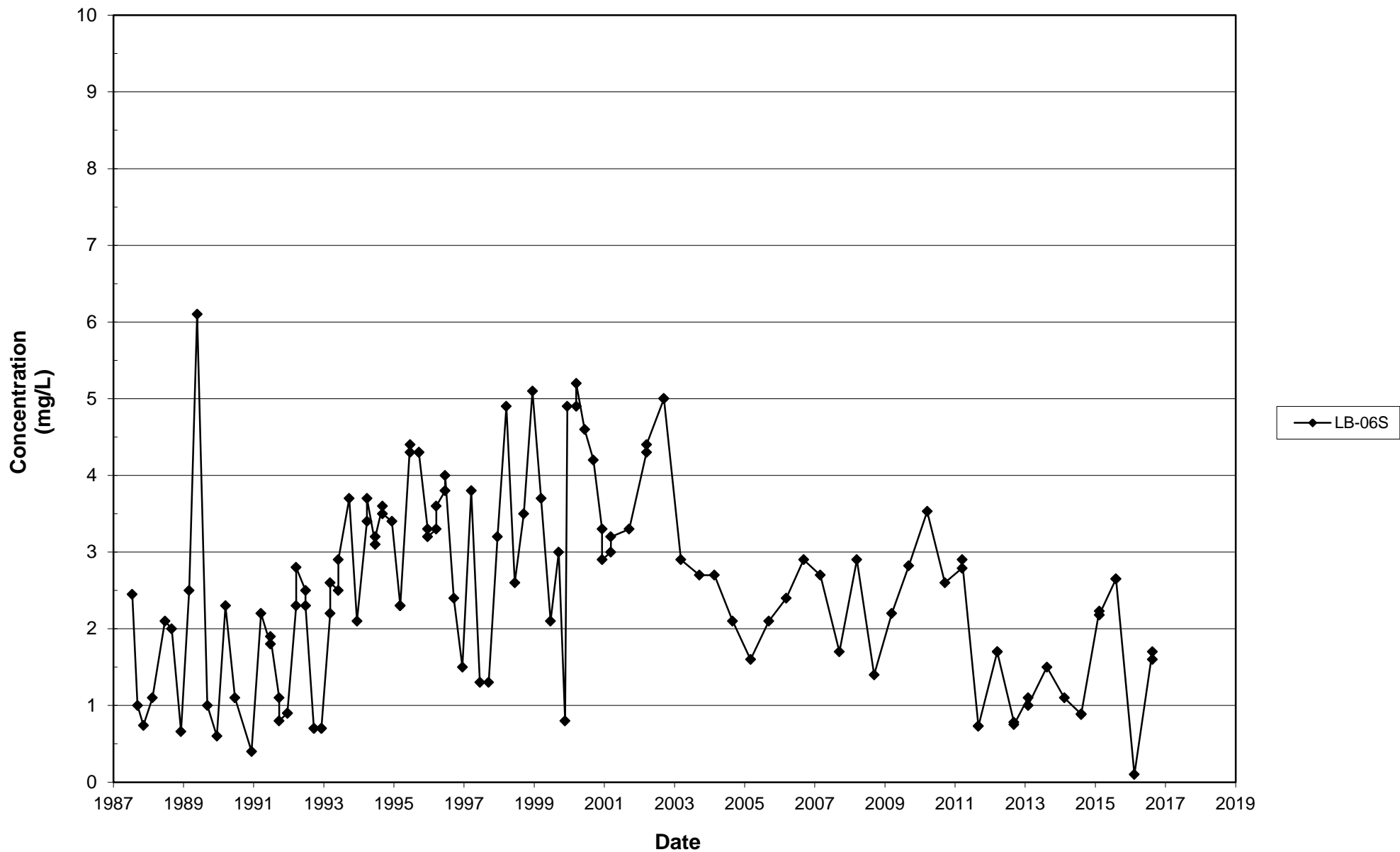
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1987 - 2016



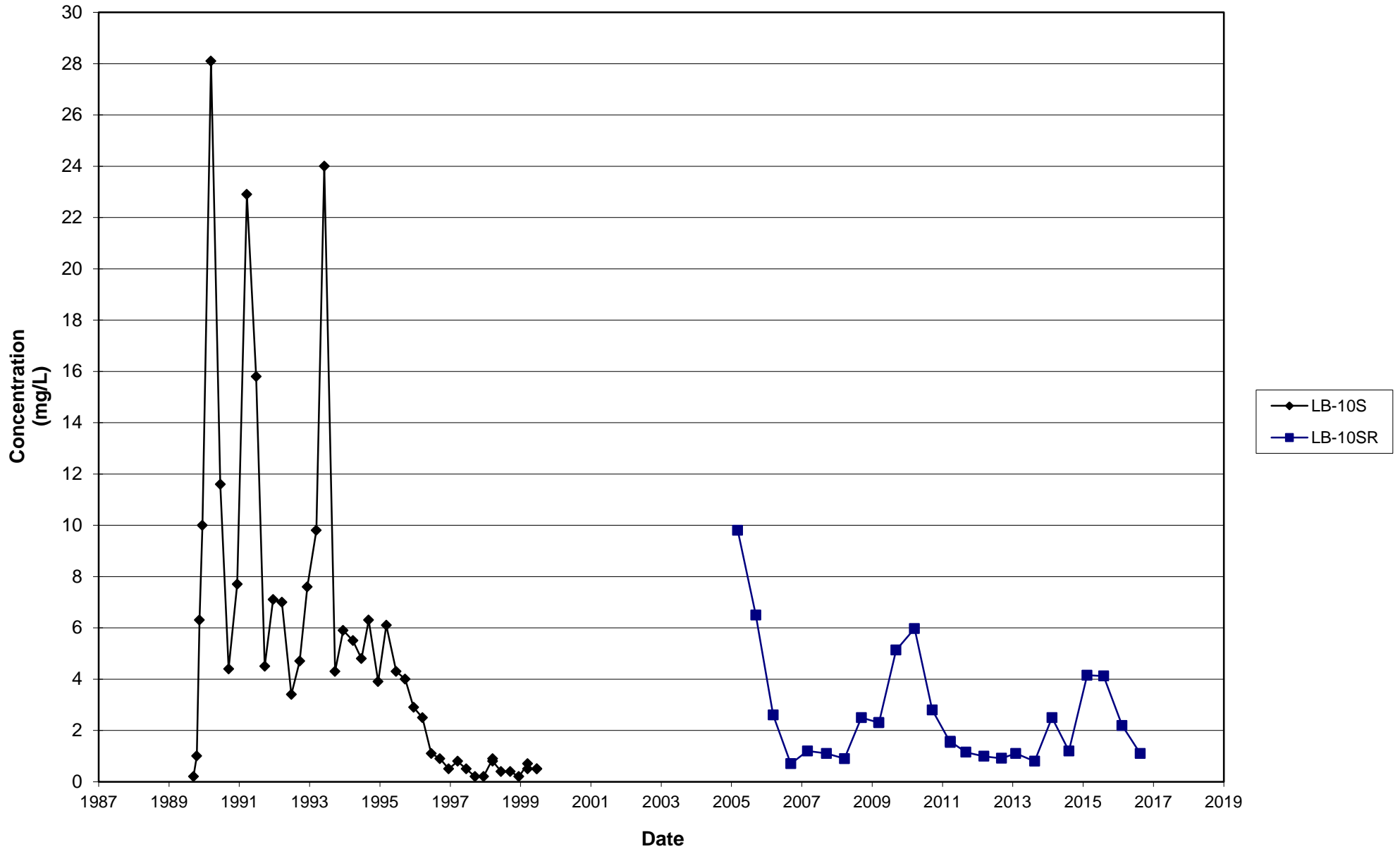
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Nitrate, LB-05D
1987 - 2016



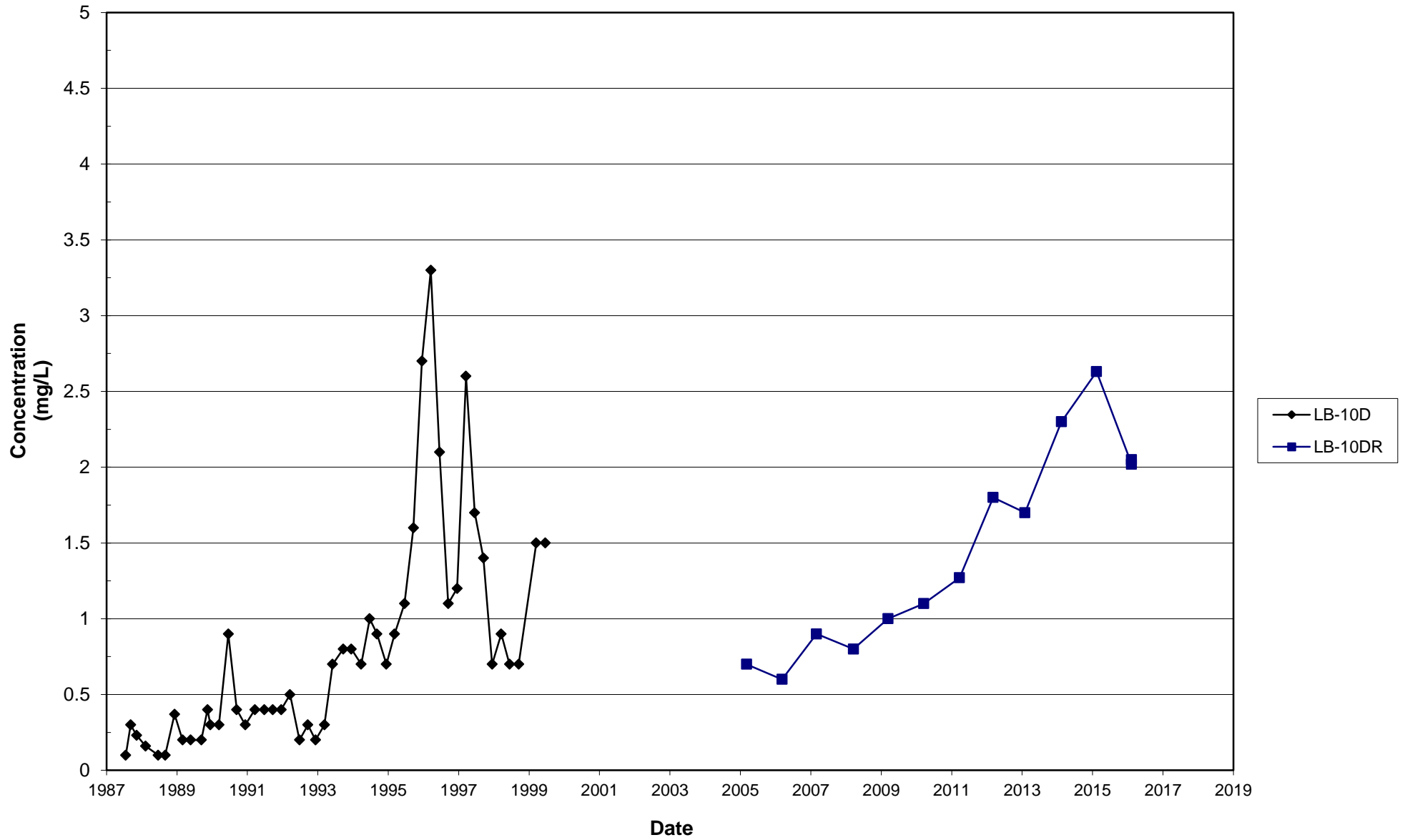
Leichner Landfill
Nitrate, LB-06S
1987 - 2016



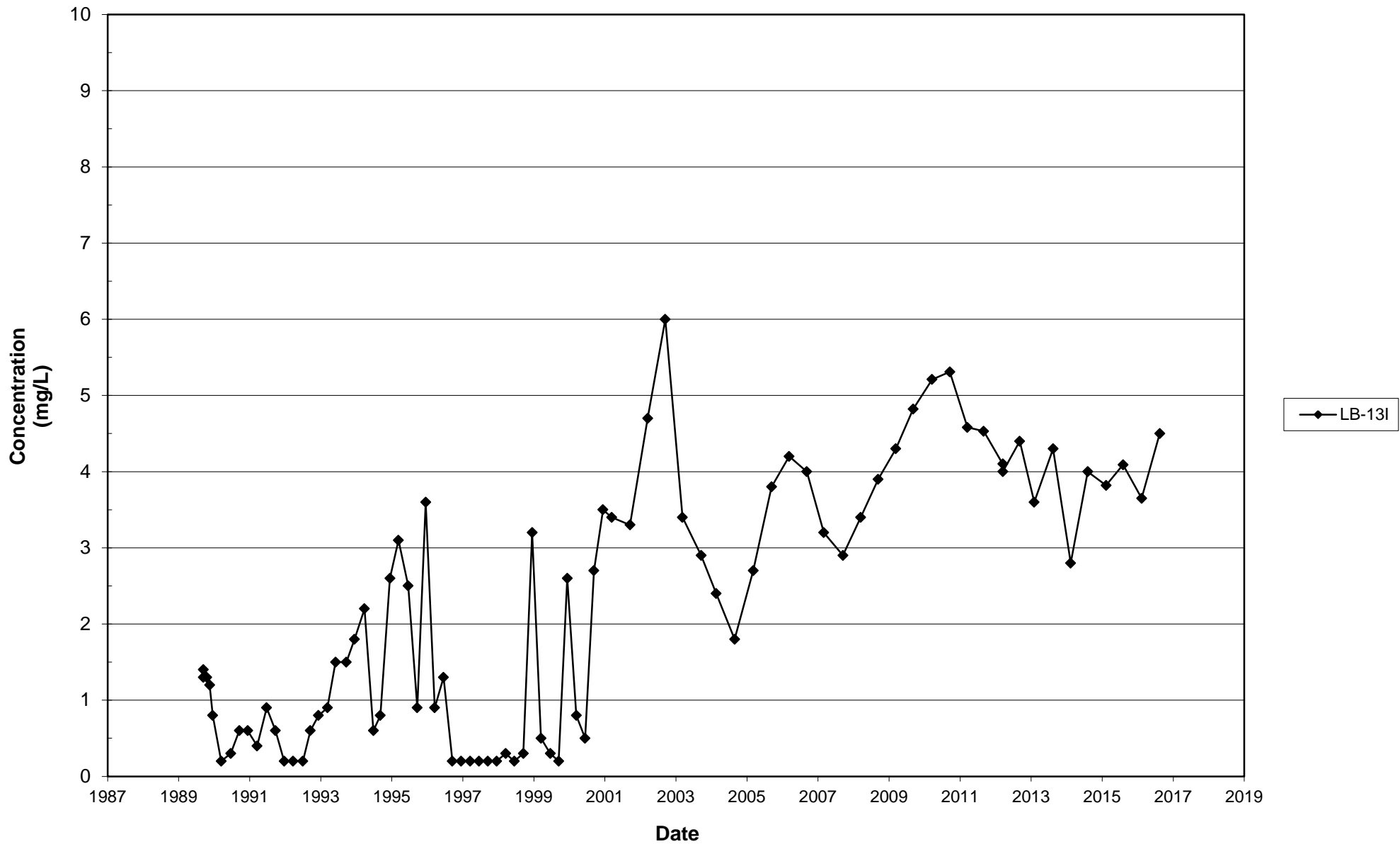
Leichner Landfill
Nitrate, LB-10S and LB-10SR
1987 - 2016



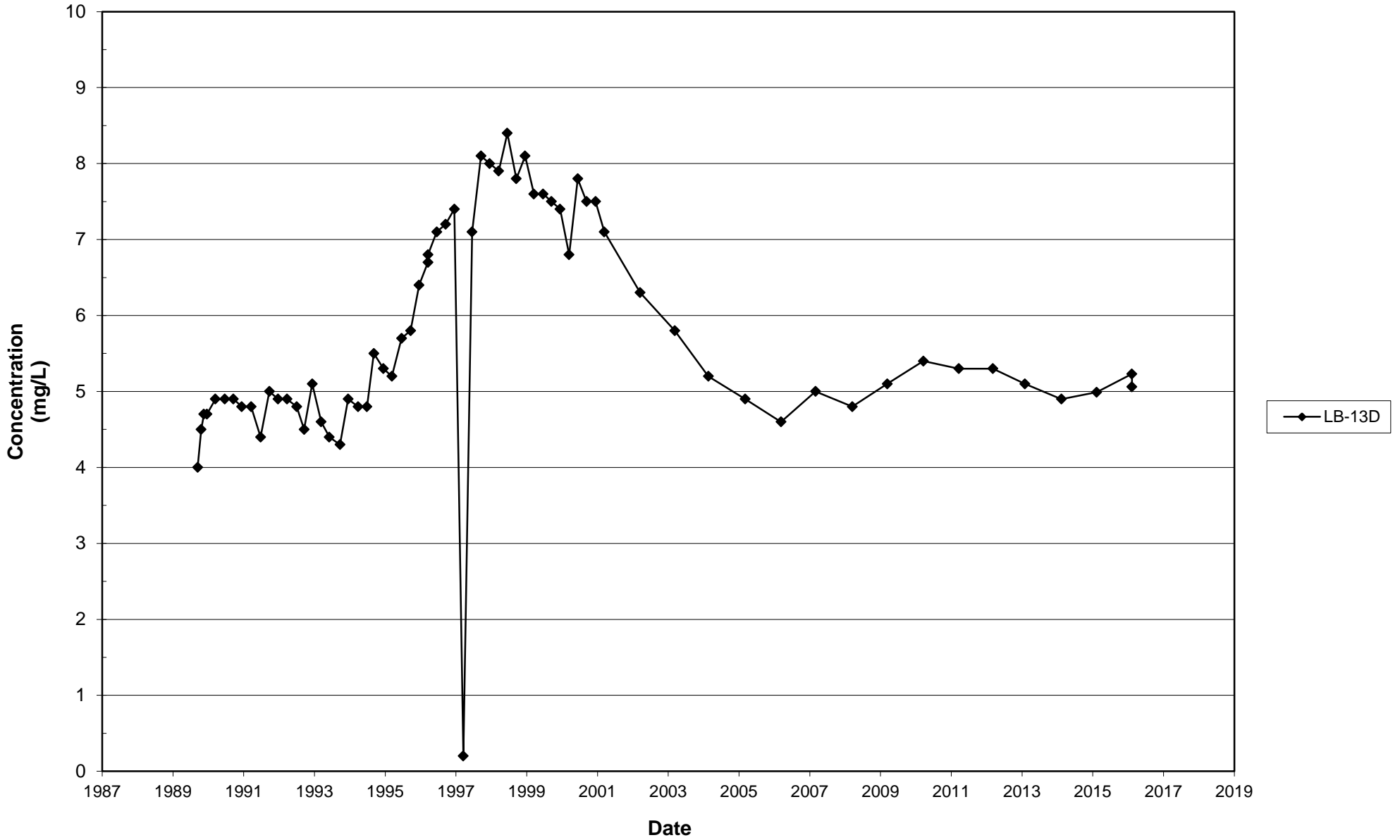
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Nitrate, LB-10D and LB-10DR
1987 - 2016



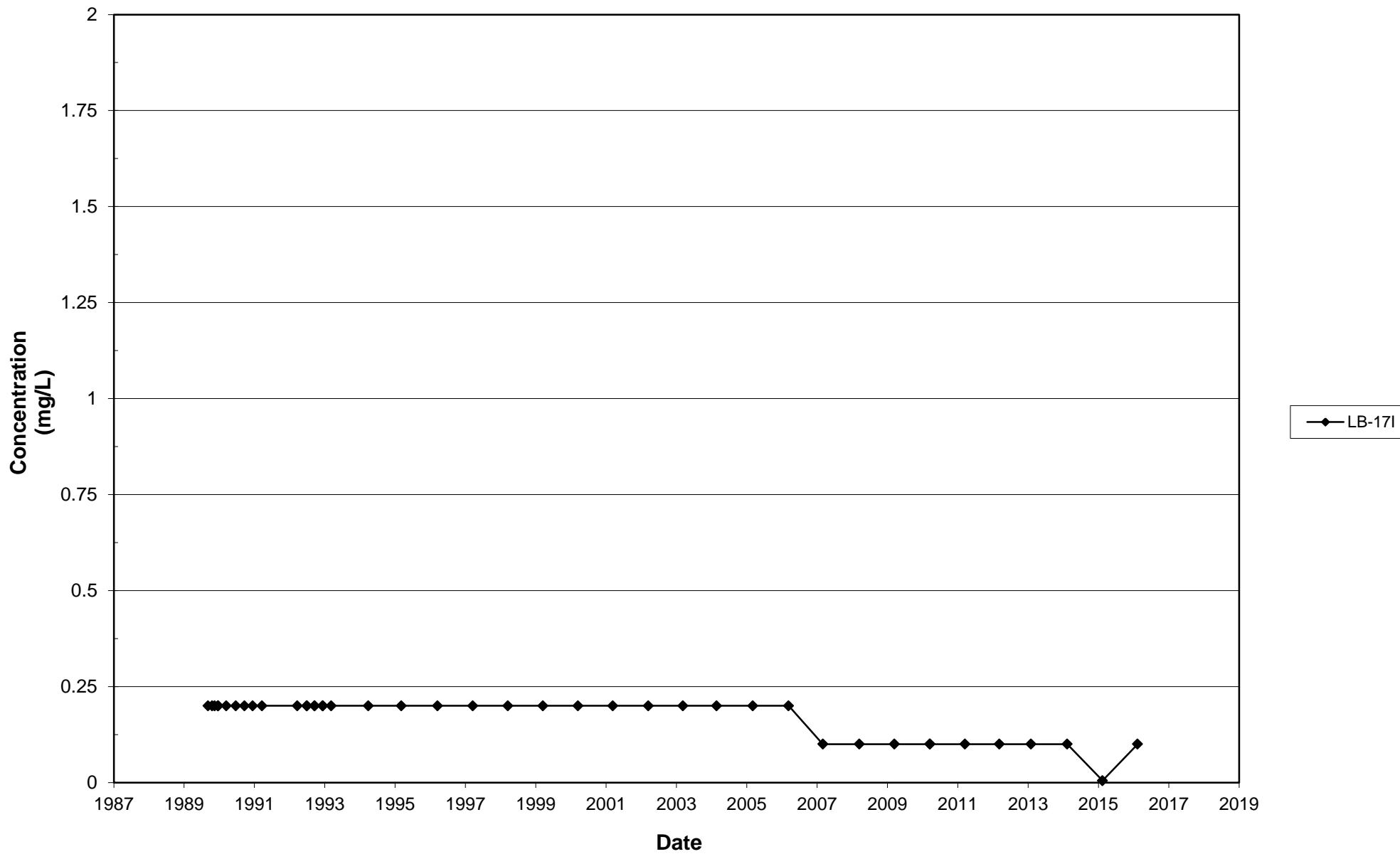
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Nitrate, LB-13I
1987 - 2016



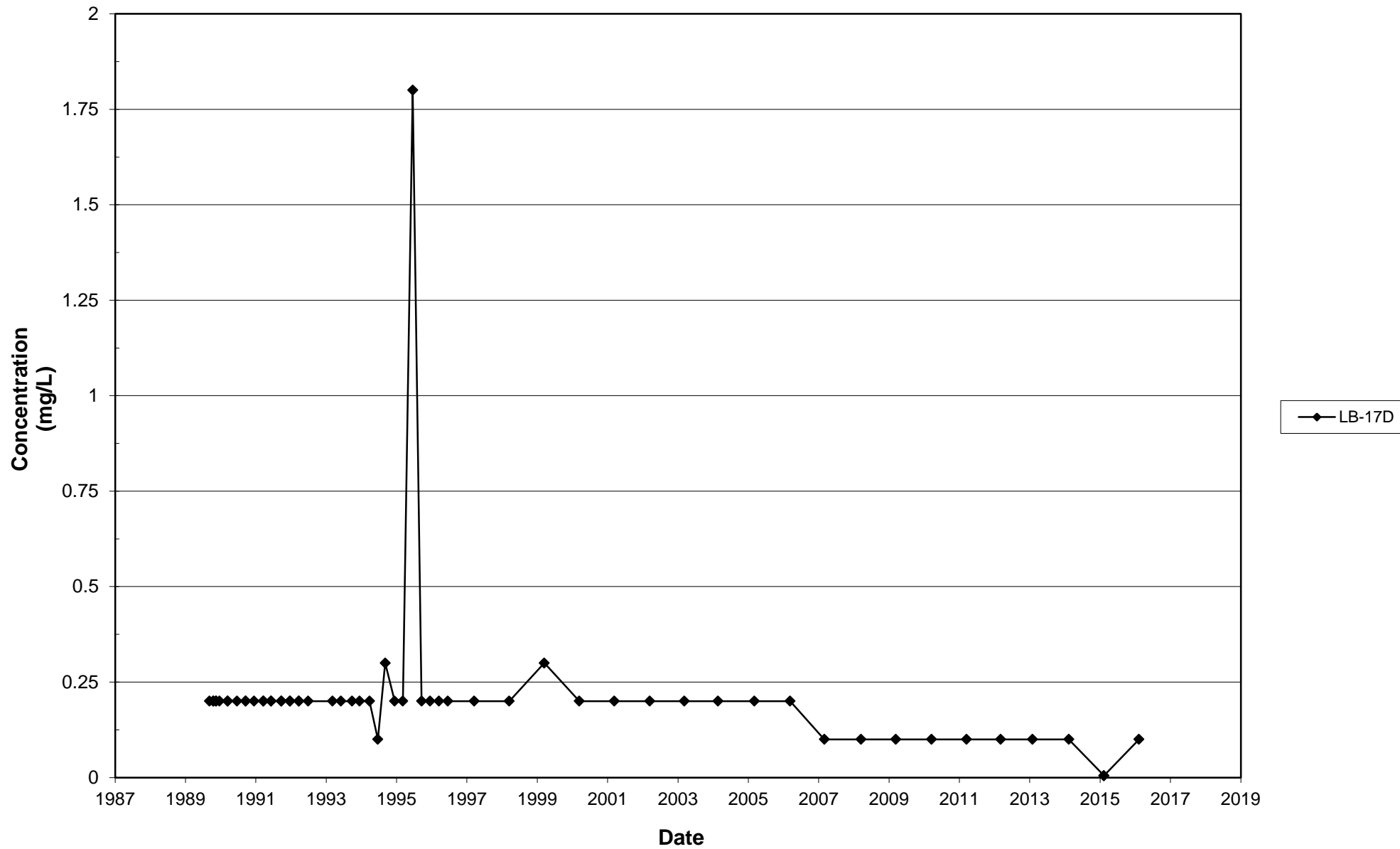
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Nitrate, LB-13D
1987 - 2016



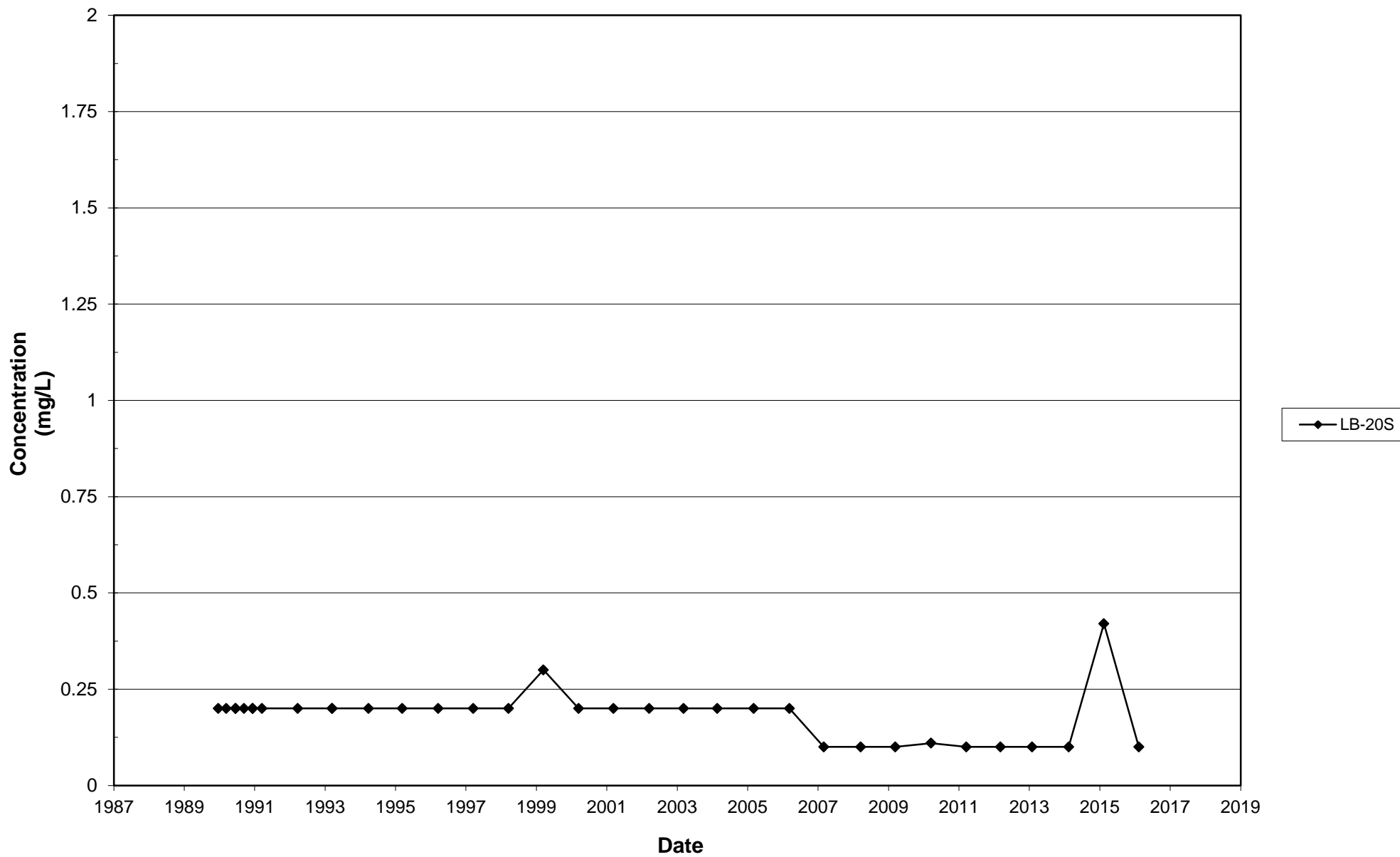
Leichner Landfill
Nitrate, LB-17I
1987 - 2016



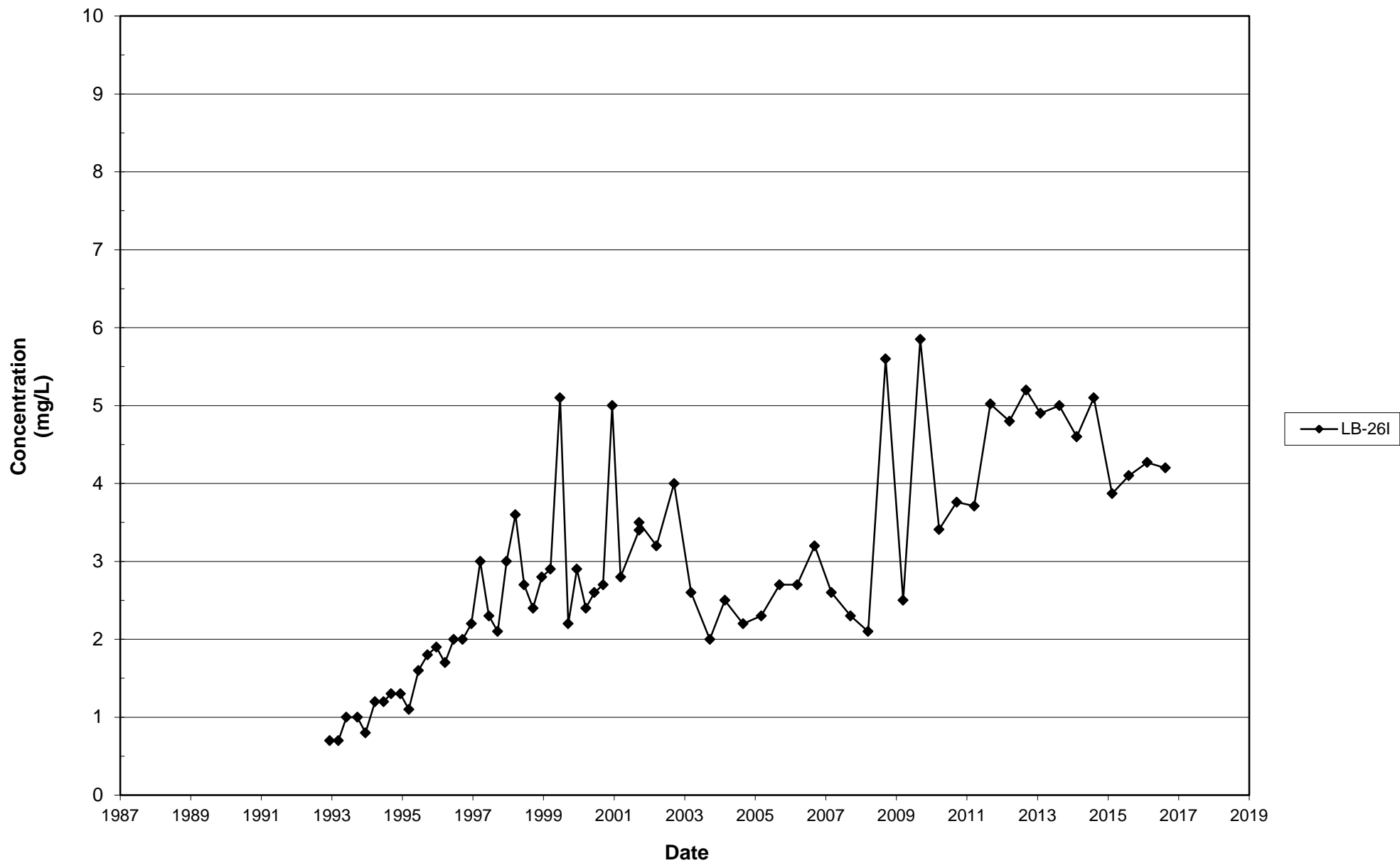
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Nitrate, LB-17D
1987 - 2016



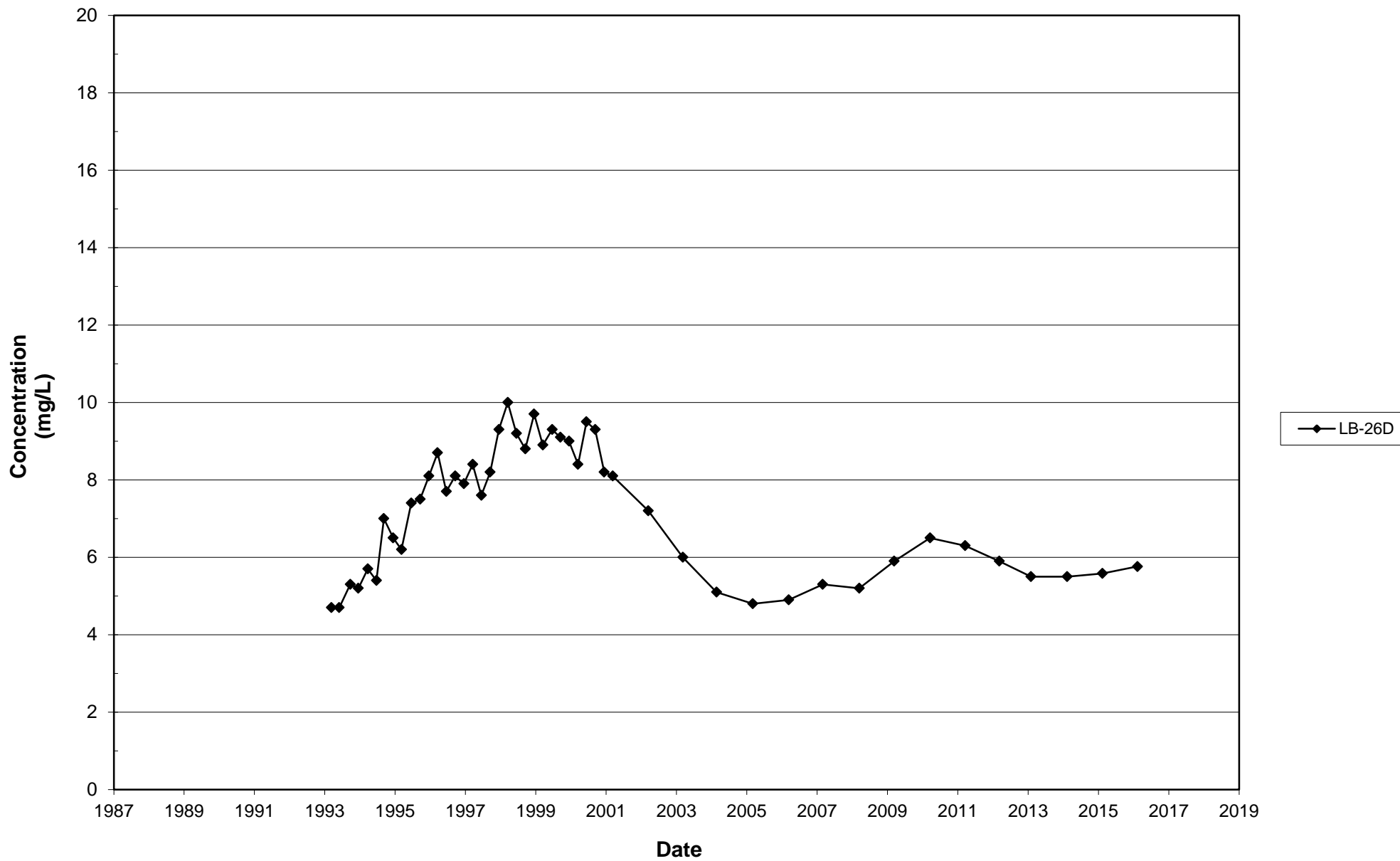
Leichner Landfill
Nitrate, LB-20S
1987 - 2016



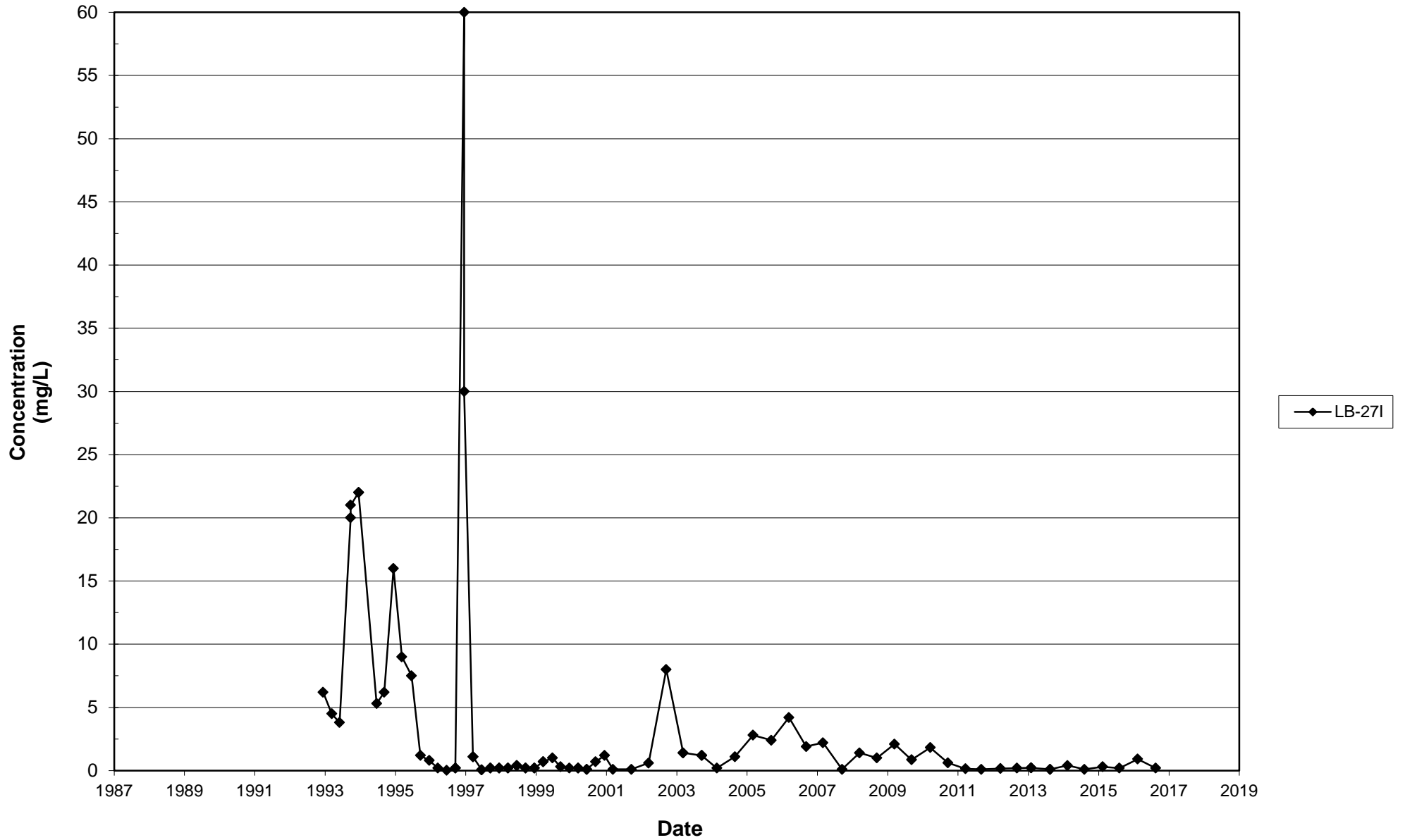
Leichner Landfill
Nitrate, LB-26I
1987 - 2016



