2022 Annual Report
Closed Leichner Landfill
Vancouver, Washington
Consent Decree 96-2-03081-7
Facility ID No. 1017

Clark County Public Health
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04223030.14 | February 15, 2023

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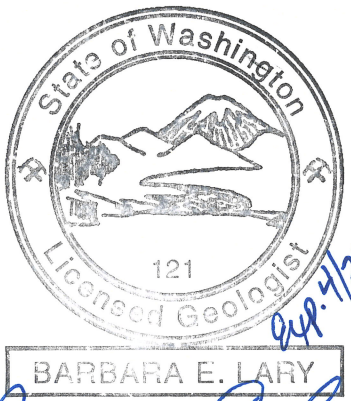

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A complete copy of this report is provided on compact disc attached to back cover of report.

1.0 INTRODUCTION

This report presents and evaluates the results of groundwater and landfill gas (LFG) compliance monitoring performed during 2022 at the closed Leichner Landfill located in Vancouver, Washington (Figure 1-1). The report also summarizes notable landfill maintenance, repair, and construction activities performed during 2022. 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 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 State Department of Ecology (Ecology) and Clark County Public Health (CCPH) in July 2013 (SCS, 2013).

Although not directly related to environmental monitoring, it should be mentioned that the County formally notified Ecology and CCPH in November 2019 of the purchase-and-sale agreement (PSA) with the City of Vancouver (City) for the Koski property. The sale was finalized in December 2020. The Koski property is part of the overall closed Leichner Landfill property (see Figure 1-1). The City intends to develop the Koski property as the operations center for its Public Works Department. The City submitted to Ecology and CCPH a letter of intent dated January 15, 2020 (City, 2020) to join as a responsible party to the Consent Decree.

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; closure activities included constructing 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 consists of 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. 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 Troutdale Formation aquifer. The monitoring well locations are shown in Figure 2-1. The following describes the nomenclature used for the site monitoring wells:

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

The compliance groundwater quality monitoring well network consists of 18 monitoring wells[1] that were sampled during the annual monitoring event performed in February 2022: 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 monitoring these during the semiannual monitoring event performed in July 2022: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-26I, and LB-27I.

It should be noted that two monitoring wells LB-9SR and LB-22S (see Figure 2-1) were decommissioned in late August 2021 to accommodate the planned construction of the NE 99th Street road extension across the northern portion of the site, including the North Detention Basin. The fieldwork activities were performed in accordance with the May 2021 work plan (SCS, 2021c) approved by Ecology in an email dated May 26, 2021. A report documenting the decommissioning of these wells dated September 22, 2021 was submitted to Ecology and CCPH (SCS, 2021d). Once road construction activities are completed likely by the end of the second quarter 2023, replacement monitoring wells will be installed close to the original well locations.

Groundwater samples collected from the site monitoring wells in 2022 were submitted for laboratory analyses to ALS Environmental in Kelso, Washington. The samples were analyzed for nitrate as nitrogen (nitrate), total dissolved solids (TDS), chloride (Cl), dissolved iron (Fe), dissolved manganese (Mn), and volatile organic compounds (VOCs), consistent with testing methods specified in the CMP (SCS, 2013). Laboratory analytical data reports are provided in Appendix C (included on the attached compact disc [CD] only).

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. The 2022 field parameter monitoring results are provided in Appendix B (see Table B-1).

[1] The compliance monitoring network described in the 2013 CMP (SCS, 2013) includes monitoring wells LB-4SR and LB-4D formerly located east of the Leichner Landfill property. These two wells, along with well LB-4I, were decommissioned in August 2014 as approved by Ecology (Ecology, 2014).

2.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

Static depth-to-groundwater levels were measured on February 14, 2022 and July 25, 2022, and converted to groundwater elevations for interpreting groundwater potentiometric surface contours and groundwater flow in the alluvial WBZ and Troutdale Formation aquifer (see Figures 2-2 through 2-5). The 2022 and historical groundwater elevation data are presented in Appendix D.

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, with minor southeast to southwest variations (see Figures 2-3 and 2-5). The 2022 groundwater flow directions were consistent with historical interpretations of groundwater flow at Leichner Landfill.

Groundwater elevation hydrographs are provided in Appendix D. The 2022 groundwater elevation data are 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 and hydrographs in Appendix D) appear to be influenced by the presence of the silty (sandy silt and clayey silt) aquitard. 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), groundwater elevations are about 20 to 25 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) and west of the landfill (LB-3S/LB-3D), 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 assurance/quality control (QA/QC) procedures included collecting field groundwater 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. ALS Environmental incorporated its laboratory data quality review comments in the Case 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. The QA/QC reviews (Appendix E) indicated that no laboratory QA/QC issues were identified that required corrective action, and the data were acceptable for their intended use.

2.4 GROUNDWATER ANALYTICAL RESULTS

Laboratory analytical results of groundwater samples collected from site monitoring wells in 2022 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 below.

2.4.1 Volatile Organic Compounds

VOCs for which compliance levels were established in the 1996 Consent Decree, and that are still part of the analytical testing program (including 1,4-dichlorobenzene, tetrachloroethene, and

trichloroethene)[2], were not detected above the laboratory method reporting limits (MRLs) in groundwater samples collected in February and July 2022.

During the February 2022 semiannual monitoring event, chloroform and bromodichloromethane (BDCM) were detected in monitoring well LB-3S, and verified through resampling in April 2022 (Table B-2). The detected VOCs were considered anomalous because VOCs have not been detected in monitoring well LB-3S historically. Notification of the VOC detections in groundwater samples collected in 2022 from LB-3S, and of the County's proposed follow-up activities (including implementing quarterly sampling of LB-3S and nearby wells LB-1S and LB-20S) were provided in a memorandum to CCPH and Ecology on August 30, 2022 (SCS, 2022b).

Well LB-3S (along nearby monitoring wells LB-1S and LB-20S) were sampled during the following three quarters (May, July, and November 2022) and chloroform was detected above the laboratory MRLs in the LB-3S groundwater samples at concentrations ranging from 0.66 to 0.89 microgram per liter (µg/L), which are below the WAC Groundwater Quality Criteria of 7.0 ug/L. BCDM was detected during April and May sampling events at 0.5 to 0.53 ug/L and nondetect during the July and November 2022 monitoring events. The WAC Groundwater Quality Criteria for BDCM is 0.3 µg/L. VOCs were detected in any of the samples collected from wells LB-1S and LB-20S.

The source of the recent 2022 VOC concentrations in LB-3S groundwater is undetermined. The detected VOCs are considered anomalous because (1) they have not been historically detected in groundwater at Leichner Landfill and (2) VOCs have not been detected in LB-3S (See Table B-2). While LFG and/or leachate was historically a source of VOC contamination to groundwater, these recent VOC detections are inconsistent with VOC results for at least the last 10 years. Additionally, the 2022 VOCs signature is not characteristic of VOCs typically found in groundwater due to a leachate release or from LFG, such as other halogenated VOCs; fluorinated VOCs dichlorofluoromethane (DCFM) and trichlorofluoromethane (TCFM); and benzene, toluene, ethylbenzene, and xylenes (BTEX).

2.4.2 Inorganic Parameters and Dissolved Metals

The 2022 analytical data for inorganic parameters (nitrate, Cl, TDS) and dissolved metals (Mn and Fe) are summarized in Appendix B (see Table B-3), and time-concentration graphs of historical data for these parameters are provided in Appendix F.

Overall, 2022 groundwater analytical results for inorganic parameters and dissolved metals were generally consistent with historical data. Table 2-1 summarizes 2022 groundwater concentrations above compliance levels. Concentrations of Mn and/or Fe above the compliance levels were detected in three wells located downgradient and near the landfill areas (i.e., LB-17I, LB-17D, and LB-20S). However, Fe and/or Mn concentrations detected above the compliance levels in groundwater collected from these wells may be attributed, in part, to localized variations in natural groundwater chemistry, as previously reported to Ecology, based on the following:

- The concentrations of other leachate indicator parameters, including TDS and Cl, have not shown increasing or elevated concentrations in groundwater collected from these wells and are significantly below compliance levels (see time-concentration graphs in Appendix F).

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

- Fe and Mn have occasionally been detected at concentrations above the compliance levels in groundwater samples collected from cross-gradient well LB-10SR (see Figures 2-2 and 2-4) screened in the shallow alluvium WBZ (see time-concentration diagrams in Appendix F).
- Mn concentrations in groundwater samples collected from well LB-20S since 2006 have shown an overall decreasing trend since 2013 and are typically below the compliance level (see time-concentration diagrams in Appendix F).
- Fe and/or Mn concentrations in samples collected from 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) have remained stable (or non-detect) throughout most of their extensive monitoring history (see time-concentration diagrams in Appendix F).

2.4.2.1 Statistical Analysis of Groundwater Analytical Data

Leichner Landfill groundwater quality data from 2018 to 2022 for inorganic parameters (nitrate, Cl, and TDS) and dissolved metals (Mn and Fe) were statistically evaluated using the MTCA Stat97 program.[3] 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. Table 2-2 provides a summary of calculated UCL-95 of the mean values, along with groundwater compliance levels established in the Consent Decree and CAP.

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 (EPA, 2002), the method may commonly yield estimated UCL-95 values that are greater than predicted for data distributions that are not truly lognormal (i.e., non-parametric data). When sample sizes are small and the variance is large, the method can be impractical. This resulted in a UCL-95 value for chloride in LB-13D groundwater that exceeded the range of concentrations. In these cases, the highest reported value from the last 5 monitoring years (2018 to 2022) was selected (see Table 2-2).

[3] MTCA Stat97 was obtained from Ecology's website: http://www.ecy.wa.gov/programs/tcp/tools/Mtca.exe.

The calculated UCL-95 values, or default highest reported values, for nitrate, Cl, TDS, Fe and Mn were below their respectively compliance levels except for the following:

- Nitrate: The calculated UCL-95 value for nitrate was above the compliance level of 10 mg/L in well LB-10SR groundwater. Nitrate concentrations in well LB-10SR groundwater exhibited variability by two orders of magnitude (0.75 to 23.4 mg/L) between 2018 and 2022. Historical nitrate concentrations in well LB-10SR (and former well LB-10S) have shown notable fluctuations that are reflective of natural background concentrations.
- Iron: The calculated UCL-95 values, or default highest reported values, for dissolved Fe were above the compliance of 0.3 mg/L in groundwater from well LB-17I (UCL-95 of 13.84 mg/L) and LB-17D (UCL-95 of 0.33 mg/L).
- Manganese: The calculated UCL-95 values, or default highest reported values, for dissolved Mn were above the compliance level of 0.05 mg/L, in groundwater from wells LB-17I (UCL-95 of 3.09 mg/L), LB-17D (UCL-95 of 4.29 mg/L), LB-20S (UCL-95 of 8.10 mg/L), and LB-27I (UCL-95 of 0.235 mg/L).

The above results are consistent with those previously reported in annual reports.

2.4.2.2 Trend Analysis of Groundwater Analytical Data

Time-series concentration plots were generated for each of the inorganic parameters tested (see Appendix F) and evaluated visually to assess whether groundwater parameter concentrations exhibit increasing, decreasing or stable trends. Key results are presented below.

Inorganic parameter concentrations in groundwater samples collected from alluvial WBZ wells and Troutdale Formation wells show either generally stable or decreasing trends (particularly since about 2001), except for nitrate concentrations in samples collected from wells MW-5D, LB-10SR, LB-10DR, LB-26I, and LB-27D. As previously discussed, changes in nitrate concentrations detected in these wells are believed to be reflective of background (i.e., non-landfill-impacted) groundwater conditions. It should be noted that the maximum detected nitrate concentrations in groundwater collected from these wells are below the regulatory compliance level of 10 mg/L. While recent nitrate fluctuations in LB-10SR included detections above the compliance level of 10 mg/L, the concentrations are within the range detected historically in this well and former well LB-10S. As noted above, these appear to be reflected of natural background concentrations.

Some parameters show notable fluctuations but do not exhibit increasing trends. For example, LB-03D groundwater had elevated chloride and nitrate concentrations in February 2022 which immediately decreased during the July 2022 monitoring event, although the concentrations were below their respective compliance levels. It appears chloride has an overall decreasing trend in LB-3D while nitrate has a steady to slightly increasing trend.

It is also noteworthy that Cl, TDS, Fe, and Mn concentrations in groundwater collected from wells LB-17I, LB-17D, and LB-20S, located downgradient and in close proximity to the former landfilling areas, exhibited pronounced decreasing concentration trends generally from about 1991-1993 to 2001 (see time-concentration plots in Appendix F). These decreasing concentration trends were likely in response to the implementation of Leichner Landfill's post-closure systems, including the landfill cover system and the stormwater control and collection system. Concentrations of these inorganic parameters in groundwater samples collected from these wells have remained relatively stable and/or exhibited decreasing trends since about 2001, except for Cl in well LB-20S (see time-concentration diagrams in Appendix F).

3.0 STORMWATER MONITORING

The County received formal approval from Ecology to terminate Leichner Landfill's General Stormwater Permit (No. WAR005572B) as memorialized in a letter dated March 30, 2018 (Ecology, 2018). As a result, monthly stormwater inspection, quarterly monitoring, and annual reporting are no longer required, and these activities were suspended in the first quarter of 2018.

Consistent with Ecology's requirements noted in its March 30, 2018 letter (Ecology, 2018), the County will retain and make available upon request to Ecology or any other local government agency the facility's Stormwater Pollution Prevention Plan (SWPPP), along with all notices of intent, reports on inspections, and all other reports required by the General Stormwater Permit for at least three years from the date of termination.

In 2022, the County coordinated with Clark County Public Works (CCPW) in support of the engineering design and construction of stormwater control system for the extension of 99th Street through the northern portion of the Leichner Landfill. The road project required decommissioning and filling of the North Detention Pond (completed in 2022), redesign of the stormwater control system, and repair of landfill liner system along the southern edge of the North Detention Pond potentially impacted by the road construction. This work will continue in 2023. Dewatering of the area started in December 2022 and groundwater samples of dewatering groundwater were collected and analyzed. As of January 1, 2023, no impacts were found based on review of the groundwater results. The County will keep Ecology apprised of these developments if impacts to the landfill require modification to the landfill liner system.

4.0 LANDFILL GAS MONITORING

This section describes the GCCS that was initially installed at the Leichner Landfill in 1978, and presents compliance and performance monitoring results associated with the GCCS. The GCCS 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, and installation of a new micro-flare in October 2020 (discussed in Section 4.3.1) to replace the former flare due to further decreases in methane production. The current GCCS includes an LFG extraction well field with 102 gas extraction wells, a condensate collection system, an LFG blower and flare station (BFS), and an integrated remote monitoring and control (RMC) system. The RMC system 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.

4.1 COMPLIANCE LANDFILL GAS MIGRATION MONITORING RESULTS

Compliance LFG migration monitoring at Leichner Landfill is performed to (1) fulfill compliance monitoring requirements for 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 BFS.

The LFG compliance monitoring network is comprised of 51 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.

To accommodate construction of the NE 99th Street road project, six LFG wells, located in the northern portion of the site (probes GP-14R, GP-18S, GP-18D, GP-19S, GP-19D, and GP-31; see Figure 4-1), were decommissioned in accordance with the May 2021 work plan (SCS, 2021c) approved by Ecology. A September 2021 report documenting the probe decommissioning (SCS, 2021d) was submitted to Ecology and CCPH. As noted in the May 2021 work plan (SCS, 2021c), two replacement probes will be installed once road construction activities are completed in 2023.

Compliance LFG monitoring was performed quarterly in 2022 (March, June, September, and December). Quarterly monitoring data collected in 2022 are summarized in Table 4-1. Monitoring results indicate methane was predominantly not detected in the LFG monitoring probes, except in probe GP-07 measured in March 2022. The methane detected in GP-07 was immediately addressed with adjustments to the GCCS. Monitoring of the probe the following day after the adjustments indicated no methane detected.

4.2 LANDFILL GAS EXTRACTION WELLS

The LFG extraction wells (see Figure 4-1) were monitored and adjusted (balanced) semi-monthly (twice a month) during 2022 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 in 2022.

4.3 LANDFILL GAS FLARE

4.3.1 Installation of New Micro-Flare

The LLOC approved in 2019 the installation of a new, smaller, more efficient LFG micro-flare. The old flare was turned off and disassembled on September 28, 2020, and the new flare was started on October 2, 2020.

A new Air Discharge Permit (ADP 20-3433) was issued by the Southwest Clean Air Agency (SWCAA) in 2020. As required, an emissions source test of the newly installed micro-flare was conducted by Montrose Air Quality Services, LLC (Montrose) on December 9, 2020. A report presenting the source test results performed to meet the requirements under Permit No 20-3433 was submitted to SWCAA in January 2021 (Montrose, 2021). A report documenting the installation of the new flare was submitted to SWCAA under separate cover in March 2021 (SCS, 2021b).

4.3.2 Landfill Gas Flare Monitoring

The LFG flare system was monitored regularly (typically on a weekly or biweekly basis) in 2022 and continuously by 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.

To meet the annual reporting requirements of the ADP, the 2021 Annual Flare Emissions Estimate report, dated March 15, 2022 (SCS, 2022a), was submitted to the SWCAA. The report presents and evaluates flare monitoring data and performance objectives.

4.4 GREENHOUSE GAS MONITORING

SCS completed an evaluation in November 2013 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 weekly monitoring. Consequently, weekly GHG monitoring was suspended beginning January 2014.

5.0 MAINTENANCE AND REPAIR OF LANDFILL POST-CLOSURE SYSTEMS

5.1 ROUTINE ACTIVITIES

Routine operations, maintenance, and repair of the GCCS and stormwater collection and control system performed in 2022 included the following:

- Performing checks and adjusting 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 wellfields.
- Performing general maintenance of the (1) detention pond pumps, (2) air compressor for the condensate collection and Module 2 stormwater pumping systems, and (3) Module 2 stormwater management system.
- Coordinating periodic pumping and disposal of condensate collected from the condensate sumps and temporarily stored in the onsite condensate holding tank.
- Performing vegetation control.
- Reviewing and uploading the LFG monitoring data into SCS's site-specific DataServices™ database for the Leichner Landfill project.

5.2 NON-ROUTINE ACTIVITIES

Notable non-routine maintenance, repair, and replacement activities related to the Leichner Landfill's post-closure systems and equipment performed in 2022 are described in this section unless already previous discussed in this report.

5.2.1 First Quarter 2022

- Reset high water level alarm settings in the North Pond pump vault.
- Repaired/cleaned the propane solenoid so that it could operate correctly.
- Setup waste profile for condensate disposal. Met subcontractor onsite to pump off condensate tanks for off-site disposal.
- Performed troubleshooting to resolve technical problems with the flare RMC data output.
- Reviewed information from Clark Regional Wastewater District (CRWWD) (including its construction stormwater permit) related to storing/managing dewatering groundwater

generated from road construction project in either the North Pond or north borrow pit area.

- Prepared/submitted to County a memo assessing the viability of and outlining requirements/conditions for using these landfill facilities to manage dewatering groundwater generated off-site. Reviewed analytical results from dewatering groundwater sample and geomembrane specifications provided by CRWWD.

- Participated in virtual meetings in February with CCPH to discuss issues related to managing groundwater generated during sewer construction on landfill.

- Reviewed information from CRWWD (including their construction stormwater permit and Administrative Order) related to storing/managing dewatering groundwater generated from NE 99th Street Extension construction project in either the North Pond or North Borrow pit area.

- At the County's request, reviewed the applicability of the state of Washington's new HB1663 to the Leichner Landfill and its impact on establishing new air compliance requirements. Prepared a brief response memorandum and provided it to the County.

- Provided onsite support for upcoming 99th street construction and dewatering activities, including emptying the North Pond.

5.2.2 Second Quarter 2022

- Welded 6-inch pipe as part of the rerouting of the South Pond discharge line.

- Inspected newly installed South pond stormwater discharge line during a rain event to ensure proper discharge was occurring. Made some modifications to the configuration of the discharge line.

- Removed pump and conducted cleanup of North Pond prior to backfill activities.

- Performed troubleshooting to resolve problem with the remote flare startup.

- Installed new well heads for LFG extraction wells SW-5 and SE-11.

- Prepared for and collected groundwater samples from wells LB-05s and LB-06s for analysis of per- and polyfluoroalkyl substances (PFAS) per the City of Vancouver's request and with the County's approval. Work required conducting additional sampling and handling procedures to prevent introducing contamination during sampling and coordinating the sampling with the City. Reviewed groundwater sample results from wells LB-05S and LB-06S for analysis of PFAS and provided the analytical results to the City.

- Continued reviewing information from CCPW (including its stormwater permit and AO) and prepared memo providing SCS's review comments of AO, stormwater plan, and Nutter's Control of Water plan.

- Assembled and revised detailed budget for construction support and groundwater monitoring during upcoming road construction.

- Sampled the water in the North Pond and submitted the results to the County.

- Provided support for North Pond dewatering and demolition of the utility shed and pump vault at North Pond. Prepared for and removed pumps and associated equipment to facilitate construction activities for the 99th Street road project.

- Prepared draft/final memo describing the proposed sampling/analysis plan for monitoring the quality of dewatering groundwater during construction and prepared cost estimates for CQA/construction and engineering support and dewatering groundwater monitoring during road construction.

- Attended onsite construction meetings and provided as needed on-site support and oversight of construction activities and follow-up communications with the County Project Manager.

5.2.3 Third Quarter 2022

- Reviewed upcoming landfill liner adjustments with SCS engineering staff

- Restarted flare following onsite power outage that occurred on July 27, 2022 and addressed high heat issues that resulted from the shutdown.

- Performed trenching and installed a new 6-inch discharge line from the South Pond pump vault to the new force main. Work involved (1) connecting the new line to the existing 8-inch discharge line in the vault, (2) installing a tracer wire, (3) backfilling the trench, and (4) placing seed and hay over disturbed areas.

- Attended weekly construction meetings with Nutter Corporation and documented the key points of the meetings for distribution to the project team.

5.2.4 Fourth Quarter 2022

- Performed troubleshooting of weather station issues and power loss; made necessary repairs.

- Evaluated and resolved issues with the flare shutting down due to air leaks and other issues.

- Assessed flare temperature issues related to a non-operational louvers motor. Electrician diagnosed and repaired the problem.

- Responded to an alarm from South Pond pumping system. Arrived onsite October 21, 2022 to find no liquid in South Pond. Performed troubleshooting of South Pond pump to determine why it wasn't operating and performed the necessary repairs.

- Diagnosed electrical problem with the South Pond pumps and performed manual pumping until the high-water levels in pond returned to normal. Switched back to automatic operation after manual pumping was completed.

- Conducted inspection activities and identified a leak in the newly-installed conveyance (discharge) lines from South Pond. Excavated the 8-inch discharge line and repaired it. Provided County with an estimate for replacing the discharge line.

- Initiated weekly sampling of dewatering groundwater generated during the sewer line installation and provided the County with the analytical results from each sampling event.

- Attended weekly construction meetings with Nutter Corporation and documented the key points of the meetings for distribution to the project team.

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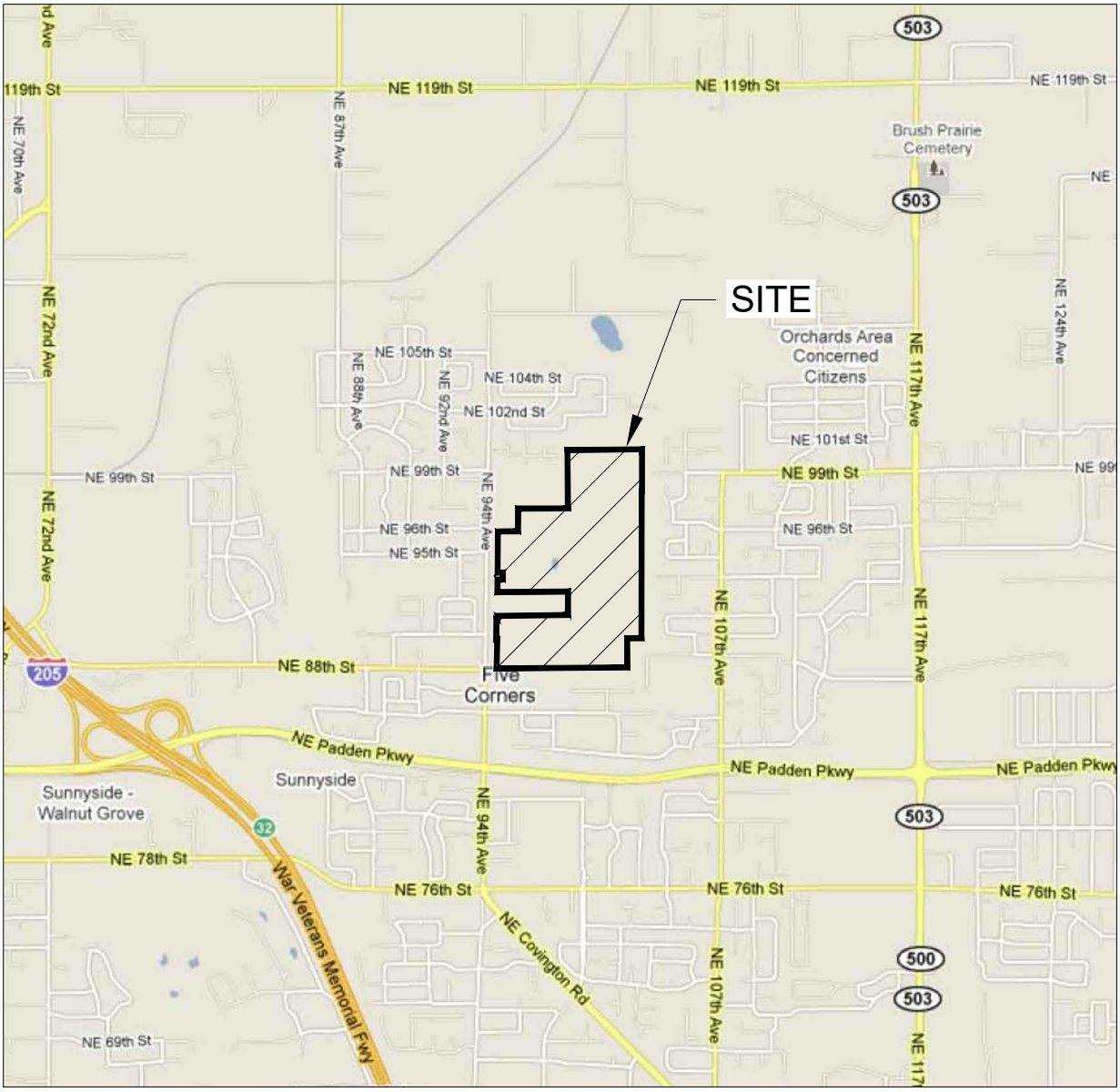
FIGURES



NOT TO SCALE

WASHINGTON

SOURCE: GOOGLE MAPS

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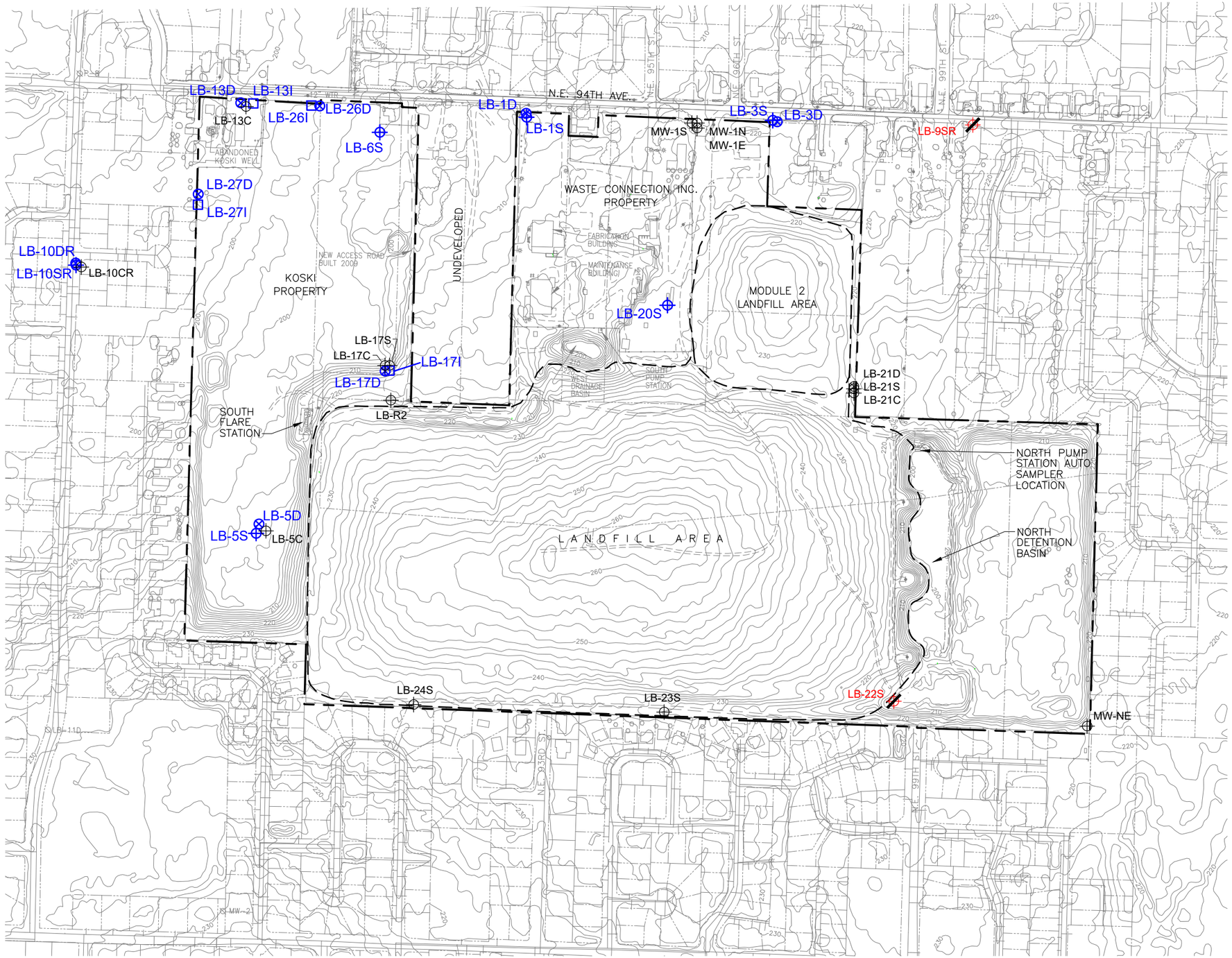
PROJECT NO. 04223030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 1-1	APP BY L.C.

SITE LOCATION MAP

LEICHNER LANDFILL
CLARK COUNTY, WASHINGTON

DATE JANUARY 2023

FIGURE 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
LB-22S ⊕	Decommissioned Monitoring Well Location, 2021
———	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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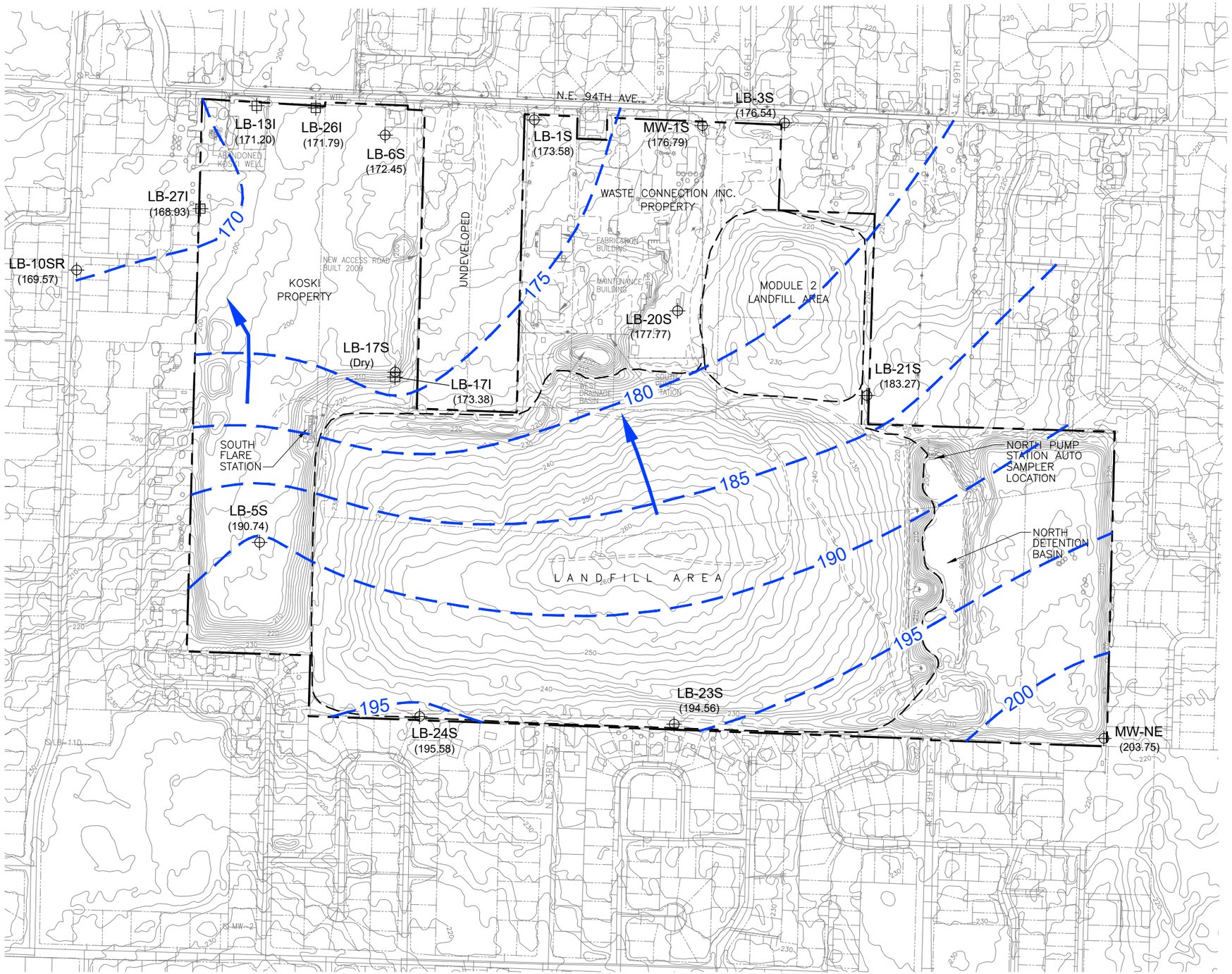
SCALE
0 400 800 FEET

PROJECT NO. 04223030.14	DES BY B.L.	GROUNDWATER MONITORING WELL LOCATIONS	DATE JANUARY 2023
SCALE AS SHOWN	CHK BY B.L.	LEICHNER LANDFILL VANCOUVER, WASHINGTON	FIGURE 2-1
CAD FILE FIGURE 2-1	APP BY L.C.		



LEGEND:

LB-5S ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-17I ⊕	Monitoring Well Location, Middle of Alluvial Water–Bearing Zone
— — —	Property Boundary
— — —	Limit of Landfill Cover and Approximate Edge of Waste
— —200— —	Groundwater Potentiometric Surface Contour, queried where uncertain
(173.38)	Groundwater Elevation Measured on February 14, 2022
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

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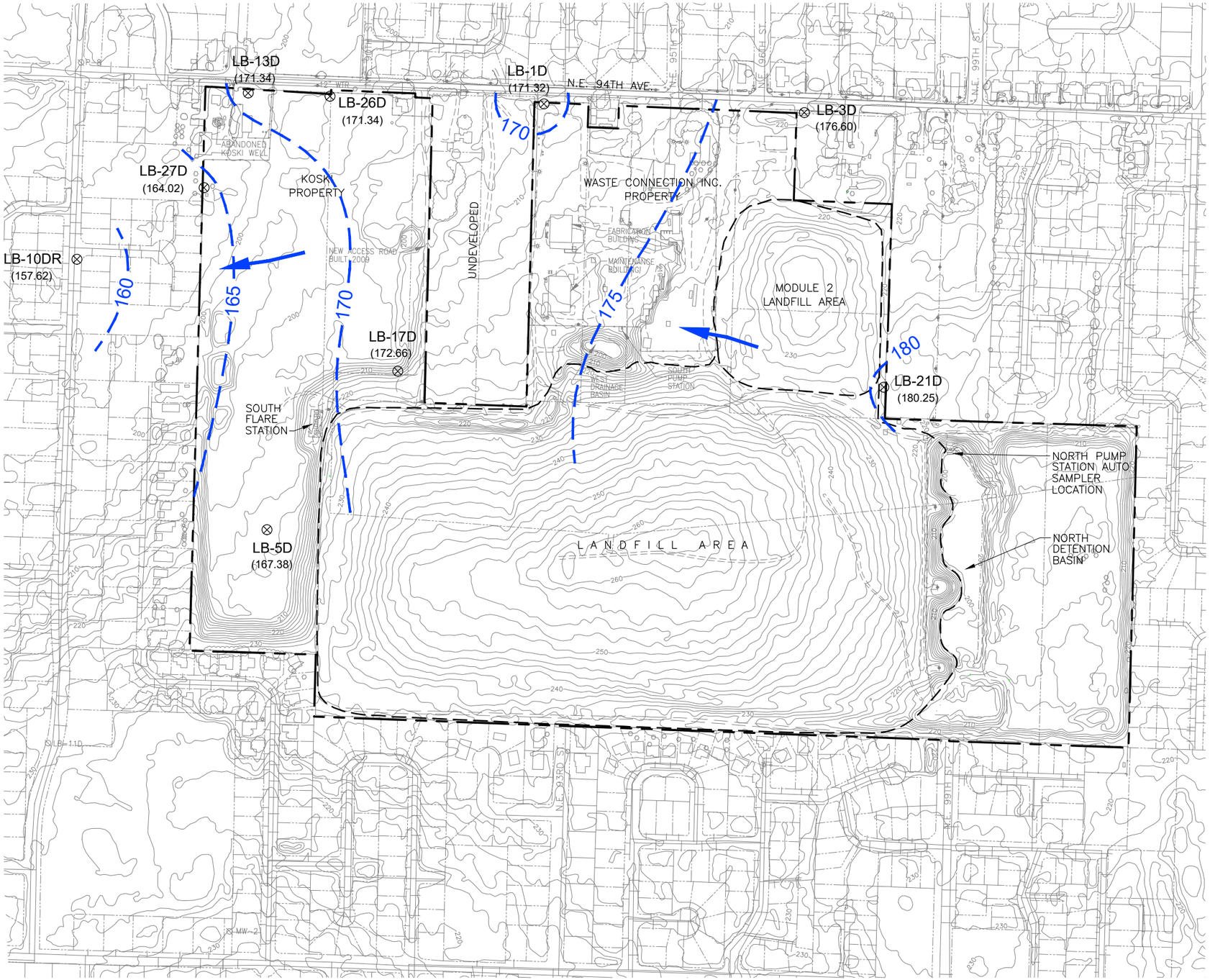
SCALE
0 400 800 FEET

PROJECT NO. 04223030.14	DES BY B.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE FEBRUARY 14, 2022 LEICHNER LANDFILL VANCOUVER, WASHINGTON	DATE JANUARY 2023
SCALE AS SHOWN	CHK BY B.L.		FIGURE 2-2
CAD FILE FIGURE 2-2	APP BY L.C.		



LEGEND:

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
(167.38)	Groundwater Elevation Measured on February 14, 2022
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

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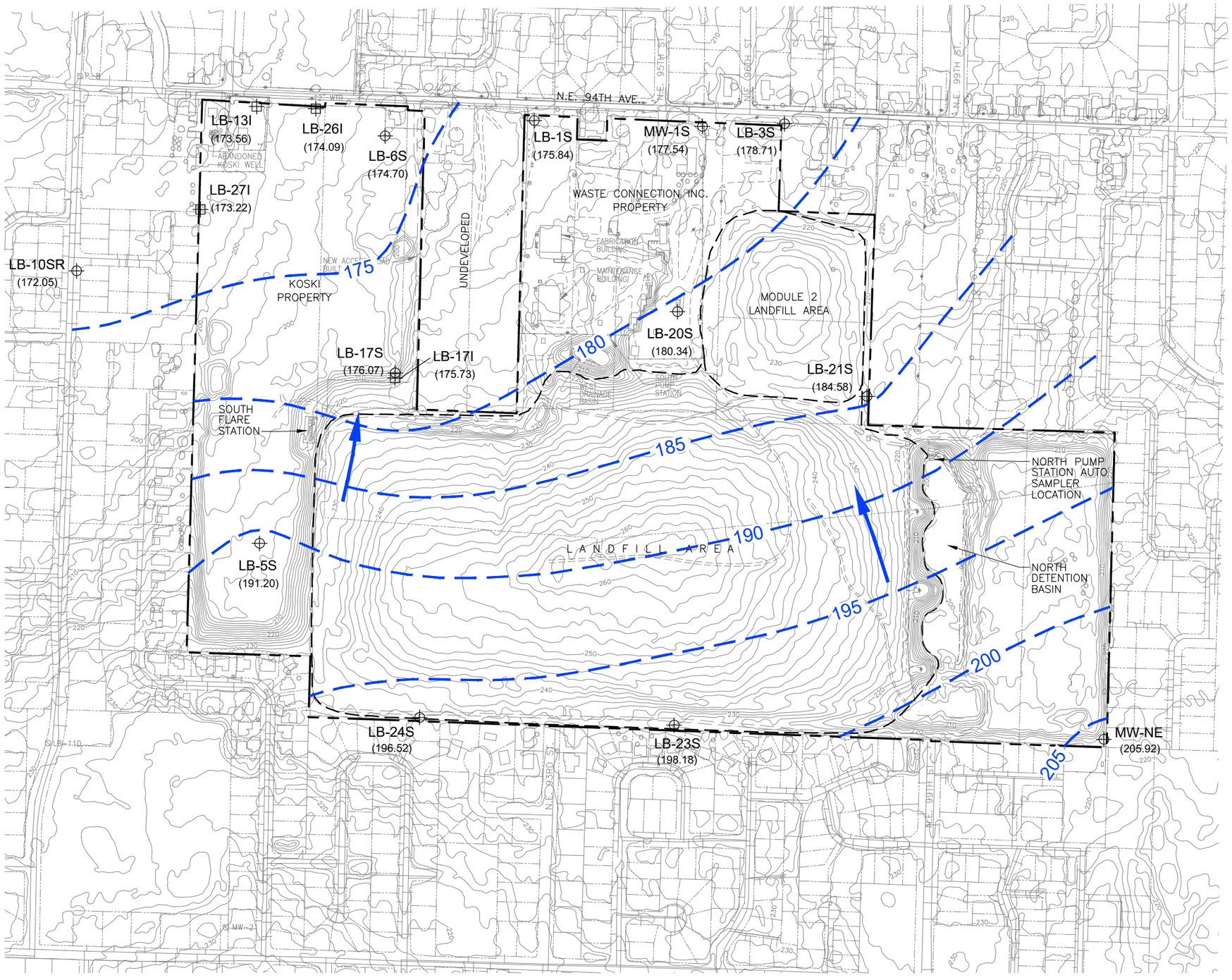
SCALE
0 400 800 FEET

PROJECT NO. 04223030.14	DES BY B.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER FEBRUARY 14, 2022 LEICHNER LANDFILL VANCOUVER, WASHINGTON	DATE JANUARY 2023
SCALE AS SHOWN	CHK BY B.L.		FIGURE 2-3
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
(175.73)	Groundwater Elevation Measured on July 25, 2022
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

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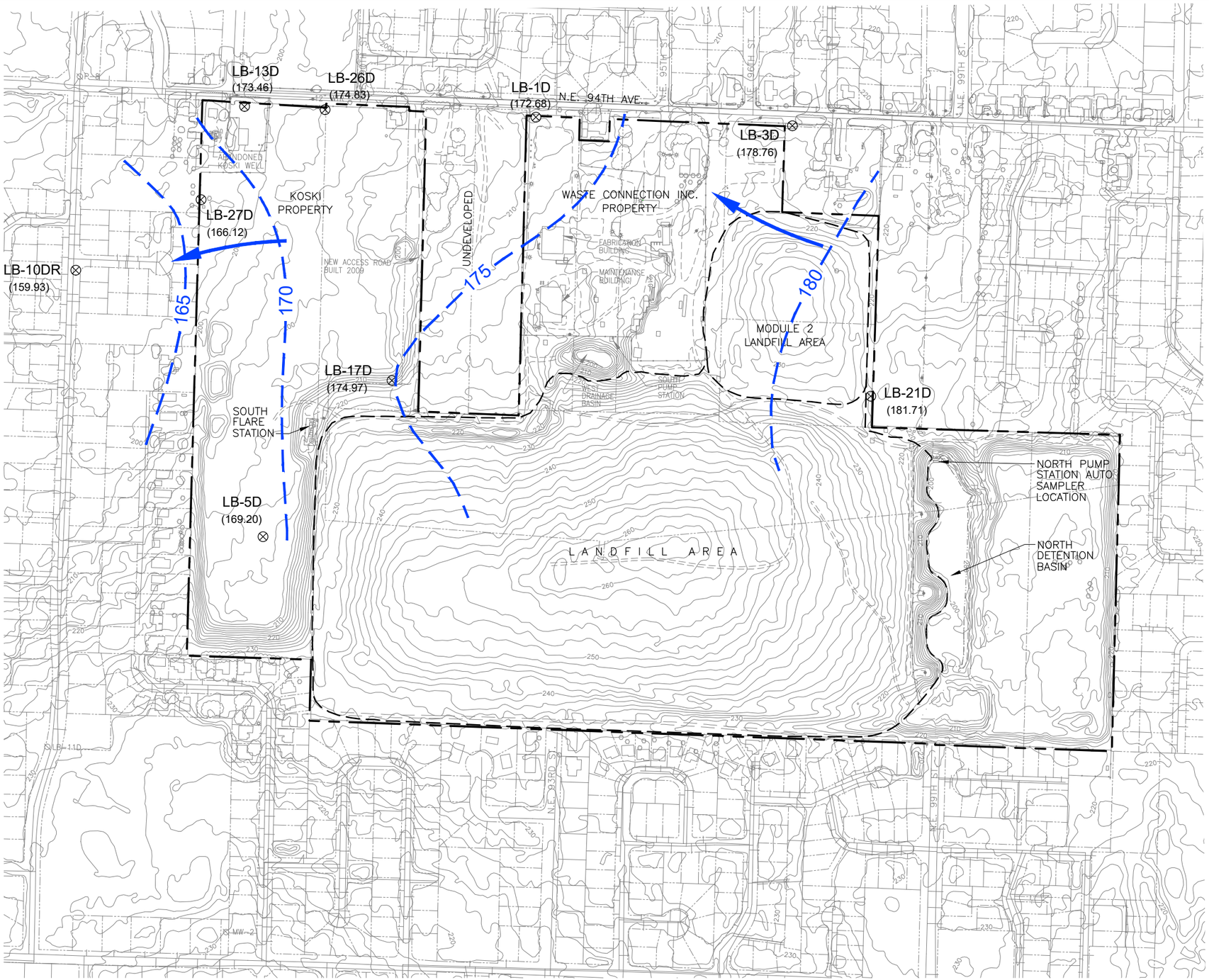
PROJECT NO. 04223030.14	DES BY B.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE JULY 25, 2022 LEICHNER LANDFILL VANCOUVER, WASHINGTON	DATE JANUARY 2023
SCALE AS SHOWN	CHK BY B.L.		FIGURE 2-4
CAD FILE FIGURE 2-4	APP BY L.C.		



LEGEND:

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
(164.72)	Groundwater Elevation Measured on July 25, 2022
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

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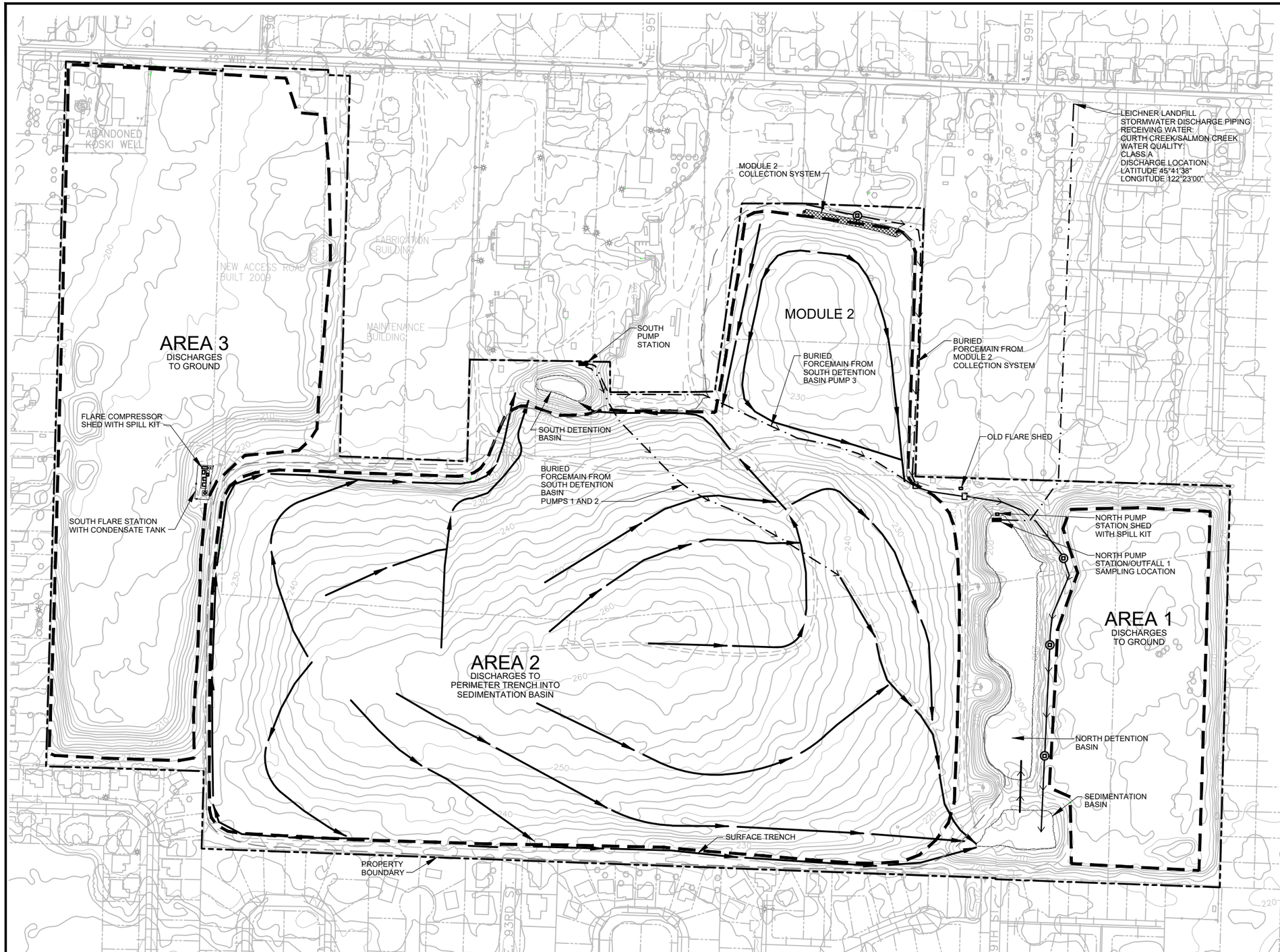
SCALE
0 400 800 FEET

PROJECT NO. 04223030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 2-5	APP BY L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
TROUTDALE FORMATION AQUIFER
JULY 25, 2022
LEICHNER LANDFILL
VANCOUVER, WASHINGTON

DATE JANUARY 2023
FIGURE 2-5



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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SCALE
0 300 600 FEET

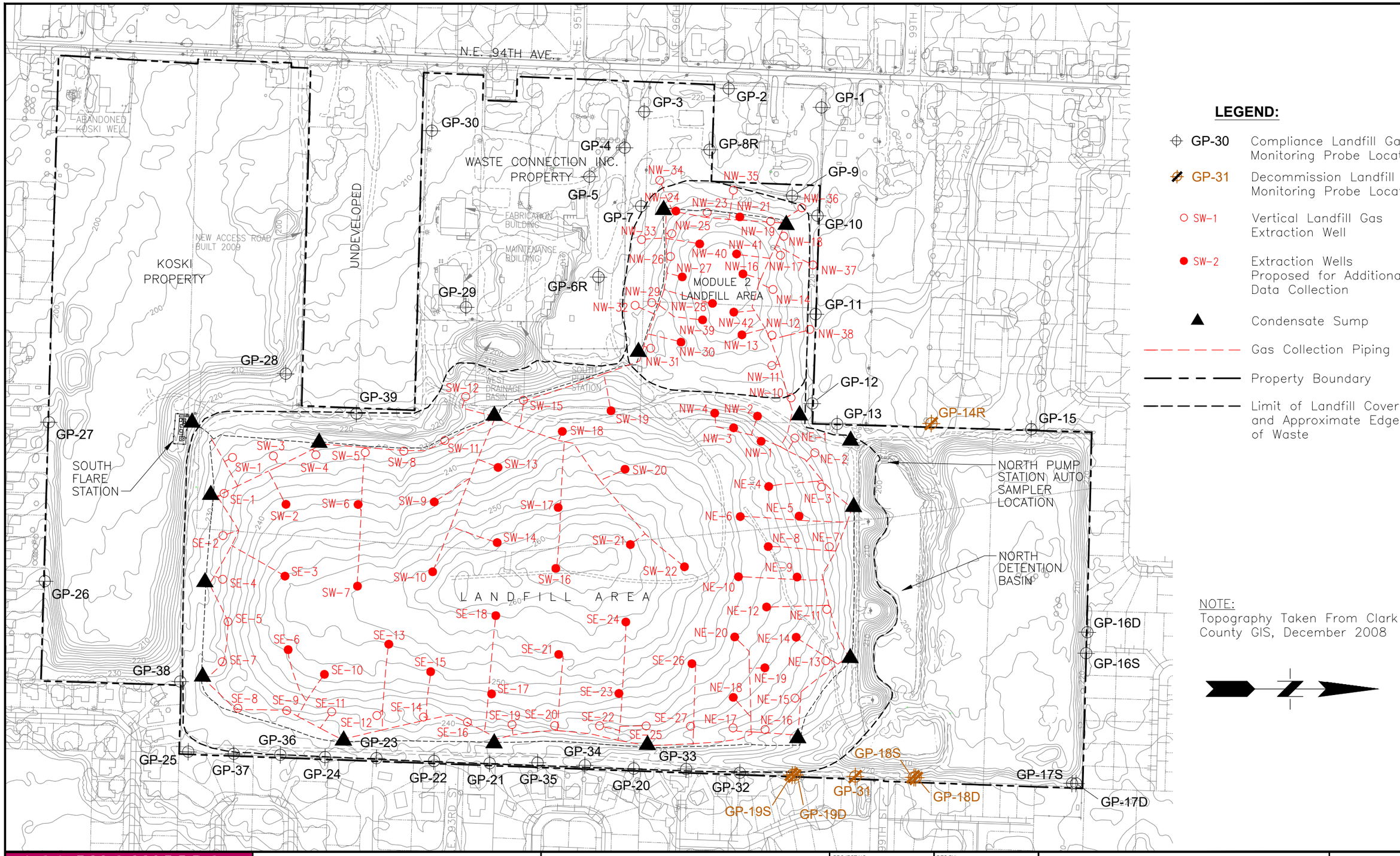
PROJECT NO. 04223030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 3-1	APP BY L.C.