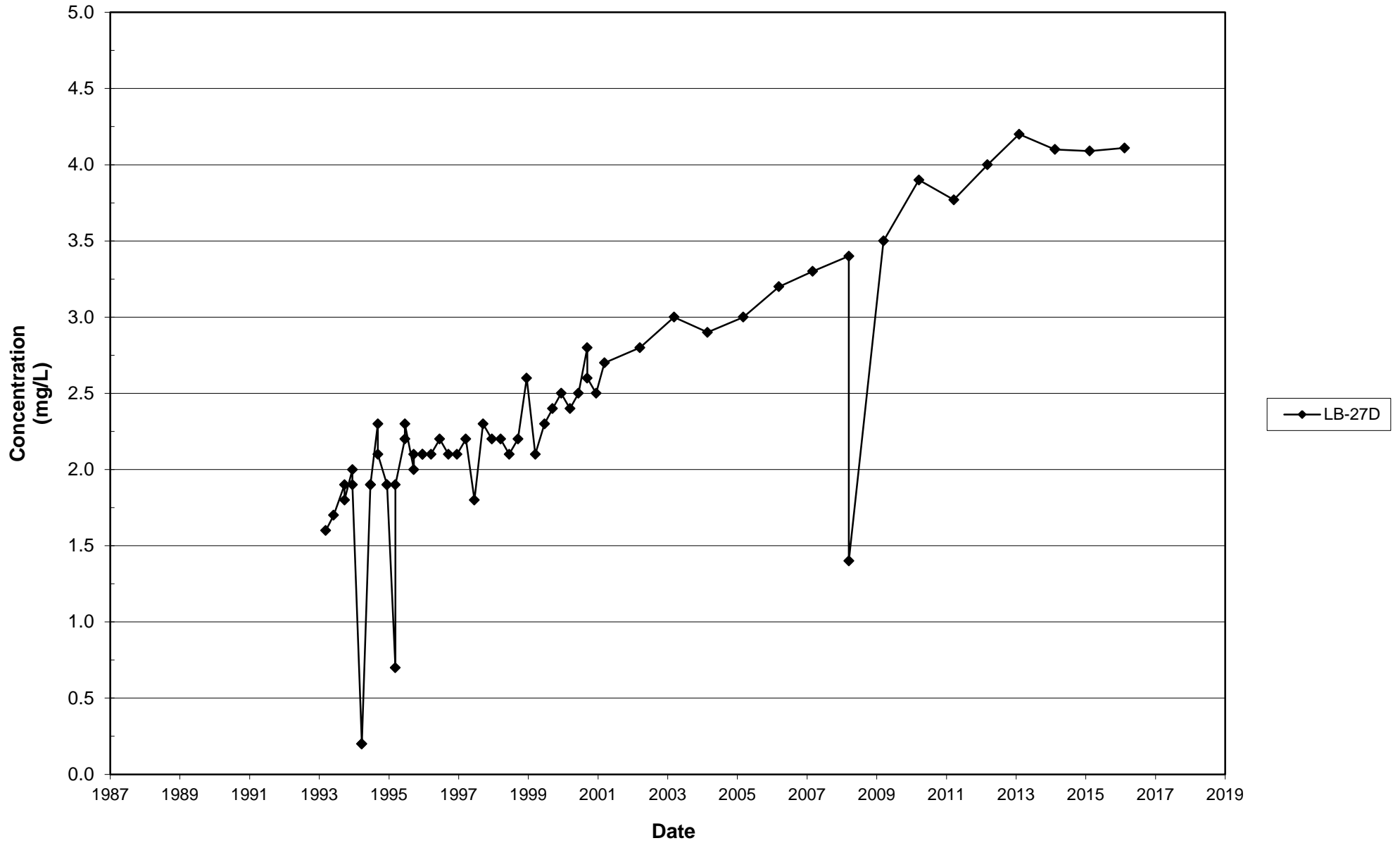
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Nitrate, LB-26D
1987 - 2016



Leichner Landfill
Nitrate, LB-27I
1987 - 2016

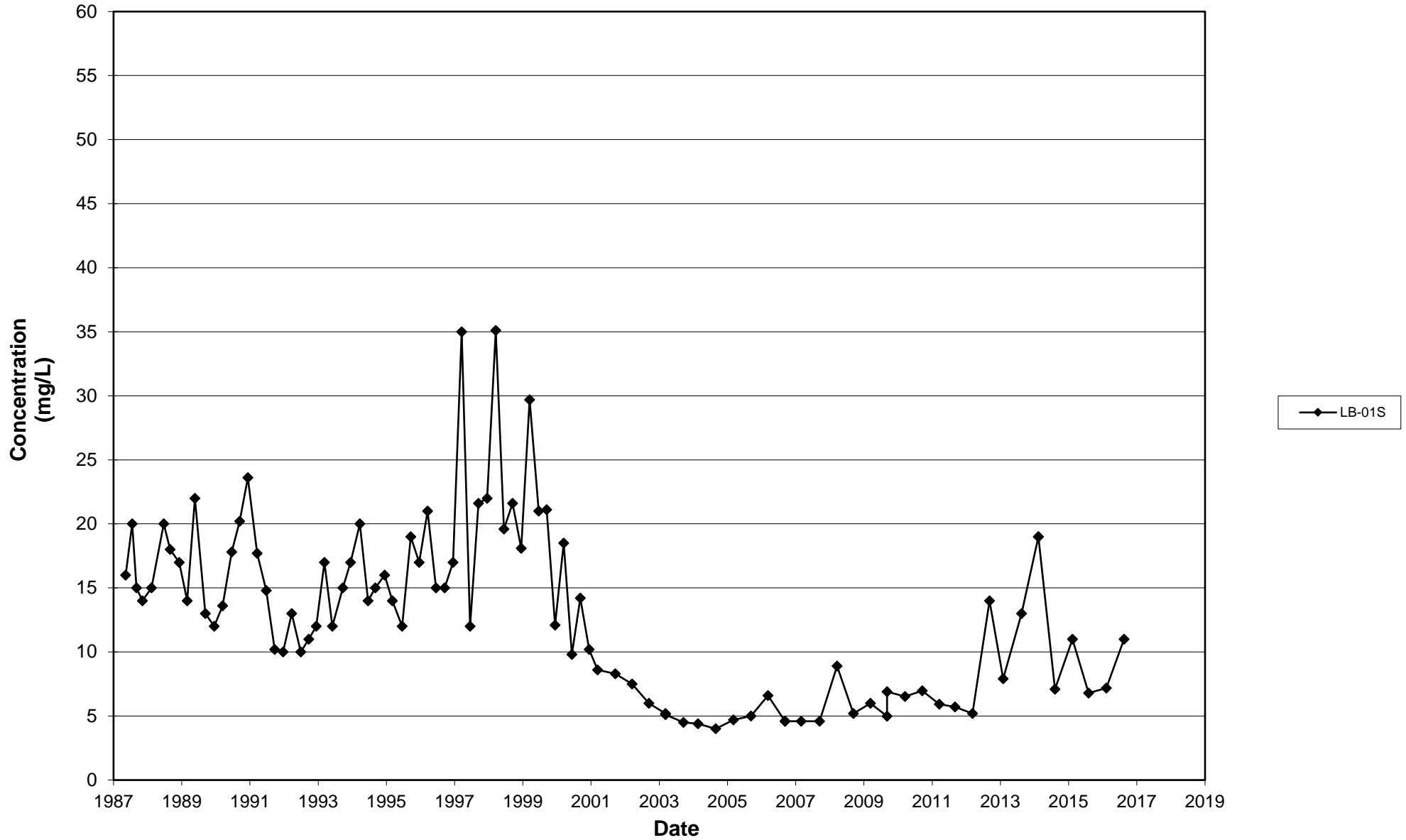


Leichner Landfill
Nitrate, LB-27D
1987 - 2016

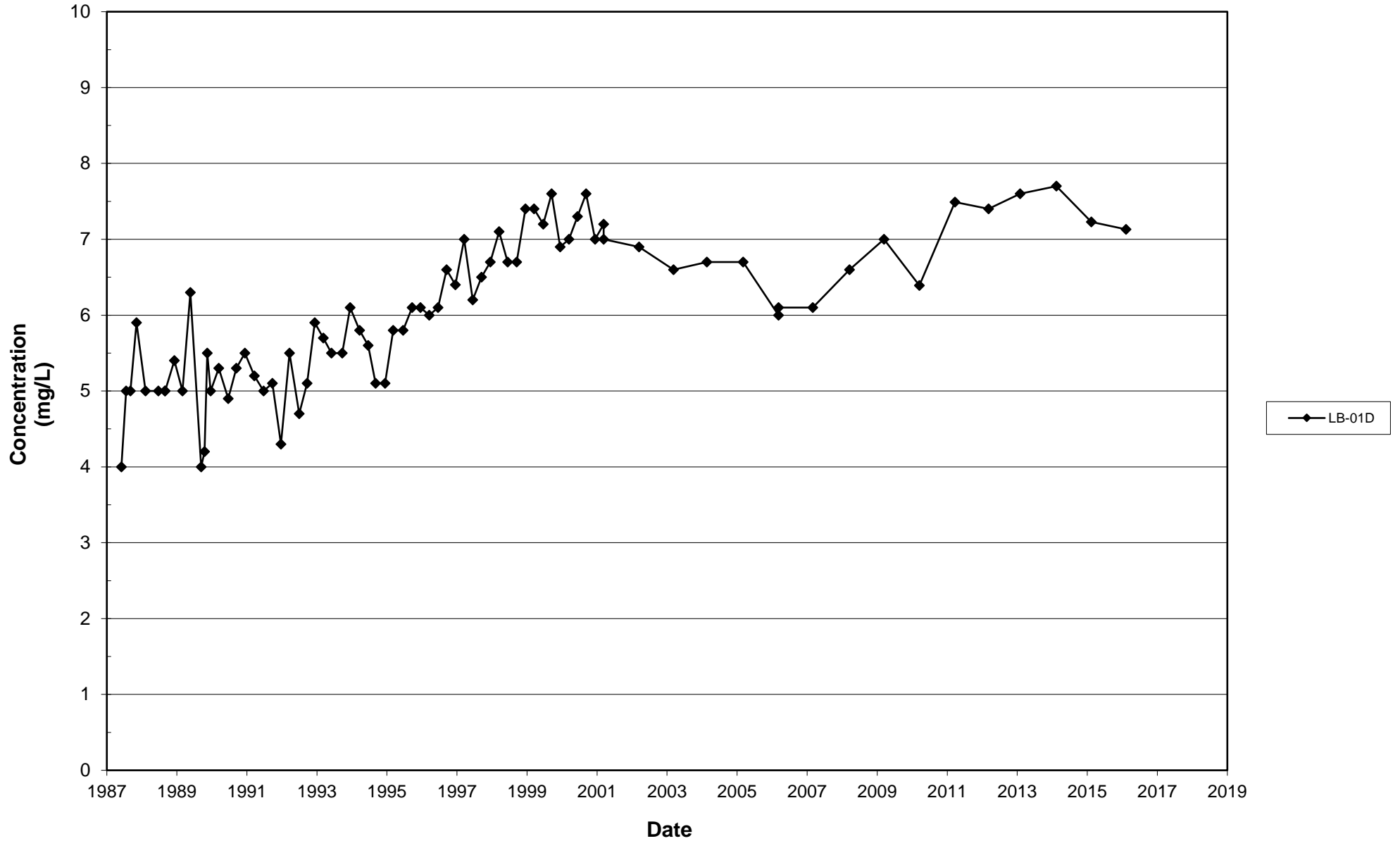


Chloride

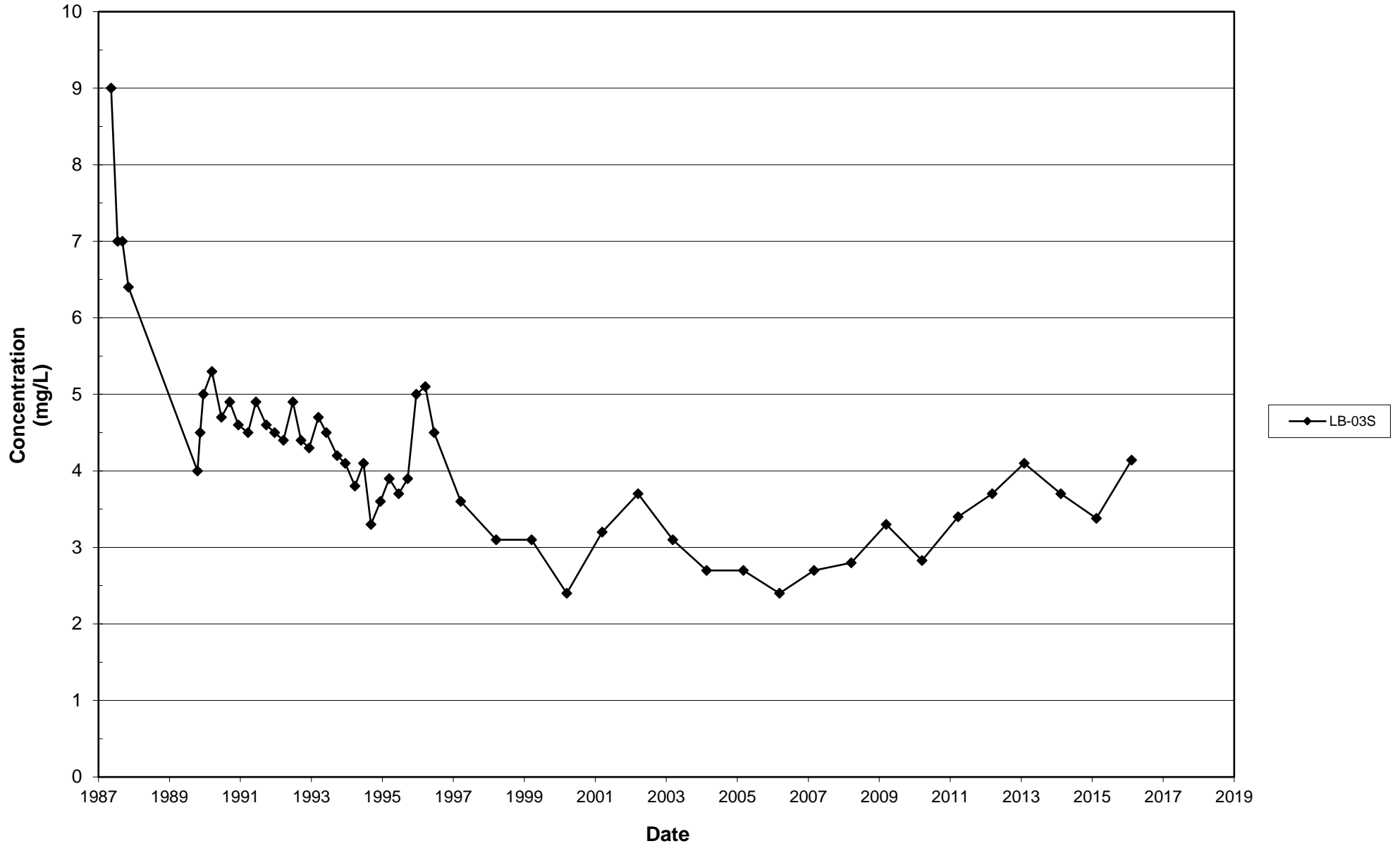
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Chloride, LB-01S
1987 - 2016



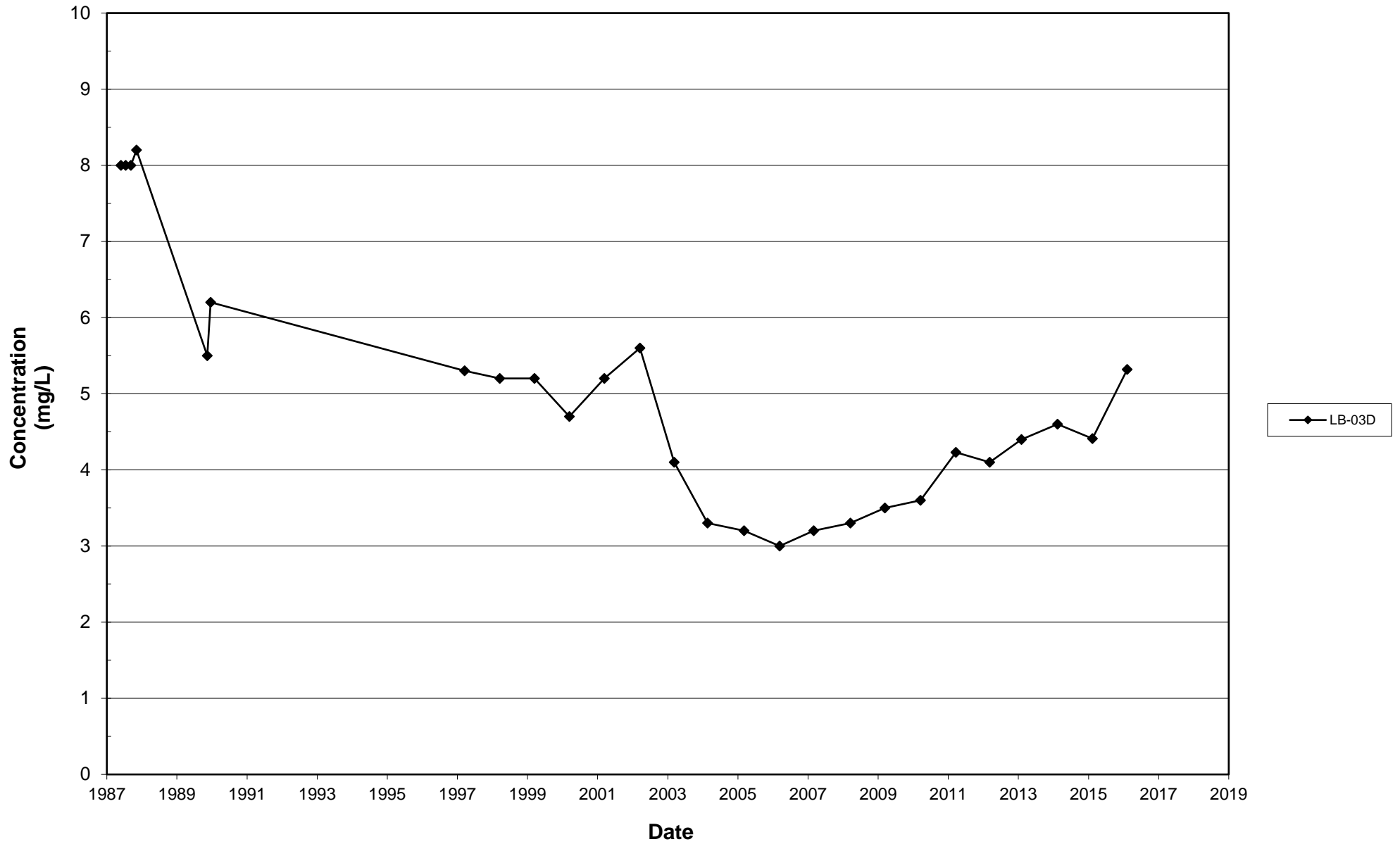
Leichner Landfill
Chloride, LB-01D
1987 - 2016



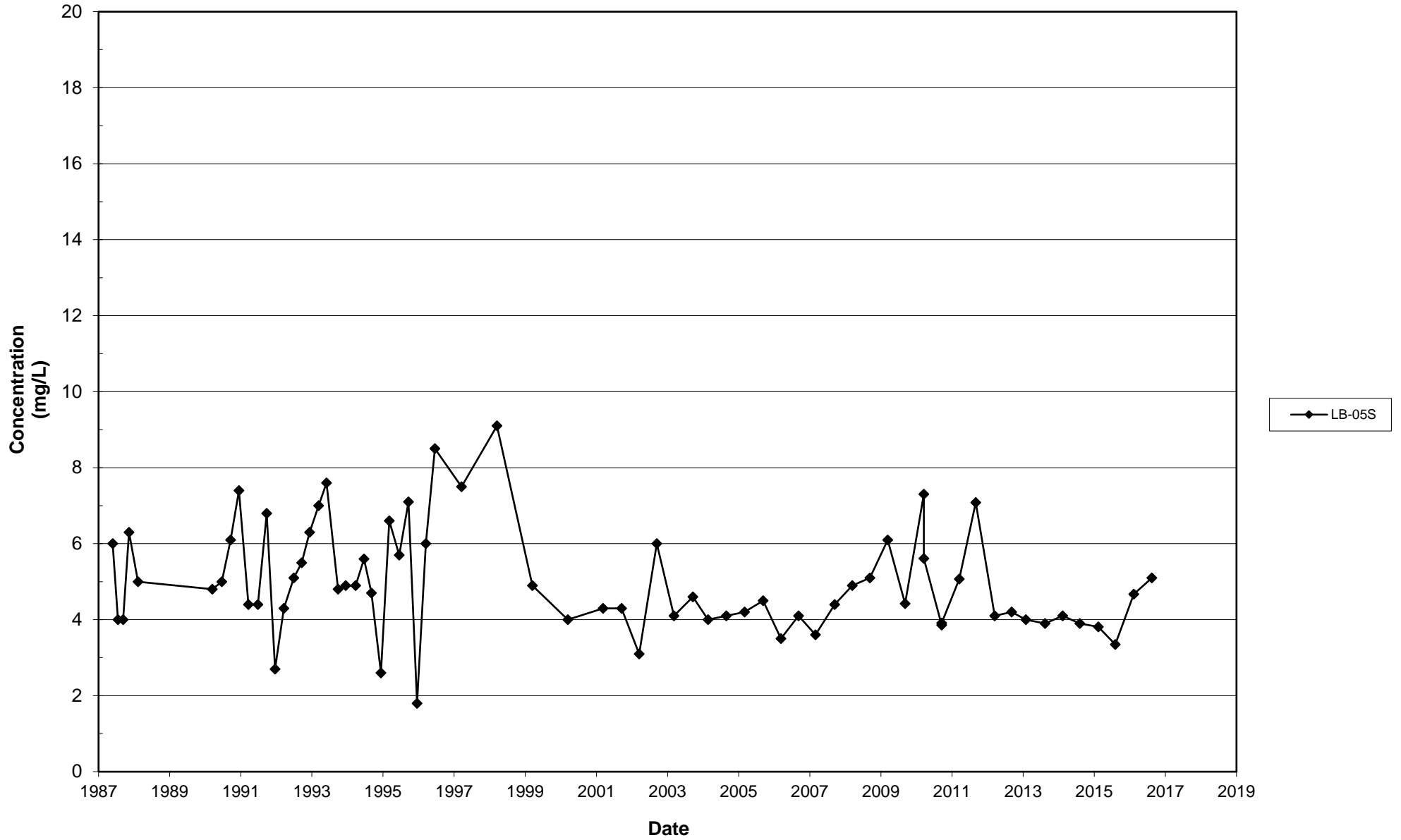
Leichner Landfill
Chloride, LB-03S
1987 - 2016



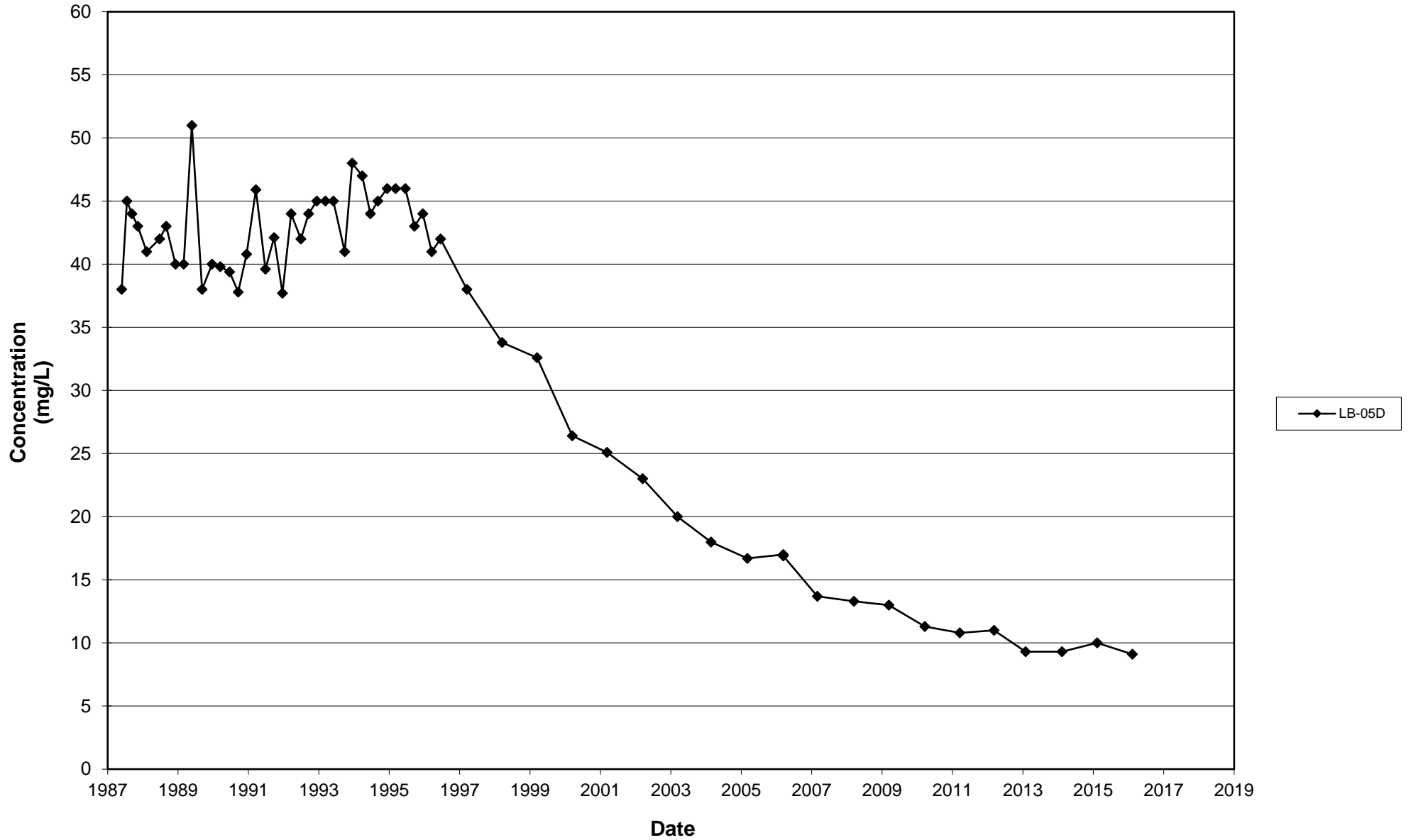
Leichner Landfill
Chloride, LB-03D
1987 - 2016



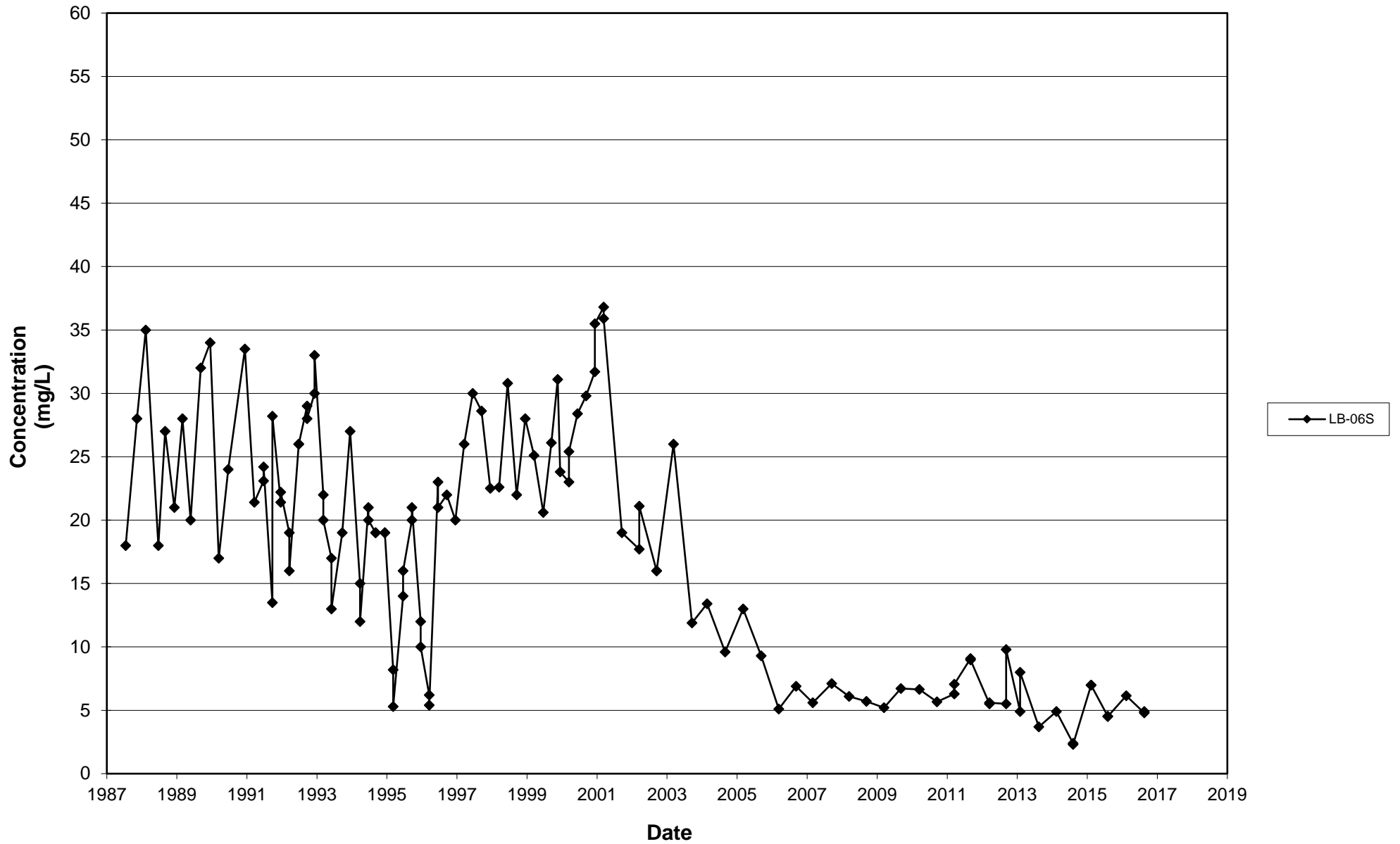
Leichner Landfill
Chloride, LB-05S
1987 - 2016



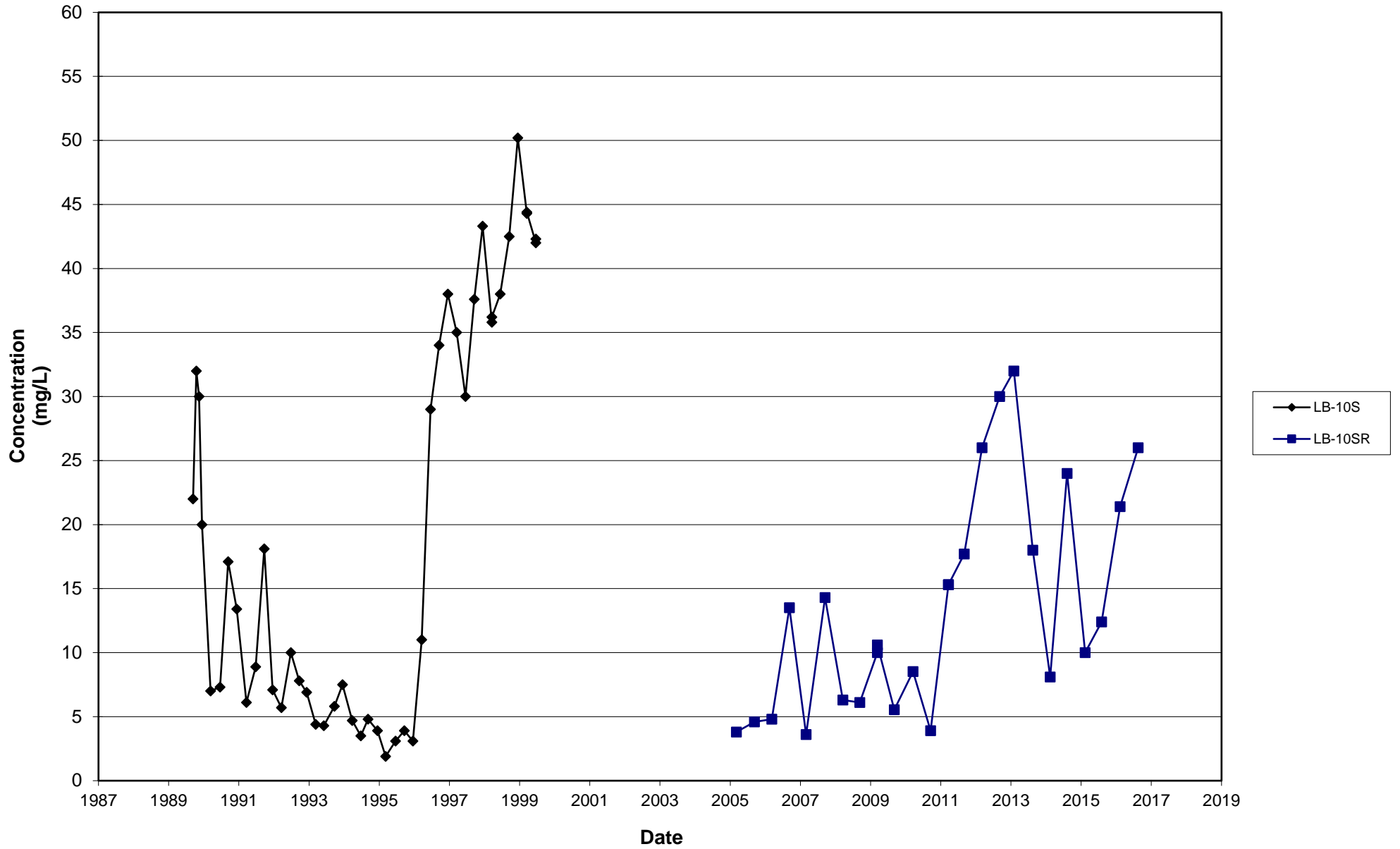
Leichner Landfill
Chloride, LB-05D
1987 - 2016



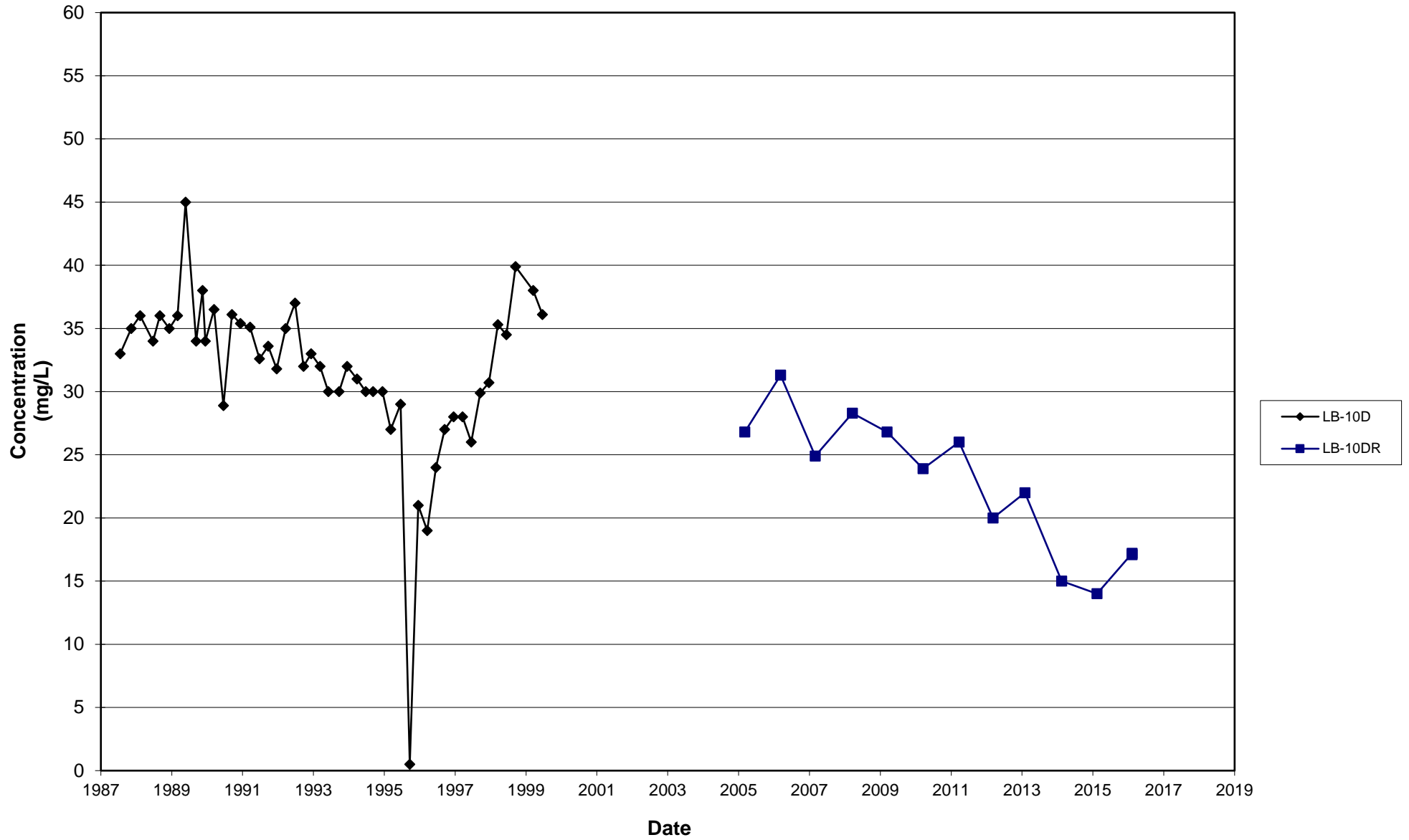
Leichner Landfill
Chloride, LB-06S
1987 - 2016