SITE MAP AND STORMWATER SYSTEM

LEICHNER LANDFILL
VANCOUVER, WASHINGTON

DATE JANUARY 2023

FIGURE 3-1



LEGEND:

- GP-30 — Compliance Landfill Gas Monitoring Probe Location
- GP-31 — Decommission 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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SCALE
0 300 600 FEET

PROJECT NO. 04223030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 4-1	APP BY L.C.

LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS

LEICHNER LANDFILL
VANCOUVER, WASHINGTON

DATE JANUARY 2023
FIGURE 4-1

TABLES

Table 2-1
2022 Groundwater Concentrations Above Compliance Levels
Leichner Landfill

Location	Sample Number	Date	Nitrate as Nitrogen (CL = 10 mg/L)	Dissolved Iron (CL = 0.3 mg/L)	Dissolved Manganese (CL = 0.05 mg/L)
LB-10SR	LB-020620-01-10SR	2/6/20	23.40	---	---
LB-10SR	LB-101420-05-10SR	10/14/20	---	---	---
LB-10SR	LB-021821-03-10SR	2/18/21	---	---	---
LB-10SR	LB-081021-02-10SR	8/10/21	15.20	---	---
LB-10SR	LB-021522-08-10SR	2/15/22	---	---	---
LB-10SR	LB-072622-05-10SR	7/26/22	---	---	---
LB-17D	LB-020520-03-17D	2/5/20	---	---	4.17
LB-17D	LB-021821-09-17D	2/18/21	---	---	4.06
LB-17D	LB-021422-04-17D	2/14/22	---	0.326	3.58
LB-17I	LB-020520-05-17I	2/5/20	---	9.42	1.58
LB-17I	LB-021921-03-17I	2/19/21	---	14.50	2.86
LB-17I	LB-021622-09-17I	2/16/22	---	11.00	2.41
LB-20S	LB-020620-02-20S	2/6/20	---	---	0.119
LB-20S	LB-021921-01-20S	2/19/21	---	---	0.251
LB-20S	LB-021522-04-20S	2/15/22	---	---	0.0779
LB-20S	LB-072622-01-20S	7/26/22	---	---	0.445
LB-20S	LB-112922-03-20S	11/29/22	---	---	---
LB-27I	LB-020520-06-27I	2/5/20	---	---	0.134
LB-27I	LB-072820-02-27I	7/28/20	---	---	0.320
LB-27I	LB-021921-04-27I	2/19/21	---	---	0.079
LB-27I (DUP)	LB-021921-04-27I	2/19/21	---	---	0.082
LB-27I	LB-021622-02-27I	2/16/22	---	---	---
LB-27I	LB-072522-03-27I	7/25/22	---	---	---
MW-NE	LB-031621-06-NE	3/16/21		---	0.235

Notes:
CL = compliance level for inorganic parameters and metals in groundwater at Leichner Landfill.
mg/L = milligrams per liter
WGQC =Ground water quality criteria
µg/L = micrograms per liter
--- = concentration was below the compliance level

Table 2-2
Statistical Summary of Groundwater Quality Data From 2018 to 2022
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
Inorganic Parameters																				
Chloride	250	mg/L	M(12.2)	6.48	5.62	M(10.1)	5.03	8.08	7.01	9.88	12.11	10.59	M(10.8)	M(10.20)	16.77	90.44	8.98	M(6.21)	38.50	7.61
Nitrate	10	mg/L	4.7	5.97	M(6.82)	M(9.14)	5.45	M(1.92)	3.47	**M(23.4)**	3.59	4.74	4.86	All ND	All ND	NC	4.16	M(5.55)	1.97	M(4.25)
Total Dissolved Solids	500	mg/L	191.10	M(170)	165.00	181.27	164.97	211.10	M(187)	253.72	221.98	204.36	M(179.00)	305.26	209.46	329.90	198.47	189.0	287.17	M(213)
Metals																				
Iron (dissolved)	0.3	mg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	13.84	M(0.33)	All ND	NC	All ND	All ND	NC
Manganese (dissolved)	0.05	mg/L	All ND	All ND	All ND	All ND	All ND	0.0027	All ND	All ND	All ND	0.0070	All ND	3.09	M(4.29)	8.10	0.0040	All ND	0.235	NC

NOTES:
mg/L = milligrams per liter
ND = indicates not detected at any sampling event
M = maximum value detected in last five years shown in parenthesis.
NC = not calculated.
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 (Ecology, 1992).

Table 4-1
2022 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-1A	3/14/2022	0.0	2.3	17.9	79.8
GP-1A	6/8/2022	0.0	3.3	16.7	80.0
GP-1A	9/29/2022	0.0	1.8	20.4	77.8
GP-1A	12/16/2022	0.0	2.1	19.3	78.6
GP-1B	3/14/2022	0.0	2.2	18.6	79.2
GP-1B	6/8/2022	0.0	2.7	17.2	80.1
GP-1B	9/29/2022	0.0	1.6	20.6	77.8
GP-1B	12/16/2022	0.0	2.0	19.1	78.9
GP-02	3/14/2022	0.0	2.5	18.6	78.9
GP-02	6/8/2022	0.0	2.5	16.6	80.9
GP-02	9/29/2022	0.0	2.4	20.0	77.6
GP-02	12/16/2022	0.0	2.1	18.8	79.1
GP-03	3/14/2022	0.0	1.8	17.1	81.1
GP-03	6/8/2022	0.1	5.7	15.2	79.0
GP-03	9/29/2022	0.0	2.7	18.8	78.5
GP-03	12/16/2022	0.0	3.0	17.4	79.6
GP-4A	3/14/2022	0.0	4.0	12.9	83.1
GP-4A	6/8/2022	0.0	3.5	13.9	82.6
GP-4A	9/29/2022	0.0	3.2	17.6	79.2
GP-4A	12/16/2022	0.0	4.0	16.7	79.3
GP-4B	3/14/2022	0.0	4.6	10.7	84.7
GP-4B	6/8/2022	0.0	3.6	12.7	83.7
GP-4B	9/29/2022	0.0	3.3	16.8	79.9
GP-4B	12/16/2022	0.0	4.1	14.9	81.0
GP-05	3/14/2022	0.0	4.8	14.0	81.2
GP-05	6/8/2022	0.0	4.1	14.3	81.6
GP-05	9/29/2022	0.0	3.7	16.6	79.7
GP-05	12/16/2022	0.0	4.9	16.1	79.0
GP-06	3/14/2022	0.0	4.8	12.0	83.2
GP-06	6/8/2022	0.0	4.7	12.3	83.0
GP-06	9/29/2022	0.0	6.0	11.9	82.1
GP-06	12/16/2022	0.0	5.5	12.4	82.1
GP-07	3/14/2022	7.6	7.5	0.0	84.9
GP-07	3/15/2022	0.0	6.3	14.6	79.1
GP-07	6/8/2022	0.1	7.0	15.0	77.9
GP-07	9/29/2022	0.0	2.4	20.1	77.5
GP-07	12/16/2022	1.9	7.4	0.0	90.7

Table 4-1
2022 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-8R	3/14/2022	0.0	0.5	19.8	79.7
GP-8R	6/8/2022	0.1	2.4	17.5	80.0
GP-8R	9/29/2022	0.0	1.3	20.9	77.8
GP-8R	12/16/2022	0.0	1.5	19.5	79.0
GP-9A	3/14/2022	0.2	14.6	1.2	84.0
GP-9A	6/8/2022	0.0	4.8	11.6	83.6
GP-9A	9/29/2022	0.0	3.5	17.7	78.8
GP-9A	12/16/2022	0.0	6.1	11.9	82.0
GP-9B	3/14/2022	0.6	14.0	1.3	84.1
GP-9B	6/8/2022	0.5	13.7	1.2	84.6
GP-9B	9/29/2022	0.2	15.4	1.9	82.5
GP-9B	12/16/2022	0.0	17.2	1.4	81.4
GP-10A	3/14/2022	0.0	5.7	12.0	82.3
GP-10A	6/8/2022	0.0	3.7	12.4	83.9
GP-10A	9/29/2022	0.0	5.6	15.0	79.4
GP-10A	12/16/2022	0.0	5.7	14.1	80.2
GP-10B	3/14/2022	0.0	2.2	16.5	81.3
GP-10B	6/8/2022	0.0	3.1	17.0	79.9
GP-10B	9/29/2022	0.0	1.9	20.2	77.9
GP-10B	12/16/2022	0.0	3.1	17.8	79.1
GP-11	3/14/2022	0.0	1.1	19.0	79.9
GP-11	6/8/2022	0.0	1.2	17.8	81.0
GP-11	9/29/2022	0.0	1.8	19.7	78.5
GP-11	12/16/2022	0.0	2.5	19.0	78.5
GP-12	3/14/2022	0.0	1.0	19.1	79.9
GP-12	6/8/2022	0.0	1.5	19.4	79.1
GP-12	9/29/2022	0.0	1.1	20.8	78.1
GP-12	12/21/2022	0.1	1.9	19.6	78.4
GP-13	3/14/2022	0.0	1.7	17.5	80.8
GP-13	6/8/2022	0.0	1.5	17.2	81.3
GP-13	9/29/2022	0.0	2.0	19.8	78.2
GP-13	12/16/2022	0.0	2.1	18.6	79.3
GP-15	3/15/2022	0.0	2.4	18.5	79.1
GP-15	6/8/2022	0.1	1.7	17.6	80.6
GP-15	9/29/2022	0.3	3.5	17.0	79.2
GP-15	12/15/2022	0.0	2.9	18.0	79.1
GP-16D	3/15/2022	0.0	2.6	18.7	78.7
GP-16D	6/8/2022	0.1	2.2	16.6	81.1
GP-16D	9/29/2022	0.0	3.0	19.0	78.0
GP-16D	12/15/2022	0.0	2.3	18.4	79.3
GP-16S	3/15/2022	0.0	1.1	20.1	78.8
GP-16S	6/8/2022	0.1	2.2	17.3	80.4
GP-16S	9/29/2022	0.0	1.6	20.1	78.3
GP-16S	12/15/2022	0.0	1.7	18.8	79.5

Table 4-1
2022 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-17D	3/15/2022	0.0	5.7	15.1	79.2
GP-17D	6/8/2022	0.1	6.1	13.5	80.3
GP-17D	9/29/2022	0.0	4.3	18.0	77.7
GP-17D	12/15/2022	0.0	4.7	16.2	79.1
GP-17S	3/15/2022	0.0	4.6	16.6	78.8
GP-17S	6/8/2022	0.1	6.1	14.8	79.0
GP-17S	9/29/2022	0.0	3.5	18.7	77.8
GP-17S	12/15/2022	0.0	4.1	16.9	79.0
GP-20	3/14/2022	0.0	6.9	9.5	83.6
GP-20	6/8/2022	0.0	4.3	9.5	86.2
GP-20	9/29/2022	0.0	6.8	12.0	81.2
GP-20	12/16/2022	0.0	8.1	8.9	83.0
GP-21A	3/14/2022	0.0	1.1	19.4	79.5
GP-21A	6/8/2022	0.0	1.4	18.4	80.2
GP-21A	9/29/2022	0.0	1.1	20.2	78.7
GP-21A	12/16/2022	0.0	1.5	20.0	78.5
GP-21B	3/14/2022	0.0	1.7	18.3	80.0
GP-21B	6/8/2022	0.0	1.1	17.5	81.4
GP-21B	9/29/2022	0.0	1.4	19.8	78.8
GP-21B	12/16/2022	0.0	1.4	19.5	79.1
GP-22	3/14/2022	0.0	1.1	19.7	79.2
GP-22	6/8/2022	0.0	1.2	18.5	80.3
GP-22	9/29/2022	0.0	0.8	20.4	78.8
GP-22	12/16/2022	0.0	1.2	20.1	78.7
GP-23	3/14/2022	0.0	1.6	19.3	79.1
GP-23	6/8/2022	0.0	1.2	18.3	80.5
GP-23	9/29/2022	0.0	1.0	20.2	78.8
GP-23	12/16/2022	0.0	1.2	20.0	78.8
GP-24A	3/14/2022	0.0	0.7	19.8	79.5
GP-24A	6/8/2022	0.0	0.9	19.2	79.9
GP-24A	9/29/2022	0.0	0.5	20.9	78.6
GP-24A	12/16/2022	0.0	0.9	19.3	79.8

Table 4-1
2022 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-24B	3/14/2022	0.0	1.3	18.1	80.6
GP-24B	6/8/2022	0.0	0.6	19.2	80.2
GP-24B	9/29/2022	0.0	0.3	20.9	78.8
GP-24B	12/16/2022	0.0	0.9	19.2	79.9
GP-25A	3/14/2022	0.0	2.7	18.2	79.1
GP-25A	6/8/2022	0.0	2.1	17.3	80.6
GP-25A	9/29/2022	0.0	1.0	19.8	79.2
GP-25A	12/16/2022	0.0	2.0	19.5	78.5
GP-25B	3/14/2022	0.0	2.8	17.8	79.4
GP-25B	6/8/2022	0.0	2.4	16.9	80.7
GP-25B	9/29/2022	0.0	2.7	17.8	79.5
GP-25B	12/16/2022	0.0	2.2	18.8	79.0
GP-26	3/14/2022	0.0	0.3	20.4	79.3
GP-26	6/8/2022	0.0	1.4	19.1	79.5
GP-26	9/29/2022	0.0	0.2	20.9	78.9
GP-26	12/16/2022	0.0	0.9	20.7	78.4
GP-27	3/14/2022	0.0	0.5	20.3	79.2
GP-27	6/8/2022	0.0	0.9	19.0	80.1
GP-27	9/29/2022	0.0	0.5	20.7	78.8
GP-27	12/16/2022	0.0	0.8	20.6	78.6
GP-28	3/14/2022	0.0	4.7	10.6	84.7
GP-28	6/8/2022	0.0	5.3	10.2	84.5
GP-28	9/29/2022	0.4	6.2	13.0	80.4
GP-28	12/16/2022	0.0	4.9	14.0	81.1
GP-29	3/14/2022	0.0	6.2	7.5	86.3
GP-29	6/8/2022	0.0	5.1	6.8	88.1
GP-29	9/29/2022	0.0	6.5	8.0	85.5
GP-29	12/16/2022	0.0	7.4	7.3	85.3
GP-30A	3/15/2022	0.0	3.4	16.7	79.9
GP-30A	6/9/2022	0.1	3.6	14.9	81.4
GP-30A	9/29/2022	0.0	4.7	17.0	78.3
GP-30A	12/16/2022	0.0	4.1	17.1	78.8
GP-30B	3/15/2022	0.0	3.3	17.0	79.7
GP-30B	6/9/2022	0.1	4.6	14.6	80.7
GP-30B	9/29/2022	0.0	4.4	17.2	78.4
GP-30B	12/16/2022	0.0	3.4	17.8	78.8
GP-32	3/14/2022	0.0	2.1	18.3	79.6
GP-32	6/8/2022	0.0	1.0	18.2	80.8
GP-32	9/29/2022	0.0	1.9	19.0	79.1
GP-32	12/16/2022	0.0	2.1	18.6	79.3

Table 4-1
2022 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-33	3/14/2022	0.0	1.5	18.3	80.2
GP-33	6/8/2022	0.0	1.5	17.6	80.9
GP-33	9/29/2022	0.0	2.1	17.8	80.1
GP-33	12/16/2022	0.0	2.1	17.8	80.1
GP-34	3/14/2022	0.0	4.1	13.4	82.5
GP-34	6/8/2022	0.0	4.2	12.9	82.9
GP-34	9/29/2022	0.0	4.8	14.9	80.3
GP-34	12/16/2022	0.0	5.3	14.2	80.5
GP-35	3/14/2022	0.0	1.6	17.4	81.0
GP-35	6/8/2022	0.0	1.9	16.4	81.7
GP-35	9/29/2022	0.0	2.4	18.7	78.9
GP-35	12/16/2022	0.0	2.6	18.0	79.4
GP-36	3/14/2022	0.0	1.8	17.4	80.8
GP-36	6/8/2022	0.0	0.9	17.1	82.0
GP-36	9/29/2022	0.0	1.7	18.9	79.4
GP-36	12/16/2022	0.0	1.9	17.6	80.5
GP-37	3/14/2022	0.0	3.1	16.9	80.0
GP-37	6/8/2022	0.0	1.4	17.2	81.4
GP-37	9/29/2022	0.0	0.5	20.5	79.0
GP-37	12/16/2022	0.0	2.7	17.7	79.6
GP-38	3/14/2022	0.0	1.5	16.8	81.7
GP-38	6/8/2022	0.0	2.8	16.2	81.0
GP-38	9/29/2022	0.0	1.4	20.2	78.4
GP-38	12/16/2022	0.0	1.9	19.2	78.9
GP-39	3/14/2022	8.6	19.3	0.0	72.1
GP-39	3/15/2022	1.2	15.3	3.2	80.3
GP-39	6/8/2022	0.5	20.3	1.7	77.5
GP-39	9/29/2022	0.5	18.9	3.9	76.7
GP-39	12/16/2022	0.0	17.7	3.8	78.5

Note: LFG probes GP14, GP18D, GP18S, GP19S, GP19D and GP31 were abandoned in July 2021 in preparation for a street extension across the northern portion of the landfill.

APPENDIX A

2022 Field Sampling Data Sheets (FSDSs)

First Quarter (February) 2022 FSDSs

Landfill Visual Inspection Program

	Yes	No
Are there any surface water impoundment's or erosion from heavy surface water runoff?		X
Are any monitoring wells or piezometers not clearly identified?		X
Are there any area's of distressed vegetation or unexplained animal remains?		X
Are there any areas of stained or tinted soils?		X
Is liquid seeping out of the slopes of the waste unit?		X
Are there any abnormal odors or observable vapors?		X
Are any of the monitoring wells damaged or unsecured?		X
Are there any abnormal conditions that are of concern to the Landfill operation?		X

Landfill Leichner LF
Inspector J. Hultquist
Date 2/14/2022
Reason for inspection Semiannual Groundwater monitoring event
(1st), 2nd, 3rd, or 4th groundwater monitoring event
Other

Notes:

Rain 45°F

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
YSI Pro Plus			17J102717		I. Hultgeist			
Location/ Project Number	Date	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	pH 4.0 Buffer (S.U.)	pH 7.0 Buffer (S.U.)	Conductivity 1413 µS/cm standard (µS/cm)	ORP 220 mV standard (mV)
04222030.13/LBLF	14 FEB22	0915	13.2	10.30	4.00	7.00	1413	220
04222030.13/LBLF	2-15-22	0730	12.7	10.02	4.00	7.00	1413	220
04222030.13/LBLF	2-16-22	0750	13.9	10.26	4.00	7.00	1413	220

Notes:

Leichner Landfill
Groundwater Elevation Survey

Project #: 04722030.13

Sampler: T. Hultquist / E. Taylor

Quarter: (1) 2 3 4

Date: 2-14-22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1 N	216.58	15.00	N/A	1410	Dry @ 14.26' TD
MW-1 S	216.13	44.50	39.34	1414	
MW-1 E	216.45	29.05	N/A	1418	Dry @ 29.25' TD
MW-NE	219.83	50.34	16.31	1031	
LB-R2	222.27	77.36	48.88	1333	
LB-1S	210.12	45.00	36.54	1407	
LB-1D	209.74	137.45	38.42	1409	
LB-3S	218.25	52.50	41.71	1355	
LB-3D	219.29	117.28	42.69	1348	
LB-5S	206.89	30.32	16.15	1104	
LB-5C	206.70	74.71	36.07	1143	
LB-5D	207.56	122.40	40.18	0949	
LB-6S	202.80	39.07	30.35	1151	
LB-10SR	204.04	42.35	34.47	1151	
LB-10CR	203.05	71.95	33.37	1353	
LB-10DR	203.36	121.10	45.74	1335	
LB-13I	202.36	55.03	31.16	1239	
LB-13C	202.68	66.00	31.73	1251	
LB-13D	202.96	88.88	31.62	1243	
LB-17S	208.18	34.38	N/A	1342	Dry @ 34.38' TD
LB-17I	213.14	51.95	39.58	1338	
LB-17C	206.55	72.35	33.28	1446	
LB-17D	213.17	100.91	40.51	1200	
LB-20S	221.22	61.50	43.45	1357	
LB-21S	223.35	54.24	40.08	1127	
LB-21C	223.32	79.10	40.46	1121	
LB-21D	223.63	110.73	43.38	1116	
LB-23S	229.19	45.40	34.63	1012	
LB-24S	235.13	54.16	39.56	1002	
LB-26I	200.22	58.30	28.43	1128	
LB-26D	200.75	101.78	29.41	1206	
LB-27I	205.35	57.15	36.42	1310	
LB-27D	204.65	115.10	40.61	1258	

Notes:

Probe decanned between Readings, Rain 40°F

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-1S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-06-1S

DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/15/22	12:25	.	.	36.56	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	2/15/22	12:50	A	3	40 mL	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	12:50	A	1	250, (500) 1L (None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	2/15/22	12:50	A	1	(125), 250, 500 (HNO3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: 12:27 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(1230)	0.00	6.93	163.9	220.4	10.6	36.56	8.88	clear/colorless
1	A(1233)	0.15	6.60	160.7	221.3	11.6	36.56	7.30	clear/colorless
2	A(1236)	0.30	6.58	135.9	223.6	11.9	36.56	6.60	clear/colorless
3	A(1239)	0.45	6.63	125.7	225.7	12.0	36.56	6.55	clear/colorless
4	A(1242)	0.60	6.62	123.8	228.9	12.0	36.56	5.96	clear/colorless
5	A(1245)	0.75	6.60	122.6	231.7	12.0	36.56	5.90	clear/colorless
6	A(1248)	0.90	6.60	121.8	233.3	12.0	36.56	5.86	clear/colorless

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

Low Flow Purge Method: (9/6/30psi) ~200ml/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-1D
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-05-1D
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 40.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/15/22	11:30	37.95	.	38.61	.	-	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	2/15/22	11:55	A	3	(40 ml)	(HCl)	(YES)	NO	✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO	
White Poly	2/15/22	11:55	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA ✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO	
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	2/15/22	11:55	A	1	(125) 250, 500	(HNO_3)	(YES)	(YES)	✓
	/ /	:			250, 500, 1L		YES		

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1137)	0.00	7.14	170.7	233.6	9.9	38.61	6.87	Clear/colorless
1	A (1140)	0.15	6.61	177.7	231.6	10.2	38.60	6.25	Clear/colorless
2	A (1143)	0.25	6.74	167.7	230.1	10.6	38.60	6.19	Clear/colorless
3	A (1146)	0.40	6.80	154.6	228.2	10.7	38.60	6.53	Clear/colorless
4	A (1149)	0.55	6.79	140.7	227.9	10.7	38.60	6.33	Clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: 20/40/70psi ~150ml/min

SAMPLER: T. Hultquist (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: Leichner Landfill **WELL ID:** LB-3S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-02,522-02-3S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/15/22	09:29	52.55	.	41.56	.	—	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	2/15/22	09:55	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	09:55	A	1	250 (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	09:55	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(0935)	0.00	6.44	182.2	199.0	10.0	41.91	5.55	Clear/colorless
1	A(0938)	0.10	6.48	165.2	202.0	10.9	41.90	4.84	Clear/colorless
2	A(0941)	0.70	6.67	151.5	204.0	10.9	41.90	4.73	Clear/colorless
3	A(0944)	0.30	6.68	151.1	205.2	11.0	41.90	4.55	Clear/colorless
4	A(0947)	0.40	6.66	152.2	205.3	11.0	41.90	4.58	Clear/colorless
5	A(0950)	0.50	6.64	153.5	205.5	11.0	41.90	4.54	Clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (9/6/22 30psi) ~ 150 ml/min

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:**

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

DUP ID: LB-021522-03-DUP2 **NA**

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 45.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/15/22	10 : 00	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	10 : 00	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	10 : 00	A	1	(125) 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

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

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

Collected at: LB-35

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-3D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-01-3D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 47.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/15/22	08:19	117.28	.	42.74	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	2/15/22	08:50	A	3 (40 mL)	HCl	(YES)	(NO)		✓
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	08:50	A	1 (250), 500, 1L	None	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	08:50	A	1 (125) 250, 500	HNO_3	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: :

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(0824)	0.00	5.58	197.8	202.5	10.2	42.74	3.22	clear, colorless
1	A(0832)	0.50	5.36	128.7	225.6	10.9	42.74	5.04	clear, colorless
2	A(0840)	0.63	6.45	124.6	225.8	10.9	42.74	4.91	clear, colorless
3	A(0843)	0.74	6.47	124.1	226.0	10.9	42.74	4.90	clear, colorless
4	A(0846)	0.81	6.47	123.9	225.9	10.9	42.74	4.91	clear, colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method: 8/7/70 psi 225 mL/min

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** LB-5S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021422-03-5S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 42.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/14/22	11:04	30.32	.	16.15	.	-	X 1	-
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/14/22	11:25	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/22	11:25	A	1	250, 500, 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/14/22	11:25	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: 11:06 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(1108)	0.00	6.32	186.6	178.8	12.2	16.15	8.13	clear/colorless
1	A(1111)	0.15	6.30	160.1	191.1	12.4	16.15	7.51	clear/colorless
2	A(1114)	0.30	6.31	151.4	197.0	12.5	16.15	7.58	clear/colorless
3	A(1117)	0.45	6.30	147.5	198.6	12.5	16.15	7.54	clear/colorless
4	A(1120)	0.60	6.29	146.5	198.9	12.5	16.15	7.52	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method: (8/7/20psi) ~200ml/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-5D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021422-01-5D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	(RAIN)		?				**TEMPERATURE:**	(°F) 40.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/14/22	09:49	122.40	.	40.18	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/14/22	10:20	A	3	40 mL (HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/22	10:20	A	1	250, (500), 1L (None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	2/14/22	10:20	A	1	(125, 250, 500 HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L	YES			
White no acid, Yellow H2SO4, Red HNO3				5	Total Bottles (include duplicate count):				

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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(1006)	0.00	6.20	188.4	324.9	12.3	40.22	2.49	Clear/colorless
1	A(1009)	0.30	6.19	145.5	320.6	12.4	40.24 IH	0.95	Clear/colorless
2	A(1012)	0.60	6.00	144.3	320.3	12.4	40.22	0.80	Clear/colorless
3	A(1015)	0.90	6.03	146.3	320.0	12.4	40.22	0.80	Clear/colorless
4	A(1018)	1.20	6.02	146.8	319.9	12.4	40.22	0.82	Clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method: (11/9/65psi) ~300ml/min

SAMPLER: I. Holtgrist (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: Leichner Landfill **WELL ID:**

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021422-02-DUP1

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(F) 40.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/14/22	10:25	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/22	10:25	A	1	250 (500) 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/14/22	10:25	A	1	(125) 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

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

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

Collected at: LB-5D

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** LB-6S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622 ~~-0665~~ -08-6S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(47.0)	°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)
2/16/22	13:48	39.07	.	30.34	.	.	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	2/16/22	14:10	A	3	40 ml	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	14:10	A	1	250, ~~500~~, 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	14:10	A	1	~~125~~, 250, 500	(HNO$_3$)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

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

WATER QUALITY DATA Purge Start Time: : 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(1350)	0.00	6.64	129.4	270.6	12.1	30.34	7.00	clear/colorless
1	A(1353)	0.25	6.58	127.8	274.8	12.1	30.37	6.99	clear/colorless
2	A(1356)	0.50	6.58	125.2	277.7	12.2	30.35	6.69	clear/colorless
3	A(1359)	0.75	6.58	123.9	280.7	12.2	30.40	6.84	clear/colorless
4	A(1402)	1.00	6.59	122.6	283.5	12.2	30.38	6.77	clear/colorless
5	A(1405)	1.25	6.59	123.1	281.4	12.2	30.38	6.76	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/30 psi) ~250ml/min

SAMPLER: E. Hartquist (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: Leichner Landfill **WELL ID:** LB-105R
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-DB-105R
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	TEMPERATURE:	(°F) 48.0 °C [Circle appropriate units]					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/15/22	14:19	42.35	.	34.50	.	-	X 1	-
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/15/22	14:55	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	14:55	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	14:55	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			
White no acid, Yellow H2SO4, Red HNO3				5	Total Bottles (include duplicate count):					

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: :
Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	ORP	E Cond (μS)	°F Temp (°C) [Circle units]	DTW	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
0	A(1427)	0.00	6.27	129.7	193.2	12.7	34.51	6.08	clear, colorless
1	A(1430)	0.80	6.33	125.7	190.5	12.7	34.51	6.36	clear, colorless
2	A(1432)	1.00	6.29	127.1	186.0	12.7	34.51	6.01	clear, colorless
3	A(1436)	1.20	6.23	130.0	182.7	12.7	34.51	6.19	clear, colorless
4	A(1439)	1.40	6.23	129.9	182.9	12.7	34.51	6.01	clear, colorless
5	A(1442)	1.60	6.23	129.4	182.6	12.8	34.51	5.55	clear, colorless
6	A(1445)	1.80	6.23	129.8	181.6	12.7	34.51	5.18	clear, colorless

Low Flow Purge Method: 4/6/30 psi 200 mL/min

SAMPLER: I. Hultquist (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-10SR
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-08-10SR
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 48.0	°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)
2/15/22	14:19	42.35	.	34.50	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/15/22	14:55	A	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	14:55	A	1	250, 500, 1L	None	YES	NO	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	14:55	A	1	125, 250, 500	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1448)	0.00 2.0	6.23	129.4	180.4	12.8	34.51	5.10	Clear, colorless
1	A(1451)	2.20	6.23	129.3	180.4	12.8	34.51	5.10	clear, colorless
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method: 9/10/30 psi 200 mL/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-10DR

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-07-10DR

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	~~W~~	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 50.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/15/22	13:26	121.10	.	46.10	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/15/22	14:00	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	14:00	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	14:00	A	1	(125) 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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(1337)	0.00	6.78	141.6	263.4	12.4	46.10	6.54	Clear & colorless
1	A(1343)	0.30	6.58	122.5	265.3	12.3	46.10	0.99	Clear & colorless
2	A(1346)	0.45	6.61	120.0	265.1	12.2	46.10	0.92	Clear/colorless
3	A(1349)	0.60	6.61	117.6	265.2	12.3	46.10	0.79	clear/colorless
4	A(1352)	0.75	6.63	112.1	265.9	12.3	46.10	0.75	clear/colorless
5	A(1355)	1.00	6.63	110.6	265.9	12.3	46.10	0.76	clear/colorless
6		.	.			.	.	.	

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

Low Flow Purge Method: (12/8/65psi) ~ 150ml/min

SAMPLER: I. Hultgren IST
(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: Leichner Landfill **WELL ID:** LB-13I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-04-13I

DUP ID: NA

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

TEMPERATURE: °F 48.0 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/16/22	10:54	.	.	31.02	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/16/22	11:15	A	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	11:15	A	1	250, 500, 1L	None	YES	NO	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	11:15	A	1	125, 250, 500	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : 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(1058)	0.00	7.01	133.1	189.8	10.5	31.03	7.78	clear/colorless
1	A(1101)	0.25	6.53	150.0	277.5	11.6	31.03	2.58	clear/colorless
2	A(1104)	0.50	6.58	139.7	286.9	11.6	31.03	2.35	clear/colorless
3	A(1107)	0.75	6.61	132.3	285.0	11.7	31.03	2.43	clear/colorless
4	A(1110)	1.00	6.64	125.3	286.0	11.7	31.03	2.25	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/30psi) ~ 300ml/min

SAMPLER: J. Hultquist
(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: Leichner Landfill **WELL ID:**

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-05-FB

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 47.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	02/16/22	11 :35	G	3	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	02/16/22	11 :35	G	1	250, 500, 1L	(None)	(YES)	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	02/16/22	11 :35	G	1	(125) 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G 1135	0.00				.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected Near: LB-131 using Lab Supplied DI water.

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** LB-13D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-03-13D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 47.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
02/16/22	10:08	88.68	.	31.77	.	.	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	02/16/22	10:25	A	3	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	02/16/22	10:25	A	1	250, (500), 1L (None)	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	02/16/22	10:25	A	1	(125, 250, 500) (HNO_3)	YES	YES		✓
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1011)	0.00	6.95	129.0	225.4	11.1	31.76	2.82	clear/colorless
1	A(1014)	0.20	6.85	120.7	228.5	11.4	31.75	2.43	clear/colorless
2	A(1017)	0.40	6.64	119.4	230.9	11.6	31.77	2.77	clear/colorless
3	A(1020)	0.60	6.60	118.8	233.8	11.4	31.79	2.69	clear/colorless
4	A(1023)	0.80	6.60	118.6	234.9	11.6	31.79	2.91	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: 8/7/60 PSI 250 mL/m

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-17I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-09-17I
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 47.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/16/22	14:52	51.95	.	39.60	.	—	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	2/16/22	15:10	A	3	(40 ml)	HCl	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	15:10	A	1	250, (500) 1L (None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	2/16/22	15:10	A	1	(125, 250, 500) (HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1453)	0.00	6.12	69.8	385.5	12.8	39.50	1.50	Clear/colorless
1	A(1456)	0.10	6.89	99.3	414.2	12.9	39.35	1.27	Clear/colorless
2	A(1459)	0.22	6.62	106.3	451.6	13.1	39.42	0.98	Clear/colorless
3	A(1502)	0.35	6.64	102.1	458.2	13.2	39.40	0.85	Clear/colorless
4	A(1505)	0.45	6.54	105.1	462.7	13.2	39.52	0.83	Clear/colorless
5	A(1508)	0.60	6.56	102.1	468.0	13.2	39.50	0.80	Clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8.5/6.5/30psi) ~200ml/min

SAMPLER: Ethan Hayes (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: Leichner Landfill **WELL ID:** LB-17D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021422-04-17D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 44.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/14/22	12:00	100.91	.	40.51	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	2/14/22	12:50	A	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/22	12:50	A	1	250, 500, 1L	None	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/14/22	12:50	A	1	125, 250, 500	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: 12:32 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1233)	0.00	6.86	216.5	265.9	8.4	40.51	3.31	Clear/colorless
1	A(1236)	0.15	6.66	223.0	272.6	10.3	40.53	1.33	Clear/colorless
2	A(1239)	0.30	6.60	203.3	274.3	10.3	40.53	1.15	Clear/colorless
3	A(1242)	0.45	6.59	194.6	273.0	10.4	40.53	0.97	Clear/colorless
4	A(1245)	0.60	6.59	197.1	273.4	10.4	40.53	0.94	Clear/colorless
5	A(1248)	0.75	6.59	184.9	274.1	10.4	40.53	0.95	Clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: 9/6/60psi ~ 300ml/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-20S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021522-04-20S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:** (°F) 48.0 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/15/22	10:36	61.50	.	42.96	.	-	X 1	-
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/15/22	11:00	A	3	(40 ml)	(HCl)	YES	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/15/22	11:00	A	1	250, 500, 1L	(None)	YES	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/15/22	11:00	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: 10:37 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(1039)	0.00	6.54	224.0	392.7	11.6	43.02	3.14	light tan / cloudy
1	A(1042)	0.15	6.67	196.3	407.0	11.9	43.02	1.29	light tan / cloudy
2	A(1045)	0.30	6.70	180.0	407.8	12.0	43.02	1.05	light tan / cloudy
3	A(1048)	0.45	6.70	164.9	407.8	12.1	43.02	0.90	light tan / cloudy
4	A(1051)	0.60	6.69	150.9	407.3	12.1	43.02	0.77	light tan / cloudy
5	A(1054)	0.75	6.68	139.4	405.4	12.1	43.02	0.76	light tan / cloudy
6	A(1057)	1.00	6.68	130.0	403.8	12.1	43.02	0.77	mostly clear / cloudy

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

Low Flow Purge Method: (9/6/35 psi) ~200 ml/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-26I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-06-26I
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 48.0 °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/16/22	11:57	58.30	.	28.38	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = $(dia./2)^2 \times 0.163$	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	2/16/22	12:20	A	3	(40 ml)	(HCl)	YES	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	12:20	A	1	250, 500, 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	12:20	A	1	(125, 250, 500)	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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 (1159)	0.00	6.79	148.6	261.4	11.7	28.37	3.90	clear / colorless
1	A (1202)	0.30	6.62	129.7	261.0	11.9	28.38	3.80	clear / colorless
2	A (1205)	0.55	6.63	125.5	261.0	11.8	28.40	3.75	clear / colorless
3	A (1208)	0.80	6.62	124.2	260.6	11.8	28.40	3.77	clear / colorless
4	A (1211)	1.05	6.60	120.3	261.3	11.8	28.38	3.39	clear / colorless
5	A (1214)	1.30	6.60	118.2	262.2	11.9	28.38	3.89	clear / colorless
6		.				.	.	.	

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

Low Flow Purge Method: 7/8/40 Psi ~400 ml/min → (9.5/5.5/35psi) ~ 300ml/min

SAMPLER: J. Hultgren (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: Leichner Landfill **WELL ID:** LB-26D
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-07-26D
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:** (°F) 45.0 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/16/22	12:45	101.28	.	27.86	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/16/22	13:10	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	13:10	A	1	250 (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	13:10	A	1	(125) 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260) (8011) OR [ ] WA [X]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO_3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Na) (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	A (1252)	0.00	7.14	135.0	240.3	11.9	27.61	1.87	Clear/colorless
1	A (1255)	0.35	6.72	117.7	241.6	12.0	27.58	1.08	Clear/colorless
2	A (1258)	0.50	6.70	114.0	242.8	12.0	27.75	0.83	Clear/colorless
3	A (1301)	0.75	6.68	112.4	~~243.5~~ 1463	12.0	27.75	0.75	Clear/colorless
4	A (1304)	0.95	6.67	111.8	247.5	12.0	27.74	0.73	Clear/colorless
5	A (1307)	1.15	6.65	112.7	248.7	11.9	27.74	0.78	Clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method (8/7/60psi) ~350 ml/min

SAMPLER: E. Hultquist (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: Leichner Landfill **WELL ID:** LB-27I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-02-27I
DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
2/16/22	09:16	57.13	.	34.41	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/16/22	09:35	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	09:35	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	09:35	A	1	(125) 250, 500	(HNO$_3$)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(0920)	0.00	6.72	131.4	243.7	10.5	34.42	12.82	Clear/colorless
1	A(0923)	0.25	6.93	108.3	244.6	10.8	34.41	5.50	Clear/colorless
2	A(0926)	0.40	6.91	107.4	244.5	11.2	34.41	5.39	Clear/colorless
3	A(0929)	0.65	6.89	106.8	244.6	11.1	34.41	5.34	Clear/colorless
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: (8ft / 35psi) ~200ml/min

SAMPLER: J. Hultquist (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: Leichner Landfill **WELL ID:** LB-27D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021622-01-27D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN			?	**TEMPERATURE:**	(F) 40.	°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)
2/16/22	07:52	115.10	.	40.90	.	—	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	2/16/22	08:35	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/16/22	08:35	A	1	250 (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/16/22	08:35	A	1	125, 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(0815)	0.00	5.57	230.1	287.2	8.4	42.45	4.98	clear/colorless
1	A(0818)	0.15	6.50	120.5	294.8	9.6	43.10	3.19	clear/colorless
2	A(0824)	0.40	6.54	105.4	295.2	10.0	43.26	3.08	clear/colorless
3	A(0827)	0.50	6.59	100.6	295.7	9.6	43.31	3.10	clear/colorless
4	A(0830)	0.60	6.63	99.5	295.0	9.6	43.54	3.04	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: ~~2o~~ (20/10/60psi) ~200 ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

ALS Environmental

1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 041222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave.
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1797 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ SIM PAH☐	Volatile Organics 624☐ 8270LL☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond, Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐	REMARKS
~~Trip Blank~~ TB1	2-14-22	0900		W	2		X															
LB-021422-01	2-14-22	1020		W	5		X					X		X								
LB-021422-02-Dup	2-14-22	1025		W	5		X					X		X								
LB-021422-03-SS	2-14-22	1125		W	5		X					X		X								
LB-021422-04-TB	2-14-22	1250		W	5		X					X		X								

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
____ Standard (15 working days)
____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
Metals are field filtered

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 2/15/22 1020	Signature: [signature] Date/Time: 2/15/22 1020	Signature: Date/Time:	Signature: Date/Time:
Printed Name: BARBARA LARY Firm: SCS	Printed Name: K Morrow Firm: ALS	Printed Name: Firm:	Printed Name: Firm:

CHAIN OF CUSTODY

ALS Environmental

1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME	Leichner Landfill
PROJECT NUMBER	04222030.13
PROJECT MANAGER	Barb Lary
COMPANY NAME	SCS Engineers
ADDRESS	15440 SW 72nd Ave
CITY/STATE/ZIP	Portland OR 97224
E-MAIL ADDRESS	BLary@scsengineers.com
PHONE #	(971) 284-1297 FAX #
SAMPLER'S SIGNATURE	

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260■ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond, Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, (TDS) Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO_2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐				R
TB2	2-15-22	0700		W	2		X																		
LB-021522-01-3D	2-15-22	0950		W	5		X						X		X										
LB-021522-02-3S	2-15-22	0955		W	5		X						X		X										
LB-021522-03-Dup2	2-15-22	1000		W	5		X						X		X										
LB-021522-04-3DS	2-15-22	1100		W	5		X						X		X										
LB-021522-05-1D	2-15-22	1155		W	5		X						X		X										
LB-021522-06-1S	2-15-22	1250		W	5		X						X		X										
LB-021522-07-10DR	2-15-22	1400		W	5		X						X		X										
LB-021522-08-10SR	2-15-22	1455		W	5		X						X		X										

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.

____ 5 day

____ Standard (15 working days)

____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIR

SPECIAL INSTRUCTIONS/COMMENTS:

Metals are field filtered

Container Supply N

65242

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Barbara C. Lary	Signature: [illegible]	Signature	Signature
Date/Time: 2/16/22 1150	Date/Time: 2/16/22 1150	Date/Time	Date/Time
Printed Name: BARBARA E. LARY	Printed Name	Printed Name	Printed Name
Firm: SCS	Firm: ALS	Firm	Firm

CHAIN OF CUSTODY

ALS Environmental
1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: BLary@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ SIM PAH☐	Volatile Organics 624☐ 8270LL☐ 8260☒	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐ 8021☐ BTEX☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total & Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX	Alkalinity☐ 1650☐ 506☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐			REMARKS
TB3	2-16-22	0700		W	2		X																	
LB-021622-01-27D	2-16-22	0835		W	5		X						X		X									
LB-021622-02-27I	2-16-22	0935		W	5		X						X		X									
LB-021622-03-13D	2-16-22	1025		W	5		X						X		X									
LB-021622-04-13I	2-16-22	1115		W	5		X						X		X									
LB-021622-05-FB	2-16-22	1135		W	5		X						X		X									
LB-021622-06-26I	2-16-22	1220		W	5		X						X		X									
LB-021622-07-26D	2-16-22	1310		W	5		X						X		X									
LB-021622-08-6S	2-16-22	1410		W	5		X						X		X									
LB-021622-09-17I	2-16-22	1510		W	5		X						X		X									

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
____ Standard (15 working days)
____ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
Metals are field filtered

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature]	Signature: [signature]	Signature:	Signature:
Date/Time: 2/17/22 0930	Date/Time: 2/17/22	Date/Time:	Date/Time:
Printed Name: I. Hultquist	Printed Name: [signature]	Printed Name:	Printed Name:
Firm: SCS	Firm: ALS 0935	Firm:	Firm:

First Quarter Resampling (April) 2022 FSDSs

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
ysi Pro plus					E. TAYLOR			
Location/ Project Number	Date	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	pH 4.0 Buffer (S.U.)	pH 7.0 Buffer (S.U.)	Conductivity 1413 µS/cm standard (µS/cm)	ORP 220 mV standard (mV)
04222030.13	4/4/22	1200	~~55~~ 10.2	9.16	4.0	7.0	1413	220

Notes:

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-040422-01-3S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-3S
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 53°	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
4/4/22	13:18	52.55	.	41.39	.	—	X 1	—
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	4/4/22	13:50	A	3	40 ml	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1327)	0.00	7.02	92.9	228.9	19.7	41.32	6.34	Clear / colorless
1	A(1330)	0.10	5.92	145.5	228.1	12.9	41.33	4.72	Clear / colorless
2	A(1333)	0.20	5.97	139.5	226.1	12.8	41.33	4.68	Clear / colorless
3	A(1336)	0.30	5.91	133.4	224.4	13.1	41.33	4.50	Clear / colorless
4	A(1339)	0.40	5.89	129.2	224.1	13.4	41.33	4.55	Clear / colorless
5	A(1342)	0.50	5.88	124.8	223.2	13.0	41.33	4.63	Clear / colorless
6	A(1345)	0.60	5.89	124.4	224.1	13.0	41.33	4.55	Clear / colorless

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

Low Flow Purge Method:

SAMPLER: E. TAYLOR (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: Leichner Landfill **WELL ID:** LB-040422-02-Dup1
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:**
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	° F	° 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)
4/4/22	:	.	.	.	.	.	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	4/4/22	13:55	A	3	40 ml	HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 3 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

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

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

Collected at: LB-35

SAMPLER: E. Taylor
(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: Leichner Landfill **WELL ID:** LB-040422-03-FB1

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

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	° F . ° 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)
4/4/22	:	.	.	.	.	.	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	4/4/22	14 : 10	G	3	40 ml	HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 3 — Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

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

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

Collected Near: LB-35 using VOA-free lab supplied DI water

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

ALS Environmental

1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1247 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260■	Hydrocarbons Gas☐ Diesel☐ (*see below) Oil☐	Oil & Grease/TRPH 1664 HEM☐	PCBs Aroclors☐	Congeners☐	Pesticides/Herbicides 608☐ 8081☐	8141☐	Chlorophenolics - Tri☐ Tetra☐	8151☐ 8151M PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐	Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐	AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐	CO_2☐ Methane☐ Ethane☐ Ethene☐			REMARKS
LB-040422-01-3S	04/04/22	1350		W	3		X																							
LB-040422-02-DUP	4/4/22	1355		W	3		X																							
LB-040422-03-FB	4/4/22	1410		W	3		X																							
TB1	4/1/22	0800		W	2		X																							

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
____ Standard (15 working days)
____ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

***INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)**

SPECIAL INSTRUCTIONS/COMMENTS:

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time 4/6/22 9:30 AM	Signature	Date/Time 4-6-22 0930	Signature	Date/Time	Signature	Date/Time
Printed Name Branden Raper	Firm SCS	Printed Name	Firm ALS	Printed Name	Firm	Printed Name	Firm

ALS Environmental

CHAIN OF CUSTODY

SR# ____________

1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 1 OF 1 COC# ____________

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS		Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260■ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ Methane☐ Ethane☐ Ethene☐ CO_2☐				REMARKS
LB-040422-01-DS	04/04/22	1350		W	3			X																	
LB-040422-02-DW	4/4/22	1355		W	3			X																	
LB-040422-03-FB	4/4/22	1410		W	3			X																	
TB1	4/1/22	0800		W	2			X																	

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # ____________

Bill To: ____________

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 day

___ Standard (15 working days)

___ Provide FAX Results

____________ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

***INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: ____________ (CIRCLE ONE)**

SPECIAL INSTRUCTIONS/COMMENTS:

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
[signature]	4/6/22 9:30 AM	[signature]	[illegible]				
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Brandon Lupe	SCS	[illegible]	[illegible]				
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

Second Quarter (May) 2022 FSDSs

SCS ENGINEERS

Field Report Form

Client: WCI		Weather: 57° Cloudy
Project: 04122030.13		
Event: VOC Resampling		Date: 5/25/22
Prepared By: E. Taylor / B. Rapozo	Address: Vancouver, Wa	Arrival: 0730
		Departure: 1530

- Already onsite and calibrated from a separate event at Leichner, we moved to sample LB-1s.
- Sampled LB-20s, troubleshooting the pump when we encountered malfunctions
- Took a field blank near LB-3s.
- Sampled LB-3s and duplicate.
- Departed from the site and headed back to the office

Signed:

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
YSI 556 MPS			09C101323		B. Rapozo, E. Taylor			
Location/ Project Number	Date	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	pH 4.0 Buffer (S.U.)	pH 7.0 Buffer (S.U.)	Conductivity 1413 µS/cm standard (µS/cm)	ORP 220 mV standard (mV)
LBLF / 04222039.13	5/24/22	0800	18.4	9.89	4.0	7.0	1413	220
Notes:								

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-1s

SITE ADDRESS: 9411 NE 9th Ave, Vancouver Wa, 98662 **BLIND ID:** LB-052522-01-1s

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 66 .	° 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)
5/25/22	11:52	.	.	34.81	.	.	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	5/25/22	12:20	A	3 (40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	5/25/22	12:20	A	1 (250) 500, 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 — 4 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 OR [ ] WA [X]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO_3)
	YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 11 : 52 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	6.09	251.3	279	14.78	34.80	4.36	cloudy / tan
1	A(1201)	0.15	6.14	249.7	279	14.47	34.80	3.69	cloudy, colorless
2	A(1204)	0.30	6.07	247.1	275	14.51	34.80	3.72	" "
3	A(1207)	0.45	6.01	242.1	272	14.46	34.80	3.65	clear / colorless
4	A(1210)	0.60	5.99	232.9	271	14.15	34.80	3.48	" "
5	A(1213)	0.75	5.98	226.8	268	13.69	34.80	3.47	" "
6	A(1216)	0.90	6.01	224.6	267	13.68	34.80	3.45	" "

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

Low Flow Purge: (9/6/30 psi) ~ 200 mL/min

SAMPLER: E. Taylor (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: Leichner Landfill **WELL ID:** LB-20s

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-052522-02-20s

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 68 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
5/25/22	12:48	61.50	.	41.34	.	.	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	5/25/22	13:40	A	3	40 ml HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	5/25/22	13:40	A	1	250, 500, 1L None	YES	NO	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: 12:49 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 (1320)	0.00	6.24	188.4	463	18.38	41.42	2.69	cloudy / brown
1	A (1323)	0.15	6.65	165.9	483	15.58	41.42	1.14	cloudy / light tan
2	A (1326)	0.35	6.71	161.8	486	14.95	41.42	0.84	" "
3	A (1329)	0.60	6.73	159.3	489	14.65	41.42	0.67	" "
4	A (1332)	0.80	6.74	156.9	491	14.61	41.41	0.66	" "
5	A (1335)	1.0	6.76	150.4	495	14.93	41.41	0.66	clear / light tan
6			.			.	.	.	