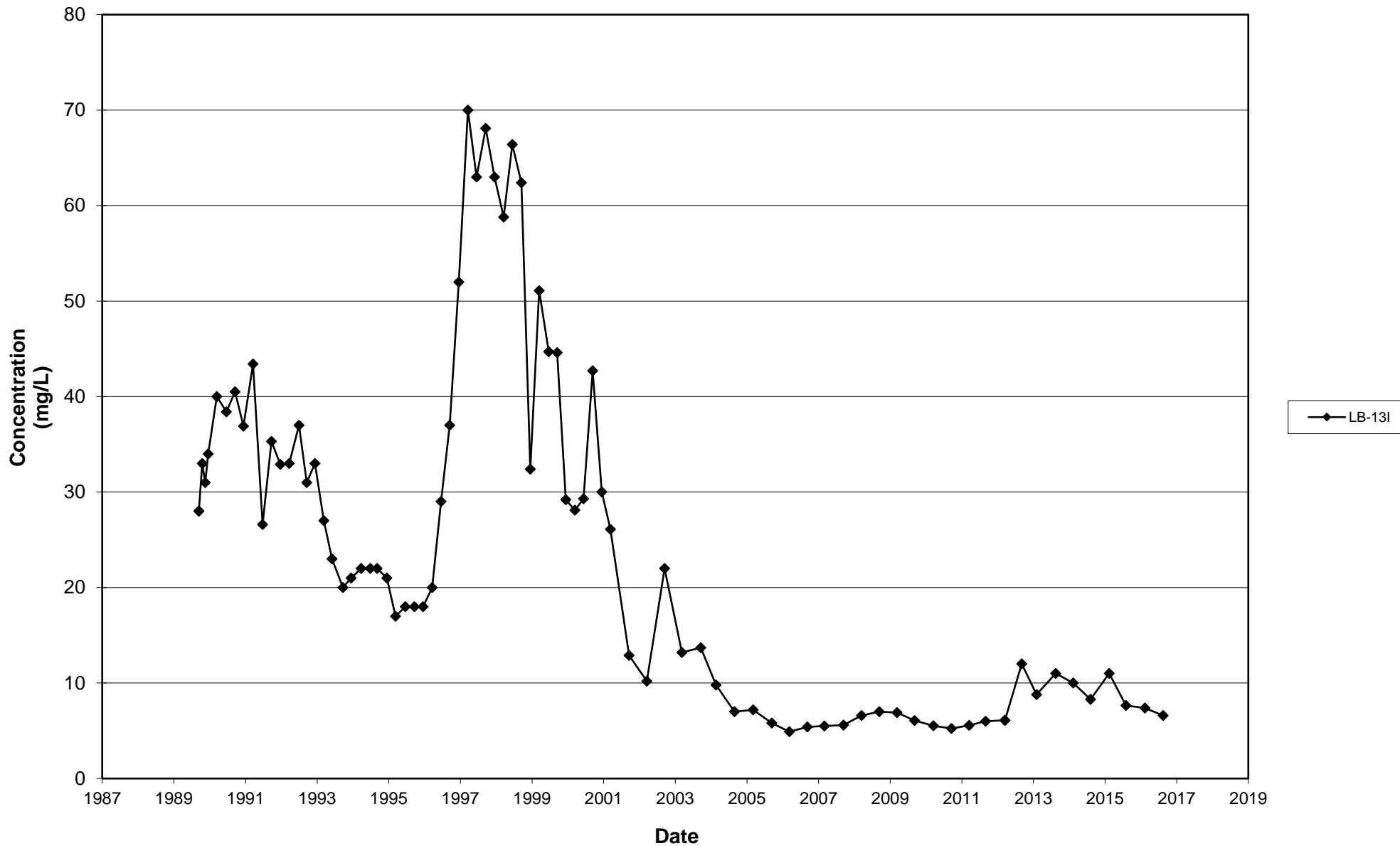
Leichner Landfill
Chloride, LB-10S and LB-10SR
1987 - 2016



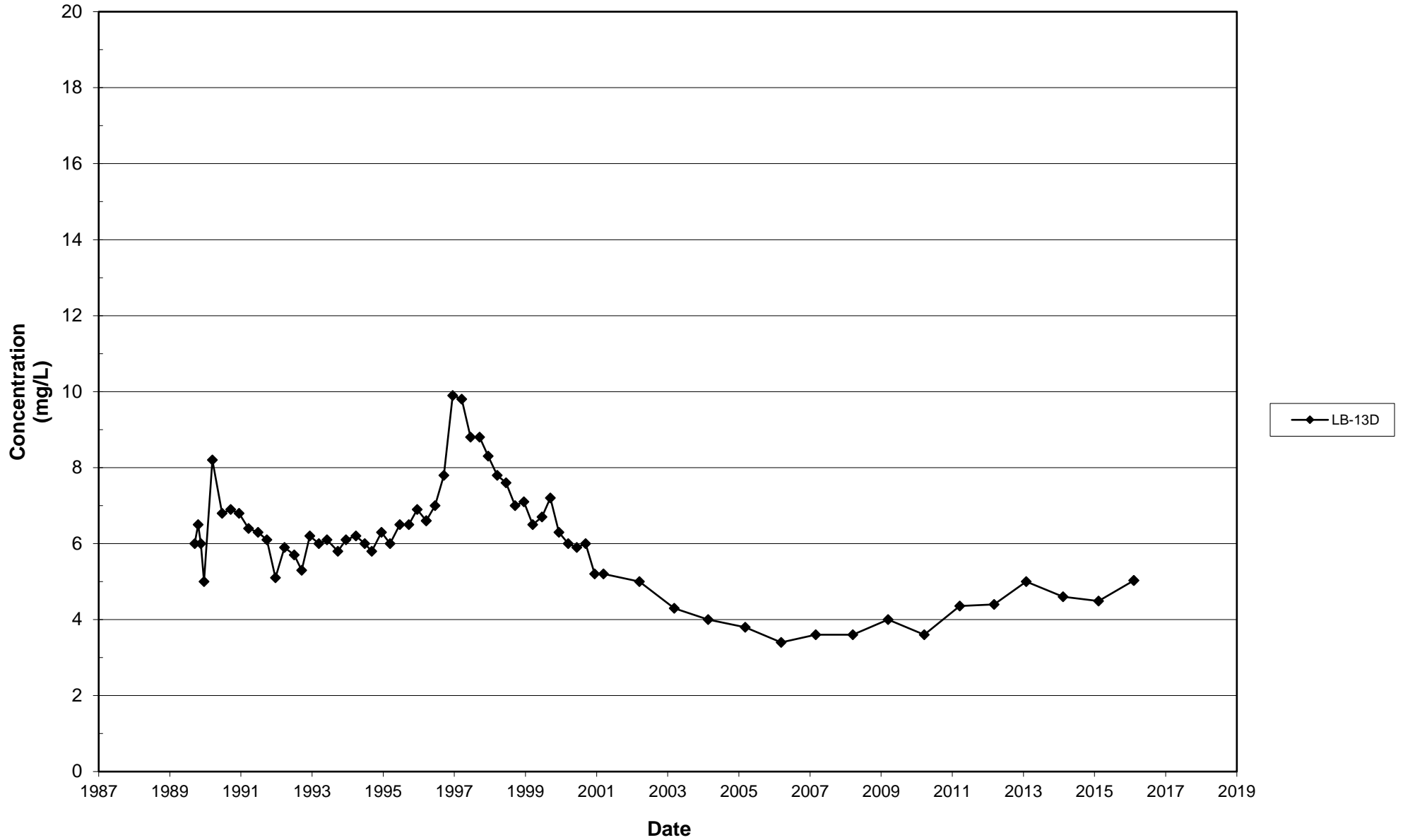
Leichner Landfill
Chloride, LB-10D and LB-10DR
1987 - 2016



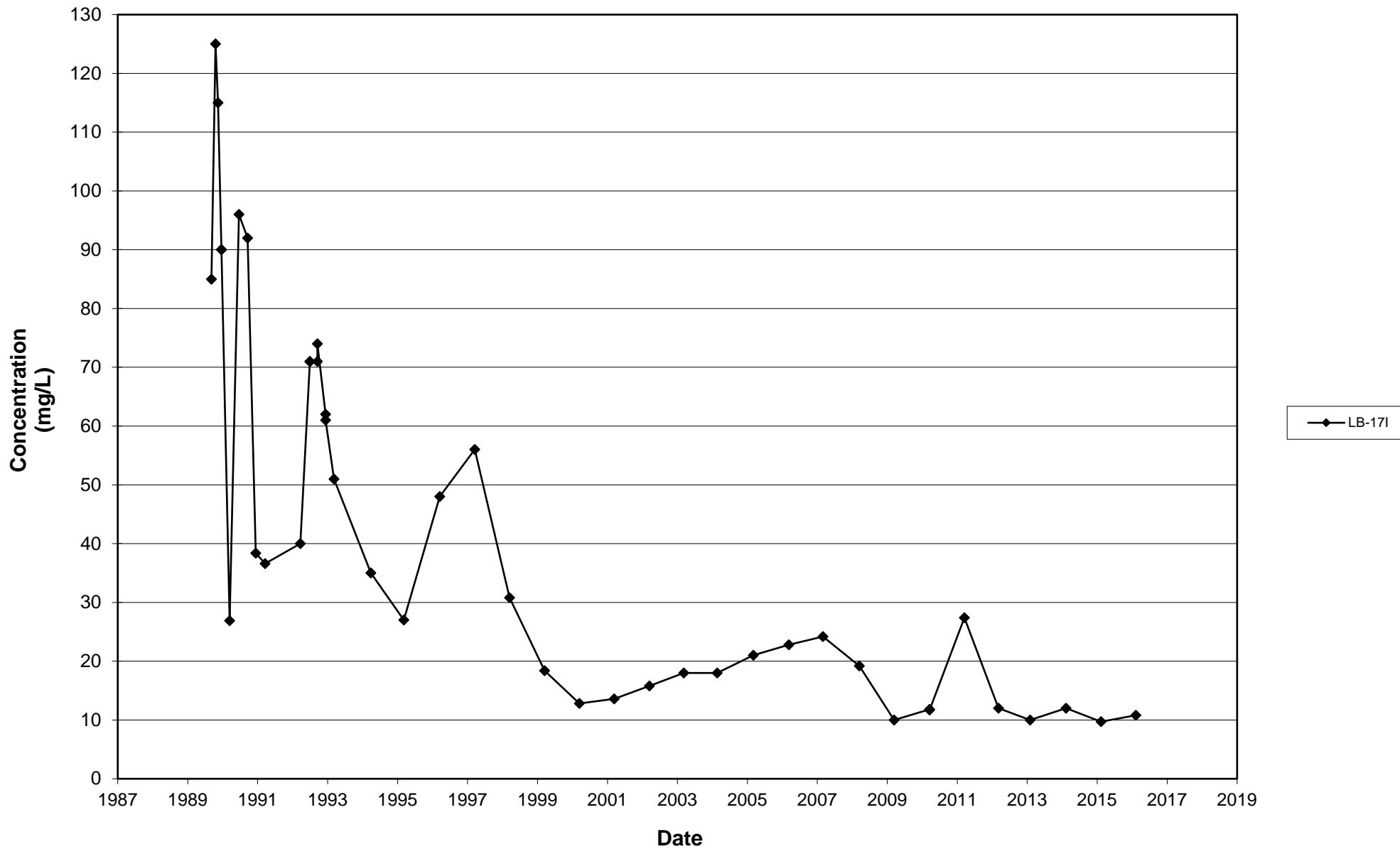
Leichner Landfill
Chloride, LB-13I
1987 - 2016



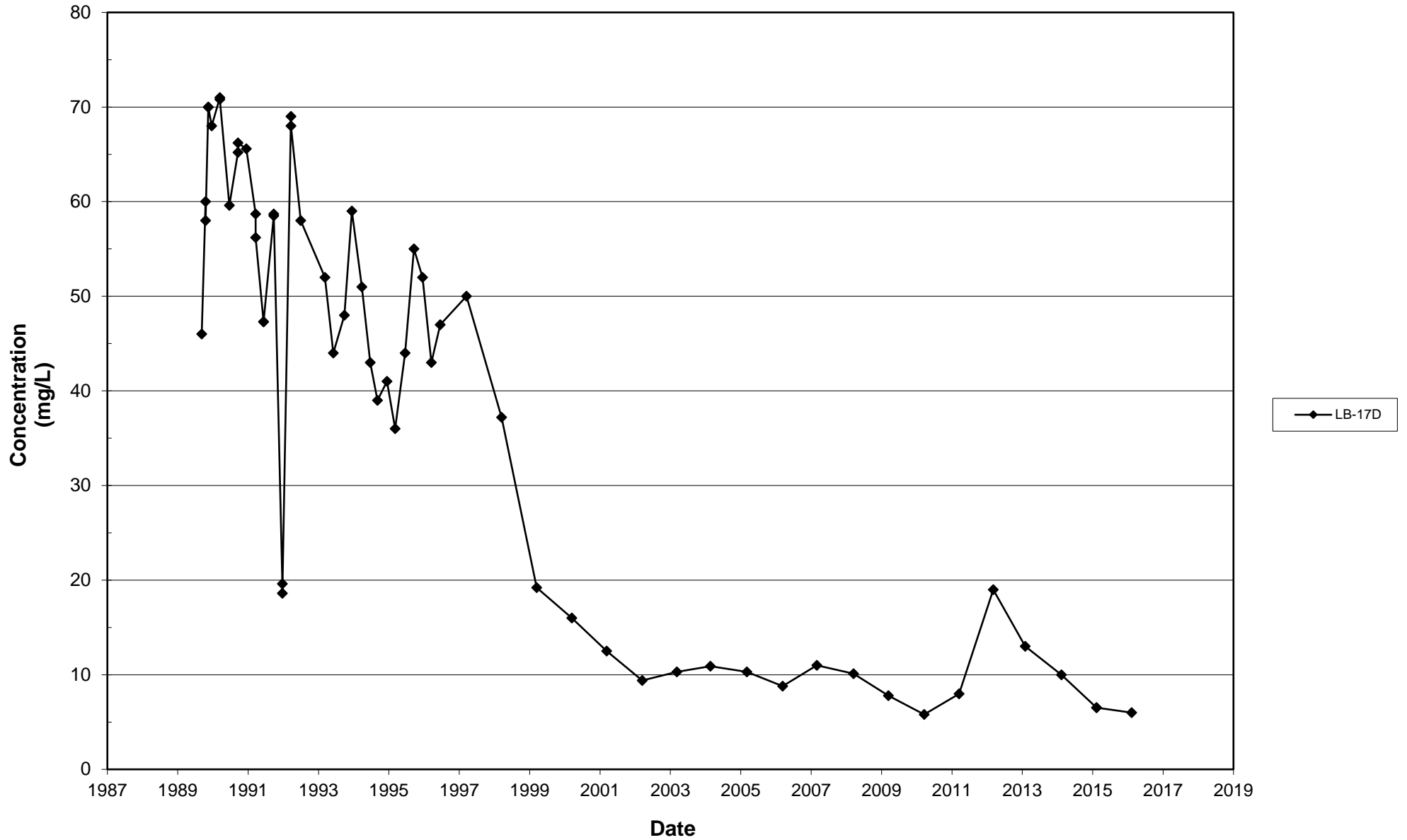
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Chloride, LB-13D
1987 - 2016



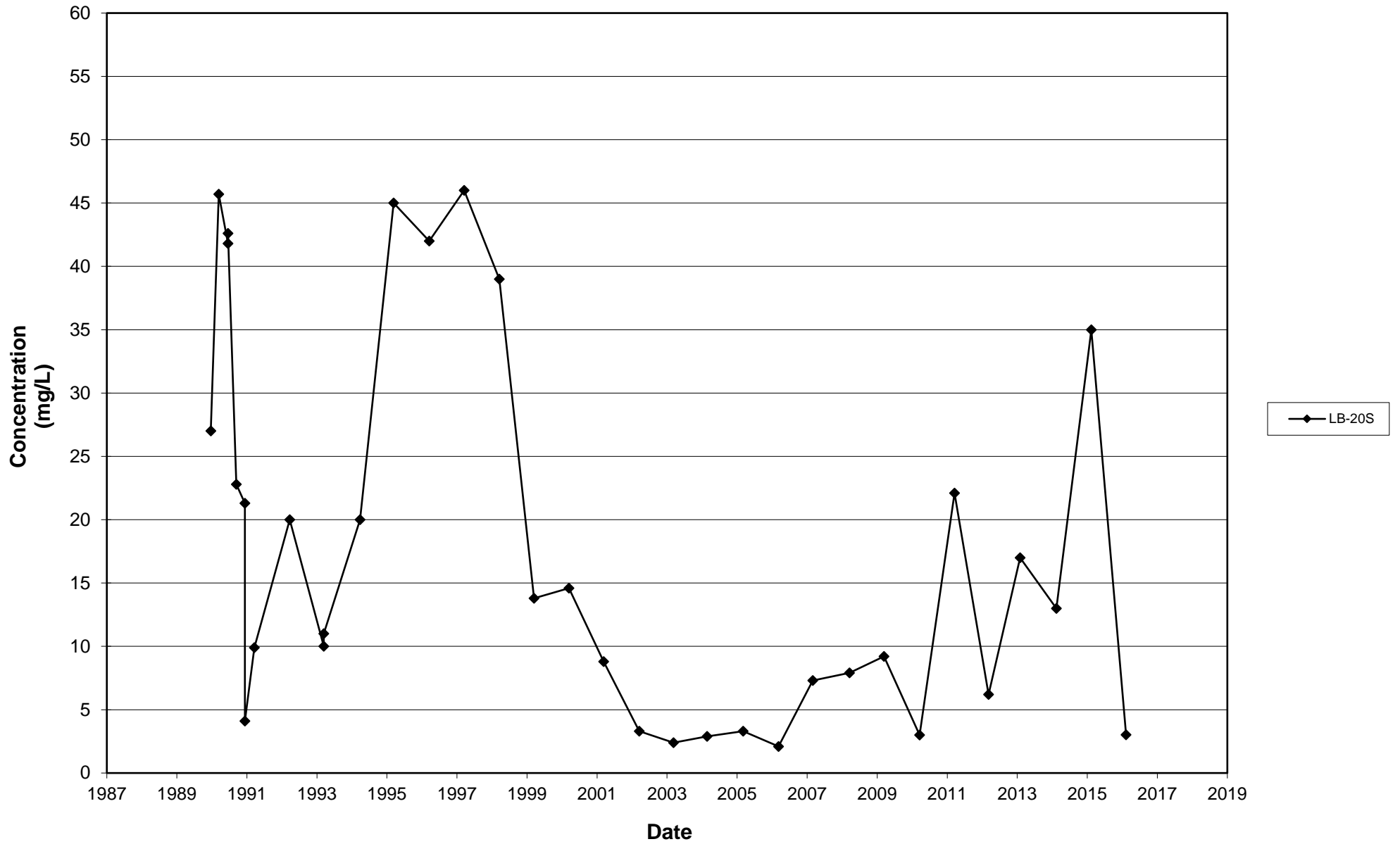
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Chloride, LB-17I
1987 - 2016



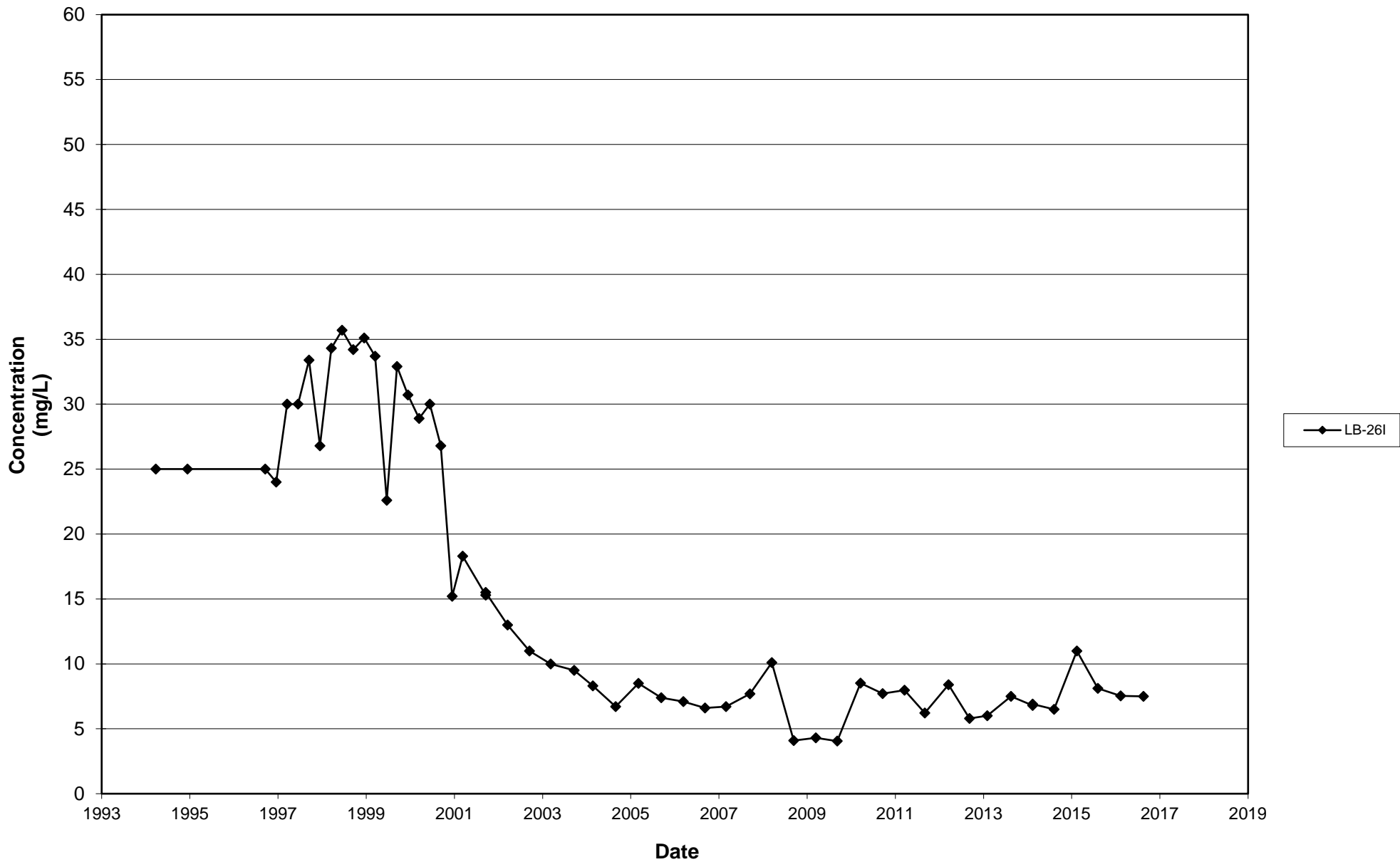
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Chloride, LB-17D
1987 - 2016



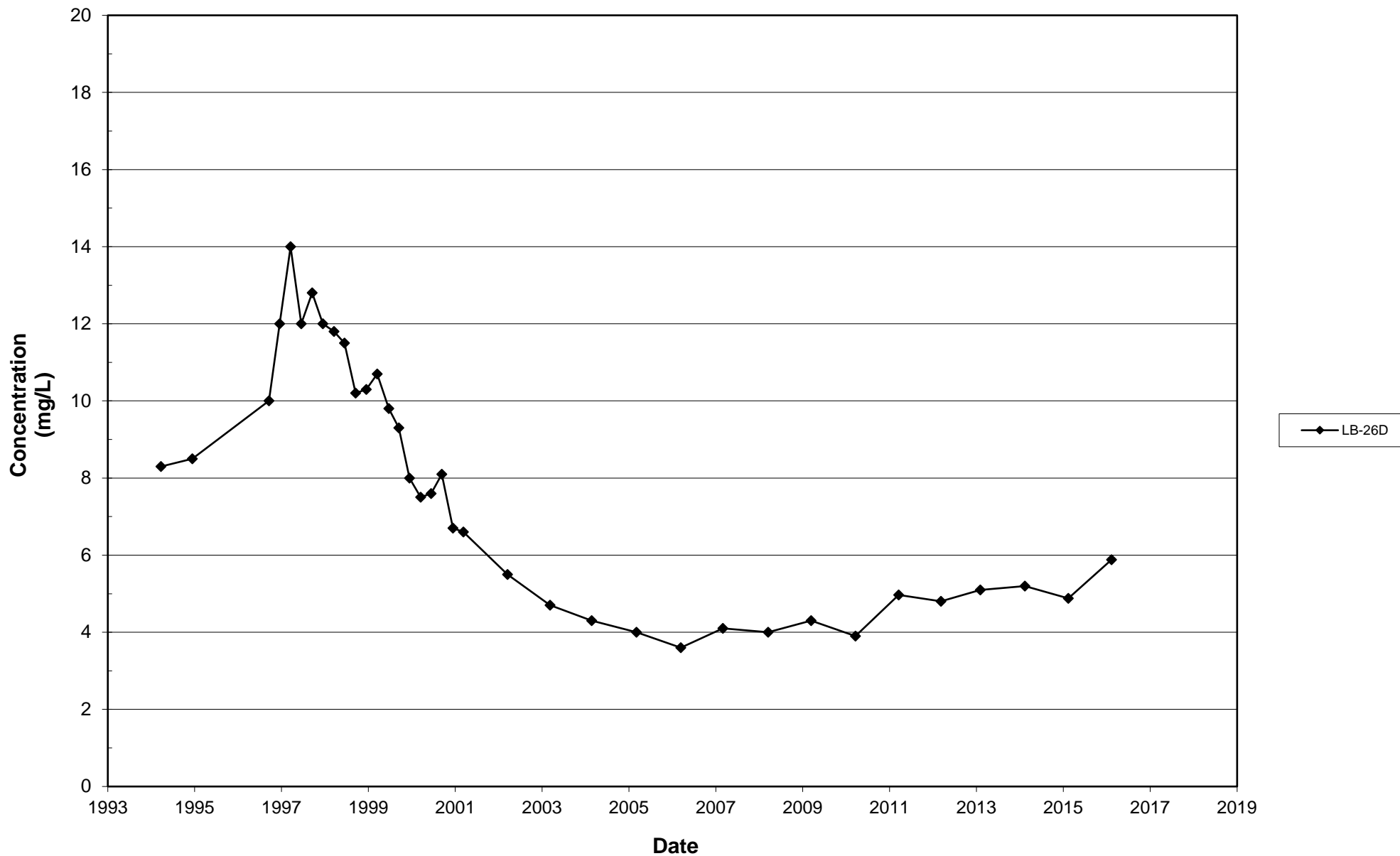
Leichner Landfill
Chloride, LB-20S
1987 - 2016



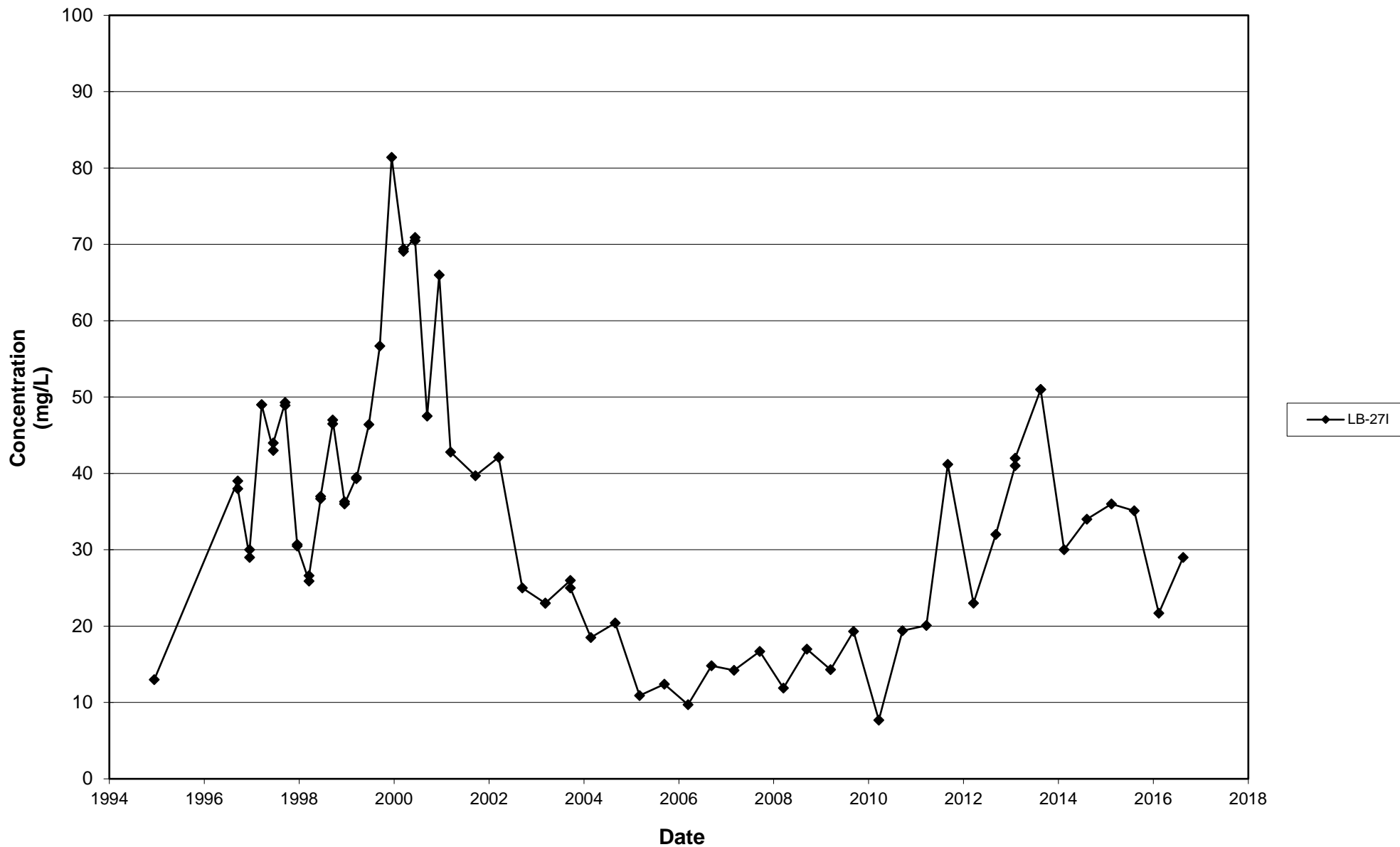
Leichner Landfill
Chloride, LB-26I
1987 - 2016



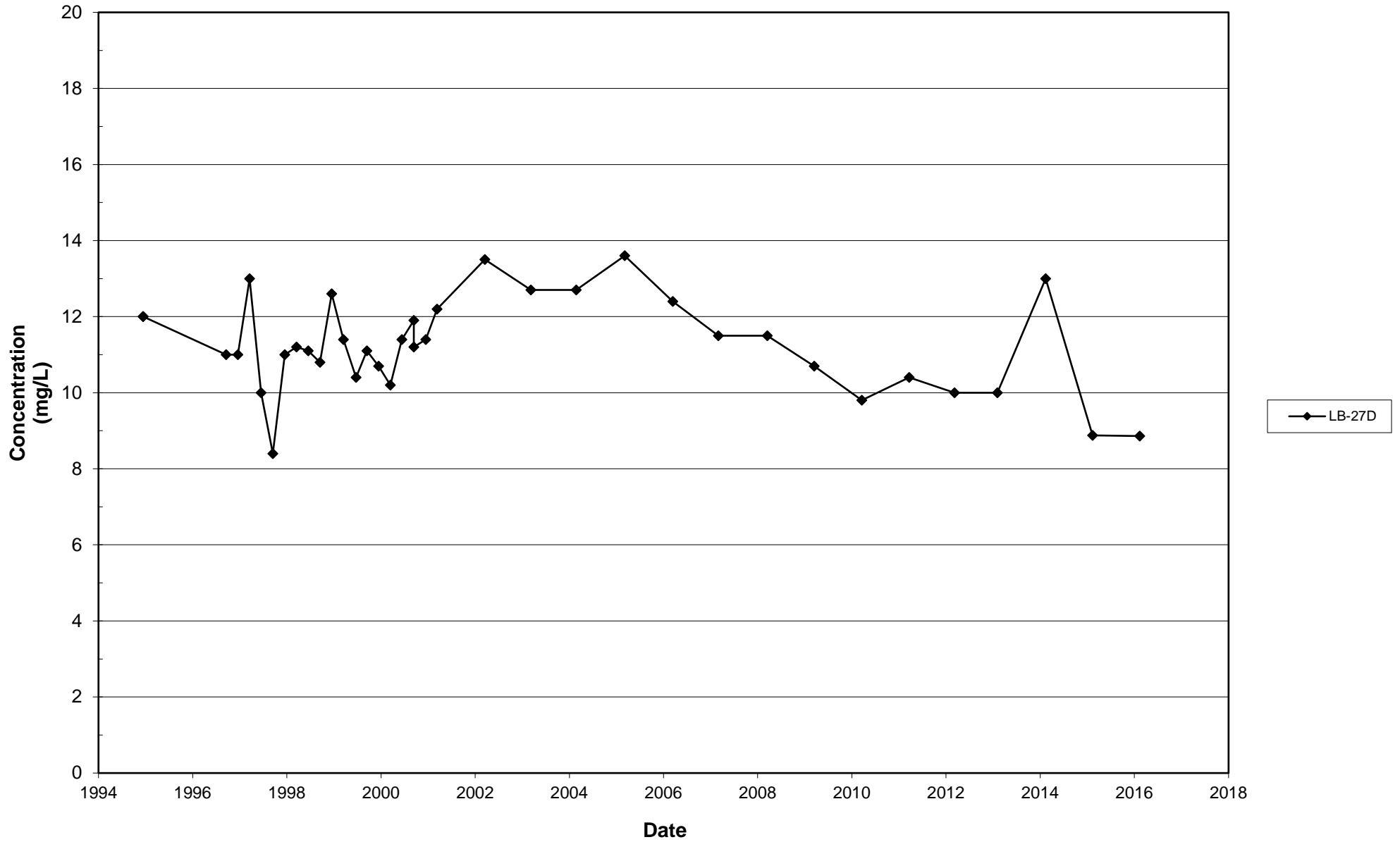
Leichner Landfill
Chloride, LB-26D
1987 - 2016



Leichner Landfill
Chloride, LB-27I
1994 - 2016

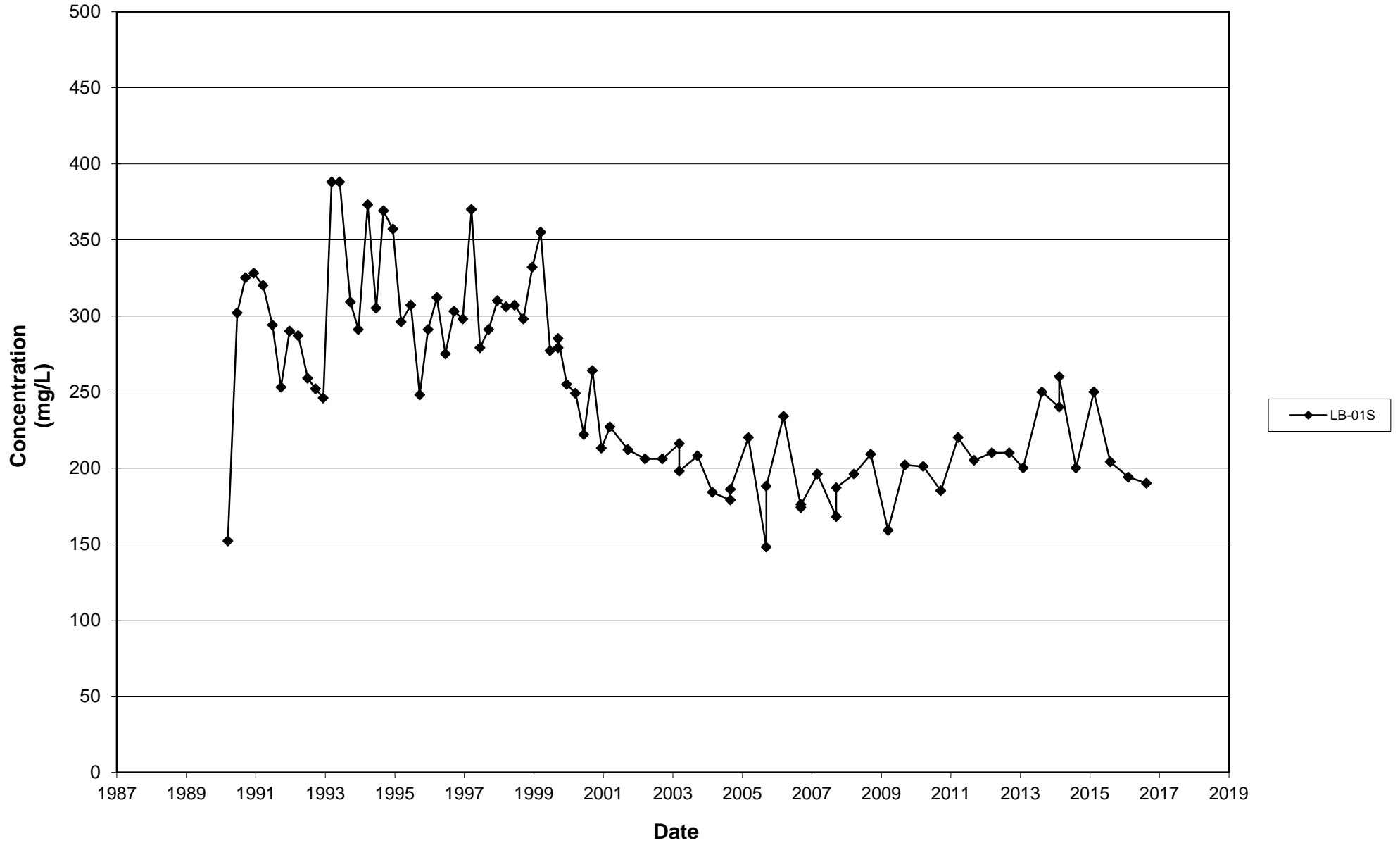


Leichner Landfill
Chloride, LB-27D
1994 - 2016

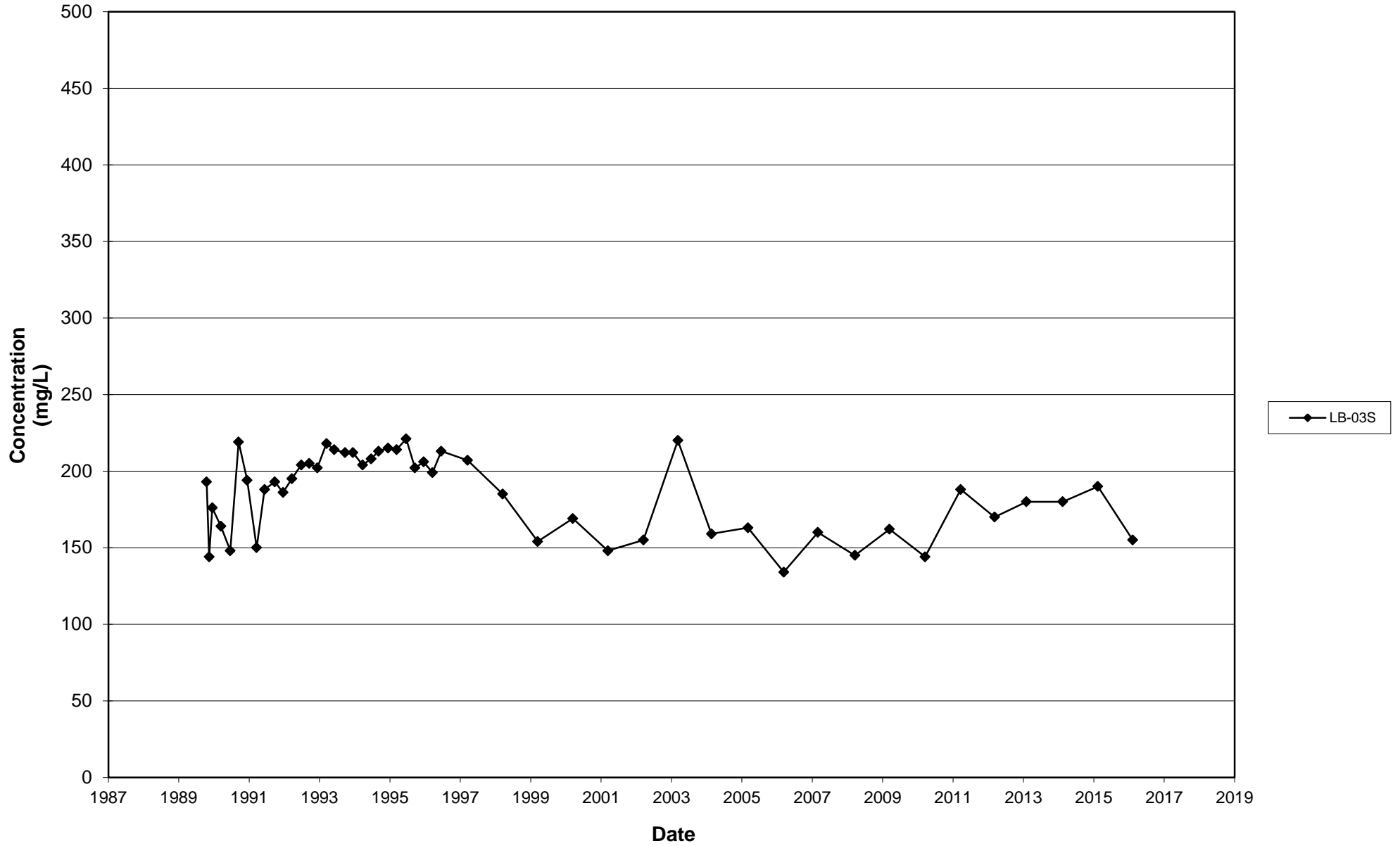


Total Dissolved Solids

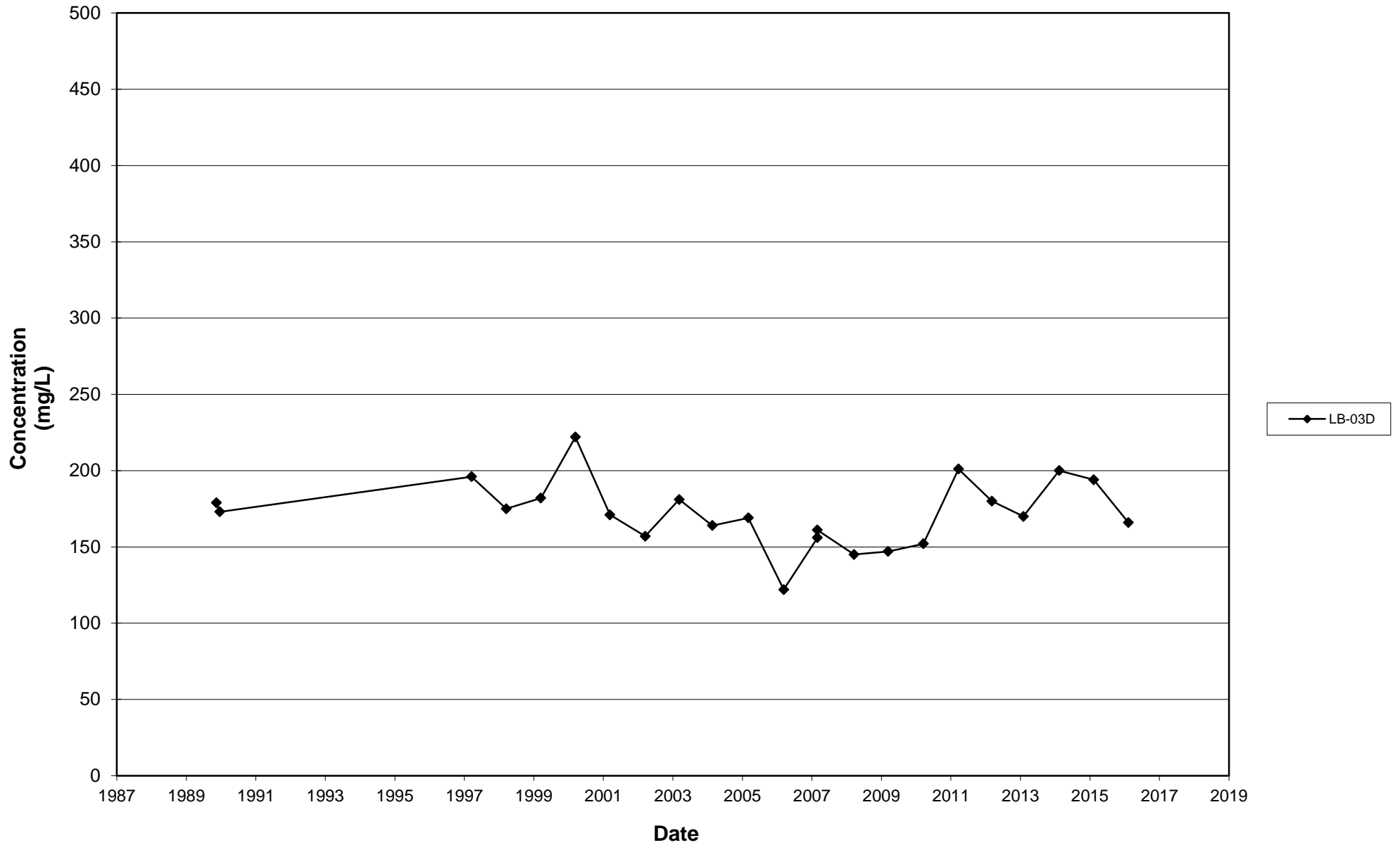
Leichner Landfill
Total Dissolved Solids, LB-01S
1987 - 2016