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

changed air tank

Low Flow Purge: (9/6/35 psi) ~ 250 mL/min

SAMPLER: E. Taylor (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: Leichner Landfill **WELL ID:** FB1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-052522-03-FB1

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:** (°F) 69 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
5/25/22	13:55	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	5/25/22	13:55	G	3	40 ml	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	5/25/22	13:55	G	1	(250), 500, 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

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

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

Collected near LB-3s

SAMPLER: E. Taylor (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: Leichner Landfill **WELL ID:** LB-3s

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-052522-04-3s

DUP ID: NA

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

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
5/25/22	14:03	52.55	.	39.95	.	.	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	5/25/22	14:30	A	3	40 ml (HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	5/25/22	14:30	A	1	(250), 500, 1L (None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: 14 : 03 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 (1406)	0.00	6.94	190.9	269	17.31	39.95	6.35	clear / ~~dk~~ light tan
1	A (1409)	0.20	6.73	193.8	222	15.90	39.95	5.21	clear / colorless
2	A (1412)	0.40	6.69	195.3	218	15.70	39.95	4.86	" "
3	A (1415)	0.55	6.66	196.7	216	15.48	39.97	4.70	" "
4	A (1418)	0.75	6.64	198.5	215	15.33	39.97	4.51	" "
5	A (1421)	0.95	6.64	199.3	215	15.36	39.96	4.55	" "
6	A (1424)	1.15	6.63	200.7	215	15.38	39.96	4.50	" "

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

Low Flow Purge: (9/6(30) ~ 300 mL/min

SAMPLER: E. Taylor (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: Leichner Landfill **WELL ID:** DUP1

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-052522-05-DUP1

DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
5/25/22	14:35	.	.	.	.	.	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	5/25/22	14:35	A	3 (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	5/25/22	14:35	A	1 (250), 500, 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — 4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

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

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

Collected at LB-3s

SAMPLER: E. Taylor (PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland Or, 97224
E-MAIL ADDRESS: BLary@SCSEngineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8270LL☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐ Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond. SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐				REMARKS
LB-052522-01-1S	5/25/22	1220		W	4		X						X											
LB-052522-02-2S	5/25/22	1340		W	4		X						X											
LB-052522-03-FB1	5/25/22	1355		W	4		X						X											
LB-052522-04-3S	5/25/22	1430		W	4		X						X											
LB-052522-05-DUP1	5/25/22	1435		W	4		X						X											
TB1	5/25/22	0800		W	2		X																	

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
____ Standard (15 working days)
____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Container Supply Number

124020

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time 5/25/22	Signature	Date/Time 5/25/22	Signature	Date/Time	Signature	Date/Time
Printed Name B. Rapozo	Firm SCS	Printed Name	Firm ACS 0940	Printed Name	Firm	Printed Name	Firm

CHAIN OF CUSTODY

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

SR# ____________

PAGE 1 OF 1 COC# ____________

PROJECT NAME	Leichner Landfill
PROJECT NUMBER	04222030.13
PROJECT MANAGER	Barb Lary
COMPANY NAME	SCS Engineers
ADDRESS	15940 SW 72nd Ave
CITY/STATE/ZIP	Portland Or, 97224
E-MAIL ADDRESS	BLary@SCSEngineers.com
PHONE #	(971) 284-1297
FAX #	
SAMPLER'S SIGNATURE	[signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS		Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ Methane☐ Ethane☐ Ethene☐ CO_2☐				REMARKS
LB-052522-01-1S	5/25/22	1220		W	4			X								X									
LB-052522-02-2S	5/25/22	1340		W	4			X								X									
LB-052522-03-FB1	5/25/22	1355		W	4			X								X									
LB-062522-04-3S	5/25/22	1430		W	4			X								X									
LB-052522-05-DUP1	5/25/22	1435		W	4			X								X									
TB1	5/25/22	0800		W	2			X																	

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # ____________

Bill To: ____________

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 day

___ Standard (15 working days)

___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

***INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: ________ (CIRCLE ONE)**

SPECIAL INSTRUCTIONS/COMMENTS:

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
[signature] Signature	5/25/22 Date/Time	[signature] Signature	5/25/22 0940 Date/Time	Signature	Date/Time	Signature	Date/Time
B. Raporo Printed Name	SCS Firm	K. Minrow Printed Name	ALS Firm	Printed Name	Firm	Printed Name	Firm

Third Quarter (July) 2022 FSDSs

SCS ENGINEERS

Field Report Form

Client: Clark County		Weather: 75°F, Clear
Project: Leichner Bros Landfill /04222030.13		
Event: 3Q2022 Semiannual monitoring (Quarterly monitoring)		Date: 7/25/22
Prepared By: J. Hultgren/DT	Address: Vancouver, WA	Arrival: 0730
		Departure: 1530

- Loaded up truck with equipment
- Departed for site
- Stopped at safeway for ice + decon supplies
- Arrived onsite, began GW elevation survey.
- Checked in at Waste Connections property, collected WL's at wells on the property. Checked out.
- Completed WL Survey.
- Calibrated YSI Pro Plus
- Collected FB (LB-072522-01-FB) near LB-5S
- Began sampling GW
  - LB-5S (LB-072522-02.5S)
  - LB-27I (LB-072522-03-27I)
  - LB-13I (LB-072522-04-13I)
  - LB-26I (LB-072522-05-26I)
  - LB-~~07~~6S (LB-072522-06-6S)
- Packed up equipment, departed site
- Samples picked up by ALS courier on 7/26/22

Signed:

SCS ENGINEERS

Field Report Form

Client: Clark County		Weather: 85°F, Clear
Project: Leichner Bros Landfill / 04228030.13		
Event: 3Q22 Semiannual monitoring + Quarterly monitoring		Date: 7/26/22
Prepared By: I. Hultgquist	Address: Vancouver, WA	Arrival: 0730
		Departure: 1230

- Loaded up truck,
- Packed samples in cooler for courier pickup
- Departed for site
- Stopped @ Safeway for ice
- Arrived onsite Calibrated YSI Pro Plus.
- Began sampling GW
- Checked in at WCI property
  - Sampled LB-20S (LB-072622-01-20S)
  - LB-1S (LB-072622-02-1S)
- Checked out of WCI property
- Sampled LB-3S and Dup @ LB-3S and LB-10SR
  - LB-3S (LB-072622-03-3S)
  - ~~LB-07~~ LB-072622-04-DUP
  - LB-072622-05-10SR
- Loaded up equipment, departed for office
- Samples picked up by courier on 7/27/22

Signed:

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
YSI Pro Plus			17J102717		Ian Hultquist			
Location/ Project Number	Date	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	pH 4.0 Buffer (S.U.)	pH 7.0 Buffer (S.U.)	Conductivity 1413 µS/cm standard (µS/cm)	ORP 220 mV standard (mV)
Leichner Landfill/0422203013	7/25/22	1045	26.1	8.01	4.00	7.00	1413	220.0
" "	7/26/22	0730	28.0	7.73	4.00	7.00	1413	220.0
Notes:								

Leichner Landfill
Groundwater Elevation Survey

Project #: ~~04222030.13~~ 104

Sampler: I. Hultquist

Quarter: 1 2 (3) 4

Date: 7/25/22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1 N	216.58	15.00	N/A	0920	Dry @ 15.03'
MW-1 S	216.13	44.50	38.59	0918	
MW-1 E	216.45	29.05	N/A	0923	Dry @ 29.00'
MW-NE	219.83	50.34	14.14	0814	
LB-R2	222.27	77.36	46.26	0755	
LB-1S	210.12	45.00	34.28	0930	
LB-1D	209.74	137.45	37.06	0932	
LB-3S	218.25	52.50	39.54	0950	
LB-3D	219.29	117.28	40.53	0944	
LB-5S	206.89	30.32	15.69	1130	
LB-5C	206.70	74.71	37.77	1058	
LB-5D	207.56	122.40	38.36	1043	
LB-6S	202.80	39.07	28.10	0908	
LB-10SR	204.04	42.35	31.99	1004	
LB-10CR	203.05	71.95	30.91	0959	
LB-10DR	203.36	121.10	43.43	1002	
LB-13I	202.36	55.03	28.80	0859	
LB-13C	202.68	66.00	29.21	0857	
LB-13D	202.96	88.88	29.50	0855	
LB-17S	208.18	34.38	32.11	0749	
LB-17I	213.14	51.95	37.23	0751	
LB-17C	206.55	72.35	30.93	0745	
LB-17D	213.17	100.91	38.20	0743	
LB-20S	221.22	61.50	40.88	0925	
LB-21S	223.35	54.24	38.77	0836	
LB-21C	223.32	79.10	39.10	0834	
LB-21D	223.63	110.73	41.92	0839	
LB-23S	229.19	45.40	31.01	0806	
LB-24S	235.13	54.16	38.61	0803	
LB-26I	200.22	58.30	26.13	0903	
LB-26D	200.75	101.78	25.92	0906	
LB-27I	205.35	57.15	32.13	0848	
LB-27D	204.65	115.10	38.51	0851	

Notes: Clear, 80°F

Probe decorned 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: Leichner Landfill **WELL ID:** FB

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-01-FB

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 85.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
/ /	:						X 1	
/ /	:						X 3	

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	
VOA Glass	7/26/22	11 :20	G	3	(40 mL)	HCl	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	11 :20	G	1	250, (500), 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/26/22	11 :20	G	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	G (1120)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected Near: LB-5S using Lab supplied DI water

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-5S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-02 -5S
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 85.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
7/25/22	11:33	30.32	.	15.69	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	7/25/22	11:55	A	3	40 ml	HCl	YES	NO	√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO	
White Poly	7/25/22	11:55	A	1	250, 500, 1L	None	YES	NO	NA √
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO	
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	7/25/22	11:55	A	1	125, 250, 500	HNO_3	YES	YES	√
	/ /	:			250, 500, 1L		YES		

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1139)	0.00	6.18	125.4	197.7	16.0	15.72	8.20	clear/colorless
1	A(1142)	0.30	6.90	102.6	195.1	14.6	15.72	7.15	" "
2	A(1145)	0.60	7.00	98.0	195.3	14.4	15.72	6.43	" "
3	A(1148)	0.90	7.05	93.5	195.4	14.4	15.72	6.42	" "
4	A(1151)	1.20	7.07	91.3	196.1	14.5	15.72	6.40	" "
5	A(1154)	1.50	7.08	90.1	196.6	14.4	15.72	6.44	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8/17/22 p2) ~ 400 ml/min

SAMPLER: J. Hultquist (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: Leichner Landfill **WELL ID:** LB-27I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-03 -27I
DUP ID: NA

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

[Circle appropriate units]

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
7/25/22	12:24	57.15	.	32.08	.	.	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	7/25/22	12:45	A	3	(40 ml)	(HC)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/25/22	12:45	A	1	250, 500, 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/25/22	12:45	A	1	125, 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1229)	0.00	6.50	117.6	245.3	20.8	32.10	9.99	clear/colorless
1	A(1232)	0.25	6.97	111.6	264.1	14.6	32.10	5.84	clear/colorless
2	A(1235)	0.50	7.07	107.3	287.9	14.2	32.10	4.46	clear/colorless
3	A(1238)	0.75	7.08	104.0	294.8	14.2	32.10	3.37	clear/colorless
4	A(1241)	1.00	7.10	101.9	295.1	14.1	32.10	3.31	clear/colorless
5	A(1244)	1.25	7.11	98.4	295.6	14.2	32.10	3.30	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8|7|30psi) ~300ml/min

SAMPLER: J. Hultquist (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: Leichner Landfill **WELL ID:** LB-13I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-04 -13I

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	(F) 86.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
7/25/22	13:10	55.03	.	28.78	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	7/25/22	13:30	A	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/25/22	13:30	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/25/22	13:30	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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(1314)	0.00	6.69	95.0	258.8	20.1	28.80	5.90	clear/colorless
1	A(1317)	0.25	7.08	98.5	269.4	16.1	28.80	1.66	clear/colorless
2	A(1320)	0.50	7.09	97.7	267.1	15.8	28.81	2.00	clear/colorless
3	A(1323)	0.75	7.09	96.9	266.2	15.7	28.81	2.23	clear/colorless
4	A(1326)	1.00	7.10	96.0	266.0	15.7	28.81	2.18	clear/colorless
5	A(1329)	1.25	7.10	96.5	259.4	15.6	28.81	2.13	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/30psi) ~ 300 ml/min

SAMPLER: T. Hultquist (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: Leichner Landfill **WELL ID:** LB-26I
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-05 -26I
DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
7/25/22	13:57	58.30	.	26.13	.	.	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	7/25/22	14:20	A	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/25/22	14:20	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/25/22	14:20	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	ORP	E Cond (µS)	°F Temp °C [Circle units]	DTW	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
0	A (1400)	0.00	6.65	107.4	240.3	19.8	26.13	4.19	clear/colorless
1	A (1403)	0.40	6.65	101.8	233.3	16.4	26.13	3.59	" "
2	A (1406)	0.80	6.74	101.4	239.6	14.3	26.13	3.53	" "
3	A (1409	1.20	6.77	101.0	249.3	14.2	26.13	3.38	" "
4	A (1412)	1.60	6.79	96.3	250.2	14.0	26.13	3.31	" "
5	A (1415	2.00	6.81	95.2	251.1	14.1	26.13	3.25	" "
6			.			.	.	.	

Low Flow Purge Method: (8/7 (40 psi) ~500 ml/min

SAMPLER: J Hultgvist (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-65

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072522-06 -65

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 91.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
7/25/22	14:43	39.07	.	28.10	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	7/25/22	15:05	A	3	(40 ml)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/25/22	15:05	A	1	250 (500) 1L (None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	7/25/22	15:05	A	1	(125) 250, 500 (HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: :

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(1446)	0.00	6.57	108.9	200.9	22.7	28.10	6.25	cloudy/light tan
1	A(1449)	0.30	6.65	107.4	194.3	16.3	28.10	6.56	clear/colorless
2	A(1452)	0.60	6.64	107.0	196.5	16.2	28.11	6.12	clear/colorless
3	A(1455)	0.90	6.69	104.1	203.9	16.1	28.11	5.77	clear/colorless
4	A(1458)	1.20	6.69	102.4	205.1	16.1	28.11	5.73	clear/colorless
5	A(1501)	1.50	6.70	101.5	206.6	16.0	28.11	5.70	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/25 psi) ~ 350 ml/min

SAMPLER: J. Hultquist
(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: Leichner Landfill **WELL ID:** LB-205

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072622-01-205

DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
7/26/22	08:14	61.50	.	40.98	.	.	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	7/26/22	08:35	A	3	(40 ml)	(HCl)	YES	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	08:35	A	1	250, 500, 1L	(None)	(YES)	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/26/22	08:35	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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(0816)	0.00	5.91	196.8	432.0	17.4	40.98	11.24	clear/colorless
1	A(0819)	0.15	6.22	157.4	540.7	14.9	40.98	11.18	clear/light tan
2	A(0822)	0.30	6.36	134.7	542.1	14.6	40.98	2.28	clear/light tan
3	A(0825)	0.45	6.40	127.2	540.4	14.6	40.98	1.84	clear/light tan
4	A(0828)	0.60	6.43	117.3	538.1	14.6	40.98	1.31	clear/light tan
5	A(0831)	0.75	6.44	114.8	537.5	14.6	40.98	1.26	clear/light tan
6	A(0834)	0.90	6.46	111.0	533.0	14.6	40.98	1.23	clear/light tan

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

Low Flow Purge Method: (9/6/35 psi) ~250 ml/min

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** LB-1S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072622-02-1S
DUP ID: NA

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

[Circle appropriate units]

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
7/26/22	09:05	45.00	.	34.30	.	.	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	7/26/22	09:25	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	09:25	A	1	250, ~~500~~ 1L	(None)	~~YES~~	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/26/22	09:25	A	1	~~125~~ 250, 500	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(0908)	0.00	6.43	120.5	276.3	16.1	34.31	4.76	clear/colorless
1	A(0911)	0.25	6.33	125.1	270.7	14.6	34.31	8.05	clear/colorless
2	A(0914)	0.50	6.36	124.4	265.1	14.3	34.31	3.82	clear/colorless
3	A(0917)	0.75	6.35	124.4	265.2	14.2	34.31	3.82	clear/colorless
4	A(0920)	1.00	6.36	124.5	262.3	14.1	34.31	3.69	clear/colorless
5	A(0923)	1.25	6.40	124.7	263.0	14.1	34.31	3.62	clear/colorless
6		.	.			.	.	.	

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

Low Flow Purge Method: (9/6/35psi) ~300ml/min

SAMPLER: T. Hultquist
(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: Leichner Landfill **WELL ID:** LR-3S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-072622-03-3S
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 80.0	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
7/26/22	10:13	52.55	.	39.47	.	.	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	7/26/22	10:35	A	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	10:35	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	7/26/22	10:35	A	1	(125), 250, 500	(HNO_3)	(YES)	(YES)		
	/ /	:			250, 500, 1L		YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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(1016)	0.00	6.49	117.2	203.4	16.3	39.47	12.50	clear/colorless
1	A(1019)	0.25	6.47	155.9	205.5	14.0	39.47	5.84	clear/colorless
2	A(1022)	0.50	6.46	199.2	205.1	14.0	39.47	5.14	clear/colorless
3	A(1025)	0.75	6.52	202.4	205.1	14.0	39.47	4.96	clear/colorless
4	A(1028)	1.00	6.53	191.1	205.0	13.9	39.47	4.68	clear/colorless
5	A(1031)	1.25	6.54	189.3	205.3	13.8	39.47	4.56	clear/colorless
6	A(1034)	1.50	6.53	188.1	205.2	13.7	39.47	4.57	clear/colorless

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

Low Flow Purge Method: (9/6/30 psi) ~ 300ml/min

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:**

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072622-04-DUP

DUP ID: DUP **NA**

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	7/26/22	10:40	A	3	~~40 ml~~	HCl	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	10:40	A	1	250, (500), 1L (None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	7/26/22	10:40	A	1	(125) 250, 500 (HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : 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-35

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** LB-105R
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-072622-05 -105R
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN					TEMPERATURE: (F) 83.	°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)
7/26/22	11:15	42.35	.	32.00	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	7/26/22	11:35	A	3	40 ml	(HCl)	YES (NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	7/26/22	11:35	A	1	250, 500, 1L (None)	YES (NO)	NO	NA	√
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	7/26/22	11:35	A	1	125, 250, 500 HNO_3	YES	YES		√
	/ /	:			250, 500, 1L	YES			

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

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1116)	0.00	6.03	151.1	125.8	21.4	32.00	10.95	clear/colorless
1	A(1119)	0.20	5.91	154.8	134.2	17.1	32.00	2.71	clear/colorless
2	A(1122)	0.40	5.94	151.3	129.2	16.7	32.00	2.52	clear/colorless
3	A(1125)	0.60	5.94	149.6	127.5	16.6	32.00	2.65	clear/colorless
4	A(1128)	0.90	5.95	148.9	132.5	16.5	32.00	2.33	clear/colorless
5	A(1131)	1.20	5.98	145.6	131.9	16.5	32.00	2.45	clear/colorless
6	A(1134)	1.50	5.98	145.8	133.4	16.6	32.00	2.43	clear/colorless

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

Low Flow Purge Method: (8/7/25 p30) ~ 250 ml/min

SAMPLER: T. Hultquist
(PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

SR# _____

PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO_3 ☐ HCO_3 ☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO_2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐	REMARKS
TB1	7/25/22	1045		W	2		X														
LB-072522-01-FB	7/25/22	1120		W	5		X						X		X						
LB-072522-02-SS	7/25/22	1155		W	5		X						X		X						
LB-072522-03-FI	7/25/22	1245		W	5		X						X		X						
LB-072522-04-IS	7/25/22	1330		W	5		X						X		X						
LB-072522-05-WI	7/25/22	1420		W	5		X						X		X						
LB-072522-06-GS	7/25/22	1505		W	5		X						X		X						

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
X Standard (15 working days)
____ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Short hold - NO_3

Container Supply Number

125071

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Barbara J. Lary	Signature:	Signature	Signature
Date/Time: 7/26/2017	Date/Time: 7-26-22 10:17	Date/Time	Date/Time
Printed Name: BARBARA E. LARY	Printed Name: Mike Ta-1/02	Printed Name	Printed Name
Firm: SCS	Firm: ALS	Firm	Firm

CHAIN OF CUSTODY

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 042220301.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: BLary@scsengineers.com
PHONE #: (971) 284-1247 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total & Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO_3 ☐ HCO_3 ☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO_2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐				REMARKS
TB2	7-26-22	0700		W	2			X																	
LB-072622-01-20S	7-26-22	0835		W	5			X						X		X									
LB-072622-02-1S	7-26-22	~~0935~~ 0925		W	5			X						X		X									Time Sampled 0925
LB-072622-03-3S	7-26-22	1035		W	5			X						X		X									
LB-072622-04-DUP	7-26-22	1040		W	5			X						X		X									
LB-072622-05-10SR	7-26-22	1135		W	5			X						X		X									

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
X Standard (15 working days)
____ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
Short hold - NO_3
Dissolved metals are field filtered

Container Supply Number
125071

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature:	Date/Time: 7/27/22 1045	Signature:	Date/Time: 7/27/22 1045	Signature:	Date/Time:	Signature:	Date/Time:
Printed Name: E. Hartquist	Firm: SCS	Printed Name:	Firm: ALS	Printed Name:	Firm:	Printed Name:	Firm:

Fourth Quarter (November) 2022 FSDSs

SCS ENGINEERS

Field Report Form

Client: Leicher Landfill / Clark County		Weather: Rain 37°F
Project: Leichner Landfill		
Event: Quarterly monitoring		Date: 11/29/22
Prepared By: I. Hultquist	Address: Vancouver WA	Arrival: 0900
		Departure: 1245

Loaded up gear @ office, departed for site
Stopped @ Safeway for ice + decon Supplies
Arrived onsite, calibrated YSI
Checked in at WCI property
Began Quarterly Sampling
Collected LB-112922-01-1S, LB-112922-02-Dup (LB-1S)
LB-112922-03-2S, LB-112922-04-FB (LB-2S), LB-112922-05-3S.
checked out of WCI property
-Met ALS Courier on Leicher Landfill property, near front gate
-Departed for office

Signed:

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
YSI Pro Plus			12E101651		J. Hultquist			
Location/ Project Number	Date	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	pH 4.0 Buffer (S.U.)	pH 7.0 Buffer (S.U.)	Conductivity 1413 µS/cm standard (µS/cm)	ORP 220 mV standard (mV)
04222030.13/LBLF	11-29-22	0850	9.9	11.23	4.00	7.00	1413	220.0
Notes:								

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-1S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-112922-01-1S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(F) 37.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/29/22	09:30	45.00	.	36.70	.	.	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	11/29/22	10:00	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	11/29/22	10:00	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 — Total Bottles (include duplicate count): 4

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 [X] WA [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(0937)	0.00	5.42	137.4	472.4	8.7	36.70	7.09	Clear/colorless
1	A(0940)	0.10	5.81	126.1	330.3	10.4	36.70	5.66	Clear/colorless
2	A(0943)	0.30	5.92	115.3	327.0	10.6	36.70	5.12	Clear/colorless
3	A(0946)	0.40	5.95	112.1	324.9	10.6	36.70	5.07	Clear/colorless
4	A(0949)	0.50	5.99	107.6	325.1	10.6	36.70	5.02	Clear/colorless
5	A(0952)	0.60	6.02	103.6	324.8	10.6	36.70	4.99	Clear/colorless
6	A(0955)	0.70	6.06	1008	325.0	10.7	36.70	4.97	Clear/colorless

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

Low Flow Purge Method: (9 6 | 25 psi) ~ 200 ml/min

SAMPLER: J. Hultquist (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: Leichner Landfill **WELL ID:** DUP

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-112922-02-DUP

DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	11/29/22	10:05	A	3	(40 ml)	(HCl)	YES	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	11/29/22	10:05	A	1	250, (500) 1L (None)	YES	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	/ /	:	~~A~~	~~1~~	125, 250, 500 HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

White no acid, Yellow H2SO4, Red HNO3 — 5/4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

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

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

Collected at: LB-1S

SAMPLER: J. Hultquist (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: Leichner Landfill **WELL ID:** LB-20S
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-112922-03-20S
DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/29/22	10:32	61.50	.	42.93	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	11/29/22	11:05	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	11/29/22	11:05	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 JV84 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1044)	0.00	6.76	89.4	619	11.1	42.98	1.36	Clear/colorless
1	A(1047)	0.15	6.32	79.9	680	11.2	42.98	1.01	Pale tan
2	A(1050)	0.30	6.39	68.9	748	11.4	42.98	0.90	Cloudy/pale tan
3	A(1053)	0.45	6.42	67.3	744	11.3	42.98	0.79	Cloudy/Pale tan
4	A(1056)	0.60	6.43	56.2	737	11.3	42.98	0.75	Cloudy/Pale tan
5	A(1059)	0.75	6.45	54.3	733	11.3	42.98	0.73	Cloudy/pale tan
6	A(1102)	0.90	6.46	51.8	732	11.3	42.98	0.72	Cloudy/Pale tan

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

Low Flow Purge Method: (23/7/55psi) ~ 200 ml/min

SAMPLER: I. Hultquist
(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: Leichner Landfill **WELL ID:** FB

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-112922-04 - FB

DUP ID: NA

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

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = 6 rub

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	11/29/22	11 : 30	G	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	11/29/22	11 : 30	G	1	(250, 500, 1L)	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:	G	1	125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 #4 Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

WATER QUALITY DATA Purge Start Time: : 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-20S

SAMPLER: I. Hultquist (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: Leichner Landfill **WELL ID:** LB-3S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-112922-05-3S

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(F) 37.0	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
11/29/22	11:49	52.55	.	41.87	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	11/29/22	12:10	A	3	(40 ml)	HCl	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	11/29/22	12:10	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	√
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			125, 250, 500	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

White no acid, Yellow H2SO4, Red HNO3 | 3+1+4 | Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

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

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

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1152)	0.00	7.01	47.1	298.8	9.7	41.89	9.53	Clear/colorless
1	A(1155)	0.20	6.51	49.2	300.6	10.8	41.89	10.04	Clear/colorless
2	A(1158)	0.40	6.40	49.8	301.3	11.4	41.89	6.11	Clear/colorless
3	A(1201)	0.60	6.30	52.0	303.8	11.4	41.89	5.68	Clear/colorless
4	A(1204)	0.80	6.30	52.1	303.9	11.4	41.89	5.67	Clear/colorless
5	A(1207)	1.00	6.30	52.0	304.6	11.5	41.89	5.62	Clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (9/6/30) ~300ml/min

SAMPLER: J. Hultquist (PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

SR# _____ PAGE 1 OF 1 COC# _____

PROJECT NAME	Leichner Landfill
PROJECT NUMBER	042270030.13
PROJECT MANAGER	Barb Lary
COMPANY NAME	SCS Engineers
ADDRESS	15940 SW 72nd Ave
CITY/STATE/ZIP	Portland OR 97224
E-MAIL ADDRESS	BLary@scsengineers.com
PHONE #	(971) 284-1297 FAX #
SAMPLER'S SIGNATURE	

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐			REMARKS
TB1	11-29-22	0700		W	2			X																
LB-112922-01-1S	11-29-22	1000		W	4			X							X									
LB-112922-02-Dup	11-29-22	1005		W	4			X							X									
LB-112922-03-2DS	11-29-22	1105		W	4			X							X									
LB-112922-04-FB	11-29-22	1130		W	4			X							X									
LB-112922-05-3S	11-29-22	1210		W	4			X							X									

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.