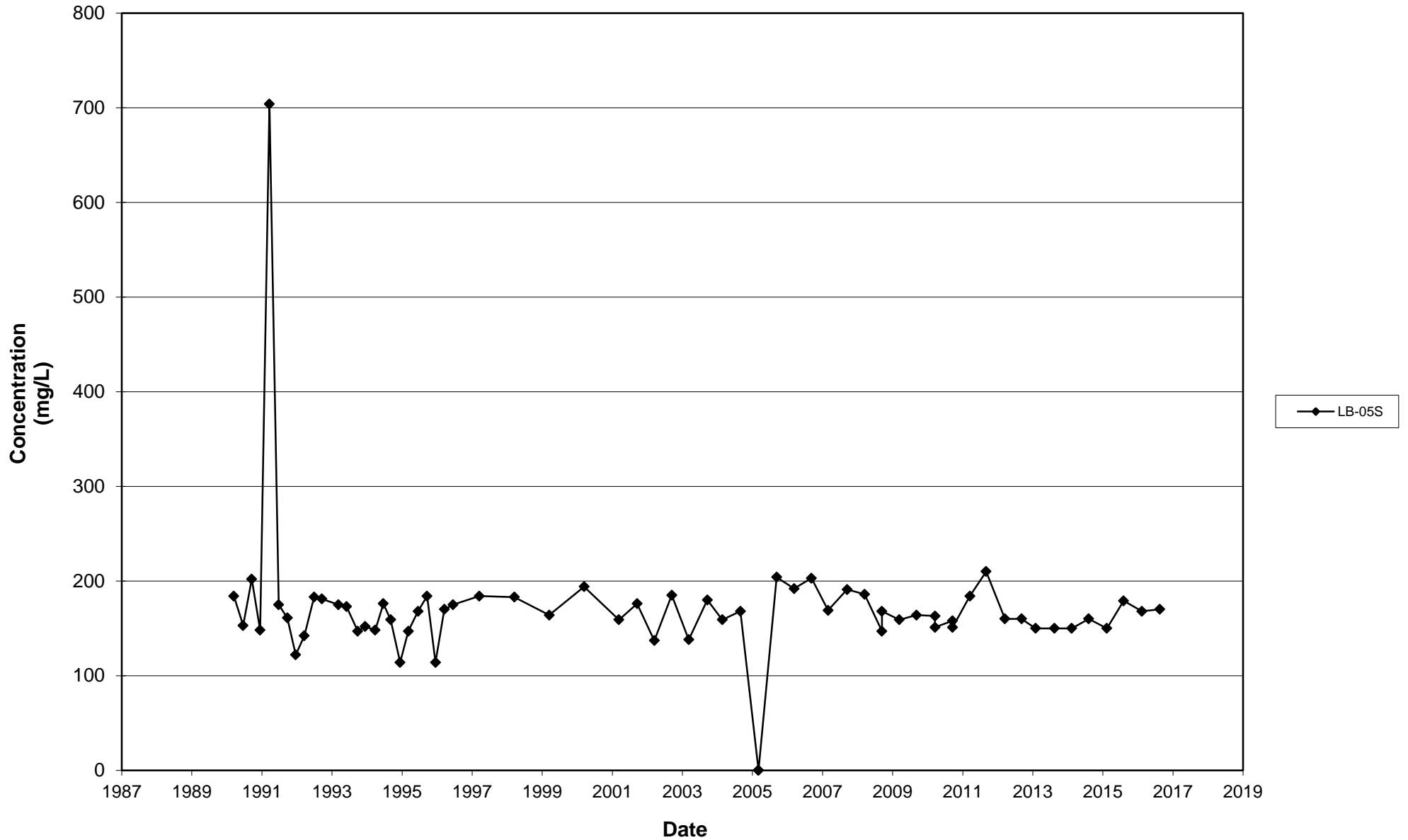
Leichner Landfill
Total Dissolved Solids, LB-03S
1987 - 2016



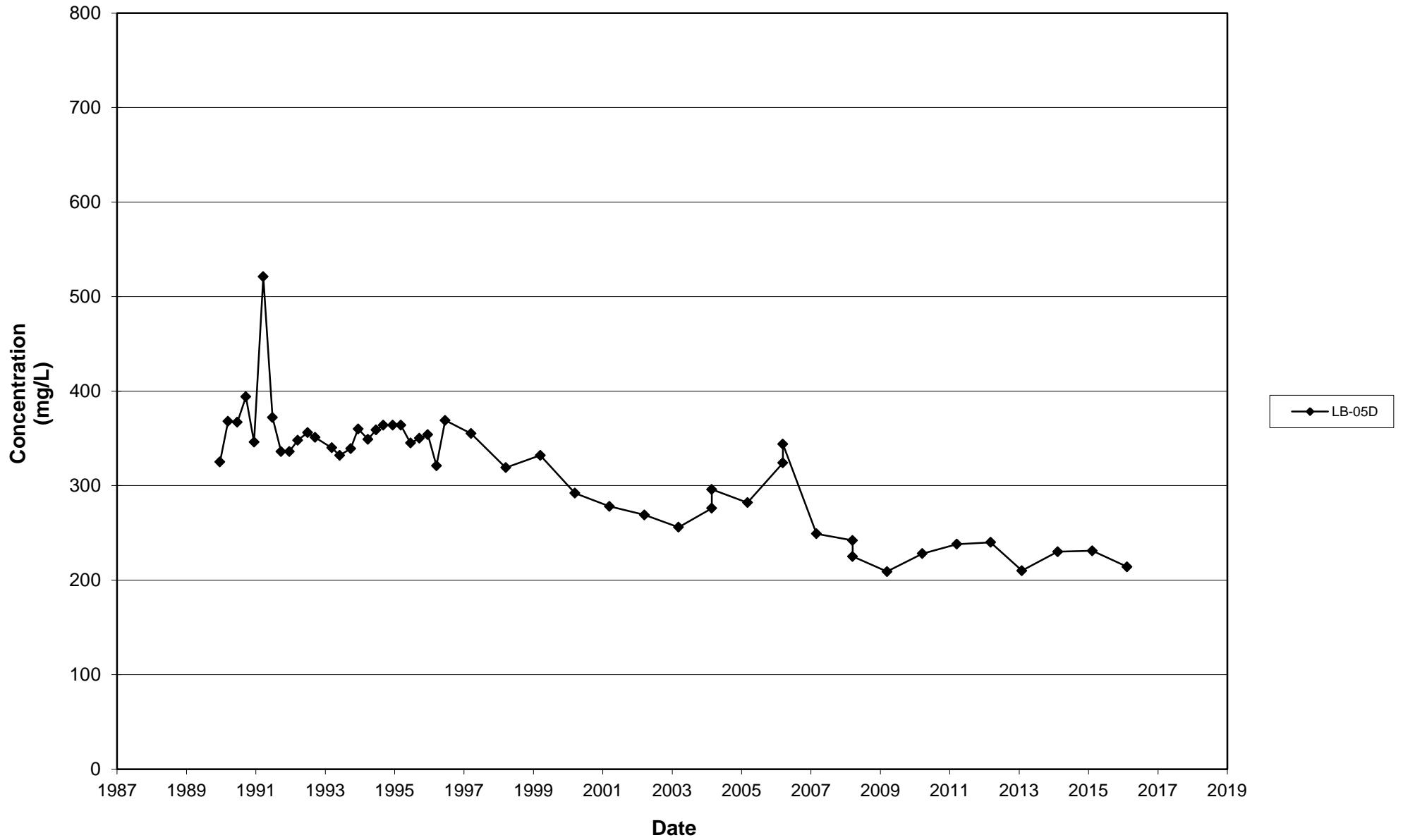
Leichner Landfill
Total Dissolved Solids, LB-03D
1987 - 2016



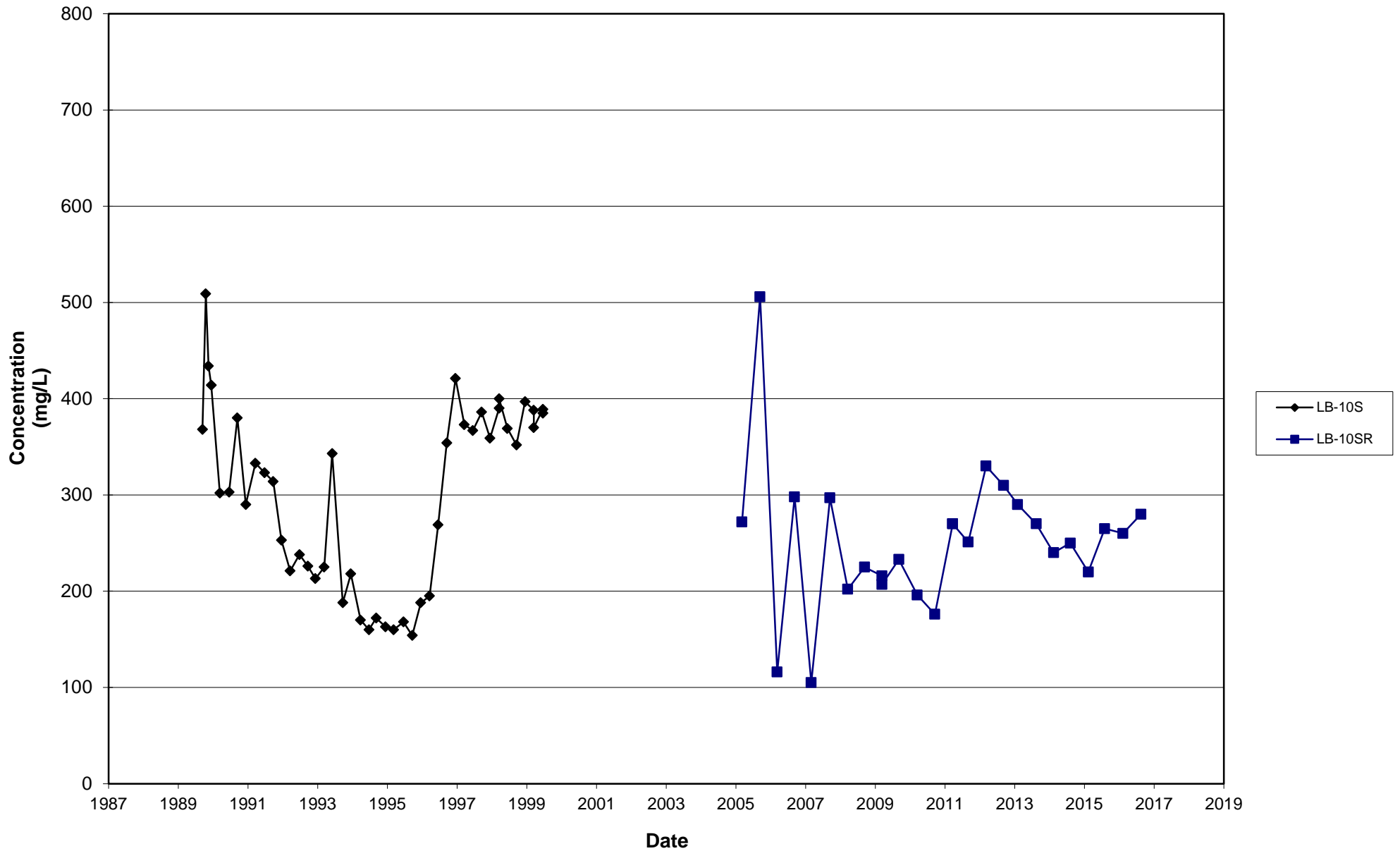
Leichner Landfill
Total Dissolved Solids, LB-05S
1987 - 2016



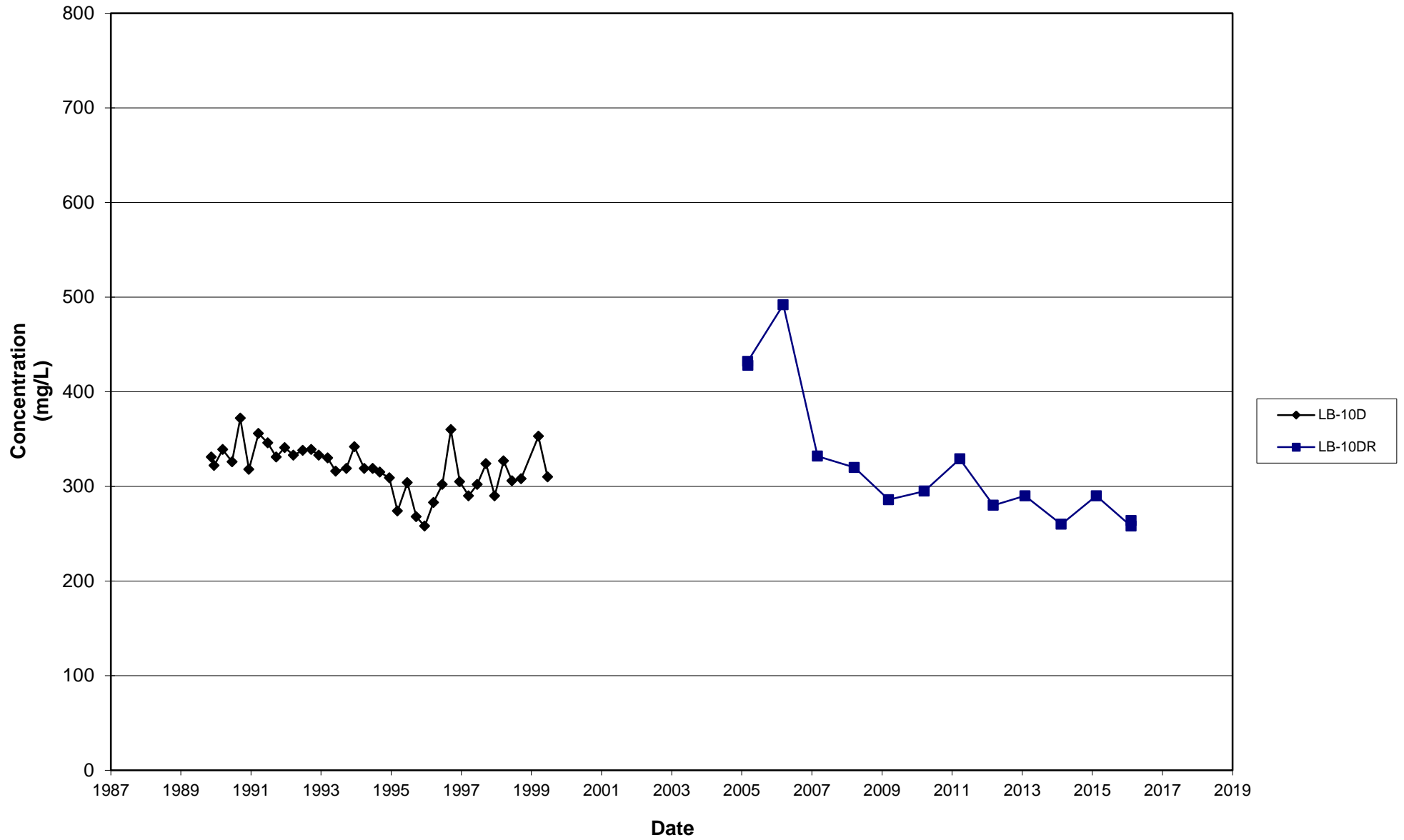
Leichner Landfill
Total Dissolved Solids, LB-05D
1987 - 2016



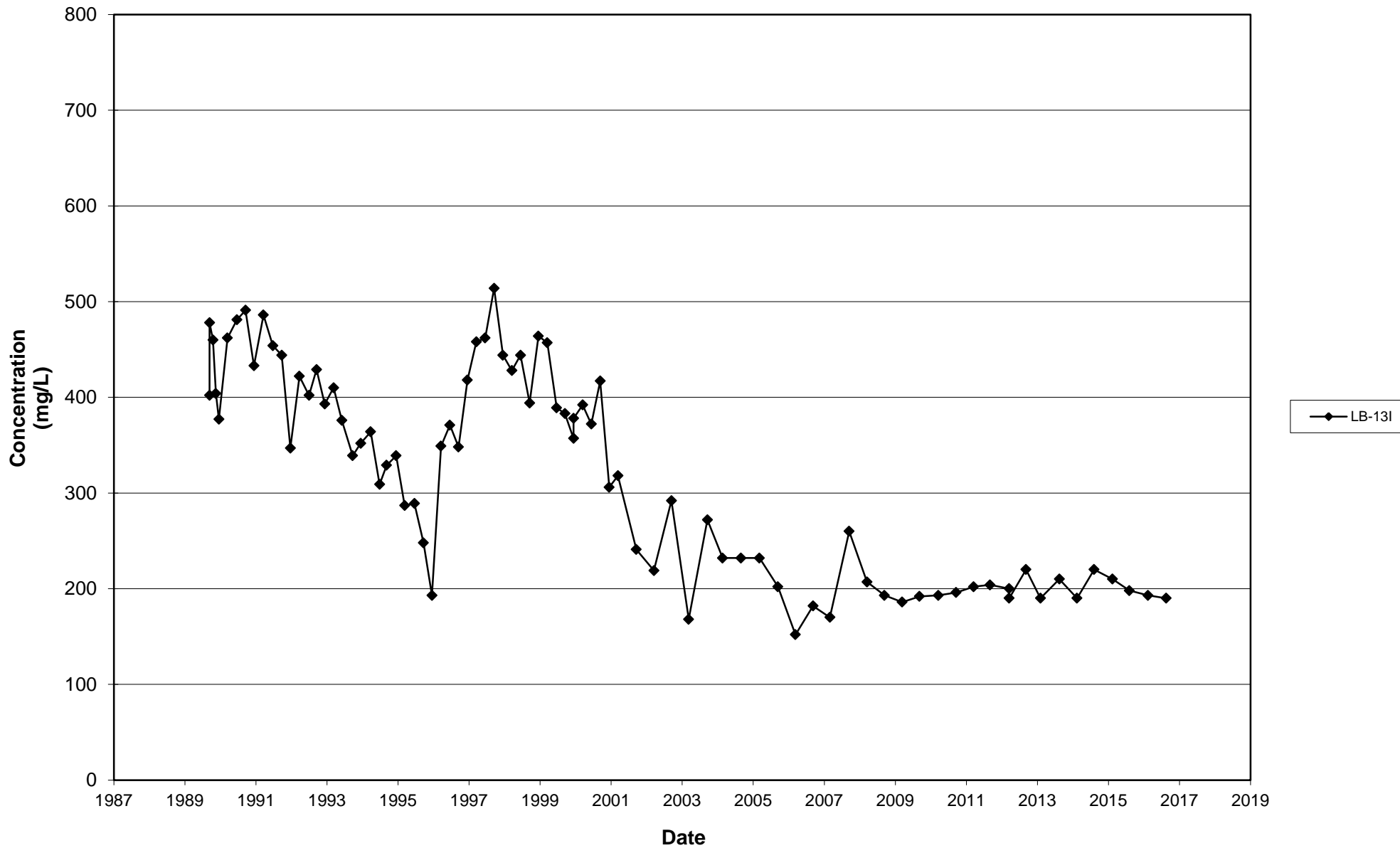
Leichner Landfill
Total Dissolved Solids, LB-10S and LB-10SR
1987 - 2016



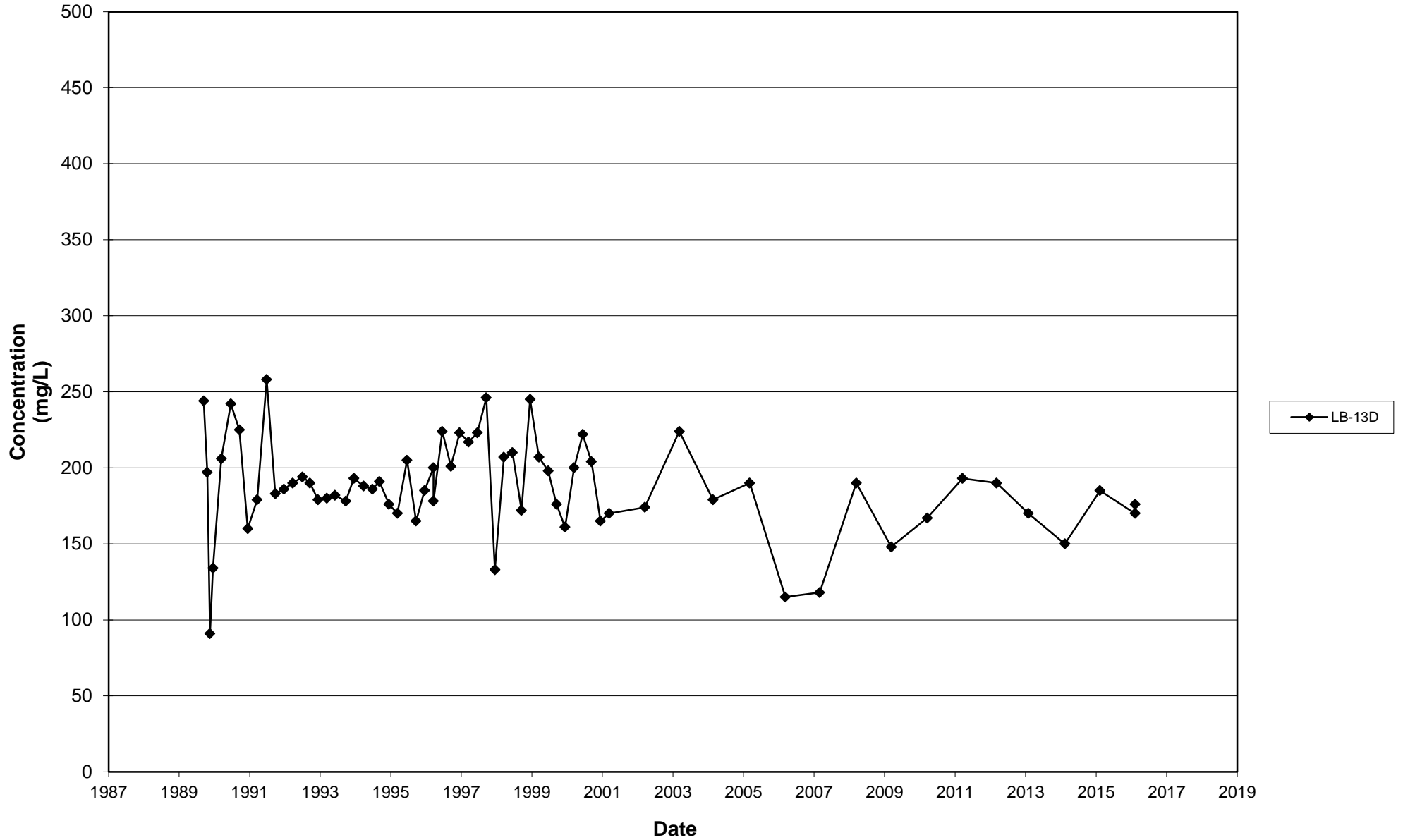
Leichner Landfill
Total Dissolved Solids, LB-10D and LB-10DR
1987 - 2016



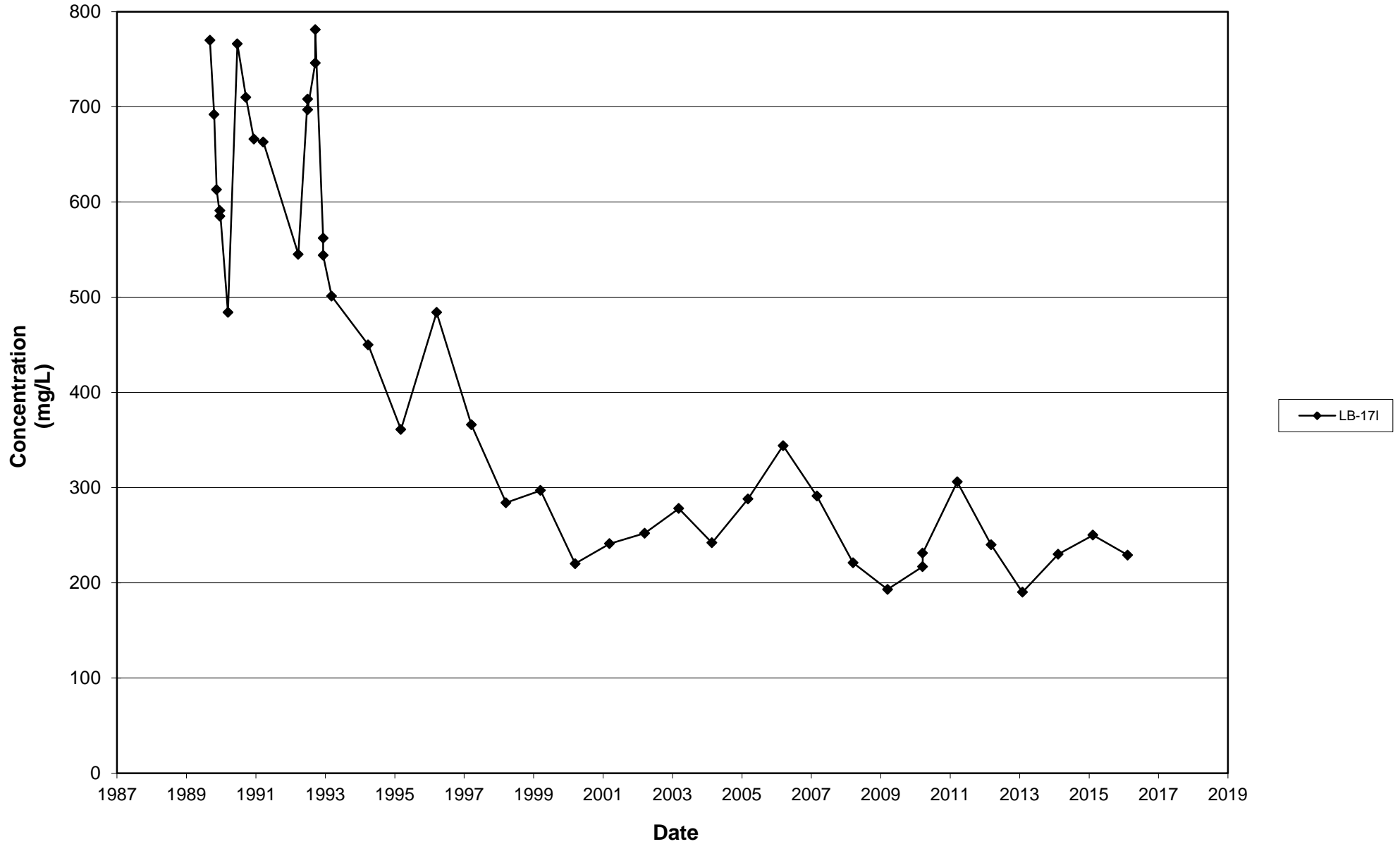
Leichner Landfill
Total Dissolved Solids, LB-13I
1987 - 2016



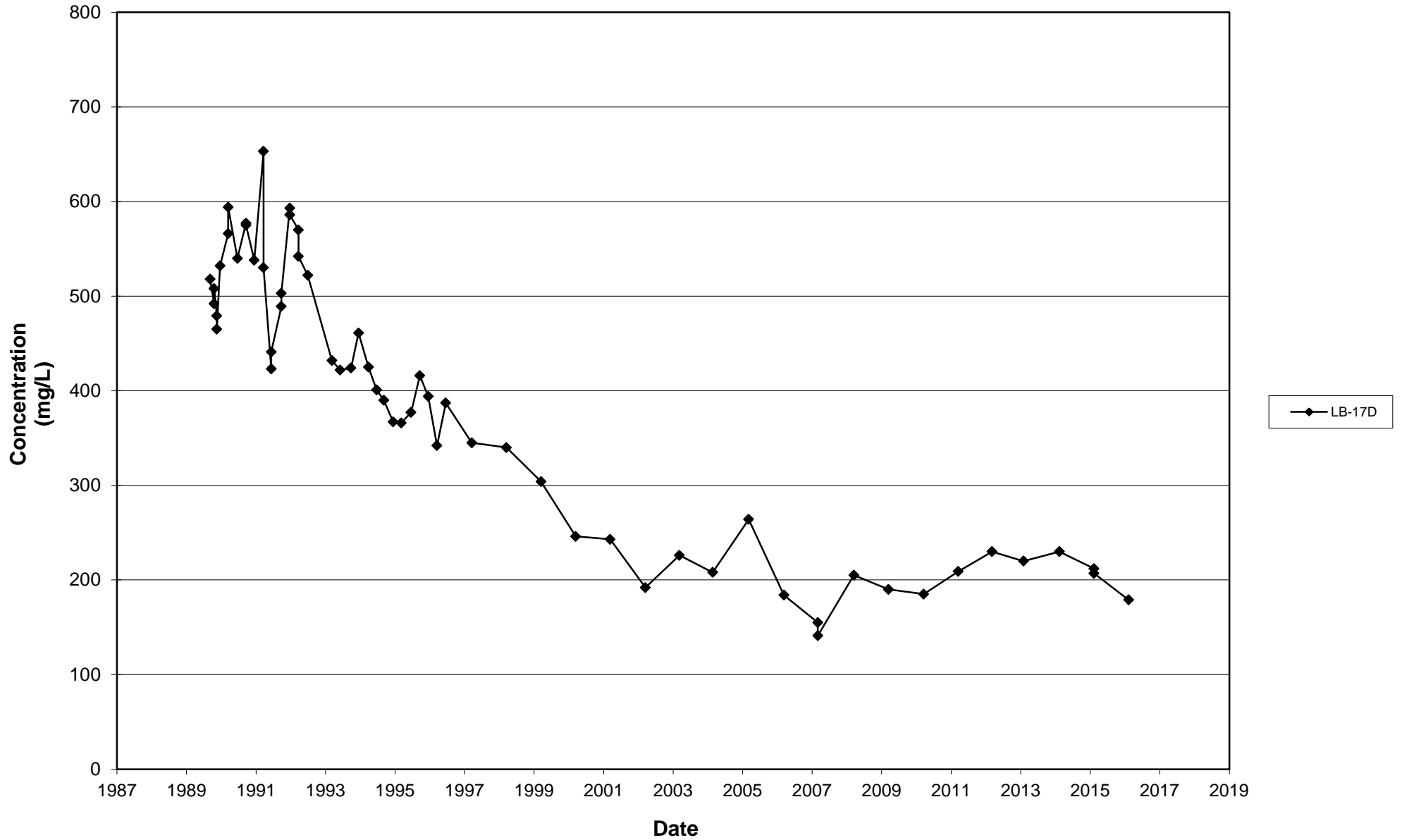
Leichner Landfill
Total Dissolved Solids, LB-13D
1987 - 2016



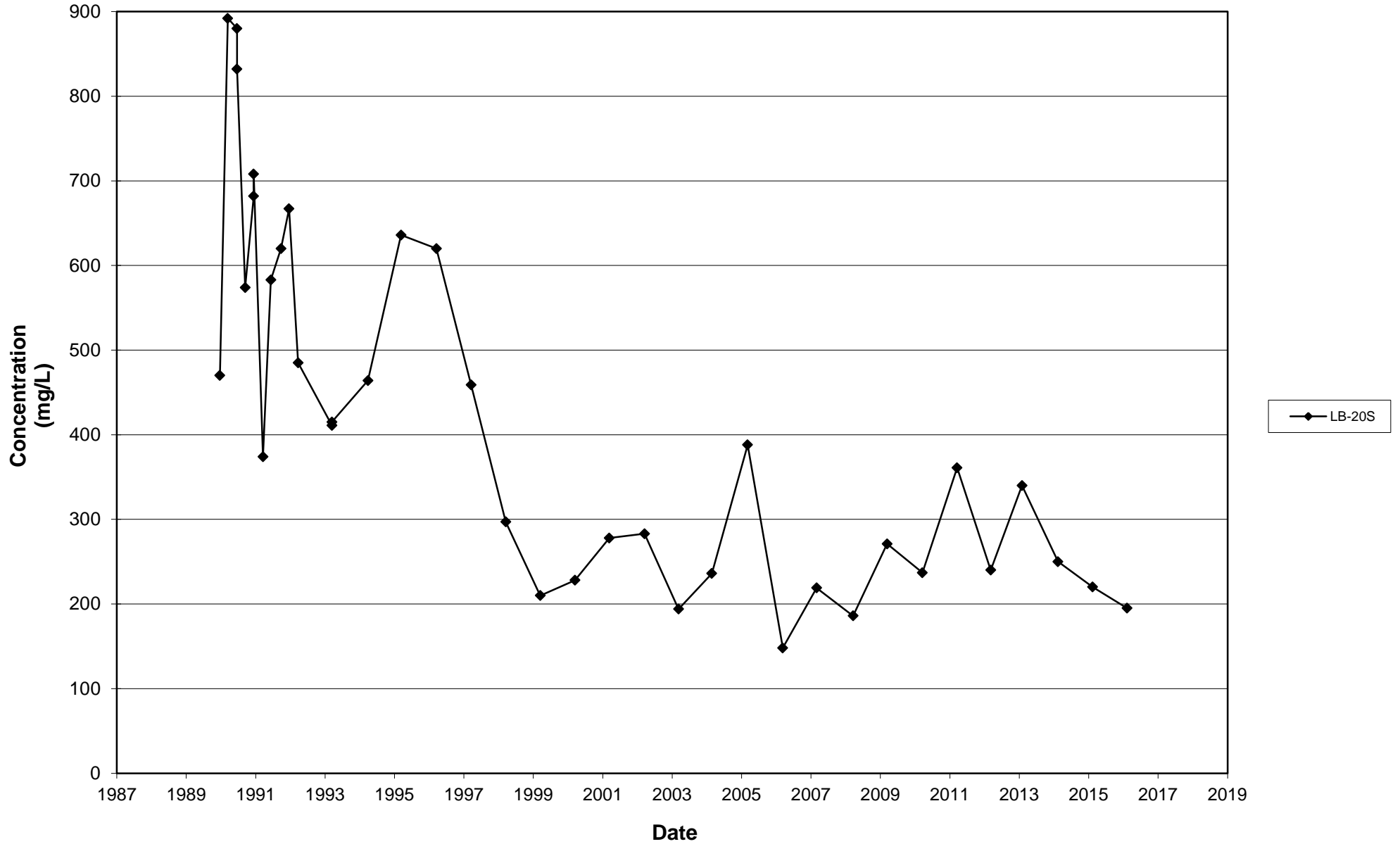
Leichner Landfill
Total Dissolved Solids, LB-17I
1987 - 2016



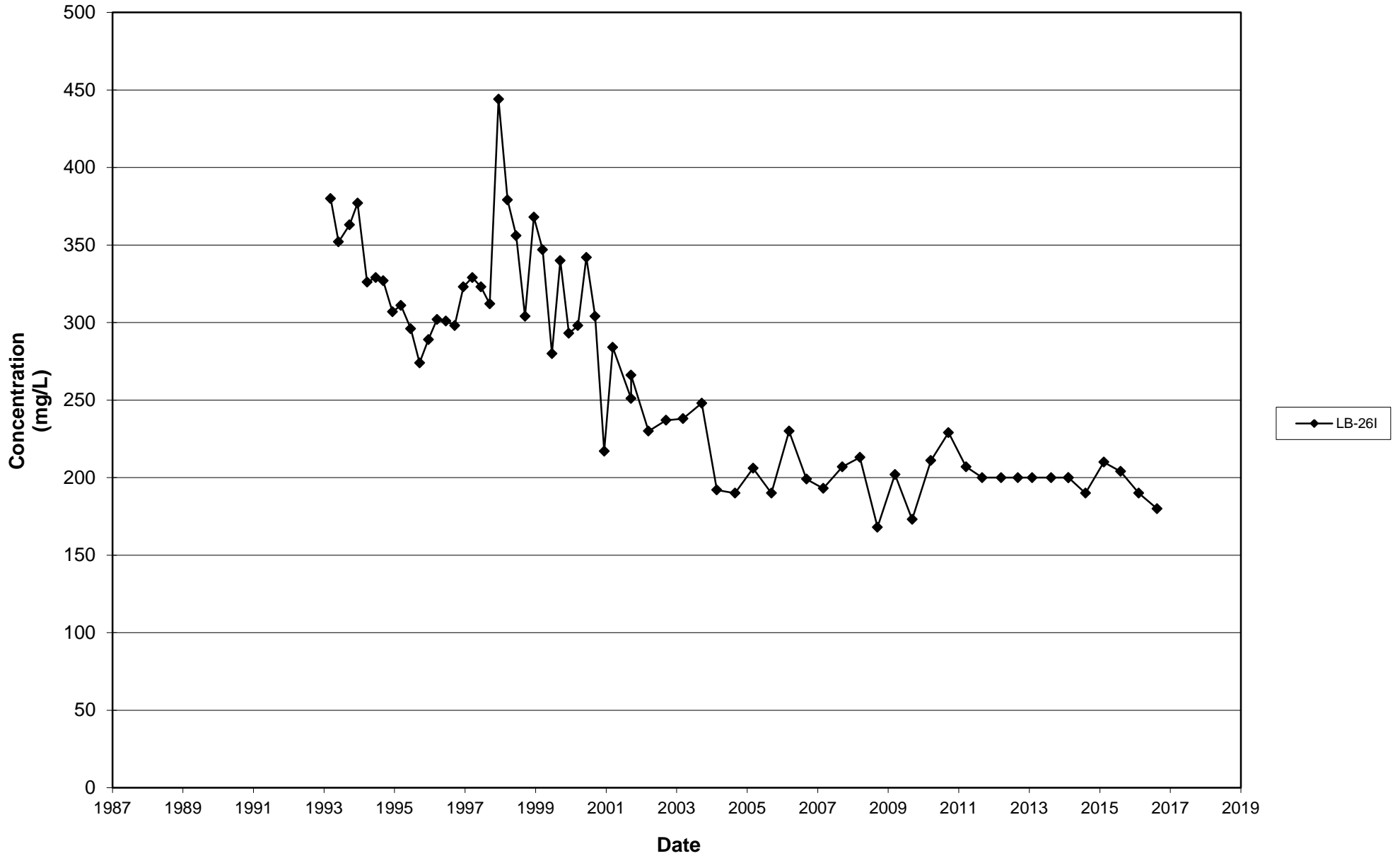
Leichner Landfill
Total Dissolved Solids, LB-17D
1987 - 2016