____ 5 day

X Standard (15 working days)

____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

***INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)**

SPECIAL INSTRUCTIONS/COMMENTS:

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time 11-29-22 @ 1230	Signature Greg Rich	Date/Time 11/29/22 1230	Signature	Date/Time	Signature	Date/Time
Printed Name J. Hufhaust	Firm SCS	Printed Name Greg Rich	Firm ALS	Printed Name	Firm	Printed Name	Firm

APPENDIX B

Summary Tables of 2022 Groundwater Field Parameter Measurements and Analytical Data

Field Parameters

Table B-1
2022 Groundwater Chemistry
Field Parameters
Leichner Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-1D	LB-021522-05-1D	2/15/22	6.79	228	10.7	6.33
LB-1S	LB-021522-06-1S	2/15/22	6.60	233	12.0	5.86
LB-1S	LB-052522-01-1S	5/25/22	6.01	267	13.7	3.45
LB-1S	LB-072622-02-1S	7/26/22	6.40	263	14.1	3.62
LB-1S	LB-112922-01-1S	11/29/22	6.06	325	10.7	4.97
LB-1S	LB-112922-01-DUP	11/29/22	6.06	325	10.7	4.97
LB-3D	LB-021522-01-3D	2/15/22	6.47	226	10.9	4.91
LB-3S	LB-021522-02-3S	2/15/22	6.64	206	11.0	4.54
LB-3S	LB-021522-03-DUP2	2/15/22	6.64	206	11.0	4.54
LB-3S	LB-052522-04-3S	5/25/22	6.03	215	15.4	4.50
LB-3S	LB-052522-04-DUP1	5/25/22	6.03	215	15.4	4.50
LB-3S	LB-072622-03-3S	7/26/22	6.53	205	13.7	4.57
LB-3S	LB-072622-03-DUP	7/26/22	6.53	205	13.7	4.57
LB-3S	LB-112922-05-3S	11/29/22	6.30	305	11.5	5.62
LB-5D	LB-021422-01-5D	2/14/22	6.02	320	12.4	0.82
LB-5D	LB-021422-02-DUP1	2/14/22	6.02	320	12.4	0.82
LB-5S	LB-021422-03-5S	2/14/22	6.29	199	12.5	7.52
LB-5S	LB-072522-02-5S	7/25/22	7.08	197	14.4	6.44
LB-6S	LB-021622-08-6S	2/16/22	6.59	281	12.2	6.76
LB-6S	LB-072522-06-6S	7/25/22	6.70	207	16.0	5.70
LB-10DR	LB-021522-07-10DR	2/15/22	6.63	266	12.3	0.76
LB-10SR	LB-021522-08-10SR	2/15/22	6.23	180	12.8	5.10
LB-10SR	LB-072622-05-10SR	7/26/22	5.98	133	16.6	2.43
LB-13D	LB-021622-03-13D	2/16/22	6.60	235	11.6	2.91
LB-13I	LB-021622-04-13I	2/16/22	6.64	286	11.7	2.25
LB-13I	LB-072522-04-13I	7/25/22	7.10	259	15.6	2.13
LB-17D	LB-021422-04-17D	2/14/22	6.59	274	10.4	0.95
LB-17I	LB-021622-09-17I	2/16/22	6.56	468	13.2	0.80
LB-20S	LB-021522-04-20S	2/15/22	6.68	404	12.1	0.77
LB-20S	LB-052522-02-20S	5/25/22	6.76	495	14.9	0.66
LB-20S	LB-072622-01-20S	7/26/22	6.46	533	14.6	1.23
LB-20S	LB-112922-03-20S	11/29/22	6.46	732	11.3	0.72
LB-26D	LB-021622-07-26D	2/16/22	6.65	249	11.9	0.78
LB-26I	LB-021622-06-26I	2/16/22	6.60	262	11.8	3.89
LB-26I	LB-072522-05-26I	7/25/22	6.81	251	14.1	3.25
LB-27D	LB-021721-01-27D	2/17/21	6.85	287	8.9	2.94
LB-27I	LB-021921-04-27I	2/19/21	6.83	250	11.5	0.43
LB-27I	LB-021921-05-DUP2	2/19/21	6.83	250	11.5	0.43
LB-27I	LB-080921-02-27I	8/9/21	7.36	241	16.3	2.90
LB-27I	LB-021622-02-27I	2/16/22	6.89	244.6	11.1	5.34
LB-27I	LB-072522-03-27I	7/25/22	7.11	295.6	14.2	3.30

Notes:
N/A = Not Applicable

Volatile Organic Compounds

Table B-2
2022 Groundwater Chemistry
Volatile Organic Compounds (µg/L)
Leichner Landfill

Location	Sample Number	Date	Bromo-dichloro-methane	Chloro-benzene	Chloro-ethane	Chloroform	Chloro-methane	1,4-DCB	1,1-DCA	1,1,1-TCA	cis-1,2-DCE	PCE	TCE
LB-1D	LB-021522-05-1D	2/15/22	0.50 L	0.50 L	0.50 L	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-021522-06-1S	2/15/22	0.50 L	0.50 L	0.50 L	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-052522-01-1S	5/25/22	0.50 L	0.50 L	0.50 L	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-072622-02-1S	7/26/22	0.50 L	0.50 L	0.50 L	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-112922-01-1S	11/29/22	0.50 L	0.50 L	0.50 L	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-112922-02-DUP	11/29/22	0.50 L	0.50 L	0.50 L	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-021522-01-3D	2/15/22	0.50 L	0.50 L	0.50 L	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-021522-02-3S	2/15/22	**0.52**	0.50 L	0.50 L	**0.82**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-021522-02-DUP2	2/15/22	0.50 L	0.50 L	0.50 L	**0.80**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-040422-01-3S	4/4/22	0.50 L	0.50 L	0.5 L	**0.82**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-040422-02-DUP	4/4/22	**0.50**	0.50 L	0.5 L	**0.80**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-052522-04-3S	5/25/22	**0.53**	0.50 L	0.50 L	**0.89**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-052522-05-DUP1	5/25/22	0.50 L	0.50 L	0.50 L	**0.89**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-072622-03-3S	7/26/22	0.50 L	0.50 L	0.50 L	**0.70**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-072622-03-DUP	7/26/22	0.50 L	0.50 L	0.50 L	**0.80**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-3S	LB-112922-05-3S	11/29/22	0.50 L	0.50 L	0.50 L	**0.66**	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
LB-5D	LB-021422-01-5D	2/14/22	0.50 L	0.50 L	0.50 L	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-021422-02-DUP1	2/14/22	0.50 L	0.50 L	0.50 L	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-021422-03-5S	2/14/22	0.50 L	0.50 L	0.50 L	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-072522-02-5S	7/25/22	0.50 L	0.50 L	0.50 L	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-021622-08-6S	2/16/22	0.50 L	0.50 L	0.50 L	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-072522-06-6S	7/25/22	0.50 L	0.50 L	0.50 L	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
2022 Groundwater Chemistry
Volatile Organic Compounds (µg/L)
Leichner Landfill

Location	Sample Number	Date	Bromo-dichloro-methane	Chloro-benzene	Chloro-ethane	Chloroform	Chloro-methane	1,4-DCB	1,1-DCA	1,1,1-TCA	cis-1,2-DCE	PCE	TCE
LB-10DR	LB-021522-07-10DR	2/15/22	0.50 L	0.50 L	0.50 L	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-021522-08-10SR	2/15/22	0.5 L	0.50 L	0.50 L	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-072622-05-10SR	7/26/22	0.5 L	0.50 L	0.50 L	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-021622-03-13D	2/16/22	0.50 L	0.50 L	0.50 L	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-021622-04-13I	2/16/22	0.50 L	0.50 L	0.50 L	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-072522-04-13I	7/25/22	0.50 L	0.50 L	0.50 L	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-021422-04-17D	2/14/22	0.50 L	0.50 L	0.50 L	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-021622-09-17I	2/16/22	0.50 L	0.50 L	0.50 L	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-021522-04-20S	2/15/22	0.50 L	0.50 L	0.50 L	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-052522-02-20S	5/25/22	0.50 L	0.50 L	0.50 L	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-072622-01-20S	7/26/22	0.50 L	0.50 L	0.50 L	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-112922-03-20S	11/29/22	0.50 L	0.50 L	0.50 L	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-021622-07-26D	2/16/22	0.50 L	0.50 L	0.50 L	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-021622-06-26I	2/16/22	0.50 L	0.50 L	0.50 L	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-072522-05-26I	7/25/22	0.50 L	0.50 L	0.50 L	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-021622-01-27D	2/16/22	0.50 L	0.50 L	0.50 L	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-021622-02-27I	2/16/22	0.50 L	0.50 L	0.50 L	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-072522-03-27I	7/25/22	0.50 L	0.50 L	0.50 L	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
2022 Groundwater Chemistry
Volatile Organic Compounds (µg/L)
Leichner Landfill

Location	Sample Number	Date	Bromo-dichloro-methane	Chloro-benzene	Chloro-ethane	Chloroform	Chloro-methane	1,4-DCB	1,1-DCA	1,1,1-TCA	cis-1,2-DCE	PCE	TCE
FIELD QC	LB-021622-05-FB	2/16/22	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELD QC*	LB-052522-03-FB	5/25/22	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELD QC	LB-072522-01-FB	7/25/22	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L
FIELD QC	LB-112922-04-FB	11/29/22	0.50 L	0.50 L	0.50 L	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	2/14/2022	0.50 L	0.50 L	0.50 L	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	2/15/2022	0.50 L	0.50 L	0.50 L	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	2/16/2022	0.50 L	0.50 L	0.50 L	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	5/25/2022	0.50 L	0.50 L	0.50 L	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	7/25/2022	0.50 L	0.50 L	0.50 L	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	7/26/2022	0.50 L	0.50 L	0.50 L	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	11/29/2022	0.50 L	0.50 L	0.50 L	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 = above the laboratory method detection limit

(MDL) but below the method reporting limit (MRL)

Dup = field duplicate sample;

L = not detected at or above MRL;

* = Field Blank had toluene detected in it on 5/25/2022 at 1.70 ug/L. Toluene was not detected in any samples.

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

Table B-3
2022 Groundwater Chemistry
Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
Leichner Landfill

Location	Sample Number	Date	Conductivity (µmhos/cm)	Chloride (CL = 250 mg/L)	Nitrate as Nitrogen (CL = 10 mg/L)	Total Dissolved Solids (CL = 500 mg/L)	Dissolved Iron (CL = 0.3 mg/L)	Dissolved Manganese (CL = 0.05 mg/L)
LB-1D	LB-021522-05-1D	2/15/22	NT	6.11	5.59	166	0.025 L	0.0011 L
LB-1S	LB-021522-06-1S	2/15/22	NT	4.74	2.40	167	0.024 L	0.0018 L
LB-1S	LB-052522-01-1S	5/25/22	NT	6.97	3.94	NT	NT	NT
LB-1S	LB-072622-02-1S	7/26/22	NT	5.61	4.17	197	0.021 L	0.0011 L
LB-1S	LB-112922-01-1S	11/29/22	NT	5.20	4.49	177	NT	NT
LB-1S	LB-112922-01-DUP	11/29/22	NT	5.16	4.43	173	NT	NT
LB-1S	LB-112922-01-1S	12/1/22	NT	7.20	5.12	153	0.021 L	0.0011 L
LB-3D	LB-021522-01-3D	2/15/22	NT	4.49	4.06	168	0.027 L	0.0011 L
LB-3S	LB-021522-02-3S	2/15/22	NT	4.19	3.07	155	0.021 L	0.0011 L
LB-3S	LB-021522-03-DUP2	2/15/22	NT	4.18	3.06	152	0.021 L	0.0011 L
LB-3S	LB-052522-04-3S	5/25/22	NT	5.81	3.61	NT	NT	NT
LB-3S	LB-052522-04-DUP1	5/25/22	NT	6.09	3.62	NT	NT	NT
LB-3S	LB-072622-03-3S	7/26/22	NT	4.80	3.37	159	0.021 L	0.0011 L
LB-3S	LB-072622-04-DUP	7/26/22	NT	4.50	3.36	156	0.021 L	0.0011 L
LB-3S	LB-112922-05-3S	11/29/22	NT	4.57	3.79	155	NT	NT
LB-5D	LB-021422-01-5D	2/14/22	NT	8.11	1.92	204	0.131	0.0043 L
LB-5D	LB-021422-02-DUP1	2/14/22	NT	8.12	1.87	205	0.130	0.0037 L
LB-5S	LB-021422-03-5S	2/14/22	NT	5.40	5.47	151	0.021 L	0.0011 L
LB-5S	LB-072522-02-5S	7/25/22	NT	3.59	4.50	153	0.021 L	0.0011 L
LB-6S	LB-021622-08-6S	2/16/22	NT	7.59	4.13	187	0.023 L	0.0011 L
LB-6S	LB-072522-06-6S	7/25/22	NT	5.49	2.23	154	0.021 L	0.0011 L
LB-10DR	LB-021522-07-10DR	2/15/22	NT	6.26	3.2	185	0.029 L	0.0045 L
LB-10SR	LB-021522-08-10SR	2/15/22	NT	6.04	5.95	165	0.064 L	0.0014 L
LB-10SR	LB-072622-05-10SR	7/26/22	NT	3.75	3.20	131	0.022 L	0.0011 L
LB-13D	LB-021622-03-13D	2/16/22	NT	5.0	4.40	173	0.024 L	0.0011 L
LB-13I	LB-021622-04-13I	2/16/22	NT	6.2	3.84	194	0.026 L	0.01 L
LB-13I	LB-072522-04-13I	7/25/22	NT	6.2	4.10	192	0.021 L	0.01 L
LB-17D	LB-021422-09-17D	2/14/22	NT	6.3	1.61	171	0.33	3.58
LB-17I	LB-021622-09-17I	2/16/22	NT	10.20	0.20 L	252	11.000	2.41

Table B-3
2022 Groundwater Chemistry
Inorganic Parameters and
Dissolved Metals Concentrations (mg/L)
Leichner Landfill

Location	Sample Number	Date	Conductivity (µmhos/cm)	Chloride (CL = 250 mg/L)	Nitrate as Nitrogen (CL = 10 mg/L)	Total Dissolved Solids (CL = 500 mg/L)	Dissolved Iron (CL = 0.3 mg/L)	Dissolved Manganese (CL = 0.05 mg/L)
LB-20S	LB-021522-04-20S	2/15/22	NT	4.65	0.20 L	242	0.030 L	0.078
LB-20S	LB-052522-02-20S	5/25/22	NT	24.80	0.20 L	NT	NT	NT
LB-20S	LB-072622-01-20S	7/26/22	NT	43.80	0.20 L	302	0.040 L	0.445
LB-20S	LB-112922-03-20S	11/29/22	NT	33.50	0.20 L	370	NT	NT
LB-26D	LB-021622-07-26D	2/16/22	NT	5.54	4.52	175	0.027 L	0.0011 L
LB-26I	LB-021622-06-26I	2/16/22	NT	5.82	4.25	186	0.024 L	0.0011 L
LB-26I	LB-072522-05-26I	7/25/22	NT	6.68	3.65	194	0.021 L	0.0058 L
LB-27D	LB-021622-01-27D	2/16/22	NT	7.3	3.82	205	0.035 L	0.001 L
LB-27I	LB-021622-02-27I	2/16/22	NT	5.77	2.48	176	0.029 L	0.0081 L
LB-27I	LB-072522-03-27I	7/25/22	NT	2.65	1.33	205	0.044 L	0.0259 L
FIELDQC	LB-021622-05-FB	2/16/22	NT	0.20 L	0.10 L	5.0 L	0.021 L	0.0011 L
FIELDQC	LB-052522-03-FB1	5/25/22	NT	0.20 L	0.10 L	NT	NT	NT
FIELD QC	LB-072522-01-FB	7/25/22	NT	0.20 L	0.10 L	5.0 L	0.021 L	0.0011 L
FIELD QC	LB-112922-04-FB	11/29/22	NT	0.20 L	0.10 L	5.0 L	0.021 L	0.0011 L

Notes:

CL = compliance level for inorganic parameters and metals in groundwater at Leichner Landfill.

µmhos/cm = microohms per centimer; mg/L = milligrams per liter

B = estimated concentration; detected above the method detection limit (MDL) but below the method reporting limit (MRL); L = not detected at or above MRL;

J = estimated concentration; H = due to laboratory error, sample was extracted and analyzed past the recommended 7-day hold time; NT = not tested.

= concentrattion is above the compliance level

APPENDIX C

2022 Laboratory Analytical Data Reports

First Quarter (February) 2022 Laboratory Reports

March 03, 2022 Service Request No:K2201572

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Landfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory February 15, 2022
For your reference, these analyses have been assigned our service request number **K2201572.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers
Project: Leichner Landfill
Sample Matrix: Ground Water

Service Request: K2201572
Date Received: 02/15/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five ground water samples were received for analysis at ALS Environmental on 02/15/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 02/18/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by  Date 03/03/2022

SAMPLE DETECTION SUMMARY

CLIENT ID: LB-021422-01 5D			Lab ID: K2201572-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	204			5.0	mg/L	SM 2540 C
Chloride	8.11			0.20	mg/L	300.0
Nitrate as Nitrogen	1.92			0.10	mg/L	300.0
Iron, Dissolved	131			21	ug/L	6010C
Manganese, Dissolved	4.3			1.1	ug/L	6010C

CLIENT ID: LB-021422-02-Dup1			Lab ID: K2201572-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	205			5.0	mg/L	SM 2540 C
Chloride	8.12			0.20	mg/L	300.0
Nitrate as Nitrogen	1.87			0.10	mg/L	300.0
Iron, Dissolved	130			21	ug/L	6010C
Manganese, Dissolved	3.7			1.1	ug/L	6010C

CLIENT ID: LB-021422-03-5S			Lab ID: K2201572-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	151			5.0	mg/L	SM 2540 C
Chloride	5.40			0.20	mg/L	300.0
Nitrate as Nitrogen	5.47			0.10	mg/L	300.0
Iron, Dissolved	22			21	ug/L	6010C

CLIENT ID: LB-021422-04-17D			Lab ID: K2201572-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	171			5.0	mg/L	SM 2540 C
Chloride	6.25			0.20	mg/L	300.0
Nitrate as Nitrogen	1.61			0.10	mg/L	300.0
Iron, Dissolved	326			21	ug/L	6010C
Manganese, Dissolved	3580			1.1	ug/L	6010C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:**K2201572

Project: Leichner Landfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2201572-001	TBl	2/14/2022	0700
K2201572-002	LB-021422-01 5D	2/14/2022	1020
K2201572-003	LB-021422-02-Dup1	2/14/2022	1025
K2201572-004	LB-021422-03-5S	2/14/2022	1125
K2201572-005	LB-021422-04-17D	2/14/2022	1250

CHAIN OF CUSTODY

SR# K2201572

ALS Environmental
1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@SCSengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐	Hex-Chrom☐	(circle) pH, Cond, Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO_2☐ RSK 175 ☐Methane ☐Ethane☐ Ethene☐			REMARKS
~~Trip Blank~~ TB1	2-14-22	0700		W	2		X																		
LB-021422-01-5D	2-14-22	1020		W	5		X						X		X										
LB-021422-02-Dup	2-14-22	1025		W	5		X						X		X										
LB-021422-03-5S	2-14-22	1125		W	5		X						X		X										
LB-021422-04-1MS	2-14-22	1250		W	5		X						X		X										

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
___ Standard (15 working days)
___ Provide FAX Results
_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
Metals are field filtered

Container Supply Number
65242

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Barbara Lary	Signature: R Morrow	Signature: R Morrow	Signature: C Morrow
Date/Time: 2/15/22 1020	Date/Time: 2/15/22 1020	Date/Time: 2/15/22 1020	Date/Time: 2/15/22 1020
Printed Name: BARBARA LARY	Printed Name: R Morrow	Printed Name: R Morrow	Printed Name: C Morrow
Firm: SCS	Firm: ALS	Firm: ALS	Firm: ALS

PM 12

Cooler Receipt and Preservation Form

Client SCS Service Request K22 01572

Received: 2/15/22 Opened: 2/15/22 By: [illegible] Unloaded: 2/15/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 Front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp.	IR Gun	Cooler #/COC ID/ (NA)	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number (NA)	Filed
—	0.7	IR02		—	—		

4. Was a Temperature Blank present in cooler? NA Y (N) If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? ~~NA~~ (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: (*Inserts*) (*Baggies*) *Bubble Wrap* *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* ~~NA~~ (Y) N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
	SHORT HOLD TIME								

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2201572
Project: Leichner Landfill/04222030.13

Sample Name: TBl **Date Collected:** 02/14/22
Lab Code: K2201572-001 **Date Received:** 02/15/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-021422-01 5D **Date Collected:** 02/14/22
Lab Code: K2201572-002 **Date Received:** 02/15/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Name: LB-021422-02-Dup1 **Date Collected:** 02/14/22
Lab Code: K2201572-003 **Date Received:** 02/15/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Name: LB-021422-03-5S **Date Collected:** 02/14/22
Lab Code: K2201572-004 **Date Received:** 02/15/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13		

Sample Name:	LB-021422-04-17D	**Date Collected:**	02/14/22
Lab Code:	K2201572-005	**Date Received:**	02/15/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Results