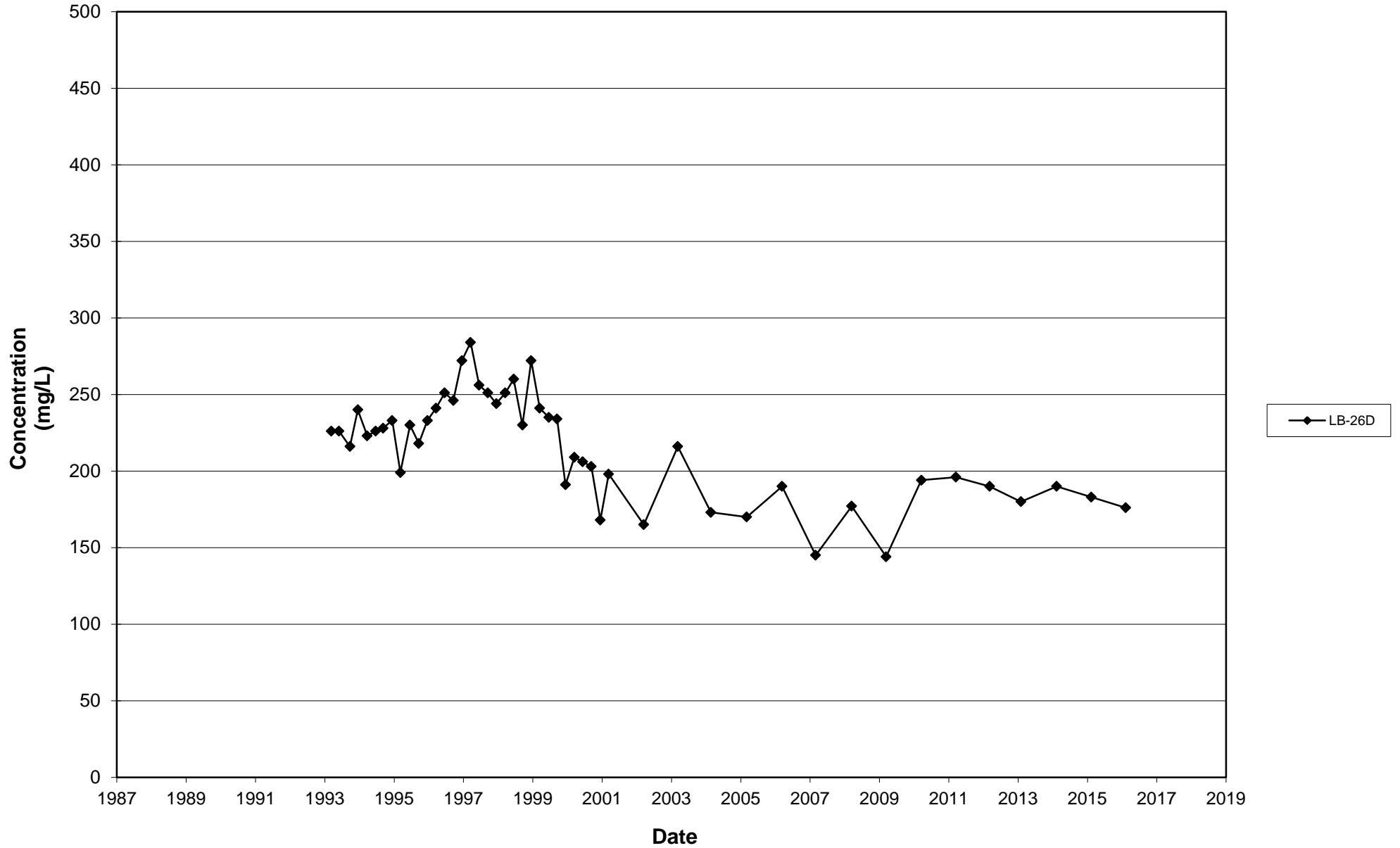
Leichner Landfill
Total Dissolved Solids, LB-20S
1987 - 2016



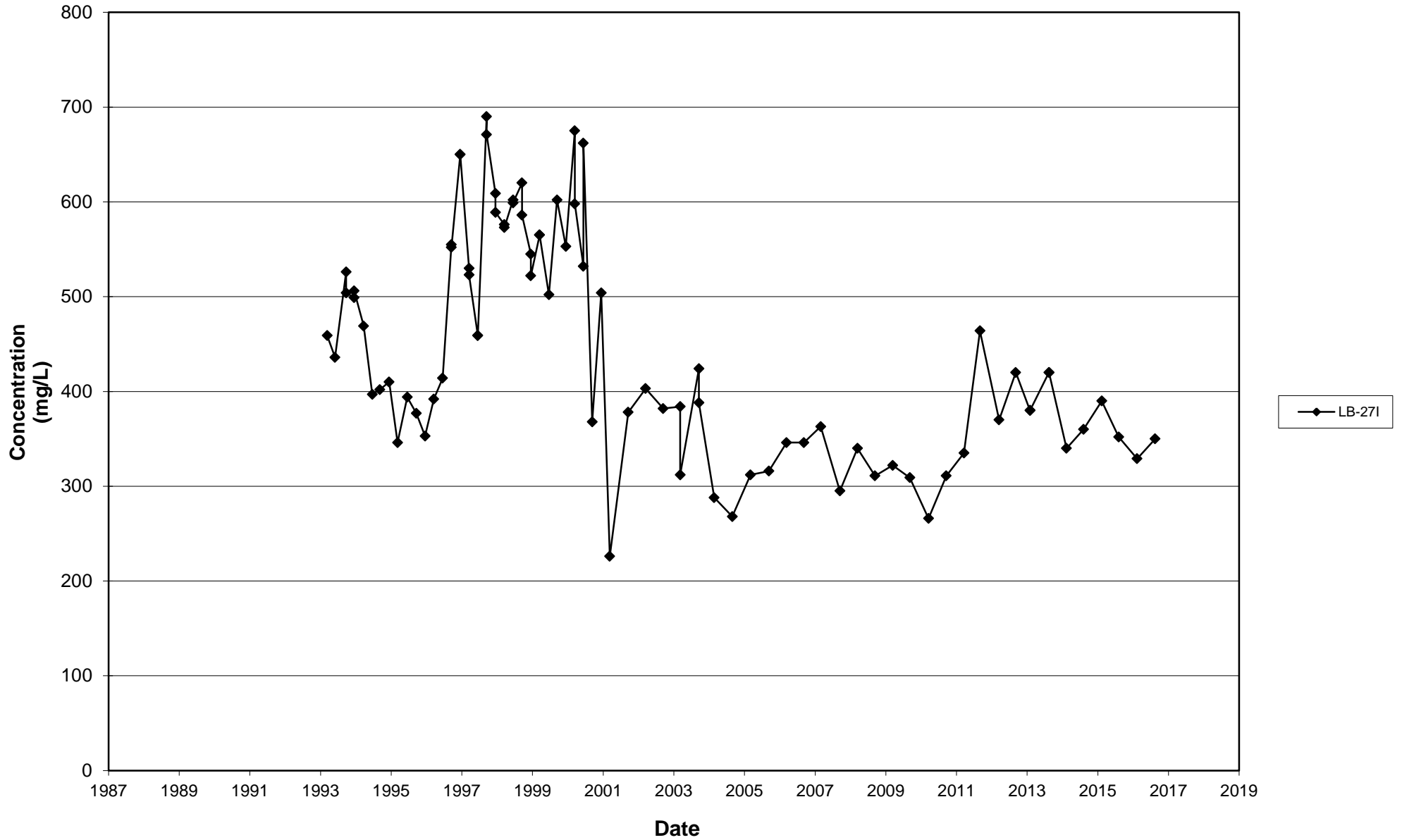
Leichner Landfill
Total Dissolved Solids, LB-26I
1987 - 2016



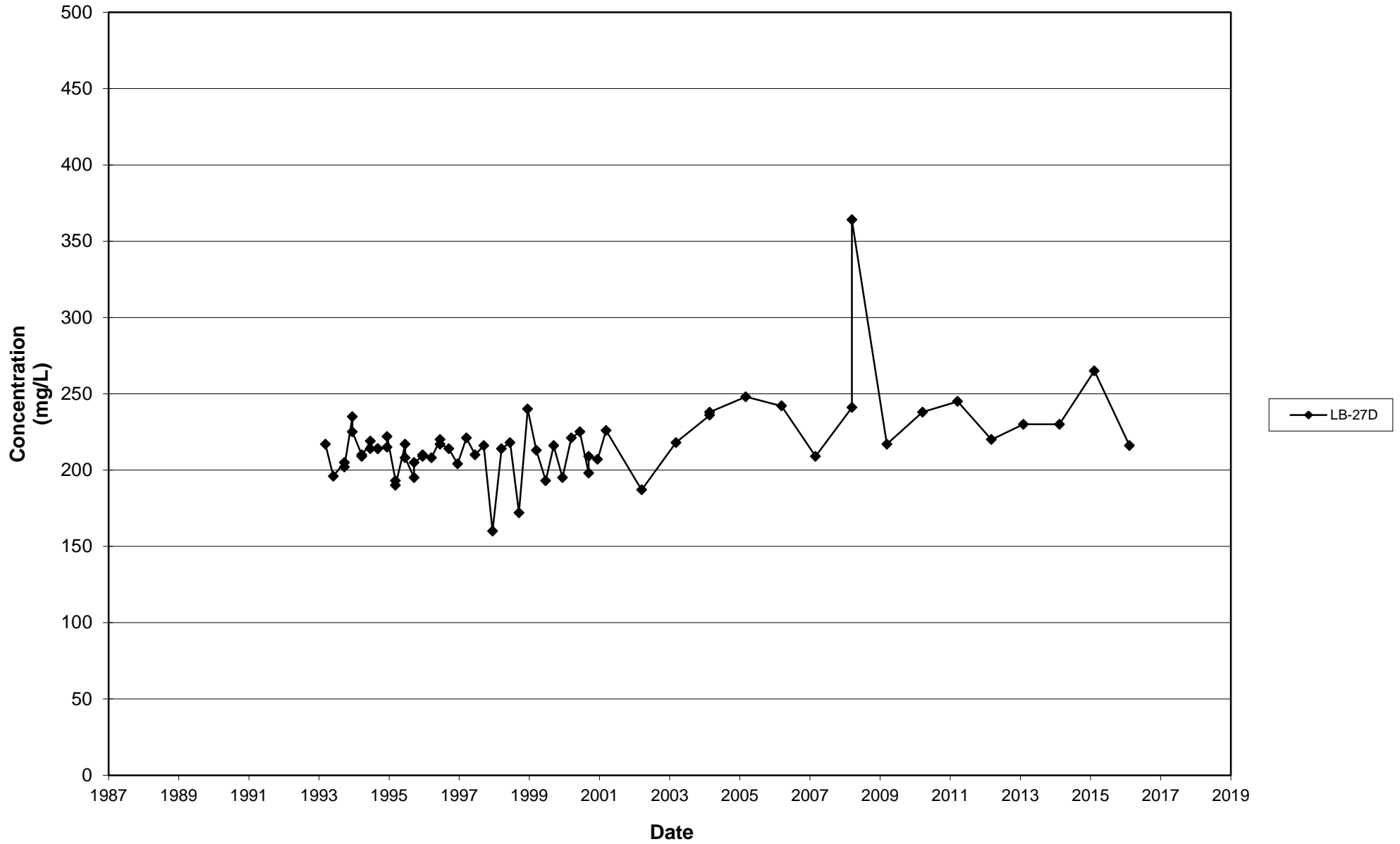
Leichner Landfill
Total Dissolved Solids, LB-26D
1987 - 2016



Leichner Landfill
Total Dissolved Solids, LB-271
1987 - 2016

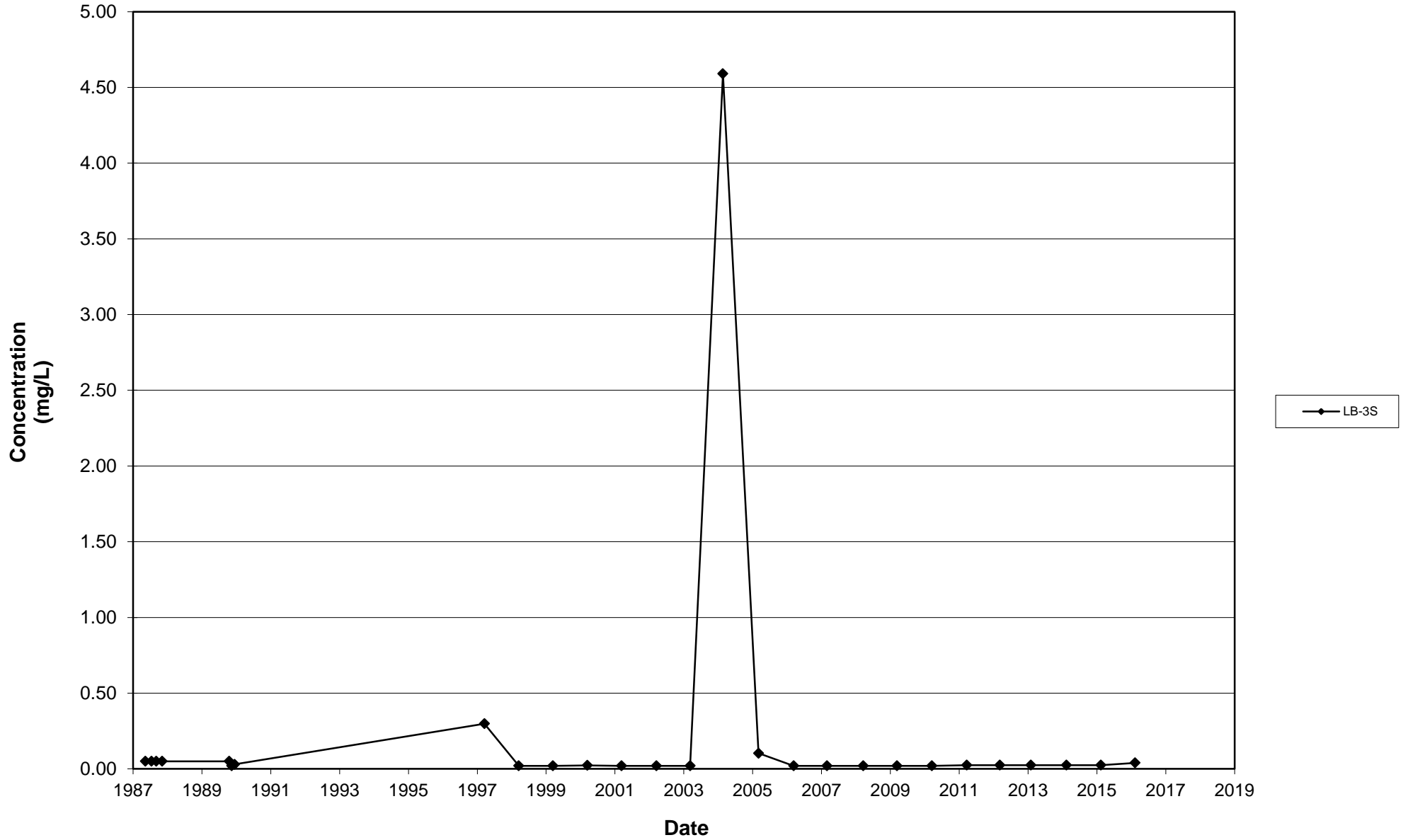


Leichner Landfill
Total Dissolved Solids, LB-27D
1987 - 2016

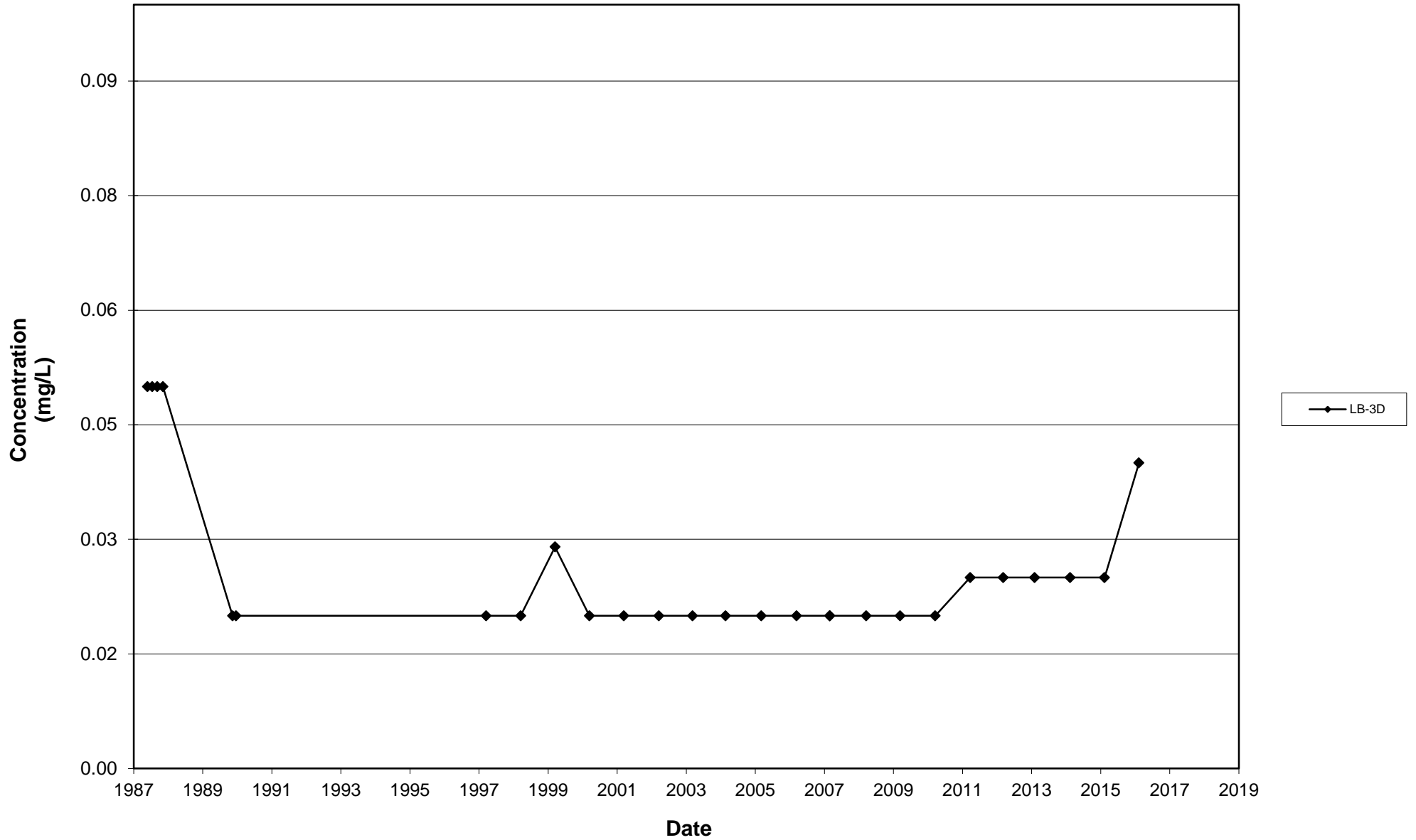


Dissolved Iron

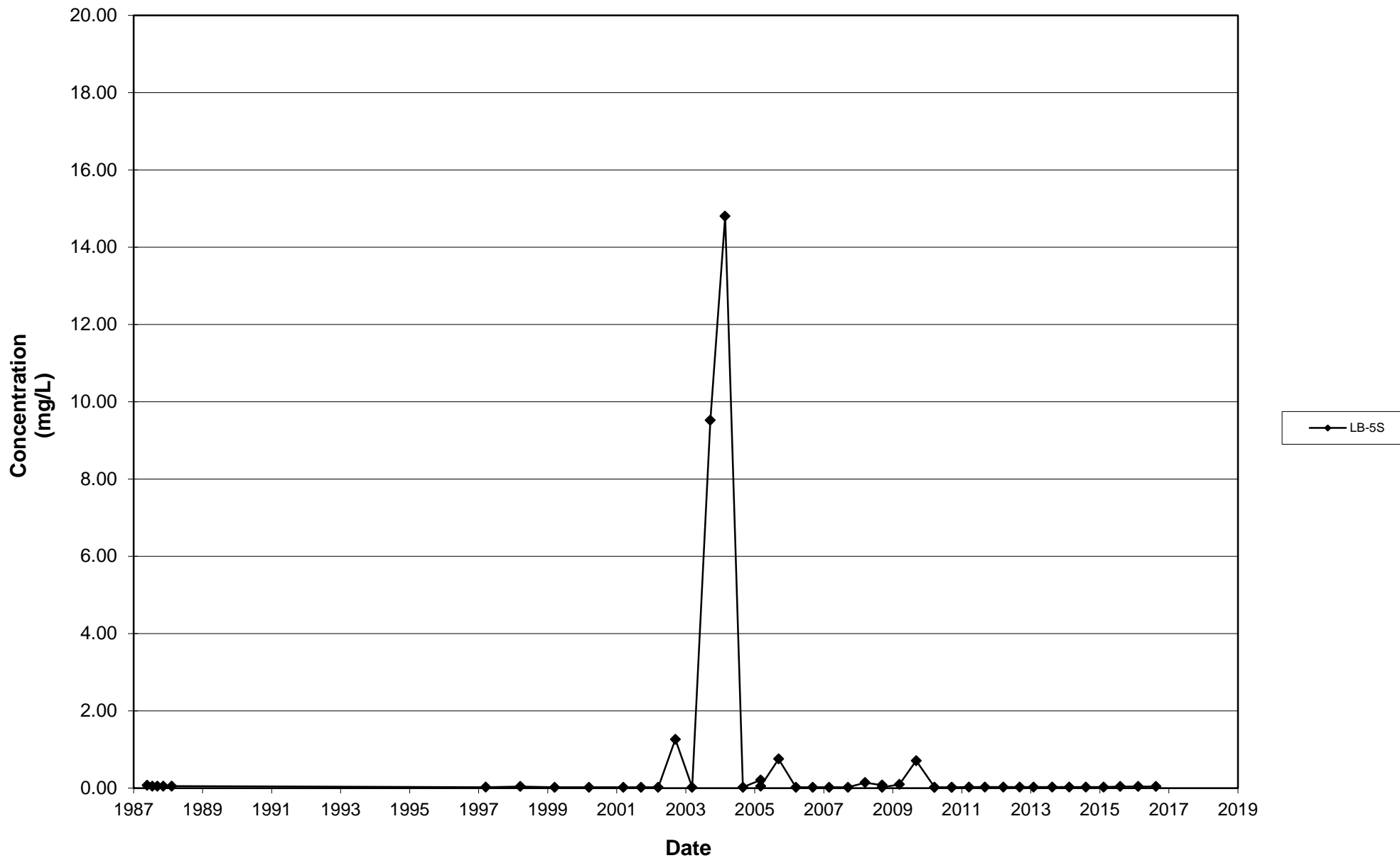
Leichner Landfill
Dissolved Iron, LB-03S
1987 - 2016



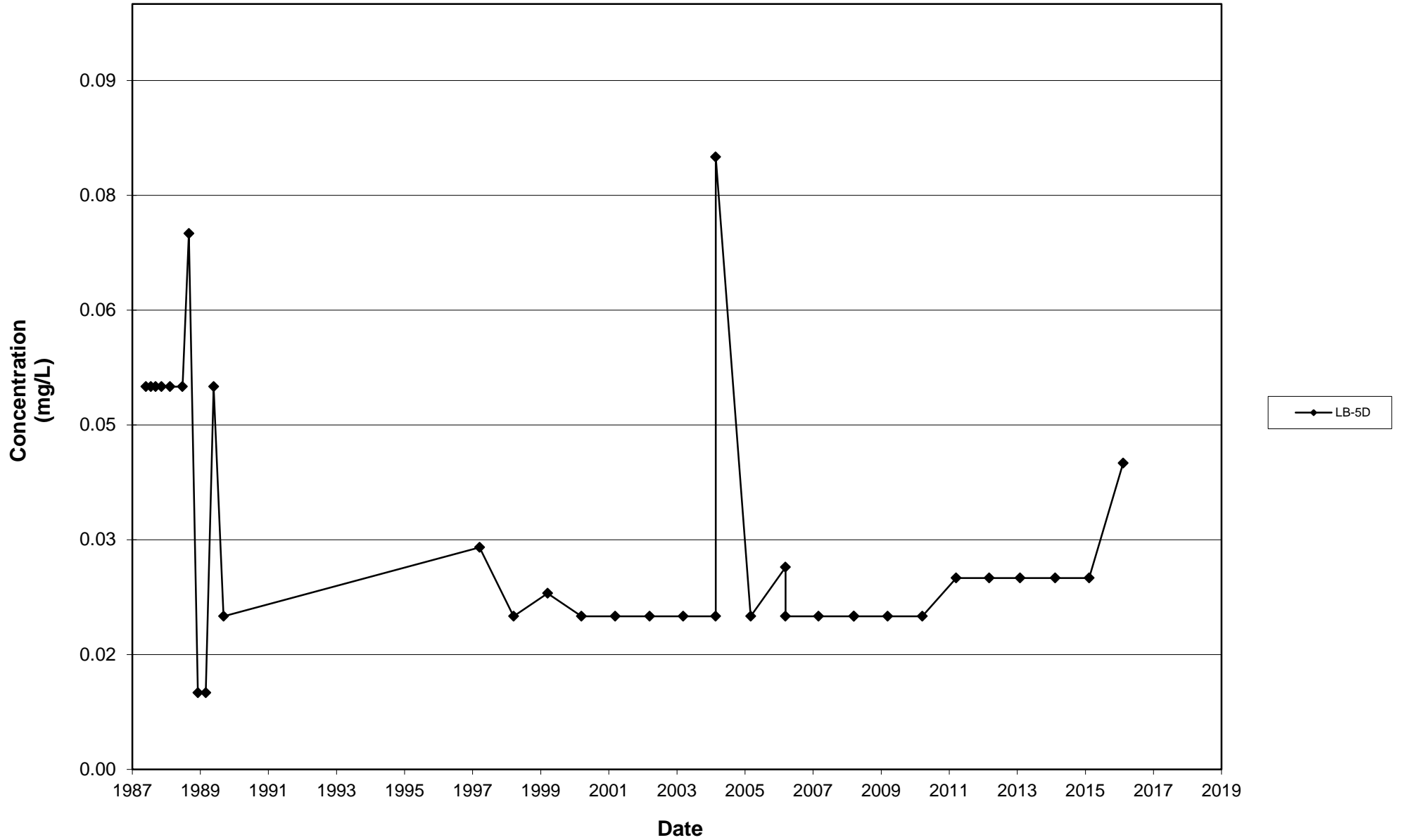
Leichner Landfill
Dissolved Iron, LB-03D
1987 - 2016



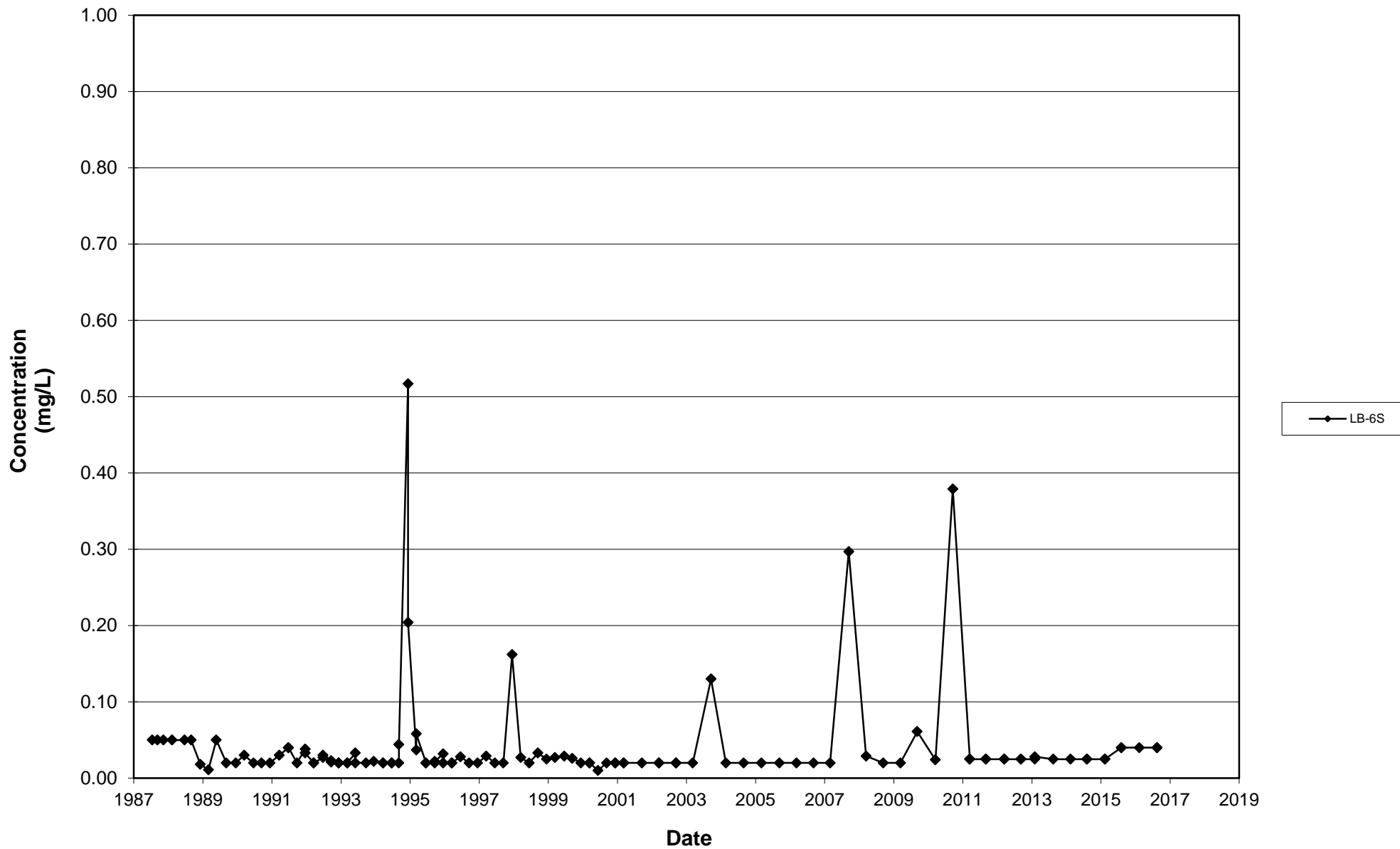
Leichner Landfill
Dissolved Iron, LB-05S
1987 - 2016



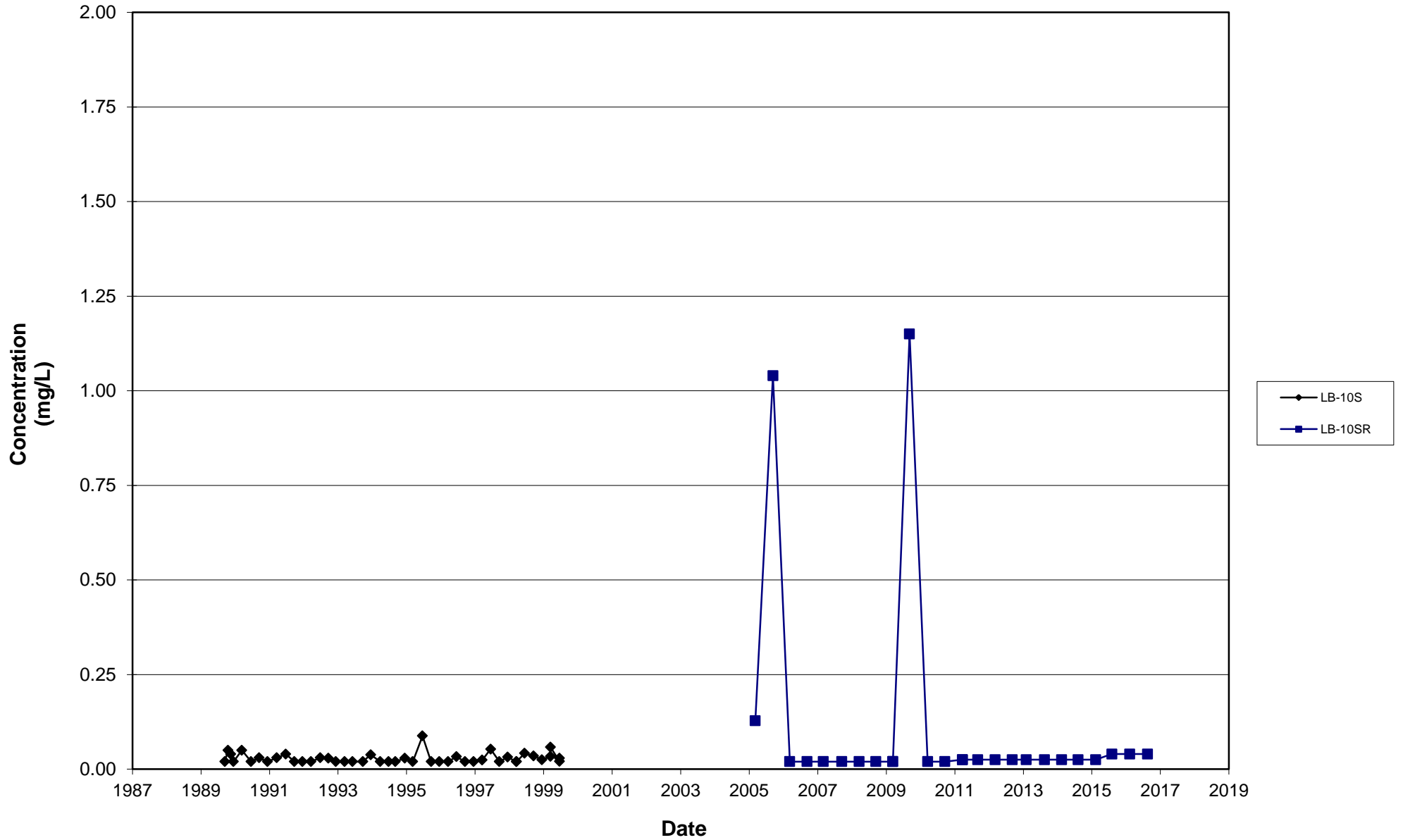
Leichner Landfill
Dissolved Iron, LB-05D
1987 - 2016



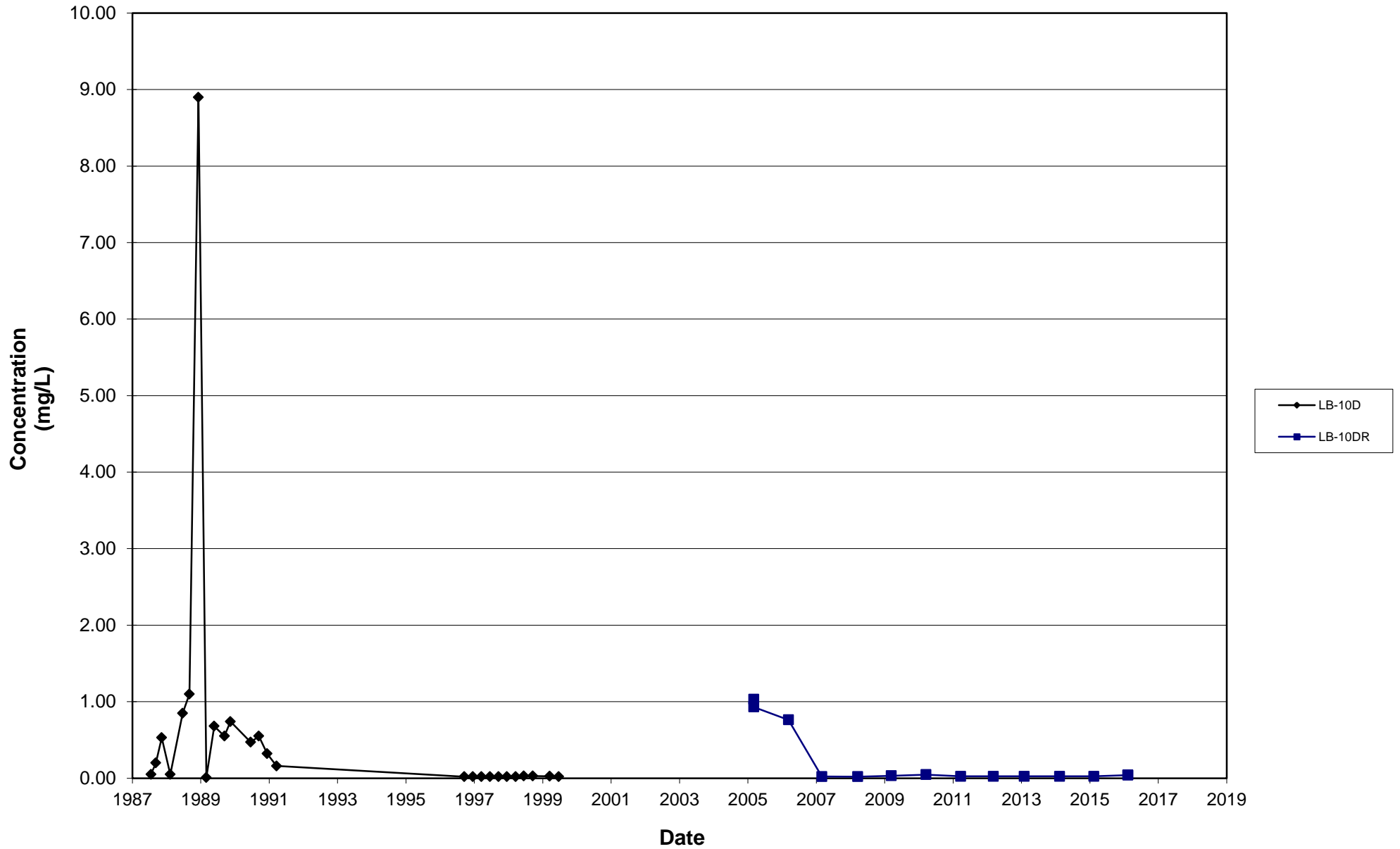
Leichner Landfill
Dissolved Iron, LB-06S
1987 - 2016



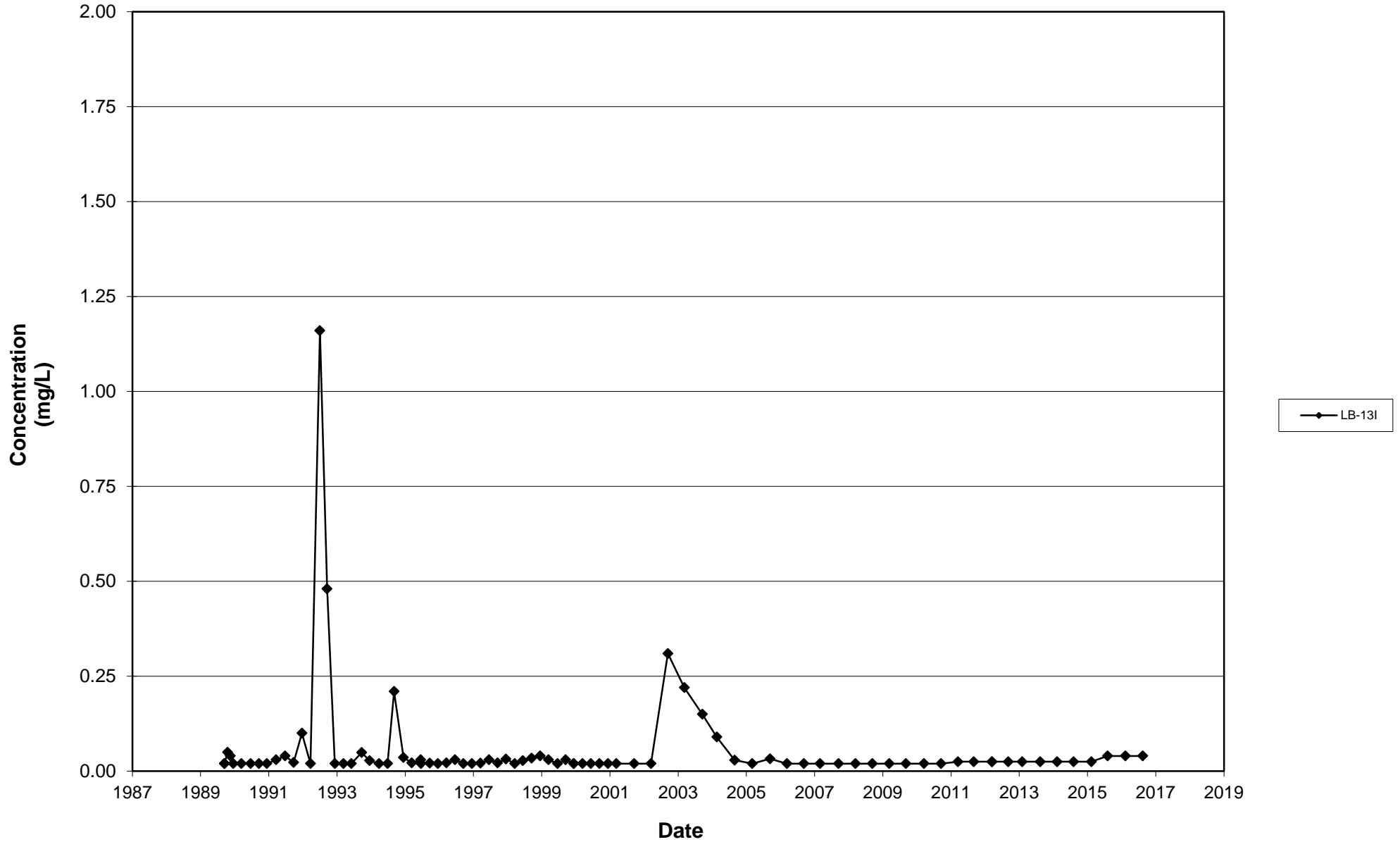
Leichner Landfill
Dissolved Iron, LB-10S and LB-10SR
1987 - 2016



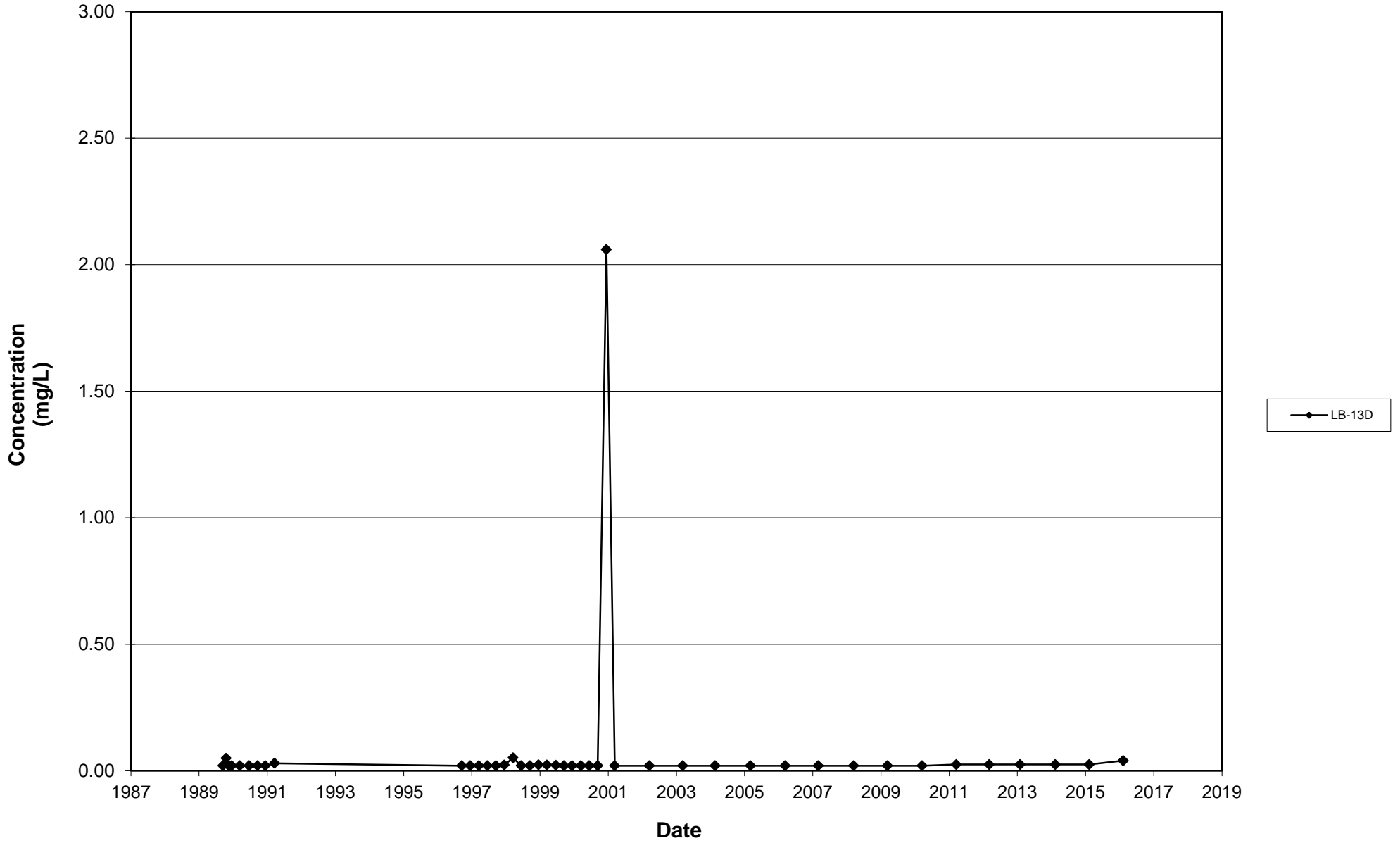
Leichner Landfill
Dissolved Iron, LB-10D and LB-10DR
1987 - 2016



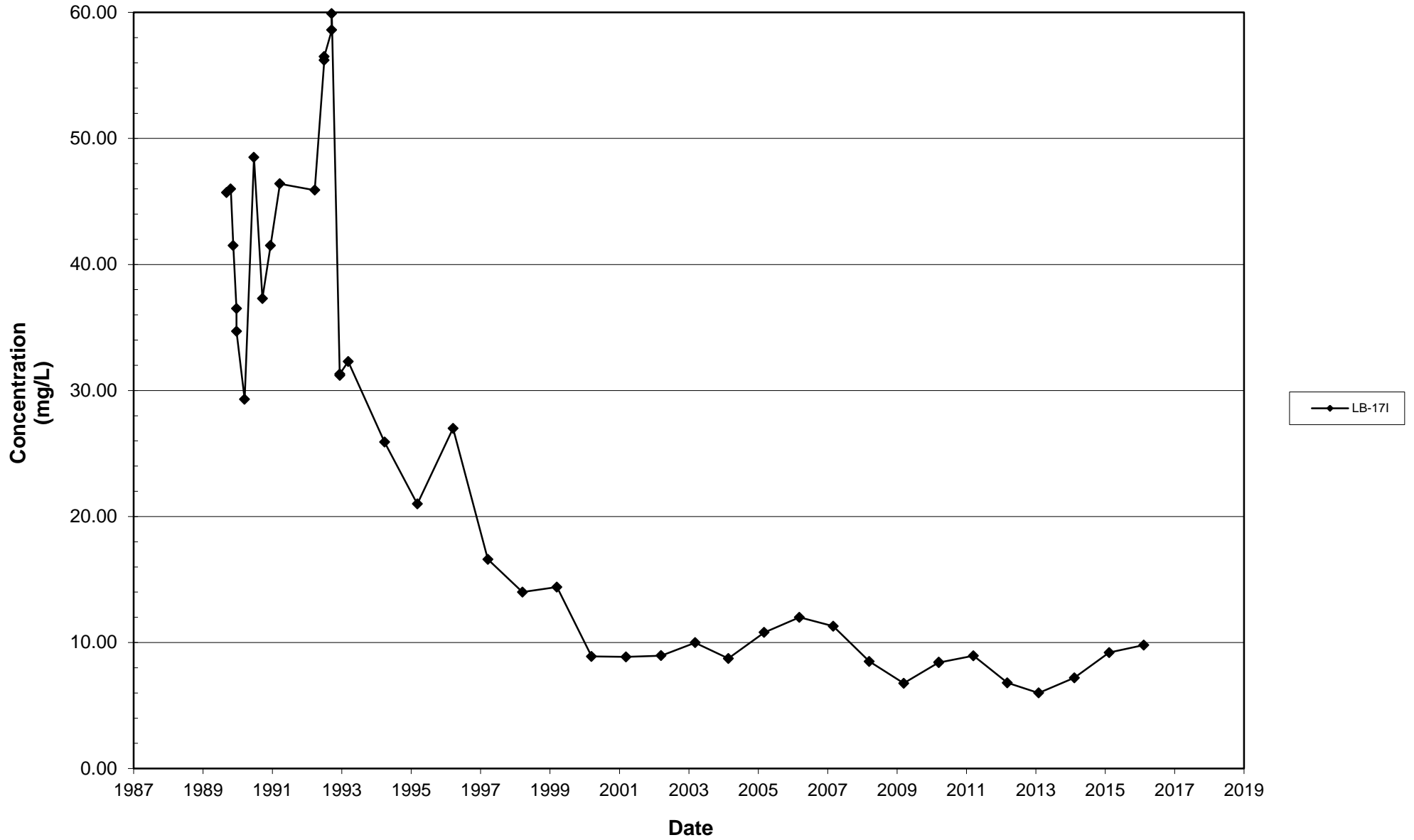
Leichner Landfill
Dissolved Iron, LB-13I
1987 - 2016



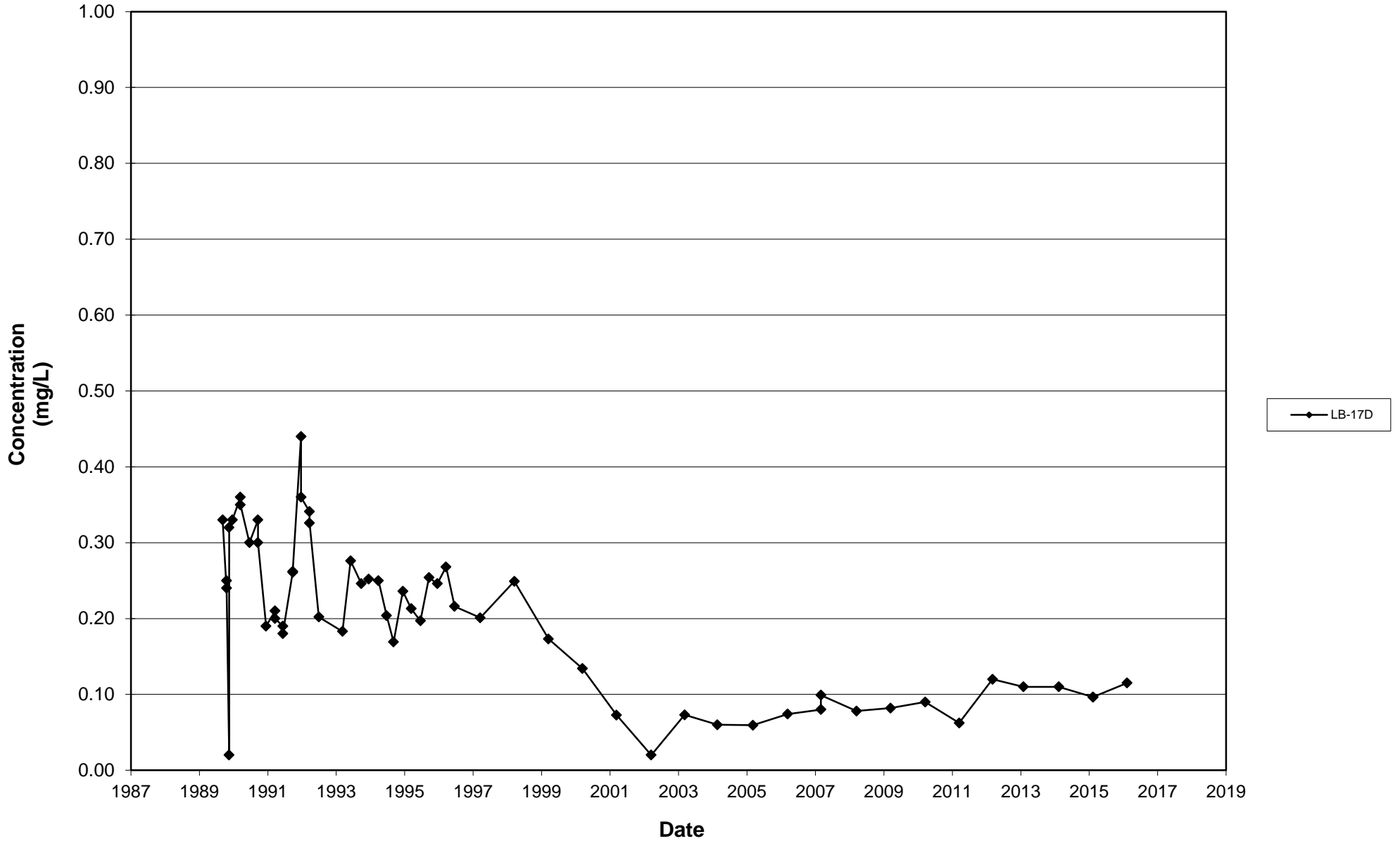
Leichner Landfill
Dissolved Iron, LB-13D
1987 - 2016



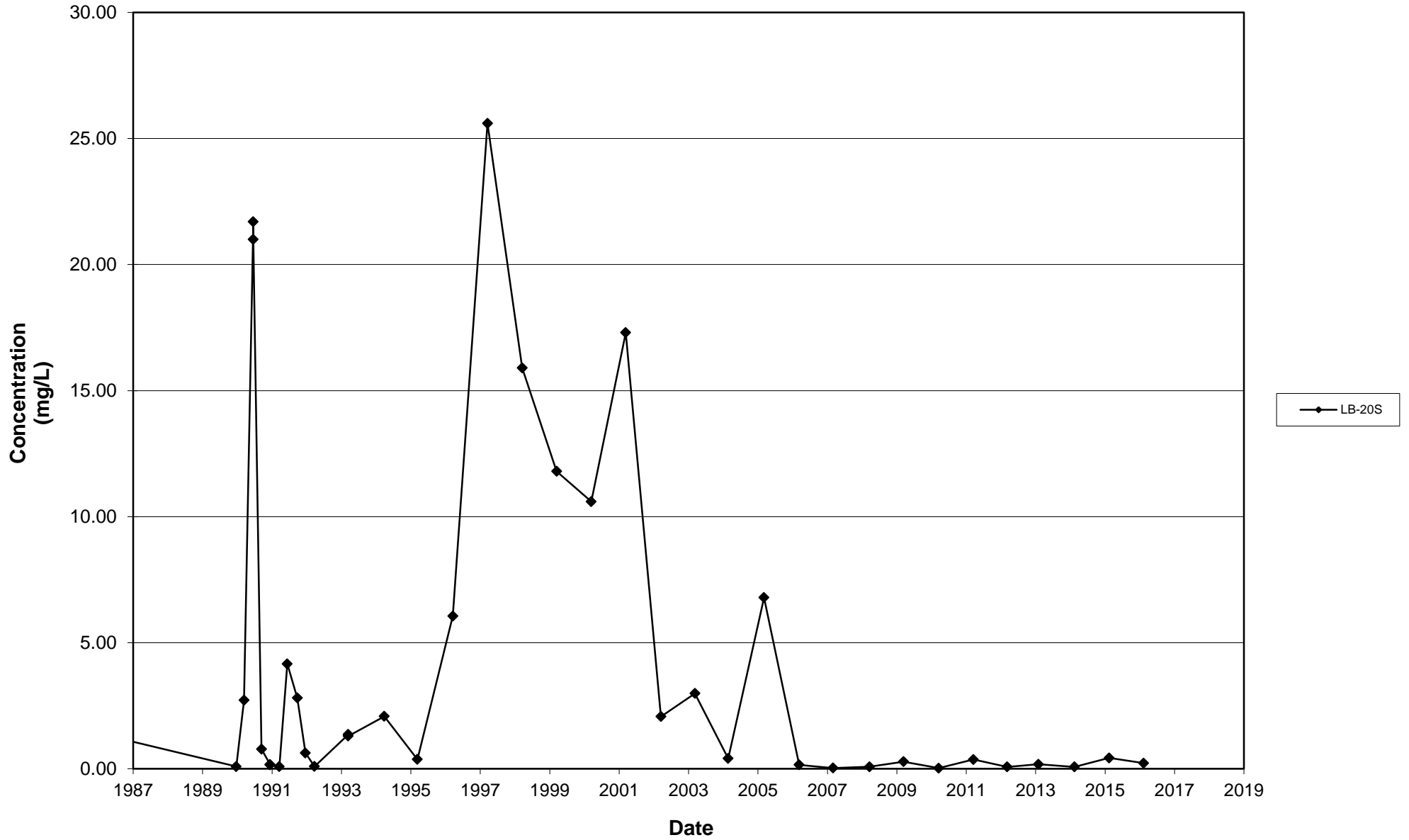
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Dissolved Iron, LB-171
1987 - 2016



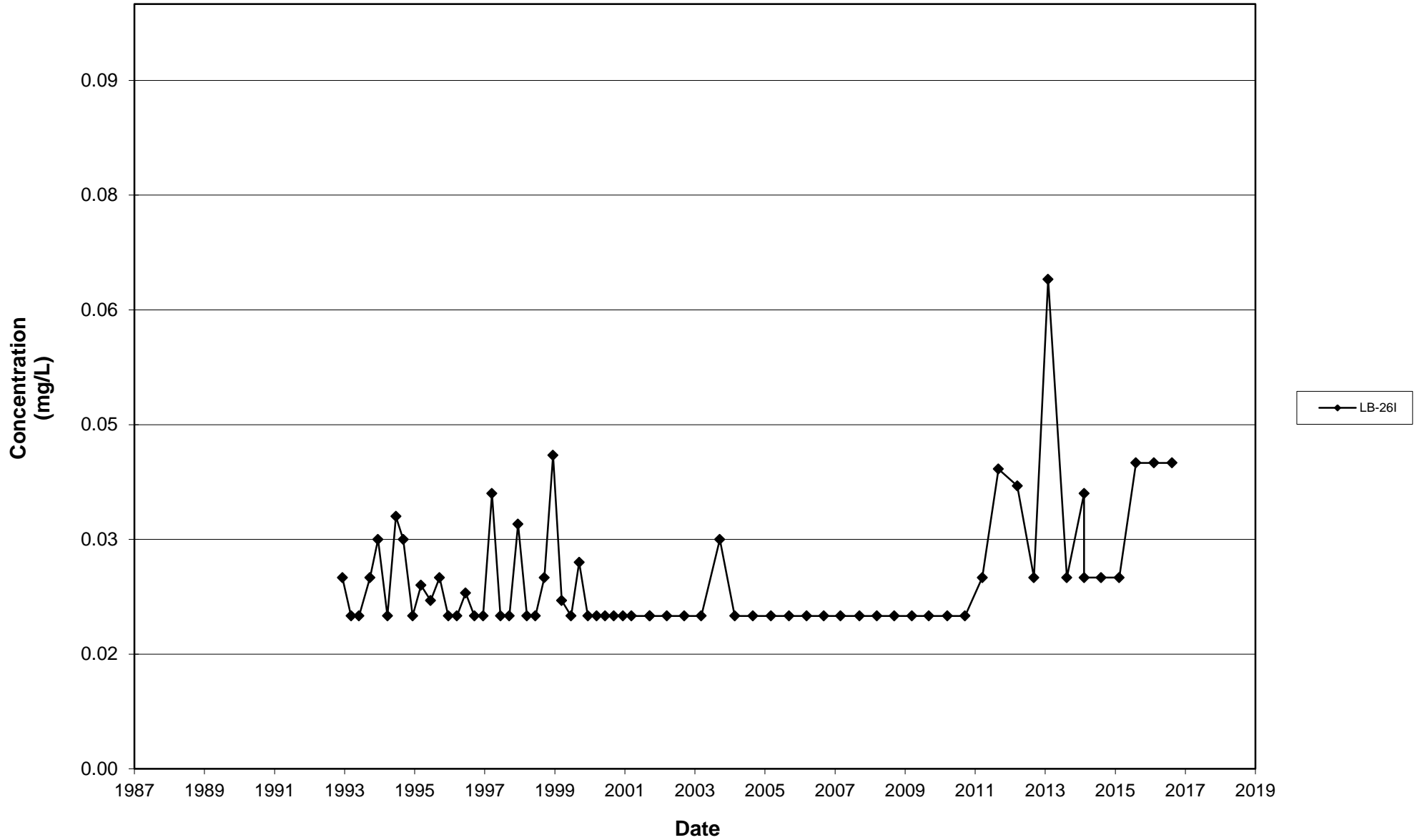
Leichner Landfill
Dissolved Iron, LB-17D
1987 - 2016



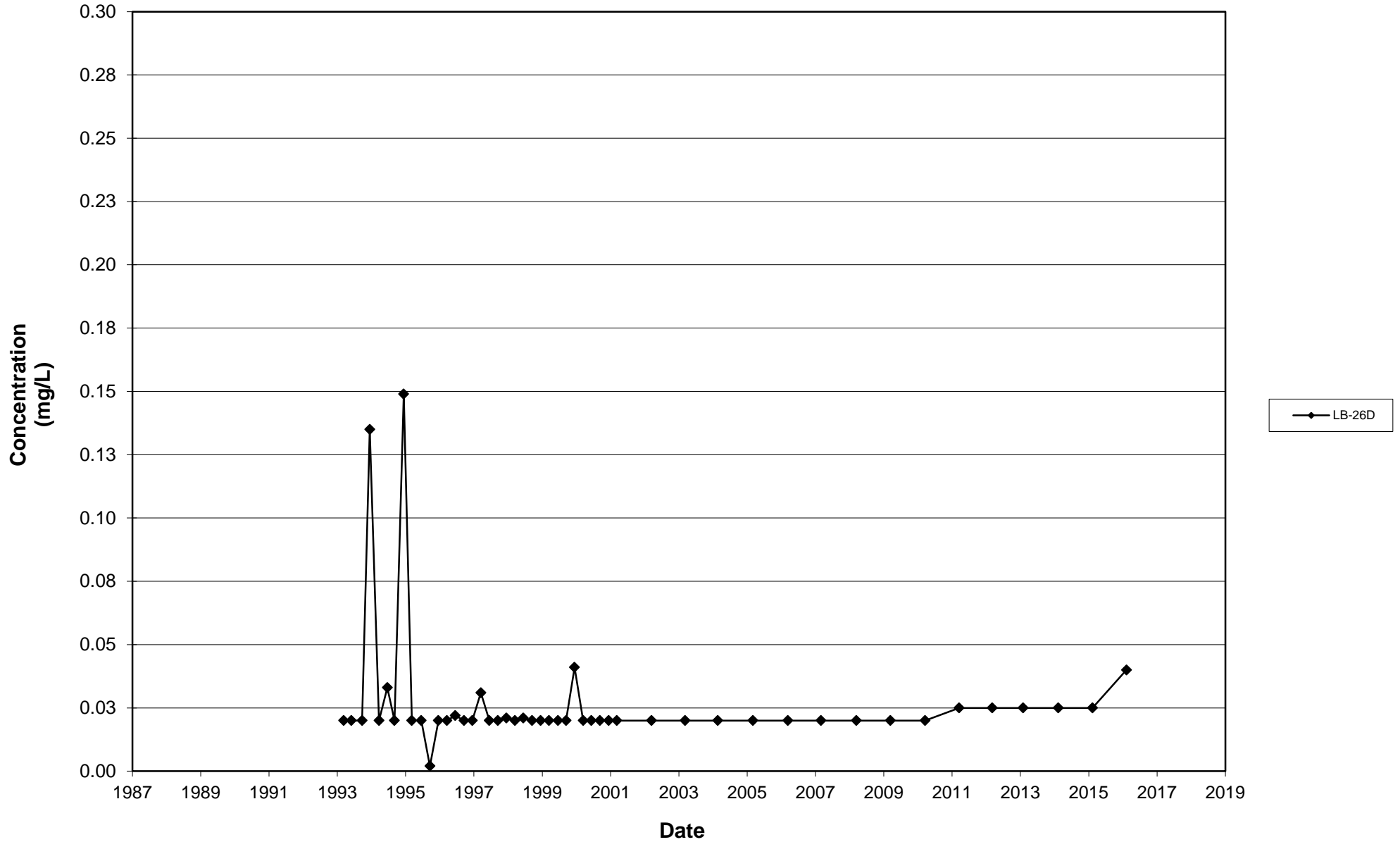
Leichner Landfill
Dissolved Iron, LB-20S
1987 - 2016



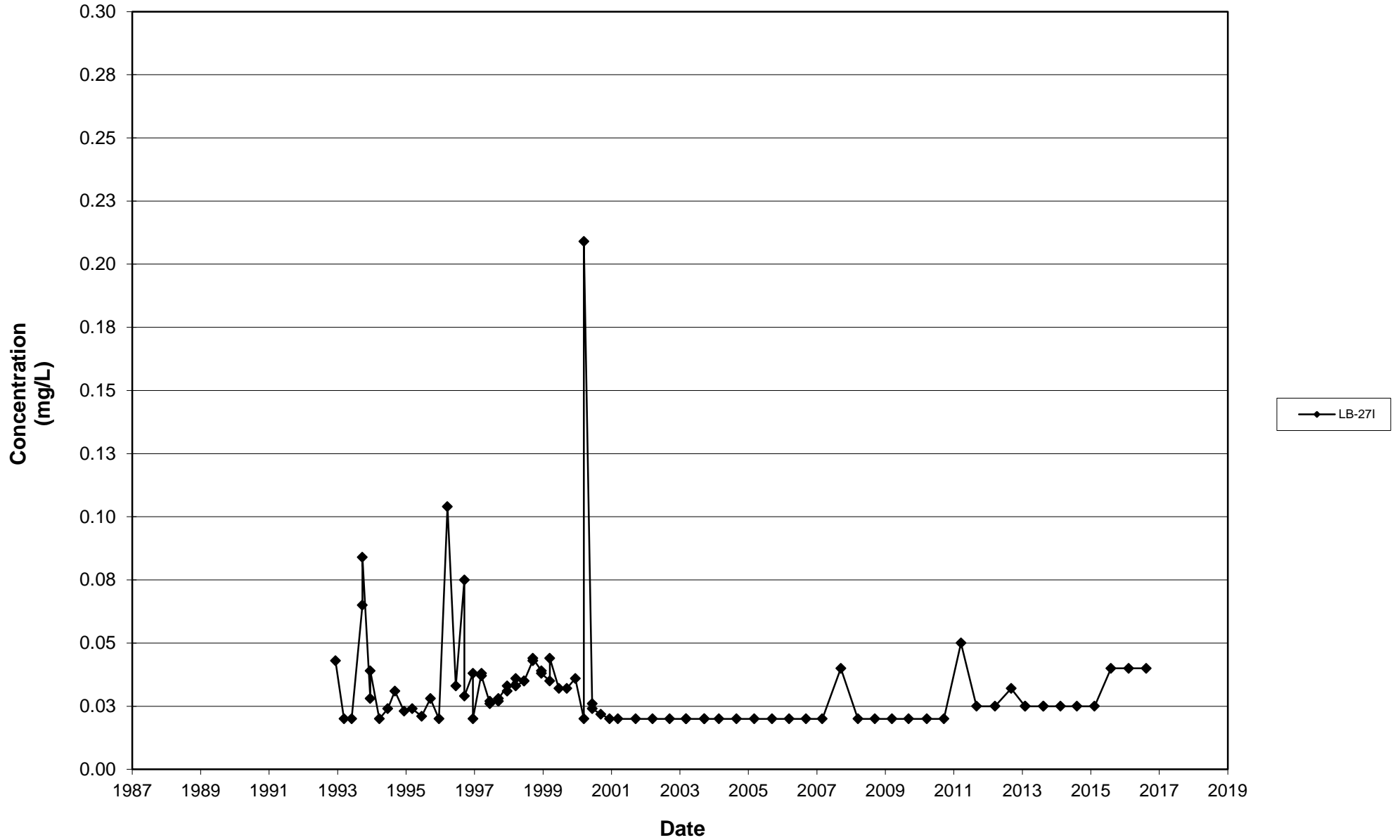
Leichner Landfill
Dissolved Iron, LB-26I
1987 - 2016



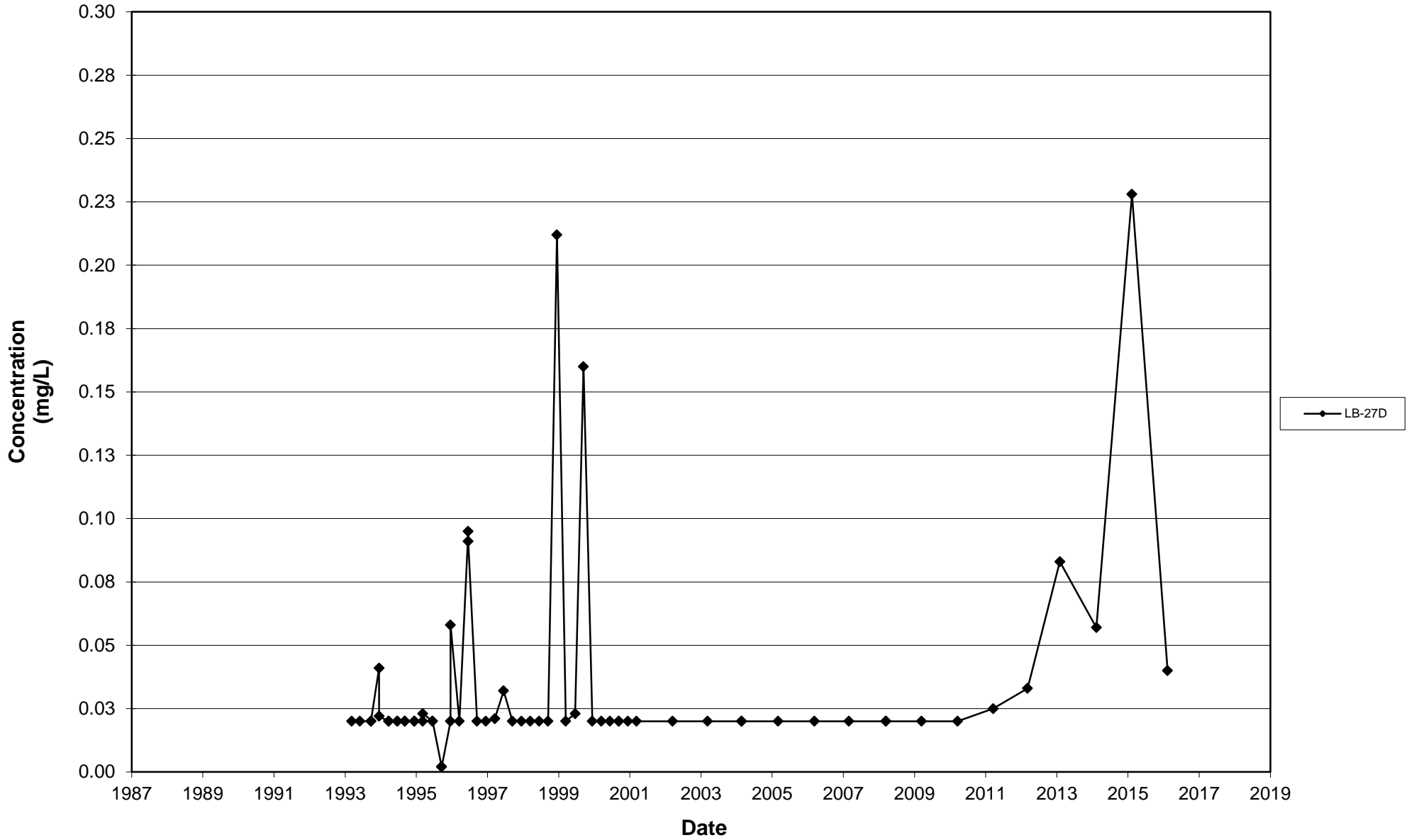
Leichner Landfill
Dissolved Iron, LB-26D
1987 - 2016



Leichner Landfill
Dissolved Iron, LB-271
1987 - 2016

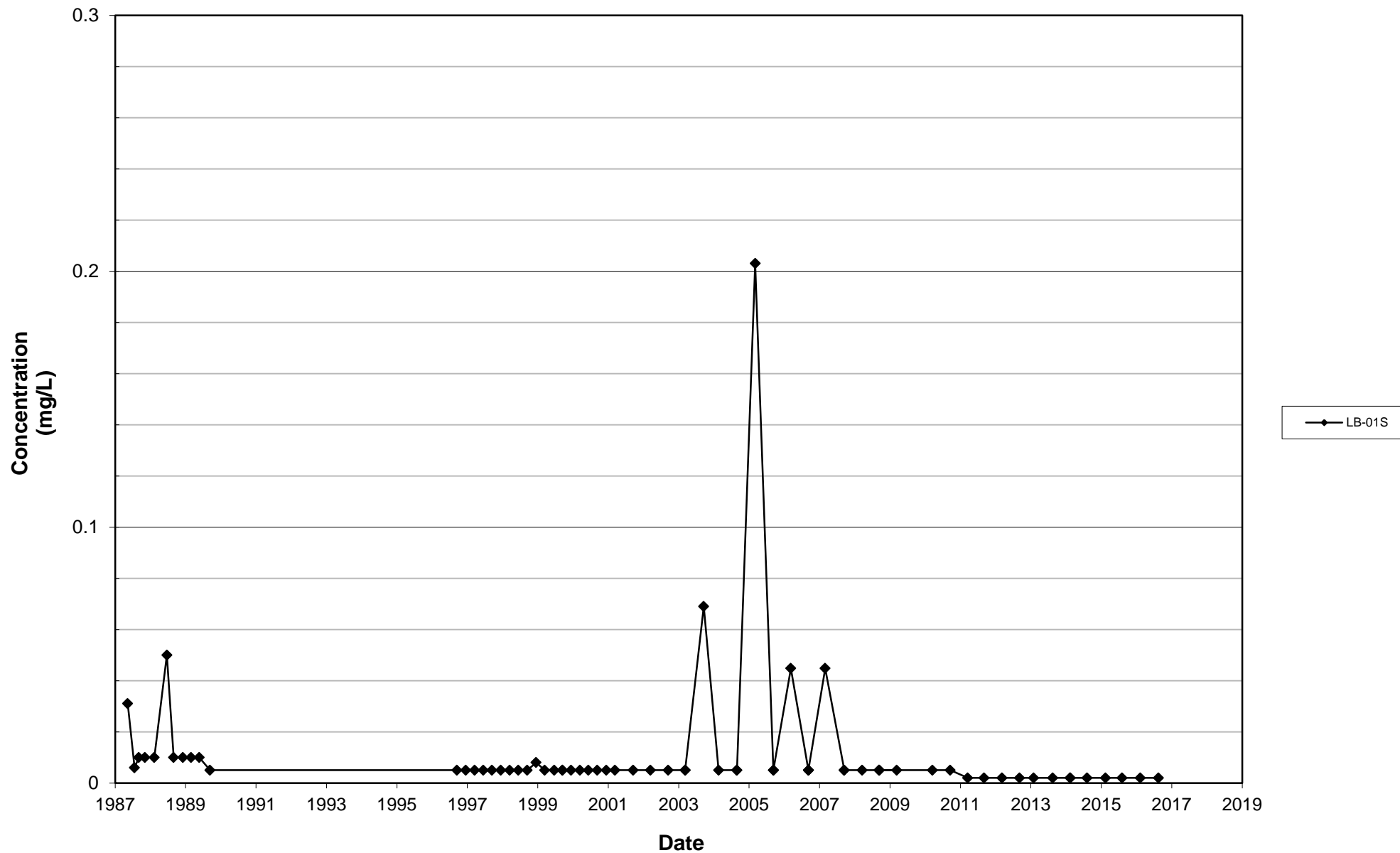


Leichner Landfill
Dissolved Iron, LB-27D
1987 - 2016

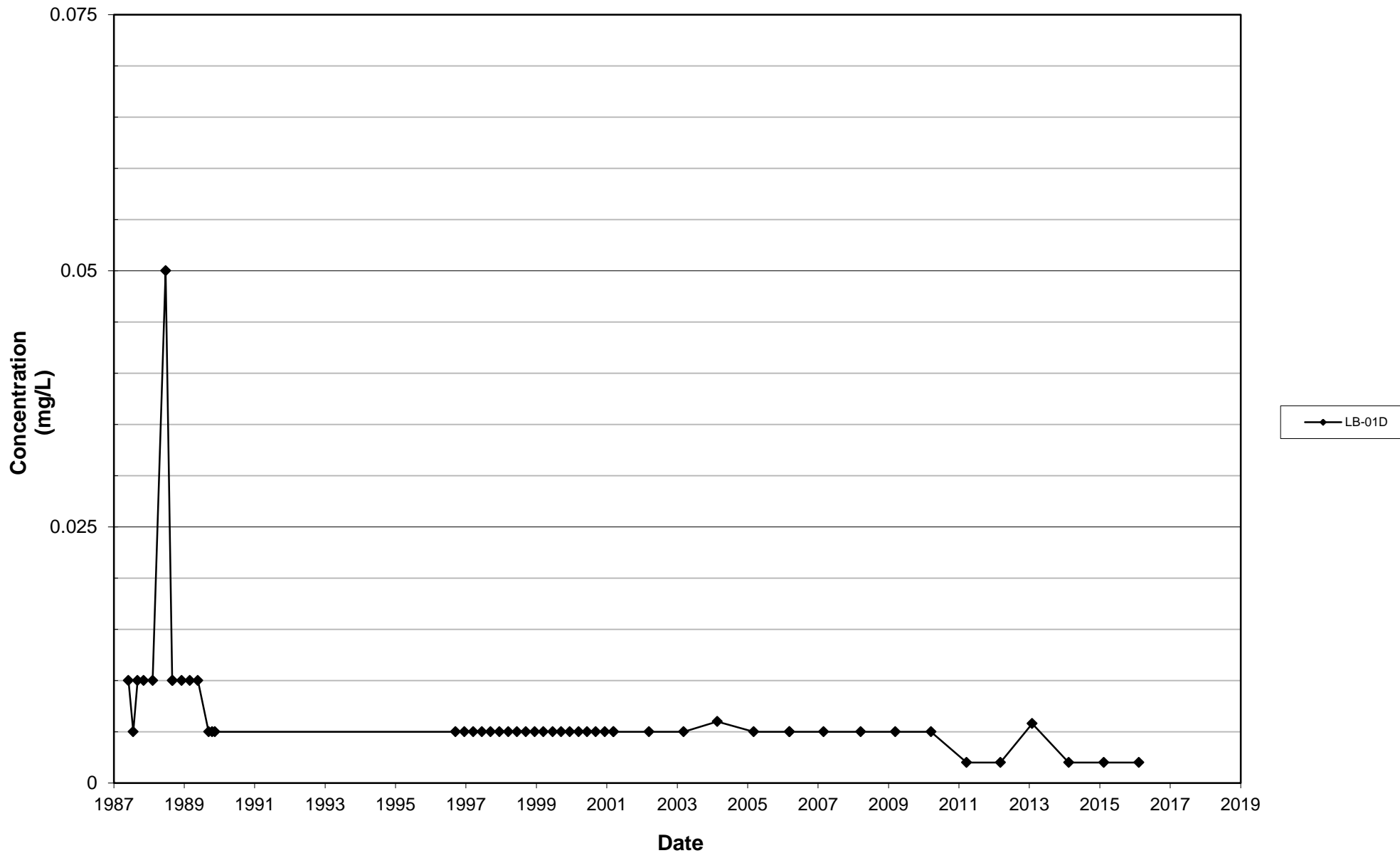


Dissolved Manganese

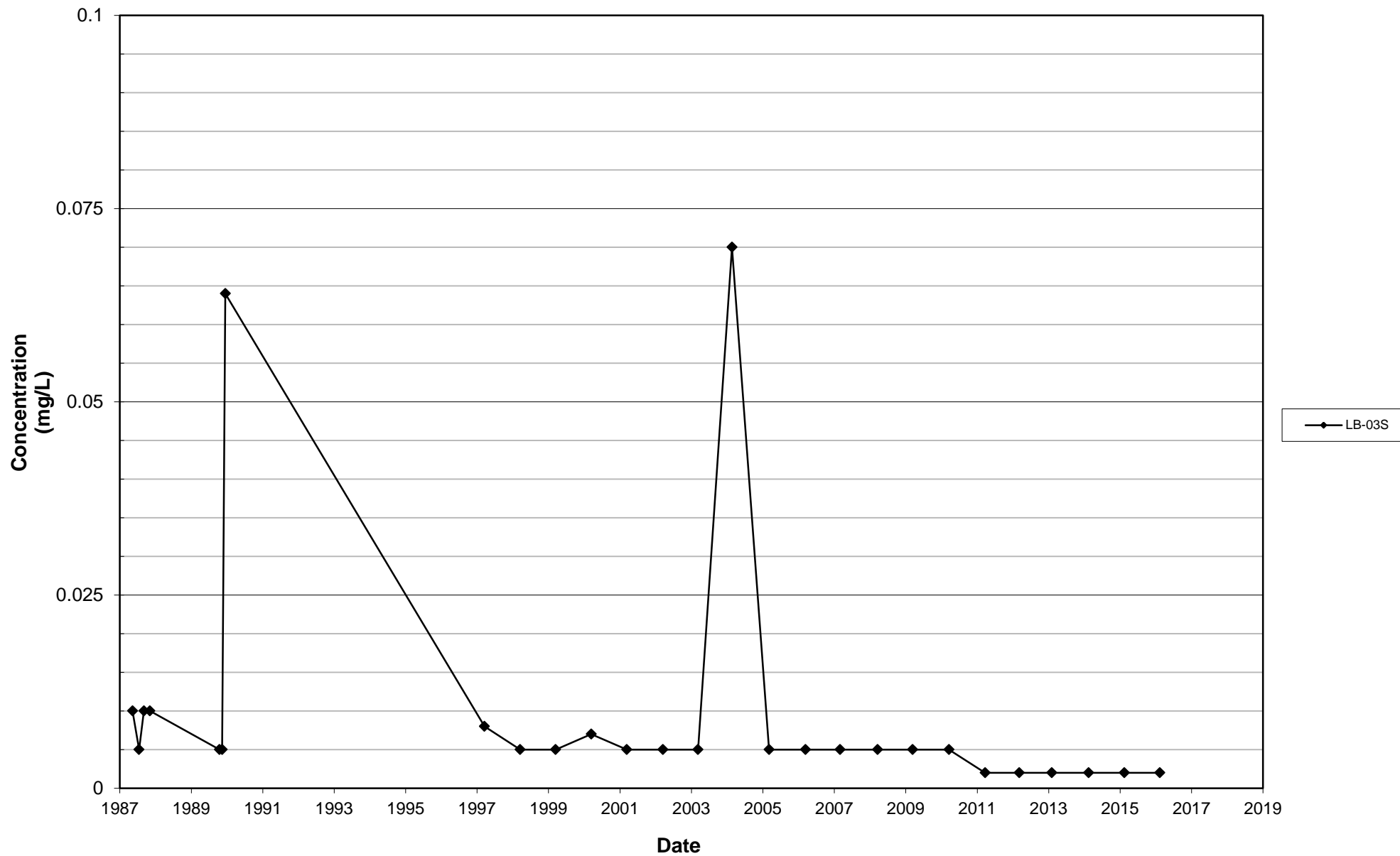
Leichner Landfill
Dissolved Manganese, LB-01S
1987 - 2016