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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	TBl	**Units:**	ug/L
Lab Code:	K2201572-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 16:20	
Benzene	ND U	0.50	1	02/18/22 16:20	
Bromobenzene	ND U	2.0	1	02/18/22 16:20	
Bromochloromethane	ND U	0.50	1	02/18/22 16:20	
Bromodichloromethane	ND U	0.50	1	02/18/22 16:20	
Bromoform	ND U	0.50	1	02/18/22 16:20	
Bromomethane	ND U	0.50	1	02/18/22 16:20	
2-Butanone (MEK)	ND U	20	1	02/18/22 16:20	
n-Butylbenzene	ND U	4.0	1	02/18/22 16:20	
sec-Butylbenzene	ND U	2.0	1	02/18/22 16:20	
tert-Butylbenzene	ND U	2.0	1	02/18/22 16:20	
Carbon Disulfide	ND U	0.50	1	02/18/22 16:20	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 16:20	
Chlorobenzene	ND U	0.50	1	02/18/22 16:20	
Chloroethane	ND U	0.50	1	02/18/22 16:20	*
Chloroform	ND U	0.50	1	02/18/22 16:20	
Chloromethane	ND U	0.50	1	02/18/22 16:20	
2-Chlorotoluene	ND U	2.0	1	02/18/22 16:20	
4-Chlorotoluene	ND U	2.0	1	02/18/22 16:20	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 16:20	
Dibromochloromethane	ND U	0.50	1	02/18/22 16:20	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 16:20	
Dibromomethane	ND U	0.50	1	02/18/22 16:20	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 16:20	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 16:20	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 16:20	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 16:20	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 16:20	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 16:20	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 16:20	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 16:20	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 16:20	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 16:20	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 16:20	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 16:20	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 16:20	
Ethylbenzene	ND U	0.50	1	02/18/22 16:20	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 16:20	
2-Hexanone	ND U	20	1	02/18/22 16:20	
Isopropylbenzene	ND U	2.0	1	02/18/22 16:20	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 16:20	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	TBl	**Units:**	ug/L
Lab Code:	K2201572-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 16:20	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 16:20	
Methylene Chloride	ND U	2.0	1	02/18/22 16:20	
Naphthalene	ND U	2.0	1	02/18/22 16:20	*
n-Propylbenzene	ND U	2.0	1	02/18/22 16:20	
Styrene	ND U	0.50	1	02/18/22 16:20	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 16:20	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 16:20	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 16:20	
Toluene	ND U	0.50	1	02/18/22 16:20	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 16:20	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 16:20	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 16:20	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 16:20	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 16:20	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 16:20	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 16:20	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 16:20	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 16:20	
Vinyl Chloride	ND U	0.50	1	02/18/22 16:20	
o-Xylene	ND U	0.50	1	02/18/22 16:20	
m,p-Xylenes	ND U	0.50	1	02/18/22 16:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	02/18/22 16:20	
Dibromofluoromethane	103	73 - 122	02/18/22 16:20	
Toluene-d8	102	65 - 144	02/18/22 16:20	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-01 5D	**Units:**	ug/L
Lab Code:	K2201572-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 16:47	
Benzene	ND U	0.50	1	02/18/22 16:47	
Bromobenzene	ND U	2.0	1	02/18/22 16:47	
Bromochloromethane	ND U	0.50	1	02/18/22 16:47	
Bromodichloromethane	ND U	0.50	1	02/18/22 16:47	
Bromoform	ND U	0.50	1	02/18/22 16:47	
Bromomethane	ND U	0.50	1	02/18/22 16:47	
2-Butanone (MEK)	ND U	20	1	02/18/22 16:47	
n-Butylbenzene	ND U	4.0	1	02/18/22 16:47	
sec-Butylbenzene	ND U	2.0	1	02/18/22 16:47	
tert-Butylbenzene	ND U	2.0	1	02/18/22 16:47	
Carbon Disulfide	ND U	0.50	1	02/18/22 16:47	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 16:47	
Chlorobenzene	ND U	0.50	1	02/18/22 16:47	
Chloroethane	ND U	0.50	1	02/18/22 16:47	*
Chloroform	ND U	0.50	1	02/18/22 16:47	
Chloromethane	ND U	0.50	1	02/18/22 16:47	
2-Chlorotoluene	ND U	2.0	1	02/18/22 16:47	
4-Chlorotoluene	ND U	2.0	1	02/18/22 16:47	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 16:47	
Dibromochloromethane	ND U	0.50	1	02/18/22 16:47	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 16:47	
Dibromomethane	ND U	0.50	1	02/18/22 16:47	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 16:47	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 16:47	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 16:47	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 16:47	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 16:47	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 16:47	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 16:47	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 16:47	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 16:47	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 16:47	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 16:47	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 16:47	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 16:47	
Ethylbenzene	ND U	0.50	1	02/18/22 16:47	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 16:47	
2-Hexanone	ND U	20	1	02/18/22 16:47	
Isopropylbenzene	ND U	2.0	1	02/18/22 16:47	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 16:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-01 5D	**Units:**	ug/L
Lab Code:	K2201572-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 16:47	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 16:47	
Methylene Chloride	ND U	2.0	1	02/18/22 16:47	
Naphthalene	ND U	2.0	1	02/18/22 16:47	*
n-Propylbenzene	ND U	2.0	1	02/18/22 16:47	
Styrene	ND U	0.50	1	02/18/22 16:47	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 16:47	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 16:47	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 16:47	
Toluene	ND U	0.50	1	02/18/22 16:47	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 16:47	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 16:47	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 16:47	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 16:47	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 16:47	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 16:47	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 16:47	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 16:47	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 16:47	
Vinyl Chloride	ND U	0.50	1	02/18/22 16:47	
o-Xylene	ND U	0.50	1	02/18/22 16:47	
m,p-Xylenes	ND U	0.50	1	02/18/22 16:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/18/22 16:47	
Dibromofluoromethane	105	73 - 122	02/18/22 16:47	
Toluene-d8	98	65 - 144	02/18/22 16:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-02-Dup1	**Units:**	ug/L
Lab Code:	K2201572-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 17:13	
Benzene	ND U	0.50	1	02/18/22 17:13	
Bromobenzene	ND U	2.0	1	02/18/22 17:13	
Bromochloromethane	ND U	0.50	1	02/18/22 17:13	
Bromodichloromethane	ND U	0.50	1	02/18/22 17:13	
Bromoform	ND U	0.50	1	02/18/22 17:13	
Bromomethane	ND U	0.50	1	02/18/22 17:13	
2-Butanone (MEK)	ND U	20	1	02/18/22 17:13	
n-Butylbenzene	ND U	4.0	1	02/18/22 17:13	
sec-Butylbenzene	ND U	2.0	1	02/18/22 17:13	
tert-Butylbenzene	ND U	2.0	1	02/18/22 17:13	
Carbon Disulfide	ND U	0.50	1	02/18/22 17:13	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 17:13	
Chlorobenzene	ND U	0.50	1	02/18/22 17:13	
Chloroethane	ND U	0.50	1	02/18/22 17:13	*
Chloroform	ND U	0.50	1	02/18/22 17:13	
Chloromethane	ND U	0.50	1	02/18/22 17:13	
2-Chlorotoluene	ND U	2.0	1	02/18/22 17:13	
4-Chlorotoluene	ND U	2.0	1	02/18/22 17:13	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 17:13	
Dibromochloromethane	ND U	0.50	1	02/18/22 17:13	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 17:13	
Dibromomethane	ND U	0.50	1	02/18/22 17:13	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 17:13	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 17:13	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 17:13	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 17:13	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 17:13	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 17:13	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 17:13	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 17:13	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 17:13	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 17:13	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 17:13	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 17:13	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 17:13	
Ethylbenzene	ND U	0.50	1	02/18/22 17:13	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 17:13	
2-Hexanone	ND U	20	1	02/18/22 17:13	
Isopropylbenzene	ND U	2.0	1	02/18/22 17:13	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 17:13	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-02-Dup1	**Units:**	ug/L
Lab Code:	K2201572-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 17:13	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 17:13	
Methylene Chloride	ND U	2.0	1	02/18/22 17:13	
Naphthalene	ND U	2.0	1	02/18/22 17:13	*
n-Propylbenzene	ND U	2.0	1	02/18/22 17:13	
Styrene	ND U	0.50	1	02/18/22 17:13	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 17:13	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 17:13	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 17:13	
Toluene	ND U	0.50	1	02/18/22 17:13	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 17:13	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 17:13	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 17:13	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 17:13	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 17:13	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 17:13	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 17:13	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 17:13	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 17:13	
Vinyl Chloride	ND U	0.50	1	02/18/22 17:13	
o-Xylene	ND U	0.50	1	02/18/22 17:13	
m,p-Xylenes	ND U	0.50	1	02/18/22 17:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/18/22 17:13	
Dibromofluoromethane	106	73 - 122	02/18/22 17:13	
Toluene-d8	100	65 - 144	02/18/22 17:13	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 11:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-03-5S	**Units:**	ug/L
Lab Code:	K2201572-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 17:40	
Benzene	ND U	0.50	1	02/18/22 17:40	
Bromobenzene	ND U	2.0	1	02/18/22 17:40	
Bromochloromethane	ND U	0.50	1	02/18/22 17:40	
Bromodichloromethane	ND U	0.50	1	02/18/22 17:40	
Bromoform	ND U	0.50	1	02/18/22 17:40	
Bromomethane	ND U	0.50	1	02/18/22 17:40	
2-Butanone (MEK)	ND U	20	1	02/18/22 17:40	
n-Butylbenzene	ND U	4.0	1	02/18/22 17:40	
sec-Butylbenzene	ND U	2.0	1	02/18/22 17:40	
tert-Butylbenzene	ND U	2.0	1	02/18/22 17:40	
Carbon Disulfide	ND U	0.50	1	02/18/22 17:40	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 17:40	
Chlorobenzene	ND U	0.50	1	02/18/22 17:40	
Chloroethane	ND U	0.50	1	02/18/22 17:40	*
Chloroform	ND U	0.50	1	02/18/22 17:40	
Chloromethane	ND U	0.50	1	02/18/22 17:40	
2-Chlorotoluene	ND U	2.0	1	02/18/22 17:40	
4-Chlorotoluene	ND U	2.0	1	02/18/22 17:40	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 17:40	
Dibromochloromethane	ND U	0.50	1	02/18/22 17:40	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 17:40	
Dibromomethane	ND U	0.50	1	02/18/22 17:40	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 17:40	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 17:40	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 17:40	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 17:40	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 17:40	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 17:40	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 17:40	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 17:40	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 17:40	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 17:40	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 17:40	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 17:40	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 17:40	
Ethylbenzene	ND U	0.50	1	02/18/22 17:40	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 17:40	
2-Hexanone	ND U	20	1	02/18/22 17:40	
Isopropylbenzene	ND U	2.0	1	02/18/22 17:40	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 17:40	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 11:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-03-5S	**Units:**	ug/L
Lab Code:	K2201572-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 17:40	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 17:40	
Methylene Chloride	ND U	2.0	1	02/18/22 17:40	
Naphthalene	ND U	2.0	1	02/18/22 17:40	*
n-Propylbenzene	ND U	2.0	1	02/18/22 17:40	
Styrene	ND U	0.50	1	02/18/22 17:40	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 17:40	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 17:40	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 17:40	
Toluene	ND U	0.50	1	02/18/22 17:40	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 17:40	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 17:40	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 17:40	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 17:40	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 17:40	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 17:40	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 17:40	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 17:40	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 17:40	
Vinyl Chloride	ND U	0.50	1	02/18/22 17:40	
o-Xylene	ND U	0.50	1	02/18/22 17:40	
m,p-Xylenes	ND U	0.50	1	02/18/22 17:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	02/18/22 17:40	
Dibromofluoromethane	107	73 - 122	02/18/22 17:40	
Toluene-d8	100	65 - 144	02/18/22 17:40	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-04-17D	**Units:**	ug/L
Lab Code:	K2201572-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 18:06	
Benzene	ND U	0.50	1	02/18/22 18:06	
Bromobenzene	ND U	2.0	1	02/18/22 18:06	
Bromochloromethane	ND U	0.50	1	02/18/22 18:06	
Bromodichloromethane	ND U	0.50	1	02/18/22 18:06	
Bromoform	ND U	0.50	1	02/18/22 18:06	
Bromomethane	ND U	0.50	1	02/18/22 18:06	
2-Butanone (MEK)	ND U	20	1	02/18/22 18:06	
n-Butylbenzene	ND U	4.0	1	02/18/22 18:06	
sec-Butylbenzene	ND U	2.0	1	02/18/22 18:06	
tert-Butylbenzene	ND U	2.0	1	02/18/22 18:06	
Carbon Disulfide	ND U	0.50	1	02/18/22 18:06	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 18:06	
Chlorobenzene	ND U	0.50	1	02/18/22 18:06	
Chloroethane	ND U	0.50	1	02/18/22 18:06	*
Chloroform	ND U	0.50	1	02/18/22 18:06	
Chloromethane	ND U	0.50	1	02/18/22 18:06	
2-Chlorotoluene	ND U	2.0	1	02/18/22 18:06	
4-Chlorotoluene	ND U	2.0	1	02/18/22 18:06	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 18:06	
Dibromochloromethane	ND U	0.50	1	02/18/22 18:06	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 18:06	
Dibromomethane	ND U	0.50	1	02/18/22 18:06	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 18:06	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 18:06	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 18:06	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 18:06	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 18:06	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 18:06	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 18:06	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 18:06	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 18:06	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 18:06	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 18:06	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 18:06	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 18:06	
Ethylbenzene	ND U	0.50	1	02/18/22 18:06	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 18:06	
2-Hexanone	ND U	20	1	02/18/22 18:06	
Isopropylbenzene	ND U	2.0	1	02/18/22 18:06	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 18:06	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-04-17D	**Units:**	ug/L
Lab Code:	K2201572-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 18:06	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 18:06	
Methylene Chloride	ND U	2.0	1	02/18/22 18:06	
Naphthalene	ND U	2.0	1	02/18/22 18:06	*
n-Propylbenzene	ND U	2.0	1	02/18/22 18:06	
Styrene	ND U	0.50	1	02/18/22 18:06	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 18:06	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 18:06	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 18:06	
Toluene	ND U	0.50	1	02/18/22 18:06	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 18:06	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 18:06	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 18:06	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 18:06	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 18:06	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 18:06	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 18:06	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 18:06	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 18:06	
Vinyl Chloride	ND U	0.50	1	02/18/22 18:06	
o-Xylene	ND U	0.50	1	02/18/22 18:06	
m,p-Xylenes	ND U	0.50	1	02/18/22 18:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	76	68 - 117	02/18/22 18:06	
Dibromofluoromethane	105	73 - 122	02/18/22 18:06	
Toluene-d8	102	65 - 144	02/18/22 18:06	

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-01 5D	**Basis:**	NA
Lab Code:	K2201572-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**131**	ug/L	21	1	02/25/22 13:26	02/18/22	
Manganese	6010C	**4.3**	ug/L	1.1	1	02/25/22 13:26	02/18/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-02-Dup1	**Basis:**	NA
Lab Code:	K2201572-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**130**	ug/L	21	1	02/25/22 13:29	02/18/22	
Manganese	6010C	**3.7**	ug/L	1.1	1	02/25/22 13:29	02/18/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 11:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-03-5S	**Basis:**	NA
Lab Code:	K2201572-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**22**	ug/L	21	1	02/25/22 13:31	02/18/22	
Manganese	6010C	ND U	ug/L	1.1	1	02/25/22 13:31	02/18/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-04-17D	**Basis:**	NA
Lab Code:	K2201572-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**326**	ug/L	21	1	02/25/22 13:34	02/18/22	
Manganese	6010C	**3580**	ug/L	1.1	1	02/25/22 13:34	02/18/22	

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-01 5D	**Basis:**	NA
Lab Code:	K2201572-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**8.11**	mg/L	0.20	2	02/15/22 16:08	
Nitrate as Nitrogen	300.0	**1.92**	mg/L	0.10	2	02/15/22 16:08	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-01 5D	**Basis:**	NA
Lab Code:	K2201572-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**204**	mg/L	5.0	1	02/18/22 16:08	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-02-Dup1	**Basis:**	NA
Lab Code:	K2201572-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**8.12**	mg/L	0.20	2	02/15/22 16:14	
Nitrate as Nitrogen	300.0	**1.87**	mg/L	0.10	2	02/15/22 16:14	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-02-Dup1	**Basis:**	NA
Lab Code:	K2201572-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**205**	mg/L	5.0	1	02/18/22 16:08	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 11:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-03-5S	**Basis:**	NA
Lab Code:	K2201572-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.40**	mg/L	0.20	2	02/15/22 16:21	
Nitrate as Nitrogen	300.0	**5.47**	mg/L	0.10	2	02/15/22 16:21	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 11:25
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-03-5S	**Basis:**	NA
Lab Code:	K2201572-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**151**	mg/L	5.0	1	02/18/22 16:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-04-17D	**Basis:**	NA
Lab Code:	K2201572-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.25**	mg/L	0.20	2	02/15/22 16:28	
Nitrate as Nitrogen	300.0	**1.61**	mg/L	0.10	2	02/15/22 16:28	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	02/14/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/15/22 12:00
Sample Name:	LB-021422-04-17D	**Basis:**	NA
Lab Code:	K2201572-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**171**	mg/L	5.0	1	02/18/22 16:08	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: SCS Engineers **Service Request:** K2201572
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TBl	K2201572-001	75	103	102
LB-021422-01 5D	K2201572-002	74	105	98
LB-021422-02-Dup1	K2201572-003	73	106	100
LB-021422-03-5S	K2201572-004	75	107	100
LB-021422-04-17D	K2201572-005	76	105	102
Method Blank	KQ2203062-05	73	102	100
Lab Control Sample	KQ2203062-03	91	96	104
Duplicate Lab Control Sample	KQ2203062-04	91	95	103

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203062-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 13:15	
Benzene	ND U	0.50	1	02/18/22 13:15	
Bromobenzene	ND U	2.0	1	02/18/22 13:15	
Bromochloromethane	ND U	0.50	1	02/18/22 13:15	
Bromodichloromethane	ND U	0.50	1	02/18/22 13:15	
Bromoform	ND U	0.50	1	02/18/22 13:15	
Bromomethane	ND U	0.50	1	02/18/22 13:15	
2-Butanone (MEK)	ND U	20	1	02/18/22 13:15	
n-Butylbenzene	ND U	4.0	1	02/18/22 13:15	
sec-Butylbenzene	ND U	2.0	1	02/18/22 13:15	
tert-Butylbenzene	ND U	2.0	1	02/18/22 13:15	
Carbon Disulfide	ND U	0.50	1	02/18/22 13:15	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 13:15	
Chlorobenzene	ND U	0.50	1	02/18/22 13:15	
Chloroethane	ND U	0.50	1	02/18/22 13:15	
Chloroform	ND U	0.50	1	02/18/22 13:15	
Chloromethane	ND U	0.50	1	02/18/22 13:15	
2-Chlorotoluene	ND U	2.0	1	02/18/22 13:15	
4-Chlorotoluene	ND U	2.0	1	02/18/22 13:15	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 13:15	
Dibromochloromethane	ND U	0.50	1	02/18/22 13:15	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 13:15	
Dibromomethane	ND U	0.50	1	02/18/22 13:15	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 13:15	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 13:15	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 13:15	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 13:15	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
Ethylbenzene	ND U	0.50	1	02/18/22 13:15	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 13:15	
2-Hexanone	ND U	20	1	02/18/22 13:15	
Isopropylbenzene	ND U	2.0	1	02/18/22 13:15	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 13:15	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203062-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 13:15	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 13:15	
Methylene Chloride	ND U	2.0	1	02/18/22 13:15	
Naphthalene	ND U	2.0	1	02/18/22 13:15	
n-Propylbenzene	ND U	2.0	1	02/18/22 13:15	
Styrene	ND U	0.50	1	02/18/22 13:15	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 13:15	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 13:15	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 13:15	
Toluene	ND U	0.50	1	02/18/22 13:15	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 13:15	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 13:15	
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 13:15	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 13:15	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 13:15	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 13:15	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 13:15	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 13:15	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 13:15	
Vinyl Chloride	ND U	0.50	1	02/18/22 13:15	
o-Xylene	ND U	0.50	1	02/18/22 13:15	
m,p-Xylenes	ND U	0.50	1	02/18/22 13:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/18/22 13:15	
Dibromofluoromethane	102	73 - 122	02/18/22 13:15	
Toluene-d8	100	65 - 144	02/18/22 13:15	

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Analyzed:**	02/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755122

	Lab Control Sample KQ2203062-03			Duplicate Lab Control Sample KQ2203062-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	10.3	10.0	103	10.0	10.0	100	66-124	3	30
1,1,1-Trichloroethane (TCA)	10.3	10.0	103	9.85	10.0	99	59-136	4	30
1,1,2,2-Tetrachloroethane	10.6	10.0	106	10.3	10.0	103	70-127	2	30
1,1,2-Trichloroethane	10.1	10.0	101	9.90	10.0	99	74-118	2	30
1,1-Dichloroethane	10.9	10.0	109	10.5	10.0	105	68-132	3	30
1,1-Dichloropropene	10.2	10.0	102	9.98	10.0	100	59-134	2	30
1,2,3-Trichlorobenzene	7.27	10.0	73	7.83	10.0	78	68-120	7	30
1,2,3-Trichloropropane	10.7	10.0	107	10.3	10.0	103	69-123	4	30
1,2,4-Trichlorobenzene	7.64	10.0	76	7.81	10.0	78	58-126	2	30
1,2,4-Trimethylbenzene	9.47	10.0	95	9.38	10.0	94	63-122	<1	30
1,2-Dibromo-3-chloropropane	7.57	10.0	76	9.10	10.0	91	55-132	18	30
1,2-Dibromoethane (EDB)	9.27	10.0	93	9.05	10.0	91	74-118	2	30
1,2-Dichlorobenzene	9.47	10.0	95	9.36	10.0	94	72-115	1	30
1,2-Dichloropropane	10.5	10.0	105	10.2	10.0	102	67-126	3	30
1,3,5-Trimethylbenzene	9.47	10.0	95	9.22	10.0	92	62-126	3	30
1,3-Dichlorobenzene	9.10	10.0	91	9.12	10.0	91	70-116	<1	30
1,3-Dichloropropane	10.3	10.0	103	10.4	10.0	104	75-116	<1	30
1,4-Dichlorobenzene	9.29	10.0	93	9.29	10.0	93	73-115	<1	30
2,2-Dichloropropane	9.54	10.0	95	9.59	10.0	96	37-145	<1	30
2-Butanone (MEK)	51.6	50.0	103	50.2	50.0	100	71-149	3	30
2-Chlorotoluene	10.1	10.0	101	9.62	10.0	96	55-131	5	30
2-Hexanone	41.8	50.0	84	41.8	50.0	84	59-131	<1	30
4-Chlorotoluene	10.1	10.0	101	9.99	10.0	100	66-121	1	30
4-Isopropyltoluene	9.56	10.0	96	9.40	10.0	94	61-128	2	30
4-Methyl-2-pentanone (MIBK)	46.8	50.0	94	44.7	50.0	89	64-134	5	30
Acetone	52.4	50.0	105	52.6	50.0	105	68-135	<1	30
Benzene	10.9	10.0	109	10.6	10.0	106	69-124	3	30
Bromobenzene	9.12	10.0	91	9.40	10.0	94	72-116	3	30
Bromochloromethane	10.3	10.0	103	9.91	10.0	99	75-131	4	30
Bromodichloromethane	11.6	10.0	116	11.5	10.0	115	63-129	<1	30
Bromoform	9.69	10.0	97	9.66	10.0	97	52-144	<1	30
Bromomethane	8.16	10.0	82	7.51	10.0	75	35-113	8	30
Carbon Disulfide	22.5	20.0	112	21.6	20.0	108	46-144	4	30
Carbon Tetrachloride	11.2	10.0	112	10.7	10.0	107	55-140	4	30
Chlorobenzene	9.64	10.0	96	9.55	10.0	96	72-116	<1	30
Chloroethane	12.0	10.0	120	11.6	10.0	116	58-134	4	30
Chloroform	10.7	10.0	107	10.3	10.0	103	70-129	3	30
Chloromethane	10.1	10.0	101	9.74	10.0	97	34-130	4	30
cis-1,2-Dichloroethene	10.1	10.0	101	9.69	10.0	97	71-118	4	30
cis-1,3-Dichloropropene	10.8	10.0	108	10.6	10.0	106	62-132	2	30
Dibromochloromethane	11.1	10.0	111	10.6	10.0	106	67-126	5	30

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Analyzed:**	02/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755122

	Lab Control Sample KQ2203062-03			Duplicate Lab Control Sample KQ2203062-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	10.0	10.0	100	9.77	10.0	98	69-128	3	30
Dichlorodifluoromethane	9.61	10.0	96	9.36	10.0	94	32-124	3	30
Ethylbenzene	9.44	10.0	94	8.89	10.0	89	67-121	6	30
Hexachlorobutadiene	9.67	10.0	97	9.08	10.0	91	57-119	6	30
Isopropylbenzene	8.97	10.0	90	8.84	10.0	88	67-129	1	30
m,p-Xylenes	19.1	20.0	96	18.7	20.0	93	69-121	2	30
Methyl tert-Butyl Ether	8.67	10.0	87	8.61	10.0	86	54-126	<1	30
Methylene Chloride	10.6	10.0	106	10.3	10.0	103	71-122	3	30
Naphthalene	6.62	10.0	66	6.85	10.0	69	64-126	3	30
n-Butylbenzene	8.87	10.0	89	8.84	10.0	88	55-130	<1	30
n-Propylbenzene	9.84	10.0	98	9.85	10.0	99	61-124	<1	30
o-Xylene	8.88	10.0	89	8.72	10.0	87	71-119	2	30
sec-Butylbenzene	9.36	10.0	94	9.29	10.0	93	59-128	<1	30
Styrene	9.01	10.0	90	8.99	10.0	90	74-121	<1	30
tert-Butylbenzene	8.89	10.0	89	8.95	10.0	90	61-127	<1	30
Tetrachloroethene (PCE)	9.48	10.0	95	9.22	10.0	92	62-126	3	30
Toluene	10.9	10.0	109	10.4	10.0	104	69-124	5	30
trans-1,2-Dichloroethene	10.3	10.0	103	10.1	10.0	101	67-125	2	30
trans-1,3-Dichloropropene	9.50	10.0	95	9.74	10.0	97	59-125	2	30
Trichloroethene (TCE)	10.2	10.0	102	9.72	10.0	97	67-128	5	30
Trichlorofluoromethane (CFC 11)	9.16	10.0	92	8.67	10.0	87	52-141	5	30
Vinyl Chloride	10.8	10.0	108	10.2	10.0	102	55-123	6	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2202374-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	02/25/22 12:23	02/18/22	
Manganese	6010C	ND U	ug/L	1.1	1	02/25/22 12:23	02/18/22	

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201572
Date Analyzed: 02/25/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2202374-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2610	2500	104	80-120
Manganese	6010C	1170	1250	93	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201572-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/15/22 12:51	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/22 12:51	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201572-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/18/22 16:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201572-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/15/22 20:26	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/22 20:26	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201572
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201572-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/18/22 16:08	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201572
Date Analyzed: 02/15/22 - 02/18/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201572-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.87	5.00	97	90-110
Nitrate as Nitrogen	300.0	2.40	2.50	96	90-110
Solids, Total Dissolved	SM 2540 C	1850	1920	96	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201572
Date Analyzed: 02/15/22 - 02/18/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201572-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.69	5.00	94	90-110
Nitrate as Nitrogen	300.0	2.30	2.50	92	90-110
Solids, Total Dissolved	SM 2540 C	1850	1920	96	85-115

March 02, 2022 Service Request No:K2201630

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory February 16, 2022
For your reference, these analyses have been assigned our service request number **K2201630.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Environmental

Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2201630
Date Received: 02/16/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Nine ground water samples were received for analysis at ALS Environmental on 02/16/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method 300.0, 02/16/2022:The matrix spike recoveries of Chloride for sample LB-021522-05-1D were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outliers suggested a potential low bias in this matrix. No further corrective action was appropriate.