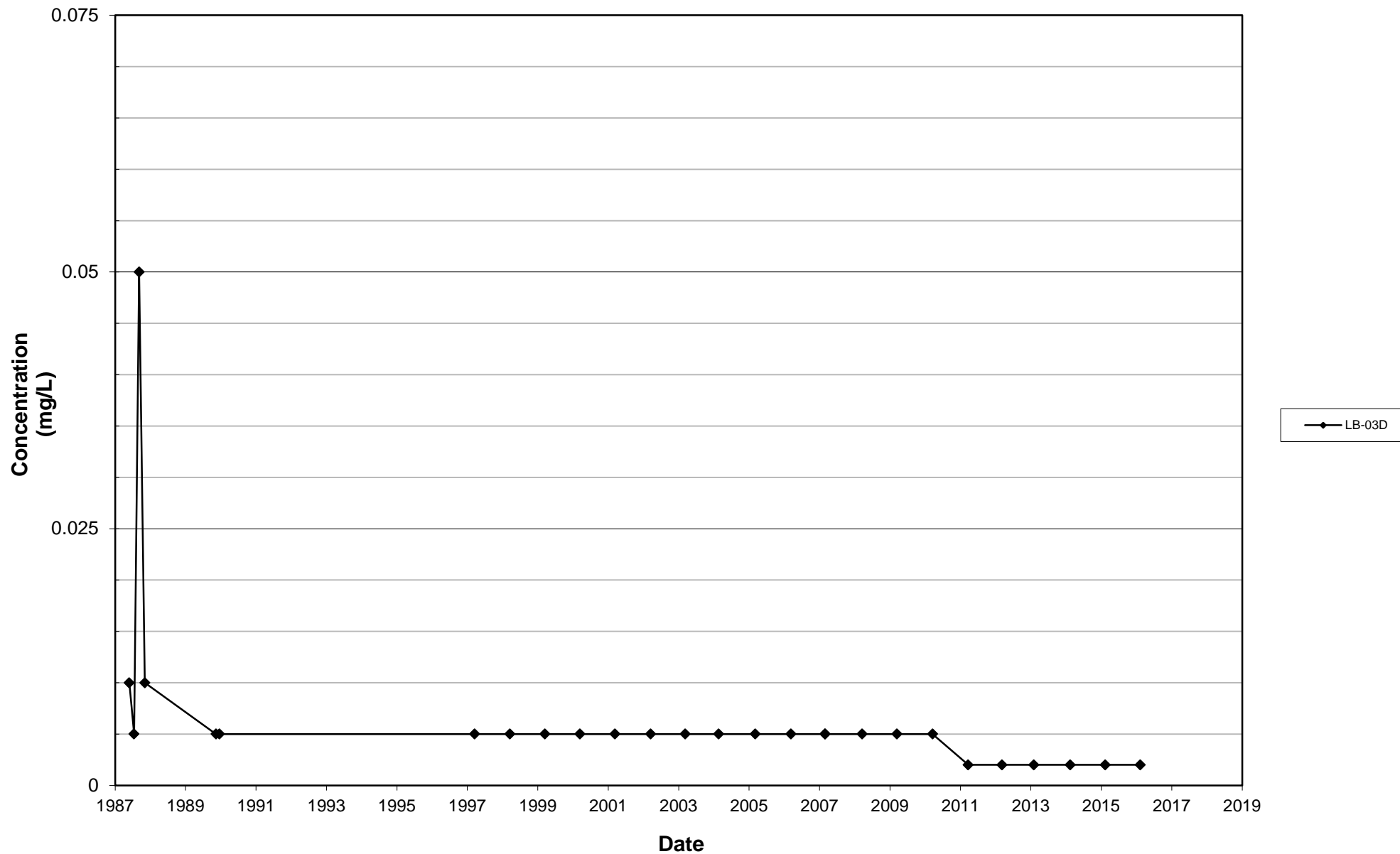
Leichner Landfill
Dissolved Manganese, LB-01D
1987 - 2016



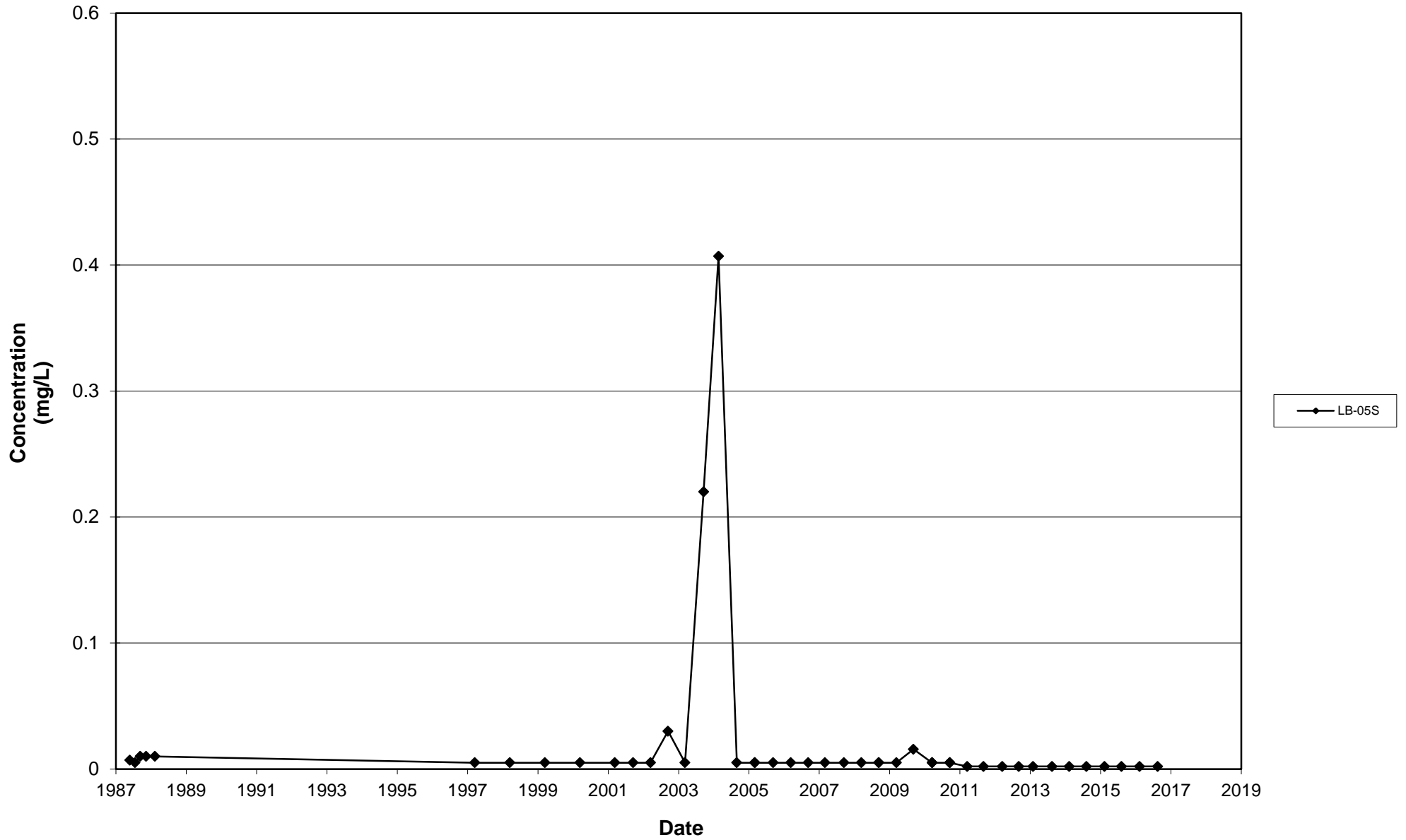
Leichner Landfill
Dissolved Manganese, LB-03S
1987 - 2016



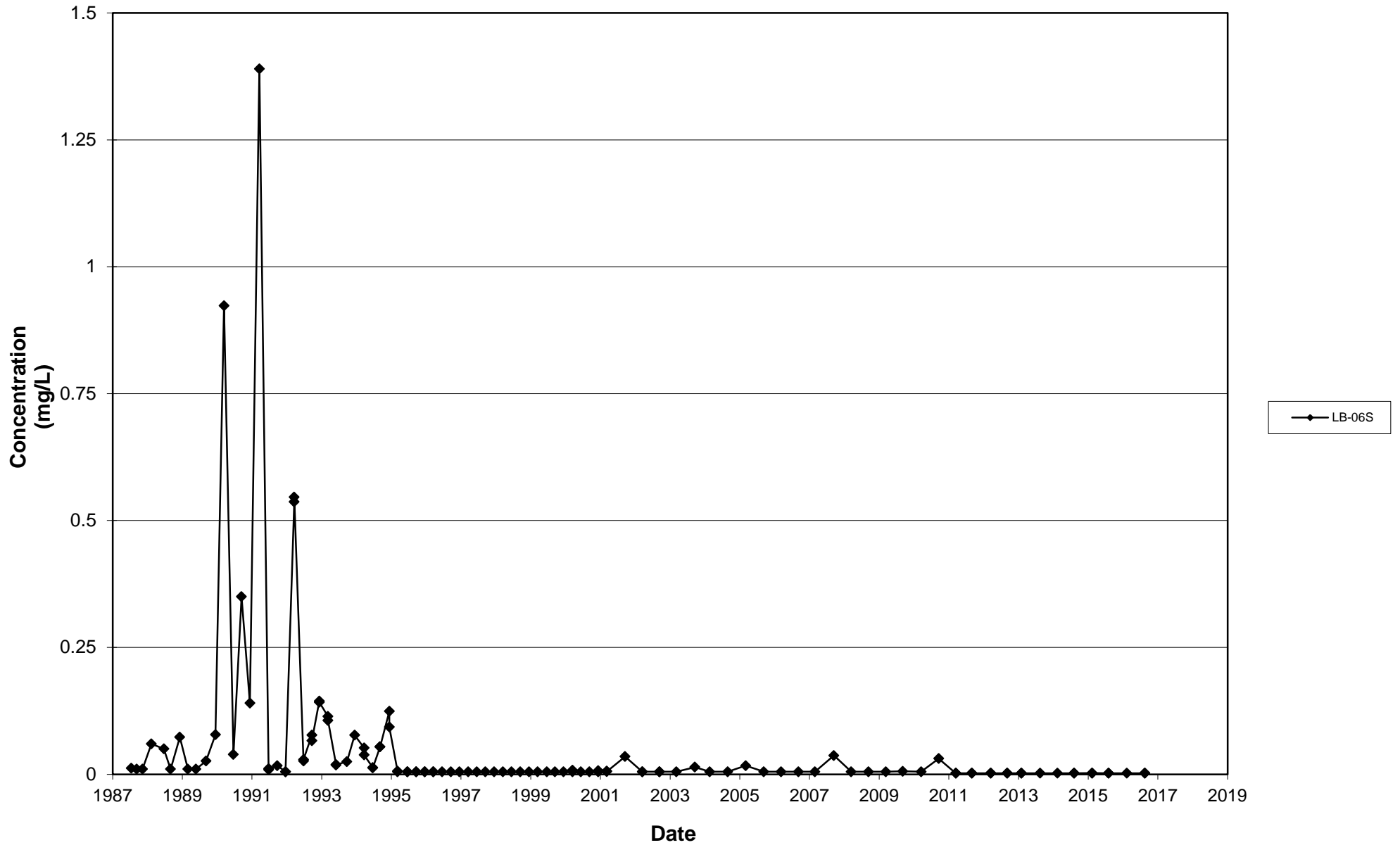
Leichner Landfill
Dissolved Manganese, LB-03D
1987 - 2016



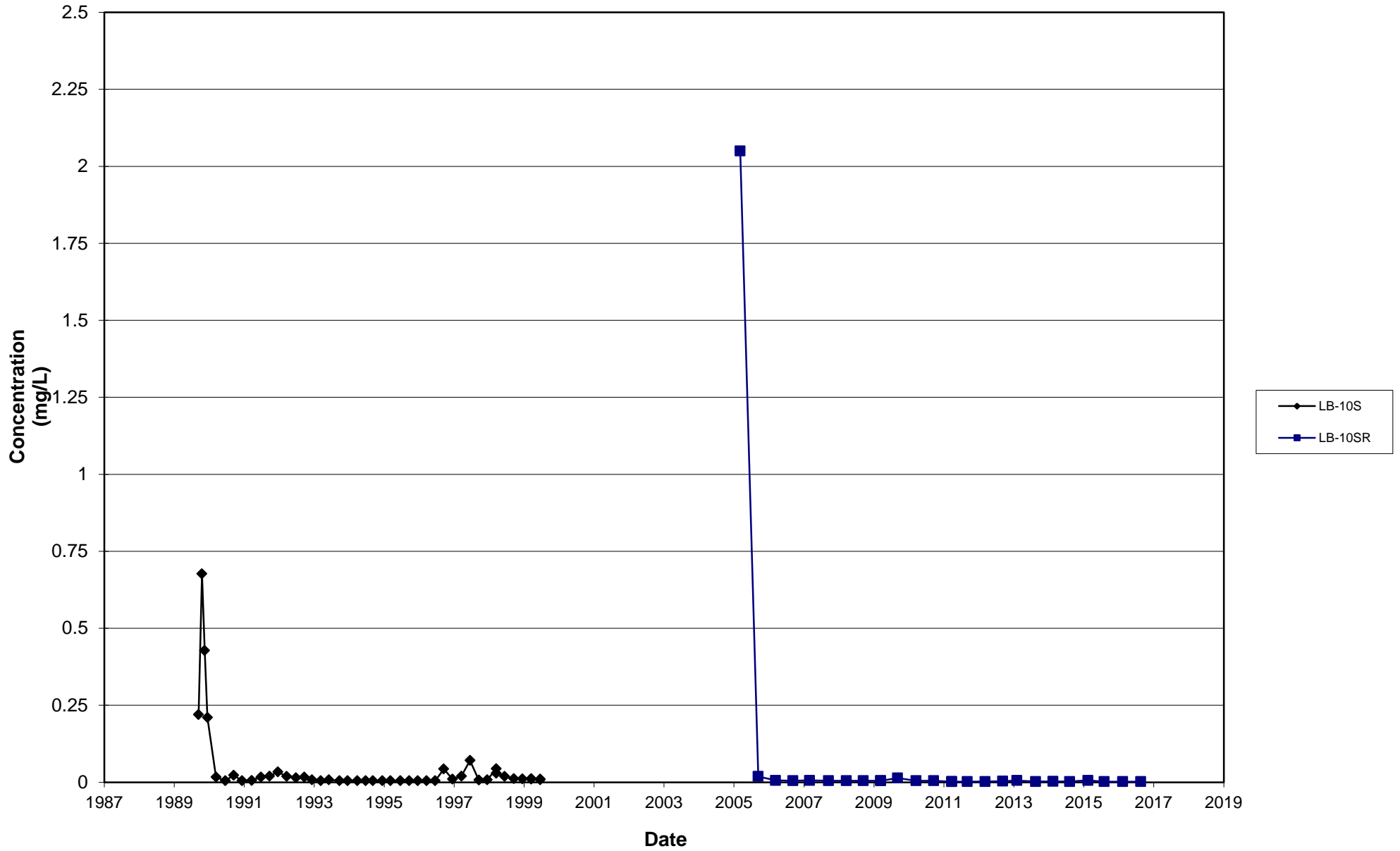
Leichner Landfill
Dissolved Manganese, LB-05S
1987 - 2016



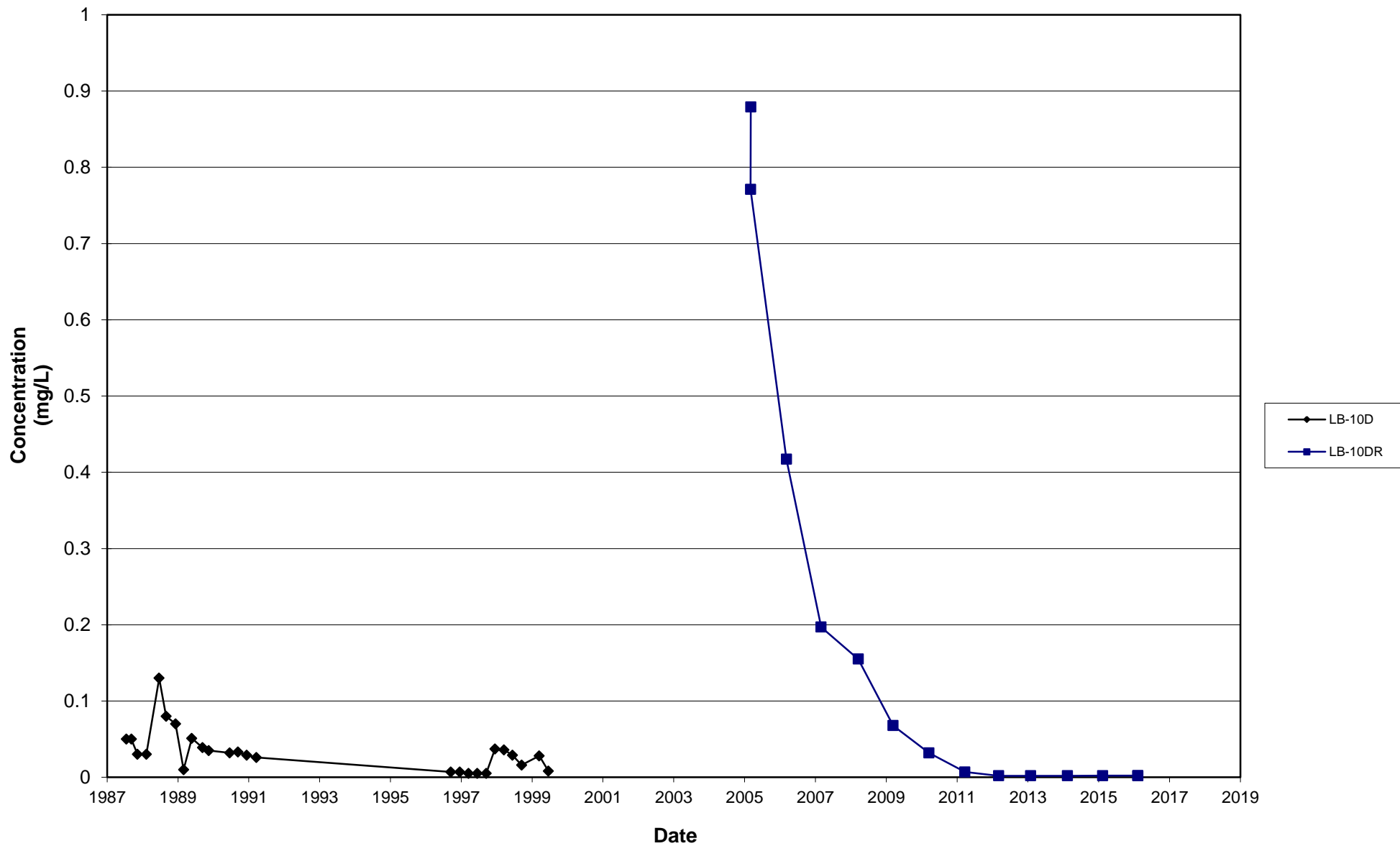
Leichner Landfill
Dissolved Manganese, LB-06S
1987 - 2016



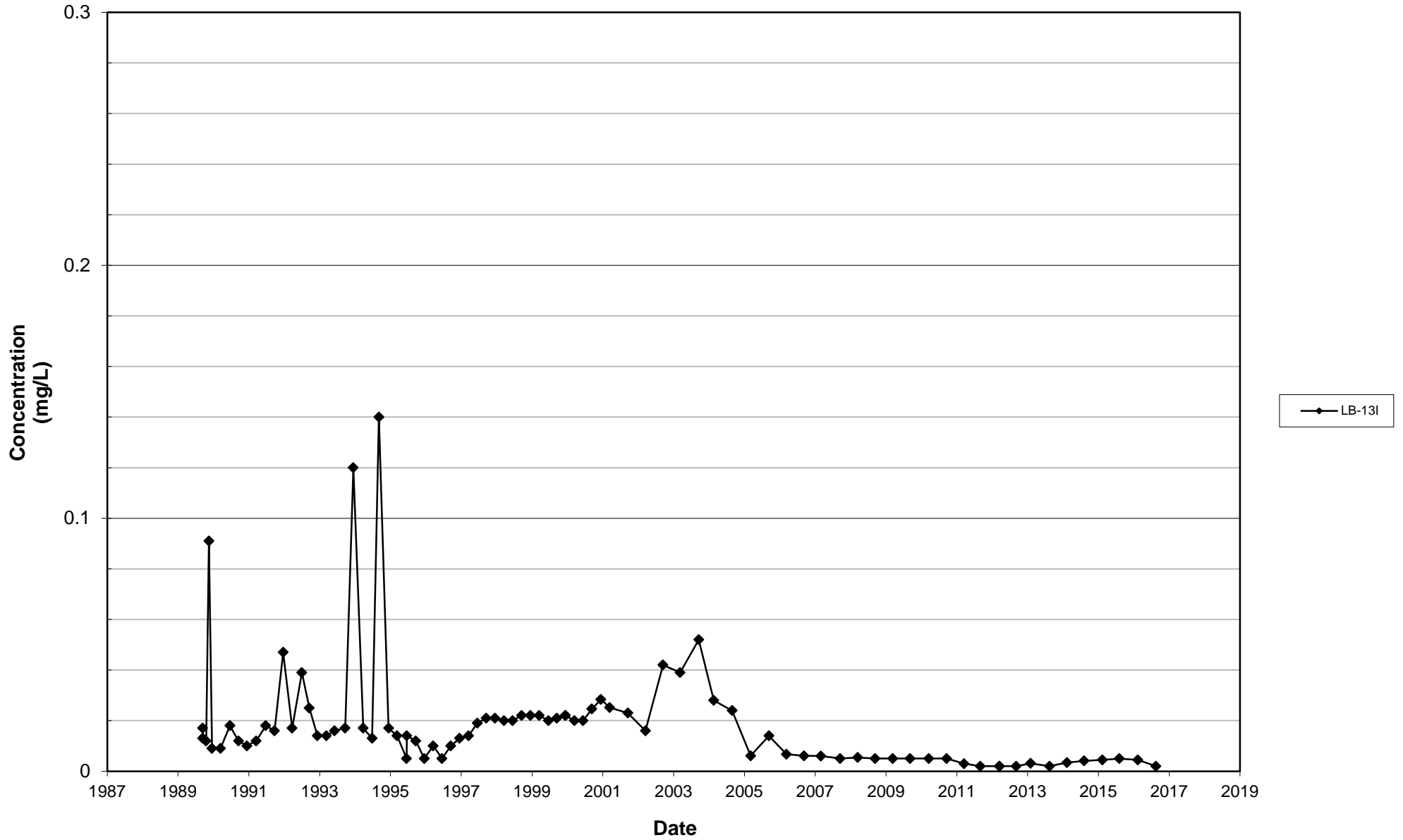
Leichner Landfill
Dissolved Manganese, LB-10S and LB-10SR
1987 - 2016



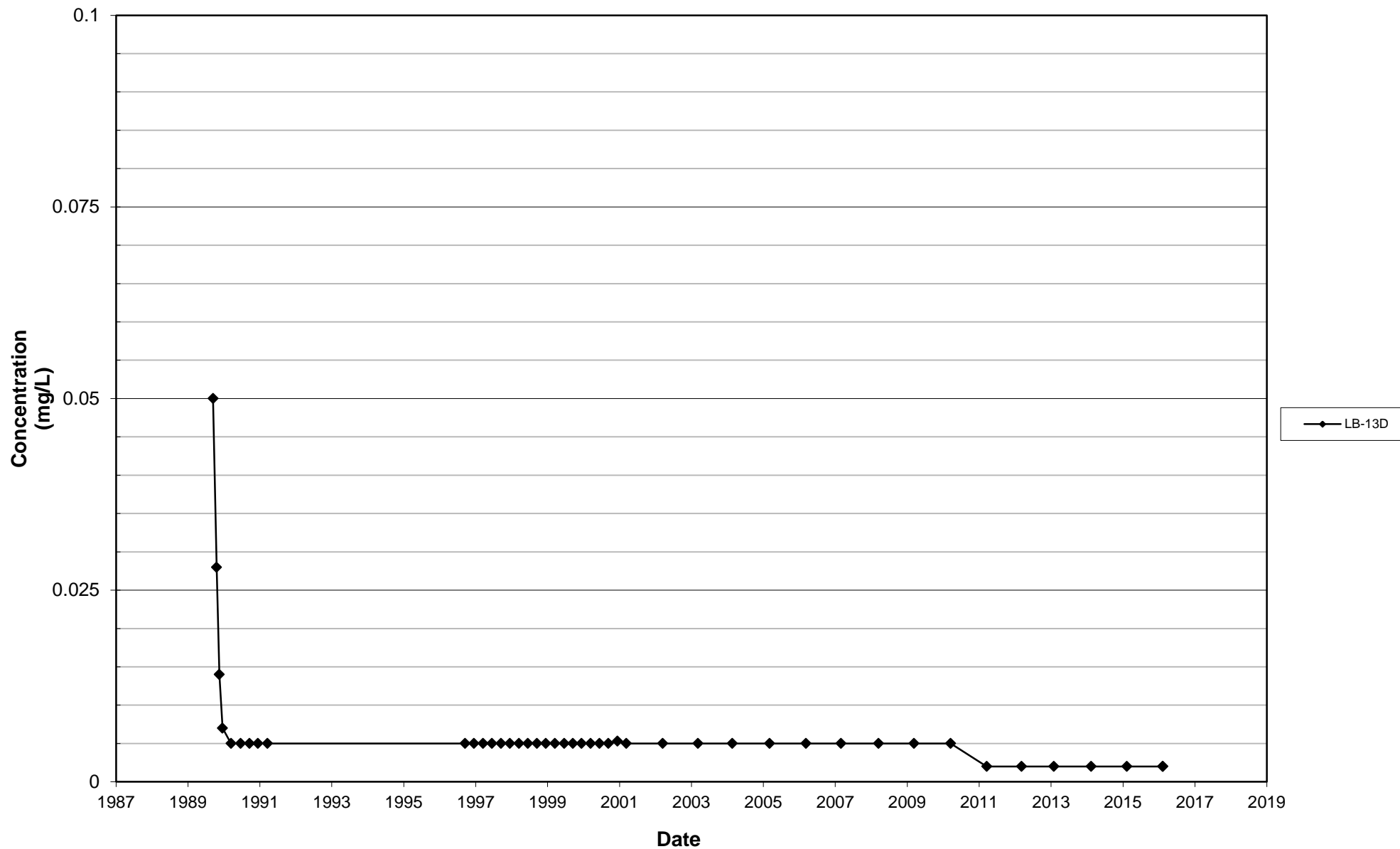
Leichner Landfill
Dissolved Manganese, LB-10D and LB-10DR
1987 - 2016



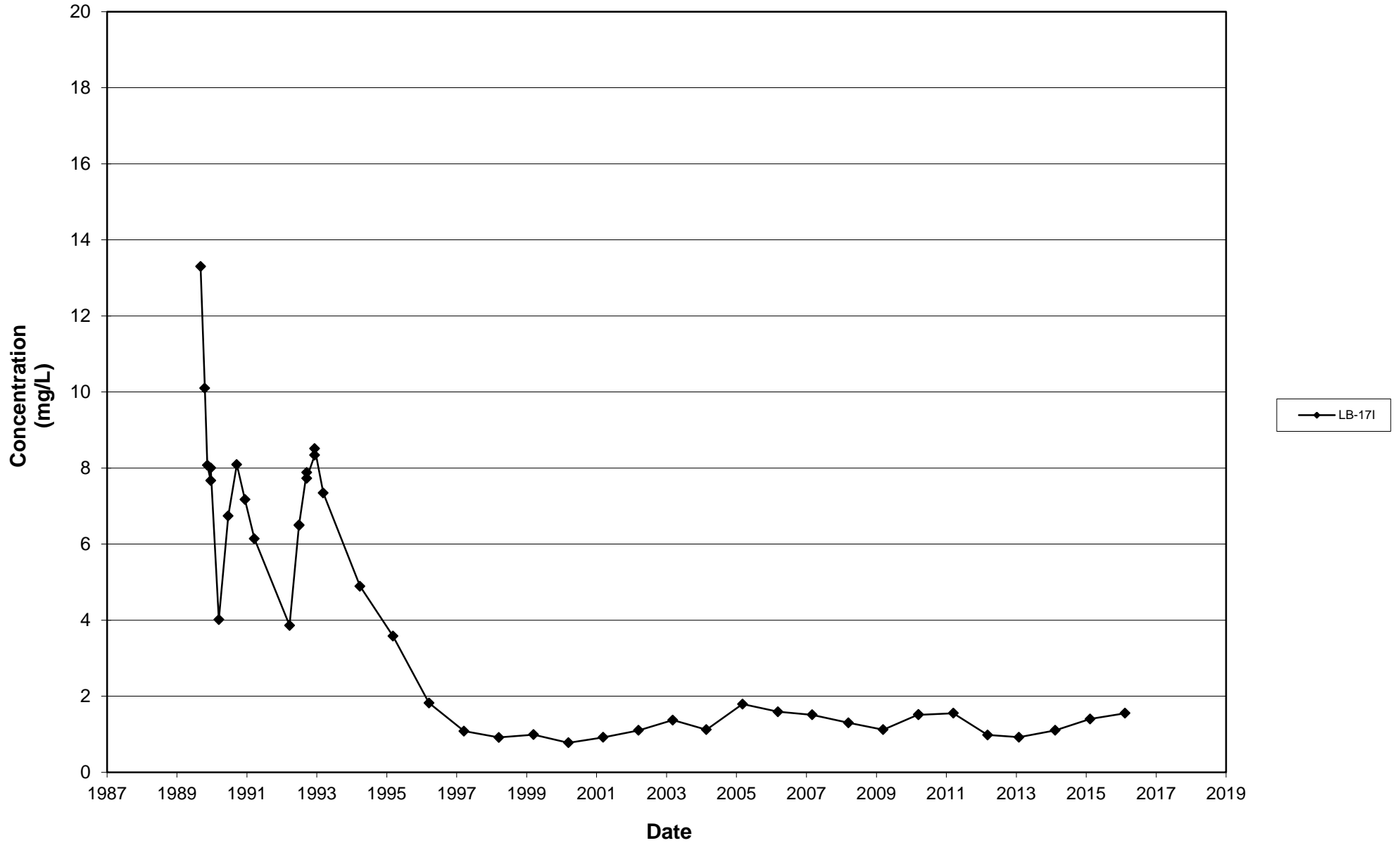
Leichner Landfill
Dissolved Manganese, LB-13I
1987 - 2016



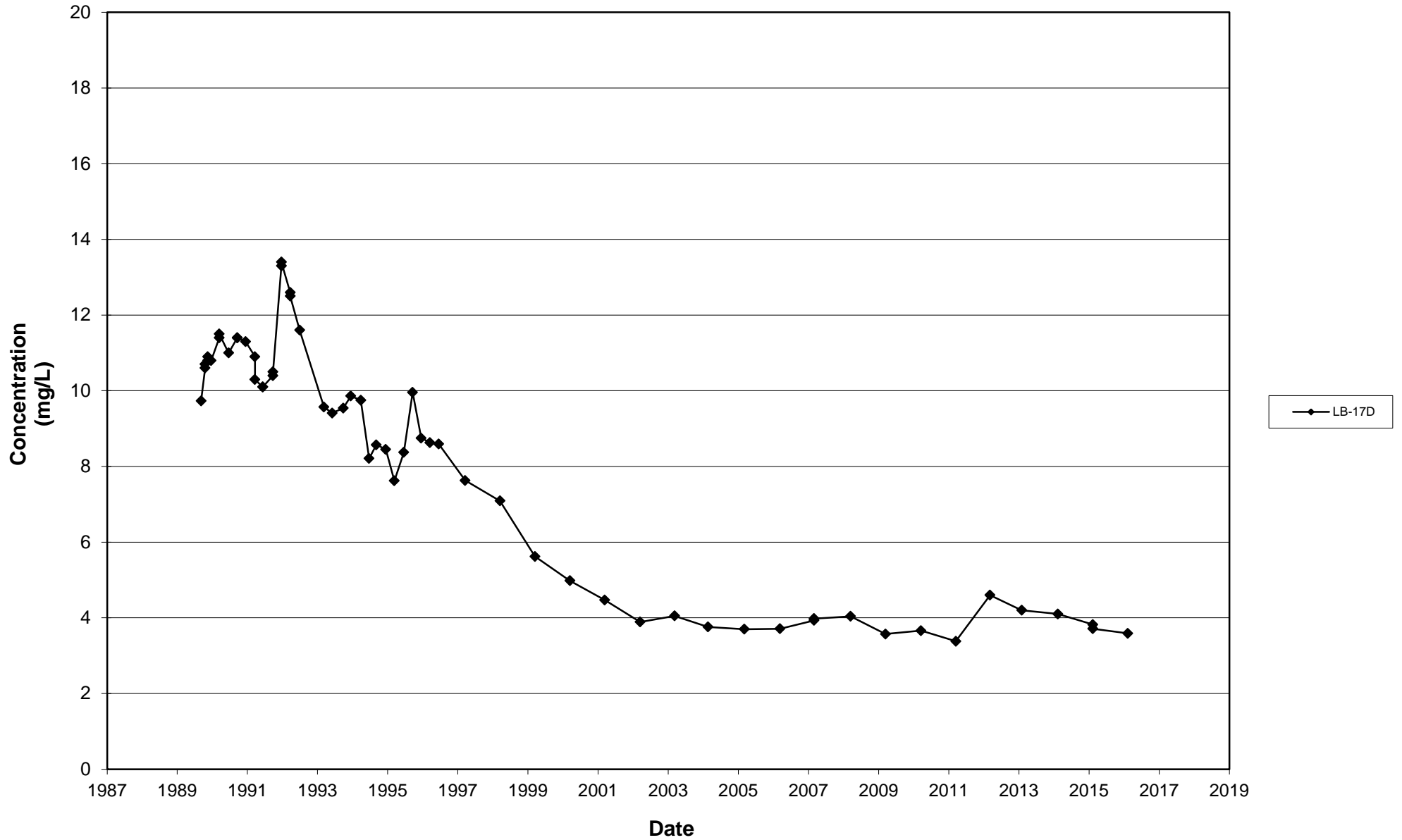
Leichner Landfill
Dissolved Manganese, LB-13D
1987 - 2016



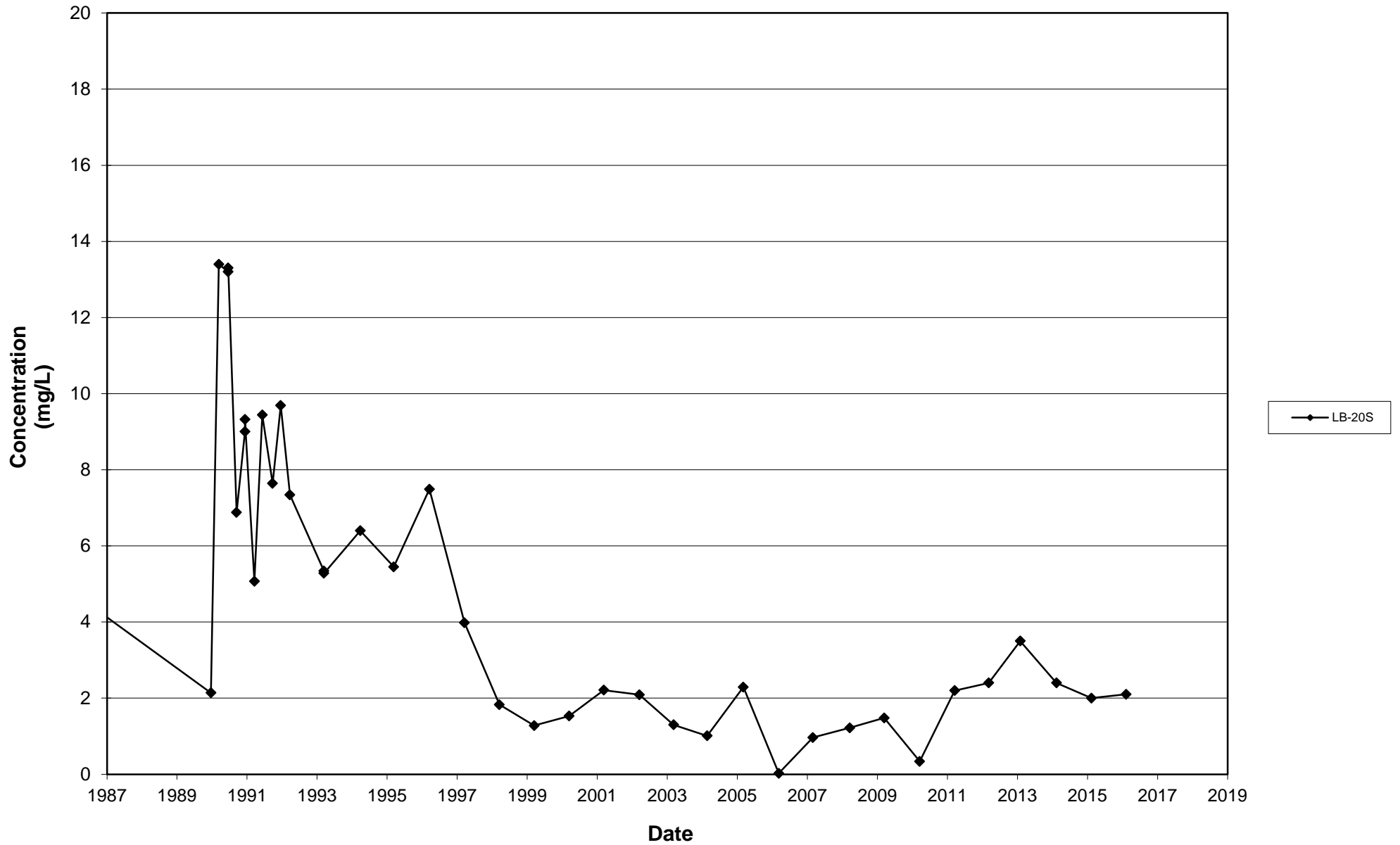
Leichner Landfill
Dissolved Manganese, LB-17I
1987 - 2016



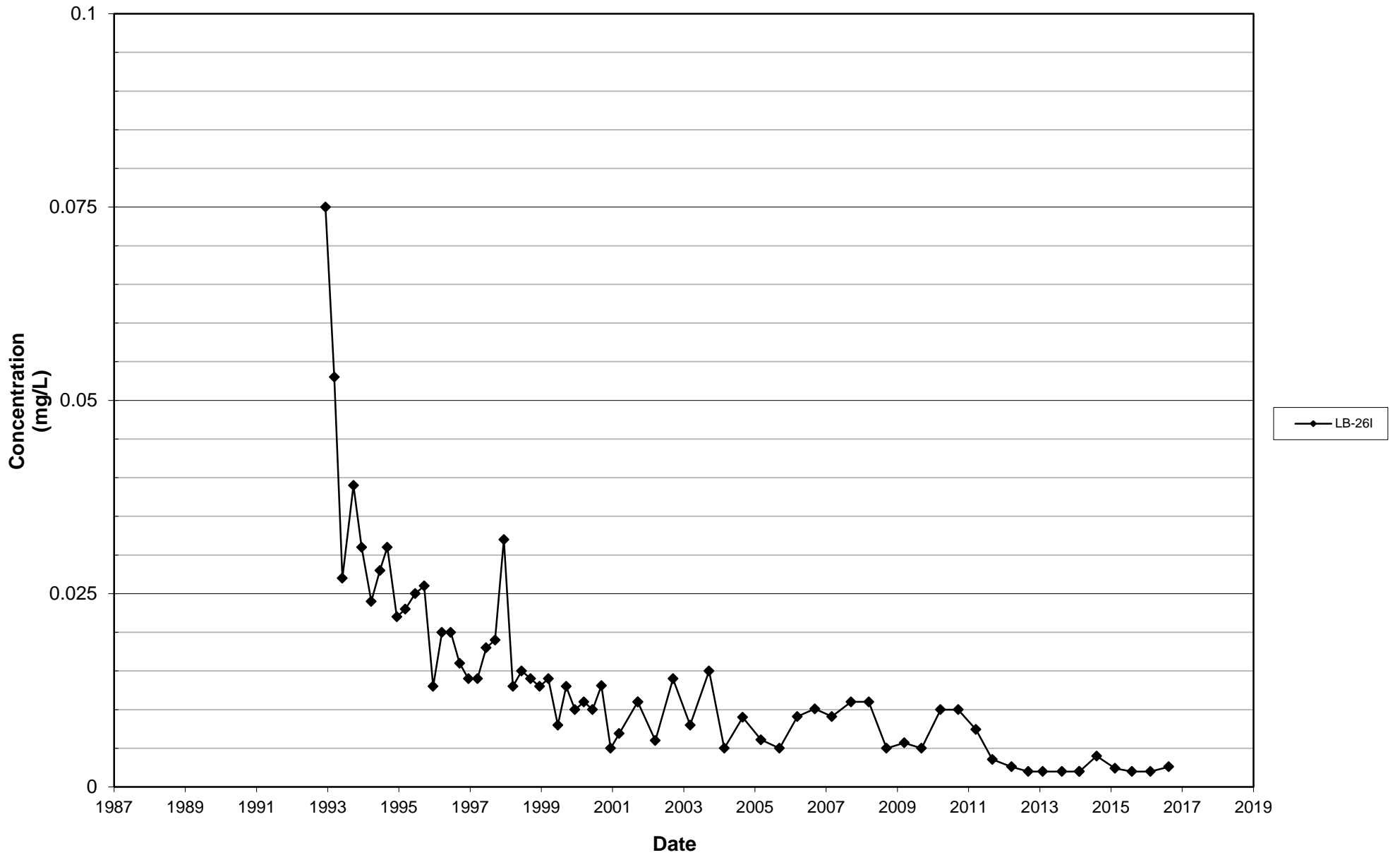
Leichner Landfill
Dissolved Manganese, LB-17D
1987 - 2016



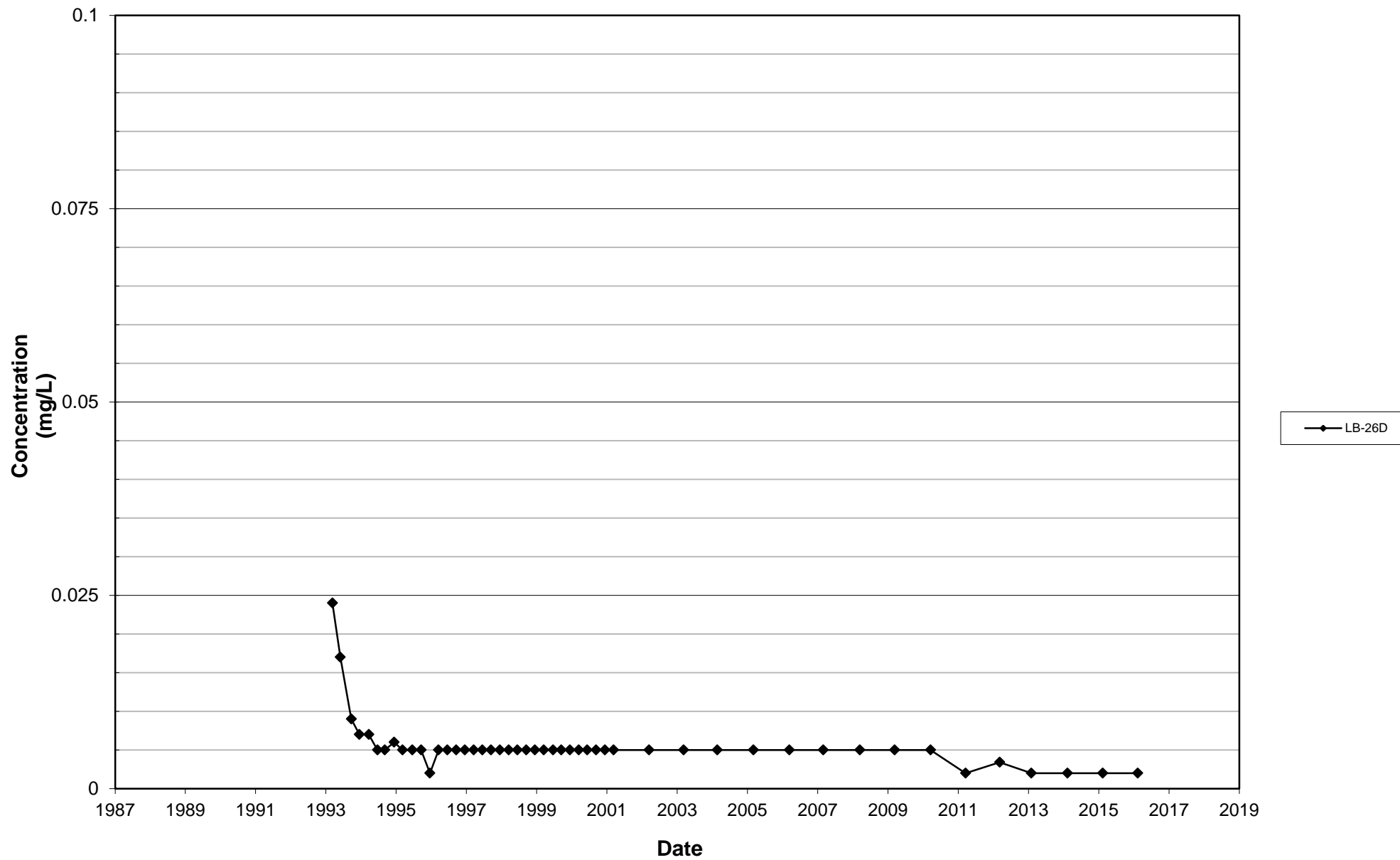
Leichner Landfill
Dissolved Manganese, LB-20S
1987 - 2016



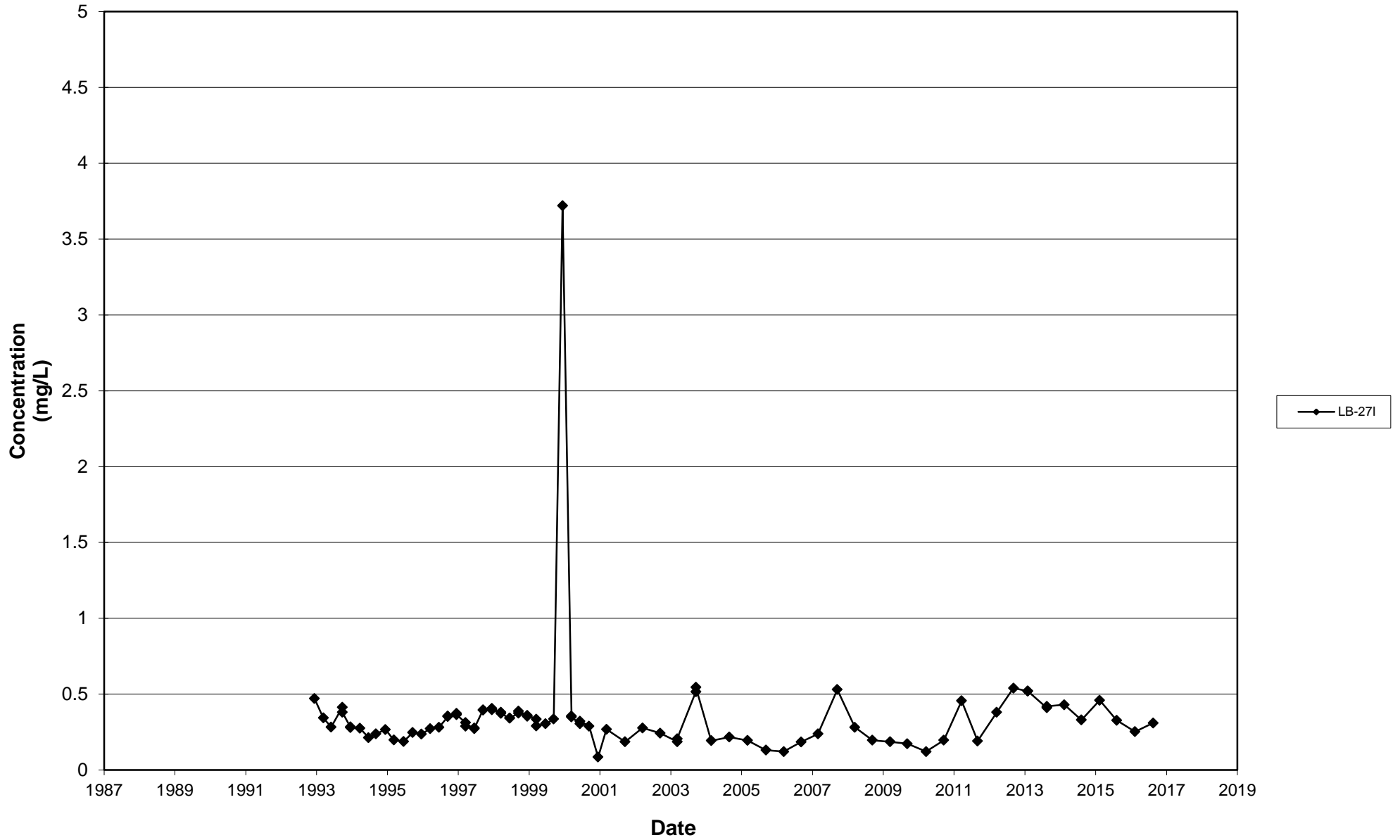
Leichner Landfill
Dissolved Manganese, LB-26I
1987 - 2016



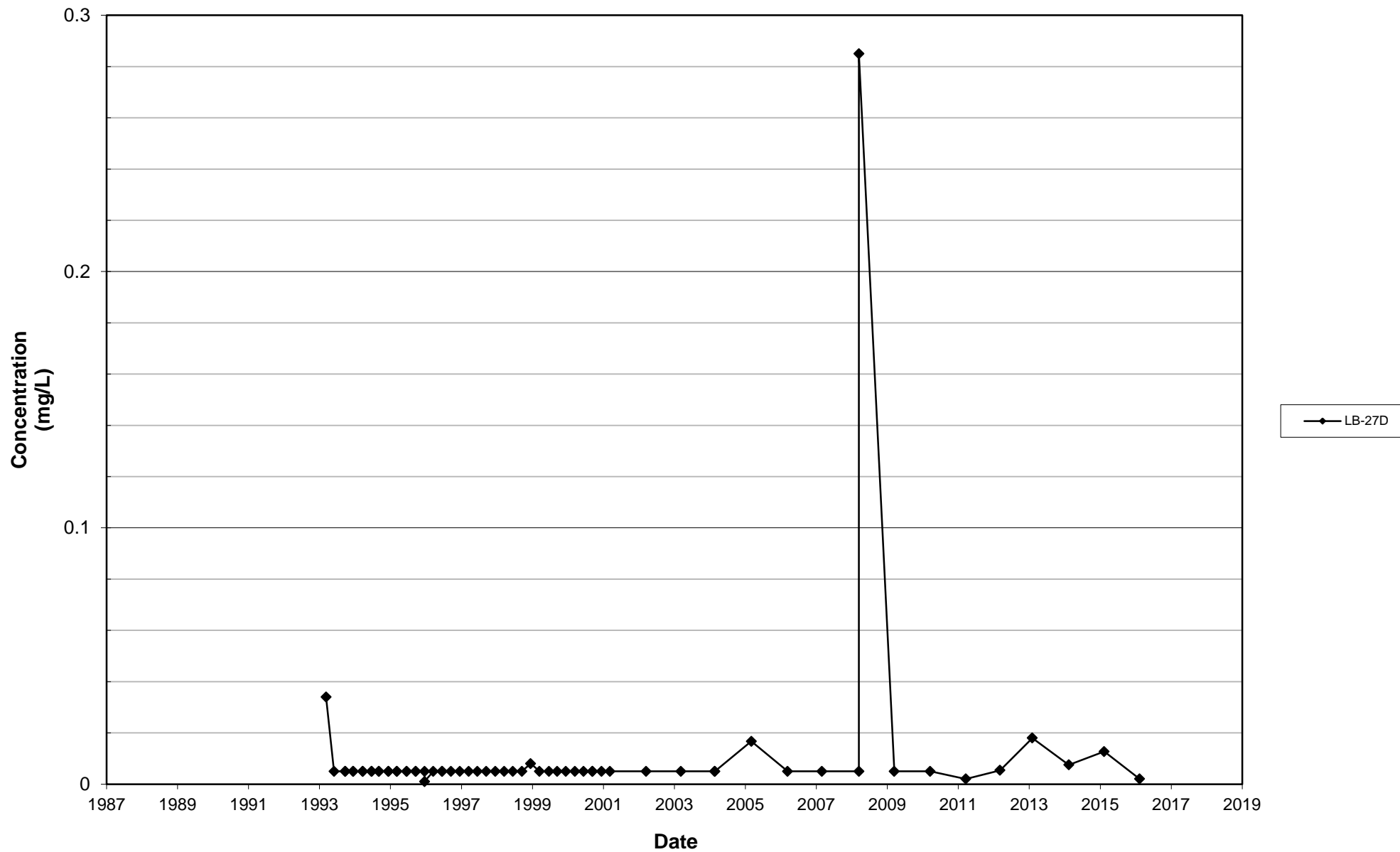
Leichner Landfill
Dissolved Manganese, LB-26D
1987 - 2016



Leichner Landfill
Dissolved Manganese, LB-27I
1987 - 2016



Leichner Landfill
Dissolved Manganese, LB-27D
1987 - 2016



APPENDIX G

Summary of 2016 Groundwater Statistical Calculations

Leichner Landfill
Groundwater Statistics - 2012 through 2016 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-1S					LB-1D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	11	11	Lognormal	10.67	14.44	5	5	Lognormal	7.41	7.65
Nitrate (mg/L)	11	11	Lognormal	5.86	6.79	5	5	Non	6.25	M(7.09)
TDS (mg/L)	11	11	Non	215.27	M(260.0)	5	5	Lognormal	189	209.87
Metals (mg/L)										
Iron (dissolved)	11	0	NC	NC	All ND	5	1	NC	0.036	M(0.036)
Manganese (dissolved)	11	1	NC	NC	M(0.002)	5	1	NC	0.0060	M(0.0058)
VOCs (µg/L)										
1,4-Dichlorobenzene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-3S					LB-3D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	5	5	Lognormal	3.80	4.14	5	5	Non	4.57	M(5.32)
Nitrate (mg/L)	5	5	Lognormal	3.89	4.22	5	5	Lognormal	4.68	4.82
TDS (mg/L)	5	5	Lognormal	175.0	189.17	5	5	Lognormal	182.00	197.49
Metals (mg/L)										
Iron (dissolved)	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	5	0	NC	NC	All ND	5	0	NC	NC	All ND
VOCs (µg/L)										
1,4-Dichlorobenzene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	5	0	NC	NC	All ND	5	0	NC	NC	All ND

Leichner Landfill
Groundwater Statistics - 2012 through 2016 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-5S					LB-5D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	10	10	Lognormal	4.11	4.41	5	5	Non	9.74	M(11.0)
Nitrate (mg/L)	10	10	Non	4.56	M(6.6)	5	5	Non	0.70	M(1.2)
TDS (mg/L)	10	10	Non	159.0	M(179.0)	5	5	Lognormal	225.0	237.82
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	10	0	NC	NC	All ND	5	3	Lognormal	0.0020	M(0.0026)
VOCs (µg/L)										
1,4-Dichlorobenzene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-6S					LB-20S				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	16	16	Lognormal	5.41	6.62	5	5	Lognormal	14.84	151.03
Nitrate (mg/L)	16	15	NC	1.51	M(2.65)	5	1	NC	0.40	M(0.40)
TDS (mg/L)	16	16	Lognormal	160.86	169.67	5	5	Non	243.0	M(340.0)
Metals (mg/L)										
Iron (dissolved)	16	1	NC	0.028	M(0.028)	5	5	Lognormal	0.20	0.88
Manganese (dissolved)	16	2	NC	0.002	M(0.0022)	5	5	Non	2.50	M(3.50)
VOCs (µg/L)										
1,4-Dichlorobenzene	16	0	NC	NC	All ND	5	3	Non	0.210	M(0.50)
Tetrachloroethene	16	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	16	0	NC	NC	All ND	5	0	NC	NC	All ND

* MTCASat 97 indicated lognormal distribution; however, the UCL 95 cannot be determined because more than 50 percent of the data are censored (i.e., non-detect).

Leichner Landfill
Groundwater Statistics - 2012 through 2016 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-10SR					LB-10DR				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	10	10	Lognormal	20.80	30.21	5	5	Lognormal	17.64	21.77
Nitrate (mg/L)	10	10	Lognormal	1.99	3.23	5	5	Lognormal	2.09	2.54
TDS (mg/L)	10	10	Lognormal	271.5	292.16	5	5	Non	275.6	M(290.0)
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	10	9	Non	0.003	M(0.0059)	5	1	Non	0.002	M(0.002)
VOCs (µg/L)										
1,4-Dichlorobenzene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-13I					LB-13D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	11	11	Lognormal	8.63	10.02	5	5	Non	4.70	M(5.03)
Nitrate (mg/L)	11	11	Non	3.93	M(4.50)	5	5	Lognormal	5.10	5.26
TDS (mg/L)	11	11	Non	201.0	M(220.0)	5	5	Lognormal	173.0	190.13
Metals (mg/L)										
Iron (dissolved)	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	11	6	Non	0.004	M(0.005)	5	0	NC	NC	All ND
VOCs (µg/L)										
1,4-Dichlorobenzene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND

Leichner Landfill
Groundwater Statistics - 2012 through 2016 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-17I					LB-17D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	5	5	Lognormal	10.90	12.07	6	6	Non	10.17	M(19.0)
Nitrate (mg/L)	5	0	NC	NC	All ND	6	0	NC	NC	All ND
TDS (mg/L)	5	5	Non	227.80	M(250.0)	6	6	Non	213.0	M(230.0)
Metals (mg/L)										
Iron (dissolved)	5	5	Lognormal	7.80	9.85	6	6	Normal	0.108	0.116
Manganese (dissolved)	5	5	Lognormal	1.19	1.54	6	6	Lognormal	4.0	4.33
VOCs (µg/L)										
1,4-Dichlorobenzene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	5	0	NC	NC	All ND	6	0	NC	NC	All ND

Parameter	LB-26I					LB-26D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	11	11	Lognormal	7.46	8.28	5	5	Non	5.17	M(5.88)
Nitrate (mg/L)	11	11	Lognormal	4.60	4.87	5	5	Non	5.65	M(5.90)
TDS (mg/L)	11	11	Non	197.64	M(210.0)	5	5	Lognormal	183.80	189.88
Metals (mg/L)										
Iron (dissolved)	11	3	NC	0.046	M(0.064)	5	0	NC	NC	All ND
Manganese (dissolved)	11	5	NC	0.003	M(0.004)	5	1	NC	0.003	M(0.0034)
VOCs (µg/L)										
1,4-Dichlorobenzene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND

**Leichner Landfill
Groundwater Statistics - 2012 through 2016 Data
95 Percent Upper Confidence Limits on the Mean**

Parameter	LB-27I					LB-27D				
	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b	No. Analyses	No. Detected	Distribution ^a	Mean	UCL 95 ^b
Inorganics										
Chloride (mg/L)	12	12	Lognormal	35.48	41.61	5	5	Non	10.15	M(13.0)
Nitrate (mg/L)	12	6	Lognormal	0.37	M(0.91)	5	5	Lognormal	4.10	4.17
TDS (mg/L)	12	12	Lognormal	375.92	393.22	5	5	Non	232.2	M(265.0)
Metals (mg/L)										
Iron (dissolved)	12	1	NC	0.032	M(0.032)	5	4	Lognormal	0.1	0.71
Manganese (dissolved)	12	12	Lognormal	0.408	0.47	5	4	Lognormal	0.011	0.11
VOCs (µg/L)										
1,4-Dichlorobenzene	12	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	12	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	12	0	NC	NC	All ND	5	0	NC	NC	All ND
Notes:										
mg/L = milligrams per liter; µg/L = micrograms per liter; NC = not calculated, more than 50% samples were non-detect; Non = neither normal nor lognormal distribution;										
M = default to maximum value per Statistical Guidance for Ecology Site Managers										
for the following scenarios: (a) more than 50% non-detect values, (b) both normal and lognormal distributions were rejected by MTCASat,										
and (c) UCL calculated using MTCASat was higher than the maximum value of the data set.										
^a Distribution was determined using MTCASat 97 program and Statistical Guidance for Ecology Site Managers.										
^b UCL 95 was calculated using MTCASat 97 program and Statistical Guidance for Ecology Site Managers.										

APPENDIX H

2016 Landfill Gas Probe Monitoring Data

**Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill**

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-1A	3/11/2016 12:28	0.0	3.3	18.5	78.2
GP-1A	6/1/2016 9:07	0.0	3.1	18.4	78.5
GP-1A	9/12/2016 11:26	0.0	2.8	19.5	77.7
GP-1A	12/19/2016 11:35	0.2	2.6	18.3	78.9
GP-1B	3/11/2016 12:28	0.0	2.8	18.7	78.5
GP-1B	6/1/2016 9:07	0.0	2.4	18.6	79.0
GP-1B	9/12/2016 11:27	0.0	2.1	19.6	78.3
GP-1B	12/19/2016 11:36	0.1	2.5	18.4	79.0
GP-02	3/11/2016 12:32	0.0	2.7	17.8	79.5
GP-02	6/1/2016 9:32	0.0	0.9	16.9	82.2
GP-02	9/12/2016 11:31	0.0	2.3	18.5	79.2
GP-02	12/19/2016 11:39	0.1	4.1	16.7	79.1
GP-03	3/11/2016 11:38	0.0	3.0	16.5	80.5
GP-03	6/1/2016 8:40	0.0	3.2	16.3	80.5
GP-03	9/12/2016 10:21	0.0	3.1	17.6	79.3
GP-03	12/19/2016 10:32	0.0	2.8	17.2	80.0
GP-4A	3/11/2016 11:59	0.0	4.2	15.3	80.5
GP-4A	6/1/2016 8:38	0.0	3.7	15.1	81.2
GP-4A	9/12/2016 10:46	0.0	3.2	17.5	79.3
GP-4A	12/19/2016 10:29	0.0	3.9	15.6	80.5
GP-4B	3/11/2016 12:00	0.0	4.4	10.2	85.4
GP-4B	6/1/2016 8:38	0.0	3.7	14.4	81.9
GP-4B	9/12/2016 10:47	0.0	3.1	17.0	79.9
GP-4B	12/19/2016 10:30	0.0	5.1	13.0	81.9
GP-05	3/11/2016 11:56	0.0	5.2	14.0	80.8
GP-05	6/1/2016 8:33	0.0	4.7	14.5	80.8
GP-05	9/12/2016 10:44	0.0	3.8	16.5	79.7
GP-05	12/19/2016 10:27	0.0	4.8	15.1	80.1
GP-06	3/11/2016 11:53	0.0	4.8	11.6	83.6
GP-06	6/1/2016 8:48	0.0	6.8	12.8	80.4
GP-06	9/12/2016 10:31	0.0	8.5	12.9	78.6
GP-06	12/19/2016 11:08	0.1	5.5	13.0	81.4
GP-07	3/11/2016 11:47	12.8	4.5	0.0	82.7
GP-07	3/25/2016 12:25	13.7	7.7	0.0	78.6
GP-07	3/28/2016 9:22	0.2	0.5	20.6	78.7
GP-07	6/1/2016 8:46	9.6	13.9	0.0	76.5

Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-07	6/6/2016 10:25	10.6	14.3	0.0	75.1
GP-07	6/7/2016 7:52	0.1	2.1	16.9	80.9
GP-07	9/12/2016 10:28	5.6	16.7	0.2	77.5
GP-07	9/13/2016 9:14	0.0	1.6	17.9	80.5
GP-07	12/19/2016 11:05	7.6	8.9	0.0	83.5
GP-07	12/21/2016 9:56	7.1	6.2	0.0	86.7
GP-07	12/21/2016 9:56	1.0	6.3	13.6	79.1
GP-8R	3/11/2016 11:43	0.0	2.0	19.3	78.7
GP-8R	6/1/2016 8:43	0.0	2.1	18.5	79.4
GP-8R	9/12/2016 10:24	0.0	2.2	19.9	77.9
GP-8R	12/19/2016 10:38	0.0	0.8	20.1	79.1
GP-9A	3/11/2016 12:11	17.3	18.2	0.0	64.5
GP-9A	3/25/2016 12:29	22.7	20.8	0.0	56.5
GP-9A	3/28/2016 9:28	0.0	0.2	20.9	78.9
GP-9A	6/1/2016 8:52	1.0	15.5	0.0	83.5
GP-9A	9/12/2016 11:16	0.0	6.3	10.9	82.8
GP-9A	12/19/2016 10:49	8.1	17.2	0.0	74.7
GP-9A	12/21/2016 11:50	4.0	17.2	0.0	74.7
GP-9B	3/11/2016 12:12	3.1	15.5	0.5	80.9
GP-9B	6/1/2016 8:54	1.0	15.7	0.0	83.3
GP-9B	9/12/2016 11:17	0.2	17.3	0.4	82.1
GP-9B	12/19/2016 10:50	1.4	17.4	0.0	81.2
GP-10A	3/11/2016 12:17	0.1	8.5	8.2	83.2
GP-10A	6/1/2016 8:56	0.0	9.3	8.8	81.9
GP-10A	9/12/2016 11:19	0.0	10.9	12.8	76.3
GP-10A	12/19/2016 10:51	0.0	8.1	11.1	80.8
GP-10B	3/11/2016 12:19	0.0	5.8	9.9	84.3
GP-10B	6/1/2016 8:56	0.0	5.2	16.1	78.7
GP-10B	9/12/2016 11:20	0.0	5.0	18.2	76.8
GP-10B	12/19/2016 10:52	0.0	2.8	17.7	79.5
GP-11	3/11/2016 13:00	4.7	5.7	2.4	87.2
GP-11	6/1/2016 9:46	0.0	2.3	14.6	83.1
GP-11	9/12/2016 11:40	0.0	1.9	19.0	79.1
GP-11	12/19/2016 11:50	0.0	2.2	16.9	80.9

Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-12	3/11/2016 12:57	0.0	3.4	19.4	77.2
GP-12	6/1/2016 9:44	0.0	0.8	19.7	79.5
GP-12	9/12/2016 11:37	0.0	1.6	20.5	77.9
GP-12	12/19/2016 11:47	0.0	0.9	19.6	79.5
GP-13	3/11/2016 13:04	0.0	2.9	15.0	82.1
GP-13	6/1/2016 9:54	0.0	2.5	17.1	80.4
GP-13	9/12/2016 11:44	0.0	1.5	20.0	78.5
GP-13	12/19/2016 11:55	0.0	2.0	17.6	80.4
GP-14	3/11/2016 13:09	0.0	2.4	17.1	80.5
GP-14	6/1/2016 9:56	0.0	1.5	19.9	78.6
GP-14	9/12/2016 11:46	0.0	1.2	20.9	77.9
GP-14	12/19/2016 11:57	0.0	0.8	19.8	79.4
GP-15	3/11/2016 13:12	0.0	1.7	19.7	78.6
GP-15	6/1/2016 9:59	0.0	1.4	19.1	79.5
GP-15	9/12/2016 11:49	0.0	1.2	19.8	79.0
GP-15	12/19/2016 12:00	0.0	2.1	19.4	78.5
GP-16D	3/11/2016 13:20	0.0	1.9	18.9	79.2
GP-16D	6/1/2016 10:09	0.0	1.6	17.5	80.9
GP-16D	9/12/2016 11:55	0.0	2.1	18.4	79.5
GP-16D	12/19/2016 12:10	0.0	3.6	18.1	78.3
GP-16S	3/11/2016 13:21	0.0	1.9	20.2	77.9
GP-16S	6/1/2016 10:11	0.0	2.1	18.6	79.3
GP-16S	9/12/2016 11:57	0.0	2.4	19.6	78.0
GP-16S	12/19/2016 12:12	0.0	1.5	19.5	79.0
GP-17D	3/11/2016 13:25	0.0	2.2	18.9	78.9
GP-17D	6/1/2016 10:16	0.0	1.9	18.5	79.6
GP-17D	9/12/2016 12:01	0.0	2.6	17.9	79.5
GP-17D	12/19/2016 12:17	0.0	4.8	16.7	78.5
GP-17S	3/11/2016 13:26	0.0	2.5	17.7	79.8
GP-17S	6/1/2016 10:17	0.0	2.8	17.8	79.4
GP-17S	9/12/2016 12:02	0.0	2.4	19.2	78.4
GP-17S	12/19/2016 12:18	0.0	4.2	17.3	78.5
GP-18D	3/11/2016 13:33	0.0	2.5	18.7	78.8
GP-18D	6/1/2016 10:33	0.0	2.1	19.1	78.8
GP-18D	9/12/2016 12:08	0.0	2.1	19.5	78.4
GP-18D	12/19/2016 12:36	0.0	2.2	18.3	79.5

**Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill**

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-18S	3/11/2016 13:34	0.0	2.1	19.8	78.1
GP-18S	6/1/2016 10:34	0.0	1.8	19.7	78.5
GP-18S	9/12/2016 12:09	0.0	1.9	20.2	77.9
GP-18S	12/19/2016 12:38	0.0	1.2	19.1	79.7
GP-19D	3/11/2016 13:39	0.0	2.2	18.2	79.6
GP-19D	6/1/2016 10:37	0.0	1.8	18.8	79.4
GP-19D	9/12/2016 12:12	0.0	2.0	18.4	79.6
GP-19D	12/19/2016 12:43	0.0	3.7	16.6	79.7
GP-19S	3/11/2016 13:39	0.0	2.3	19.3	78.4
GP-19S	6/1/2016 10:38	0.0	1.6	19.7	78.7
GP-19S	9/12/2016 12:13	0.0	1.6	19.6	78.8
GP-19S	12/19/2016 12:44	0.0	2.0	16.4	81.6
GP-20	3/11/2016 13:46	0.0	7.4	2.7	89.9
GP-20	6/1/2016 10:47	0.0	7.9	8.3	83.8
GP-20	9/12/2016 12:19	0.0	5.5	10.8	83.7
GP-20	12/19/2016 12:50	0.0	12.0	2.3	85.7
GP-21A	3/11/2016 13:51	0.0	3.0	19.6	77.4
GP-21A	6/1/2016 10:53	0.0	1.8	19.8	78.4
GP-21A	9/12/2016 12:26	0.0	2.4	20.1	77.5
GP-21A	12/19/2016 12:55	0.0	1.3	19.3	79.4
GP-21B	3/11/2016 13:52	0.0	2.2	18.0	79.8
GP-21B	6/1/2016 10:54	0.0	1.5	19.7	78.8
GP-21B	9/12/2016 12:26	0.0	1.9	19.9	78.2
GP-21B	12/19/2016 12:56	0.0	2.0	18.4	79.6
GP-22	3/11/2016 13:54	0.0	1.8	19.8	78.4
GP-22	6/1/2016 10:56	0.0	1.2	19.9	78.9
GP-22	9/12/2016 12:28	0.0	1.2	20.5	78.3
GP-22	12/19/2016 12:57	0.0	1.7	19.5	78.8
GP-23	3/11/2016 13:55	0.0	1.8	19.3	78.9
GP-23	6/1/2016 10:57	0.0	1.1	19.6	79.3
GP-23	9/12/2016 12:30	0.0	1.0	20.4	78.6
GP-23	12/19/2016 12:59	0.0	2.1	19.5	78.4
GP-24A	3/11/2016 13:57	0.0	1.6	19.8	78.6
GP-24A	6/1/2016 10:59	0.0	0.9	20.2	78.9
GP-24A	9/12/2016 12:31	0.0	0.7	20.7	78.6
GP-24A	12/19/2016 13:00	0.0	1.0	20.0	79.0

**Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill**

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-24B	3/11/2016 13:58	0.0	1.5	19.9	78.6
GP-24B	6/1/2016 11:00	0.0	0.8	20.2	79.0
GP-24B	9/12/2016 12:32	0.0	0.5	21.0	78.5
GP-24B	12/19/2016 13:01	0.0	1.3	20.4	78.3
GP-25A	3/11/2016 14:03	0.0	2.0	18.7	79.3
GP-25A	6/1/2016 11:05	0.0	1.9	18.4	79.7
GP-25A	9/12/2016 12:37	0.0	0.9	20.5	78.6
GP-25A	12/19/2016 13:07	0.0	2.2	19.0	78.8
GP-25B	3/11/2016 14:03	0.0	2.6	18.2	79.2
GP-25B	6/1/2016 11:05	0.0	2.6	17.2	80.2
GP-25B	9/12/2016 12:38	0.0	1.7	17.5	80.8
GP-25B	12/19/2016 13:07	0.0	3.5	19.1	77.4
GP-26	3/11/2016 14:08	0.0	1.4	20.5	78.1
GP-26	6/1/2016 11:14	0.0	1.6	20.0	78.4
GP-26	9/12/2016 12:43	0.0	1.3	20.9	77.8
GP-26	12/19/2016 13:12	0.0	0.6	20.5	78.9
GP-27	3/11/2016 14:09	0.0	1.2	20.2	78.6
GP-27	6/1/2016 11:16	0.0	1.0	19.9	79.1
GP-27	9/12/2016 12:45	0.0	0.9	20.5	78.6
GP-27	12/19/2016 13:14	0.0	0.6	20.3	79.1
GP-28	3/11/2016 11:34	0.0	3.2	10.7	86.1
GP-28	6/1/2016 8:13	0.0	5.4	12.1	82.5
GP-28	9/12/2016 10:14	0.0	3.3	17.5	79.2
GP-28	12/19/2016 10:18	0.0	4.8	14.6	80.6
GP-29	3/11/2016 12:49	0.0	6.0	6.9	87.1
GP-29	6/1/2016 8:29	0.0	7.6	4.7	87.7
GP-29	9/12/2016 10:36	0.0	6.9	8.7	84.4
GP-29	12/19/2016 10:24	0.0	0.3	20.6	79.1
GP-30A	3/11/2016 12:44	0.0	3.7	15.0	81.3
GP-30A	6/1/2016 8:22	0.0	5.4	14.8	79.8
GP-30A	9/12/2016 10:41	0.0	5.9	15.9	78.2
GP-30A	12/19/2016 10:12	0.0	4.3	16.1	79.6
GP-30B	3/11/2016 12:45	0.0	4.1	14.8	81.1
GP-30B	6/1/2016 8:24	0.0	5.2	15.0	79.8
GP-30B	9/12/2016 10:42	0.0	4.7	16.8	78.5
GP-30B	12/19/2016 10:13	0.1	4.2	16.1	79.6

**Table H-1
2016 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill**

Probe	Date and Time	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-31	3/11/2016 13:36	0.0	1.8	20.0	78.2
GP-31	6/1/2016 10:35	0.0	1.5	20.1	78.4
GP-31	9/12/2016 12:10	0.0	1.3	20.3	78.4
GP-31	12/19/2016 12:40	0.0	1.4	19.6	79.0
GP-32	3/11/2016 13:41	0.0	2.0	18.6	79.4
GP-32	6/1/2016 10:41	0.0	1.6	19.4	79.0
GP-32	9/12/2016 12:15	0.0	1.5	19.6	78.9
GP-32	12/19/2016 12:46	0.0	2.8	17.1	80.1
GP-33	3/11/2016 13:42	0.0	2.4	17.1	80.5
GP-33	6/1/2016 10:44	0.0	1.9	19.0	79.1
GP-33	9/12/2016 12:17	0.0	2.0	17.4	80.6
GP-33	12/19/2016 12:48	0.0	3.9	12.3	83.8
GP-34	3/11/2016 13:48	0.0	6.6	10.7	82.7
GP-34	6/1/2016 10:49	0.0	5.2	15.3	79.5
GP-34	9/12/2016 12:20	0.0	5.0	14.2	80.8
GP-34	12/19/2016 12:52	0.0	6.4	11.0	82.6
GP-35	3/11/2016 13:50	0.0	4.9	12.9	82.2
GP-35	6/1/2016 10:52	0.0	3.1	17.3	79.6
GP-35	9/12/2016 12:24	0.0	3.9	17.4	78.7
GP-35	12/19/2016 12:53	0.0	2.7	15.3	82.0
GP-36	3/11/2016 13:59	0.0	1.5	18.9	79.6
GP-36	6/1/2016 11:01	0.0	1.0	18.5	80.5
GP-36	9/12/2016 12:34	0.0	0.8	19.2	80.0
GP-36	12/19/2016 13:03	0.0	2.5	18.2	79.3
GP-37	3/11/2016 14:01	0.0	1.8	18.2	80.0
GP-37	6/1/2016 11:03	0.0	1.2	18.6	80.2
GP-37	9/12/2016 12:35	0.0	1.1	18.9	80.0
GP-37	12/19/2016 13:05	0.0	3.8	17.3	78.9
GP-38	3/11/2016 14:05	0.0	1.7	19.7	78.6
GP-38	6/1/2016 11:09	0.0	1.9	19.4	78.7
GP-38	9/12/2016 12:40	0.0	1.2	20.0	78.8
GP-38	12/19/2016 13:09	0.0	1.6	18.0	80.4