Volatiles by GC/MS:

Method 8260C, 02/22/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 02/22/2022:The ALS minimum relative response factor criterion for Naphthalene was not met in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compound was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Method 8260C, 02/22/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by  Date 03/02/2022

SAMPLE DETECTION SUMMARY

CLIENT ID: LB-021522-01-3D			Lab ID: K2201630-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	168			5.0	mg/L	SM 2540 C
Chloride	4.49			0.20	mg/L	300.0
Nitrate as Nitrogen	4.06			0.10	mg/L	300.0
Iron, Dissolved	27			21	ug/L	6010C

CLIENT ID: LB-021522-02-3S			Lab ID: K2201630-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	155			5.0	mg/L	SM 2540 C
Chloride	4.19			0.20	mg/L	300.0
Nitrate as Nitrogen	3.07			0.10	mg/L	300.0
Bromodichloromethane	0.52			0.50	ug/L	8260C
Chloroform	0.82			0.50	ug/L	8260C

CLIENT ID: LB-021522-03-Dup2			Lab ID: K2201630-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	152			5.0	mg/L	SM 2540 C
Chloride	4.18			0.20	mg/L	300.0
Nitrate as Nitrogen	3.06			0.10	mg/L	300.0
Chloroform	0.80			0.50	ug/L	8260C

CLIENT ID: LB-021522-04-20S			Lab ID: K2201630-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	242			10	mg/L	SM 2540 C
Chloride	4.65			0.20	mg/L	300.0
Iron, Dissolved	30			21	ug/L	6010C
Manganese, Dissolved	77.9			1.1	ug/L	6010C

CLIENT ID: LB-021522-05-1D			Lab ID: K2201630-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	166			5.0	mg/L	SM 2540 C
Chloride	6.11			0.20	mg/L	300.0
Nitrate as Nitrogen	5.59			0.10	mg/L	300.0
Iron, Dissolved	25			21	ug/L	6010C

CLIENT ID: LB-021522--06-1S			Lab ID: K2201630-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	167			10	mg/L	SM 2540 C
Chloride	4.74			0.20	mg/L	300.0
Nitrate as Nitrogen	2.40			0.10	mg/L	300.0
Iron, Dissolved	24			21	ug/L	6010C
Manganese, Dissolved	1.8			1.1	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: LB-021522--07-10DR			Lab ID: K2201630-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	185			5.0	mg/L	SM 2540 C
Chloride	6.26			0.20	mg/L	300.0
Nitrate as Nitrogen	3.17			0.10	mg/L	300.0
Iron, Dissolved	29			21	ug/L	6010C
Manganese, Dissolved	4.5			1.1	ug/L	6010C

CLIENT ID: LB-021522-08-10SR			Lab ID: K2201630-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	165			5.0	mg/L	SM 2540 C
Chloride	6.04			0.20	mg/L	300.0
Nitrate as Nitrogen	5.95			0.10	mg/L	300.0
Iron, Dissolved	64			21	ug/L	6010C
Manganese, Dissolved	1.4			1.1	ug/L	6010C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:**K2201630

Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2201630-001	TB2	2/15/2022	0700
K2201630-002	LB-021522-01-3D	2/15/2022	0850
K2201630-003	LB-021522-02-3S	2/15/2022	0955
K2201630-004	LB-021522-03-Dup2	2/15/2022	1000
K2201630-005	LB-021522-04-20S	2/15/2022	1100
K2201630-006	LB-021522-05-1D	2/15/2022	1155
K2201630-007	LB-021522--06-1S	2/15/2022	1250
K2201630-008	LB-021522--07-10DR	2/15/2022	1400
K2201630-009	LB-021522-08-10SR	2/15/2022	1455

CHAIN OF CUSTODY

SR# K2201630

ALS Environmental
1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15440 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: BLary@scsengineers.com
PHONE #: (971) 284-1297 FAX #
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260■	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ POP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond, Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS, Turb.	(circle) NH3-N, COD, TKN, TOC, DOC, NO2+NO3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO3☐ HCO3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐	REMARKS
TB2	2-15-22	0700		W	2		X															
LB-021522-01-3D	2-15-22	0850		W	5		X						X		X							
LB-021522-02-3S	2-15-22	0955		W	5		X						X		X							
LB-021522-03-A/2	2-15-22	1000		W	5		X						X		X							
LB-021522-04-3DS	2-15-22	1100		W	5		X						X		X							
LB-021522-05-1D	2-15-22	1155		W	5		X						X		X							
LB-021522-06-1S	2-15-22	1250		W	5		X						X		X							
LB-021522-07-10DR	2-15-22	1400		W	5		X						X		X							
LB-021522-08-10SR	2-15-22	1455		W	5		X						X		X							

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
___ Standard (15 working days)
___ Provide FAX Results
Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Metals are field filtered

Container Supply Number

65242

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Printed Name: BARBARA E. LARY	Printed Name: K Morrow	Printed Name: K Morrow	Printed Name: K Morrow
Date/Time: 2/16/22 1150	Date/Time: 2/16/22 1150	Date/Time: 2/16/22	Date/Time: 2/16/22
Firm: SCS	Firm: ALS	Firm: ALS 1305	Firm: ALS 1305

PM HH

Cooler Receipt and Preservation Form

Client SCS Service Request K22 0116 30

Received: 2/16/22 Opened: 2/16/22 By: [illegible] Unloaded: 2/16/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envèlope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front.
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
0.4	—	IR02	65242	—	—		

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, Resolutions: _____

:

1/13/22

Page ____ *of* ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2201630
Project: Leichner Lanfill/04222030.13

Sample Name: TB2 **Date Collected:** 02/15/22
Lab Code: K2201630-001 **Date Received:** 02/16/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-021522-01-3D **Date Collected:** 02/15/22
Lab Code: K2201630-002 **Date Received:** 02/16/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Name: LB-021522-02-3S **Date Collected:** 02/15/22
Lab Code: K2201630-003 **Date Received:** 02/16/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Name: LB-021522-03-Dup2 **Date Collected:** 02/15/22
Lab Code: K2201630-004 **Date Received:** 02/16/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-021522-04-20S	**Date Collected:**	02/15/22
Lab Code:	K2201630-005	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JSANCHEZ

Sample Name:	LB-021522-05-1D	**Date Collected:**	02/15/22
Lab Code:	K2201630-006	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021522--06-1S	**Date Collected:**	02/15/22
Lab Code:	K2201630-007	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021522--07-10DR	**Date Collected:**	02/15/22
Lab Code:	K2201630-008	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-021522--07-10DR	**Date Collected:**	02/15/22
Lab Code:	K2201630-008	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021522-08-10SR	**Date Collected:**	02/15/22
Lab Code:	K2201630-009	**Date Received:**	02/16/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2201630-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 19:26	
Benzene	ND U	0.50	1	02/18/22 19:26	
Bromobenzene	ND U	2.0	1	02/18/22 19:26	
Bromochloromethane	ND U	0.50	1	02/18/22 19:26	
Bromodichloromethane	ND U	0.50	1	02/18/22 19:26	
Bromoform	ND U	0.50	1	02/18/22 19:26	
Bromomethane	ND U	0.50	1	02/18/22 19:26	
2-Butanone (MEK)	ND U	20	1	02/18/22 19:26	
n-Butylbenzene	ND U	4.0	1	02/18/22 19:26	
sec-Butylbenzene	ND U	2.0	1	02/18/22 19:26	
tert-Butylbenzene	ND U	2.0	1	02/18/22 19:26	
Carbon Disulfide	ND U	0.50	1	02/18/22 19:26	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 19:26	
Chlorobenzene	ND U	0.50	1	02/18/22 19:26	
Chloroethane	ND U	0.50	1	02/18/22 19:26	*
Chloroform	ND U	0.50	1	02/18/22 19:26	
Chloromethane	ND U	0.50	1	02/18/22 19:26	
2-Chlorotoluene	ND U	2.0	1	02/18/22 19:26	
4-Chlorotoluene	ND U	2.0	1	02/18/22 19:26	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 19:26	
Dibromochloromethane	ND U	0.50	1	02/18/22 19:26	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 19:26	
Dibromomethane	ND U	0.50	1	02/18/22 19:26	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 19:26	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 19:26	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 19:26	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 19:26	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 19:26	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 19:26	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 19:26	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 19:26	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 19:26	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 19:26	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 19:26	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 19:26	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 19:26	
Ethylbenzene	ND U	0.50	1	02/18/22 19:26	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 19:26	
2-Hexanone	ND U	20	1	02/18/22 19:26	
Isopropylbenzene	ND U	2.0	1	02/18/22 19:26	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 19:26	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2201630-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 19:26	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 19:26	
Methylene Chloride	ND U	2.0	1	02/18/22 19:26	
Naphthalene	ND U	2.0	1	02/18/22 19:26	*
n-Propylbenzene	ND U	2.0	1	02/18/22 19:26	
Styrene	ND U	0.50	1	02/18/22 19:26	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 19:26	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 19:26	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 19:26	
Toluene	ND U	0.50	1	02/18/22 19:26	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 19:26	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 19:26	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 19:26	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 19:26	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 19:26	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 19:26	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 19:26	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 19:26	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 19:26	
Vinyl Chloride	ND U	0.50	1	02/18/22 19:26	
o-Xylene	ND U	0.50	1	02/18/22 19:26	
m,p-Xylenes	ND U	0.50	1	02/18/22 19:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/18/22 19:26	
Dibromofluoromethane	103	73 - 122	02/18/22 19:26	
Toluene-d8	98	65 - 144	02/18/22 19:26	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 08:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-01-3D	**Units:**	ug/L
Lab Code:	K2201630-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 19:53	
Benzene	ND U	0.50	1	02/18/22 19:53	
Bromobenzene	ND U	2.0	1	02/18/22 19:53	
Bromochloromethane	ND U	0.50	1	02/18/22 19:53	
Bromodichloromethane	ND U	0.50	1	02/18/22 19:53	
Bromoform	ND U	0.50	1	02/18/22 19:53	
Bromomethane	ND U	0.50	1	02/18/22 19:53	
2-Butanone (MEK)	ND U	20	1	02/18/22 19:53	
n-Butylbenzene	ND U	4.0	1	02/18/22 19:53	
sec-Butylbenzene	ND U	2.0	1	02/18/22 19:53	
tert-Butylbenzene	ND U	2.0	1	02/18/22 19:53	
Carbon Disulfide	ND U	0.50	1	02/18/22 19:53	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 19:53	
Chlorobenzene	ND U	0.50	1	02/18/22 19:53	
Chloroethane	ND U	0.50	1	02/18/22 19:53	*
Chloroform	ND U	0.50	1	02/18/22 19:53	
Chloromethane	ND U	0.50	1	02/18/22 19:53	
2-Chlorotoluene	ND U	2.0	1	02/18/22 19:53	
4-Chlorotoluene	ND U	2.0	1	02/18/22 19:53	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 19:53	
Dibromochloromethane	ND U	0.50	1	02/18/22 19:53	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 19:53	
Dibromomethane	ND U	0.50	1	02/18/22 19:53	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 19:53	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 19:53	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 19:53	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 19:53	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 19:53	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 19:53	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 19:53	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 19:53	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 19:53	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 19:53	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 19:53	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 19:53	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 19:53	
Ethylbenzene	ND U	0.50	1	02/18/22 19:53	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 19:53	
2-Hexanone	ND U	20	1	02/18/22 19:53	
Isopropylbenzene	ND U	2.0	1	02/18/22 19:53	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 19:53	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 08:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-01-3D	**Units:**	ug/L
Lab Code:	K2201630-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 19:53	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 19:53	
Methylene Chloride	ND U	2.0	1	02/18/22 19:53	
Naphthalene	ND U	2.0	1	02/18/22 19:53	*
n-Propylbenzene	ND U	2.0	1	02/18/22 19:53	
Styrene	ND U	0.50	1	02/18/22 19:53	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 19:53	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 19:53	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 19:53	
Toluene	ND U	0.50	1	02/18/22 19:53	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 19:53	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 19:53	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 19:53	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 19:53	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 19:53	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 19:53	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 19:53	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 19:53	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 19:53	
Vinyl Chloride	ND U	0.50	1	02/18/22 19:53	
o-Xylene	ND U	0.50	1	02/18/22 19:53	
m,p-Xylenes	ND U	0.50	1	02/18/22 19:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/18/22 19:53	
Dibromofluoromethane	103	73 - 122	02/18/22 19:53	
Toluene-d8	101	65 - 144	02/18/22 19:53	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 09:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-02-3S	**Units:**	ug/L
Lab Code:	K2201630-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	ND	U	20	1	02/18/22 20:19	
Benzene	ND	U	0.50	1	02/18/22 20:19	
Bromobenzene	ND	U	2.0	1	02/18/22 20:19	
Bromochloromethane	ND	U	0.50	1	02/18/22 20:19	
Bromodichloromethane	**0.52**		0.50	1	02/18/22 20:19	
Bromoform	ND	U	0.50	1	02/18/22 20:19	
Bromomethane	ND	U	0.50	1	02/18/22 20:19	
2-Butanone (MEK)	ND	U	20	1	02/18/22 20:19	
n-Butylbenzene	ND	U	4.0	1	02/18/22 20:19	
sec-Butylbenzene	ND	U	2.0	1	02/18/22 20:19	
tert-Butylbenzene	ND	U	2.0	1	02/18/22 20:19	
Carbon Disulfide	ND	U	0.50	1	02/18/22 20:19	
Carbon Tetrachloride	ND	U	0.50	1	02/18/22 20:19	
Chlorobenzene	ND	U	0.50	1	02/18/22 20:19	
Chloroethane	ND	U	0.50	1	02/18/22 20:19	*
Chloroform	**0.82**		0.50	1	02/18/22 20:19	
Chloromethane	ND	U	0.50	1	02/18/22 20:19	
2-Chlorotoluene	ND	U	2.0	1	02/18/22 20:19	
4-Chlorotoluene	ND	U	2.0	1	02/18/22 20:19	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/18/22 20:19	
Dibromochloromethane	ND	U	0.50	1	02/18/22 20:19	*
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/18/22 20:19	
Dibromomethane	ND	U	0.50	1	02/18/22 20:19	
1,2-Dichlorobenzene	ND	U	0.50	1	02/18/22 20:19	
1,3-Dichlorobenzene	ND	U	0.50	1	02/18/22 20:19	
1,4-Dichlorobenzene	ND	U	0.50	1	02/18/22 20:19	
Dichlorodifluoromethane	ND	U	0.50	1	02/18/22 20:19	
1,1-Dichloroethane	ND	U	0.50	1	02/18/22 20:19	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/18/22 20:19	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/18/22 20:19	
1,2-Dichloropropane	ND	U	0.50	1	02/18/22 20:19	
1,3-Dichloropropane	ND	U	0.50	1	02/18/22 20:19	
2,2-Dichloropropane	ND	U	0.50	1	02/18/22 20:19	
1,1-Dichloropropene	ND	U	0.50	1	02/18/22 20:19	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/18/22 20:19	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/18/22 20:19	
Ethylbenzene	ND	U	0.50	1	02/18/22 20:19	
Hexachlorobutadiene	ND	U	2.0	1	02/18/22 20:19	
2-Hexanone	ND	U	20	1	02/18/22 20:19	
Isopropylbenzene	ND	U	2.0	1	02/18/22 20:19	
4-Isopropyltoluene	ND	U	2.0	1	02/18/22 20:19	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 09:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-02-3S	**Units:**	ug/L
Lab Code:	K2201630-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 20:19	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 20:19	
Methylene Chloride	ND U	2.0	1	02/18/22 20:19	
Naphthalene	ND U	2.0	1	02/18/22 20:19	*
n-Propylbenzene	ND U	2.0	1	02/18/22 20:19	
Styrene	ND U	0.50	1	02/18/22 20:19	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 20:19	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 20:19	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 20:19	
Toluene	ND U	0.50	1	02/18/22 20:19	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 20:19	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 20:19	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 20:19	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 20:19	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 20:19	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 20:19	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 20:19	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 20:19	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 20:19	
Vinyl Chloride	ND U	0.50	1	02/18/22 20:19	
o-Xylene	ND U	0.50	1	02/18/22 20:19	
m,p-Xylenes	ND U	0.50	1	02/18/22 20:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/18/22 20:19	
Dibromofluoromethane	105	73 - 122	02/18/22 20:19	
Toluene-d8	103	65 - 144	02/18/22 20:19	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-03-Dup2	**Units:**	ug/L
Lab Code:	K2201630-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 20:45	
Benzene	ND U	0.50	1	02/18/22 20:45	
Bromobenzene	ND U	2.0	1	02/18/22 20:45	
Bromochloromethane	ND U	0.50	1	02/18/22 20:45	
Bromodichloromethane	ND U	0.50	1	02/18/22 20:45	
Bromoform	ND U	0.50	1	02/18/22 20:45	
Bromomethane	ND U	0.50	1	02/18/22 20:45	
2-Butanone (MEK)	ND U	20	1	02/18/22 20:45	
n-Butylbenzene	ND U	4.0	1	02/18/22 20:45	
sec-Butylbenzene	ND U	2.0	1	02/18/22 20:45	
tert-Butylbenzene	ND U	2.0	1	02/18/22 20:45	
Carbon Disulfide	ND U	0.50	1	02/18/22 20:45	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 20:45	
Chlorobenzene	ND U	0.50	1	02/18/22 20:45	
Chloroethane	ND U	0.50	1	02/18/22 20:45	*
Chloroform	**0.80**	0.50	1	02/18/22 20:45	
Chloromethane	ND U	0.50	1	02/18/22 20:45	
2-Chlorotoluene	ND U	2.0	1	02/18/22 20:45	
4-Chlorotoluene	ND U	2.0	1	02/18/22 20:45	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 20:45	
Dibromochloromethane	ND U	0.50	1	02/18/22 20:45	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 20:45	
Dibromomethane	ND U	0.50	1	02/18/22 20:45	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 20:45	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 20:45	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 20:45	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 20:45	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 20:45	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 20:45	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 20:45	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 20:45	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 20:45	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 20:45	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 20:45	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 20:45	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 20:45	
Ethylbenzene	ND U	0.50	1	02/18/22 20:45	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 20:45	
2-Hexanone	ND U	20	1	02/18/22 20:45	
Isopropylbenzene	ND U	2.0	1	02/18/22 20:45	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 20:45	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-03-Dup2	**Units:**	ug/L
Lab Code:	K2201630-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 20:45	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 20:45	
Methylene Chloride	ND U	2.0	1	02/18/22 20:45	
Naphthalene	ND U	2.0	1	02/18/22 20:45	*
n-Propylbenzene	ND U	2.0	1	02/18/22 20:45	
Styrene	ND U	0.50	1	02/18/22 20:45	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 20:45	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 20:45	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 20:45	
Toluene	ND U	0.50	1	02/18/22 20:45	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 20:45	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 20:45	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 20:45	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 20:45	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 20:45	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 20:45	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 20:45	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 20:45	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 20:45	
Vinyl Chloride	ND U	0.50	1	02/18/22 20:45	
o-Xylene	ND U	0.50	1	02/18/22 20:45	
m,p-Xylenes	ND U	0.50	1	02/18/22 20:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/18/22 20:45	
Dibromofluoromethane	102	73 - 122	02/18/22 20:45	
Toluene-d8	99	65 - 144	02/18/22 20:45	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-04-20S	**Units:**	ug/L
Lab Code:	K2201630-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 21:12	
Benzene	ND U	0.50	1	02/18/22 21:12	
Bromobenzene	ND U	2.0	1	02/18/22 21:12	
Bromochloromethane	ND U	0.50	1	02/18/22 21:12	
Bromodichloromethane	ND U	0.50	1	02/18/22 21:12	
Bromoform	ND U	0.50	1	02/18/22 21:12	
Bromomethane	ND U	0.50	1	02/18/22 21:12	
2-Butanone (MEK)	ND U	20	1	02/18/22 21:12	
n-Butylbenzene	ND U	4.0	1	02/18/22 21:12	
sec-Butylbenzene	ND U	2.0	1	02/18/22 21:12	
tert-Butylbenzene	ND U	2.0	1	02/18/22 21:12	
Carbon Disulfide	ND U	0.50	1	02/18/22 21:12	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 21:12	
Chlorobenzene	ND U	0.50	1	02/18/22 21:12	
Chloroethane	ND U	0.50	1	02/18/22 21:12	*
Chloroform	ND U	0.50	1	02/18/22 21:12	
Chloromethane	ND U	0.50	1	02/18/22 21:12	
2-Chlorotoluene	ND U	2.0	1	02/18/22 21:12	
4-Chlorotoluene	ND U	2.0	1	02/18/22 21:12	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 21:12	
Dibromochloromethane	ND U	0.50	1	02/18/22 21:12	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 21:12	
Dibromomethane	ND U	0.50	1	02/18/22 21:12	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 21:12	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 21:12	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 21:12	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 21:12	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 21:12	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 21:12	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 21:12	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 21:12	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 21:12	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 21:12	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 21:12	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 21:12	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 21:12	
Ethylbenzene	ND U	0.50	1	02/18/22 21:12	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 21:12	
2-Hexanone	ND U	20	1	02/18/22 21:12	
Isopropylbenzene	ND U	2.0	1	02/18/22 21:12	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 21:12	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-04-20S	**Units:**	ug/L
Lab Code:	K2201630-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 21:12	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 21:12	
Methylene Chloride	ND U	2.0	1	02/18/22 21:12	
Naphthalene	ND U	2.0	1	02/18/22 21:12	*
n-Propylbenzene	ND U	2.0	1	02/18/22 21:12	
Styrene	ND U	0.50	1	02/18/22 21:12	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 21:12	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 21:12	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 21:12	
Toluene	ND U	0.50	1	02/18/22 21:12	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 21:12	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 21:12	*
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 21:12	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 21:12	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 21:12	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 21:12	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 21:12	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 21:12	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 21:12	
Vinyl Chloride	ND U	0.50	1	02/18/22 21:12	
o-Xylene	ND U	0.50	1	02/18/22 21:12	
m,p-Xylenes	ND U	0.50	1	02/18/22 21:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/18/22 21:12	
Dibromofluoromethane	106	73 - 122	02/18/22 21:12	
Toluene-d8	97	65 - 144	02/18/22 21:12	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-05-1D	**Units:**	ug/L
Lab Code:	K2201630-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 15:35	
Benzene	ND U	0.50	1	02/22/22 15:35	
Bromobenzene	ND U	2.0	1	02/22/22 15:35	
Bromochloromethane	ND U	0.50	1	02/22/22 15:35	
Bromodichloromethane	ND U	0.50	1	02/22/22 15:35	*
Bromoform	ND U	0.50	1	02/22/22 15:35	
Bromomethane	ND U	0.50	1	02/22/22 15:35	
2-Butanone (MEK)	ND U	20	1	02/22/22 15:35	
n-Butylbenzene	ND U	4.0	1	02/22/22 15:35	
sec-Butylbenzene	ND U	2.0	1	02/22/22 15:35	
tert-Butylbenzene	ND U	2.0	1	02/22/22 15:35	
Carbon Disulfide	ND U	0.50	1	02/22/22 15:35	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 15:35	
Chlorobenzene	ND U	0.50	1	02/22/22 15:35	
Chloroethane	ND U	0.50	1	02/22/22 15:35	*
Chloroform	ND U	0.50	1	02/22/22 15:35	
Chloromethane	ND U	0.50	1	02/22/22 15:35	
2-Chlorotoluene	ND U	2.0	1	02/22/22 15:35	
4-Chlorotoluene	ND U	2.0	1	02/22/22 15:35	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 15:35	
Dibromochloromethane	ND U	0.50	1	02/22/22 15:35	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 15:35	
Dibromomethane	ND U	0.50	1	02/22/22 15:35	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 15:35	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 15:35	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 15:35	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 15:35	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 15:35	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 15:35	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 15:35	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 15:35	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 15:35	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 15:35	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 15:35	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 15:35	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 15:35	
Ethylbenzene	ND U	0.50	1	02/22/22 15:35	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 15:35	
2-Hexanone	ND U	20	1	02/22/22 15:35	*
Isopropylbenzene	ND U	2.0	1	02/22/22 15:35	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 15:35	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-05-1D	**Units:**	ug/L
Lab Code:	K2201630-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 15:35	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 15:35	
Methylene Chloride	ND U	2.0	1	02/22/22 15:35	
Naphthalene	ND U	2.0	1	02/22/22 15:35	*
n-Propylbenzene	ND U	2.0	1	02/22/22 15:35	
Styrene	ND U	0.50	1	02/22/22 15:35	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 15:35	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 15:35	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 15:35	
Toluene	ND U	0.50	1	02/22/22 15:35	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 15:35	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 15:35	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 15:35	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 15:35	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 15:35	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 15:35	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 15:35	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 15:35	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 15:35	
Vinyl Chloride	ND U	0.50	1	02/22/22 15:35	
o-Xylene	ND U	0.50	1	02/22/22 15:35	
m,p-Xylenes	ND U	0.50	1	02/22/22 15:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	02/22/22 15:35	
Dibromofluoromethane	103	73 - 122	02/22/22 15:35	
Toluene-d8	100	65 - 144	02/22/22 15:35	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--06-1S	**Units:**	ug/L
Lab Code:	K2201630-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 16:02	
Benzene	ND U	0.50	1	02/22/22 16:02	
Bromobenzene	ND U	2.0	1	02/22/22 16:02	
Bromochloromethane	ND U	0.50	1	02/22/22 16:02	
Bromodichloromethane	ND U	0.50	1	02/22/22 16:02	*
Bromoform	ND U	0.50	1	02/22/22 16:02	
Bromomethane	ND U	0.50	1	02/22/22 16:02	
2-Butanone (MEK)	ND U	20	1	02/22/22 16:02	
n-Butylbenzene	ND U	4.0	1	02/22/22 16:02	
sec-Butylbenzene	ND U	2.0	1	02/22/22 16:02	
tert-Butylbenzene	ND U	2.0	1	02/22/22 16:02	
Carbon Disulfide	ND U	0.50	1	02/22/22 16:02	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 16:02	
Chlorobenzene	ND U	0.50	1	02/22/22 16:02	
Chloroethane	ND U	0.50	1	02/22/22 16:02	*
Chloroform	ND U	0.50	1	02/22/22 16:02	
Chloromethane	ND U	0.50	1	02/22/22 16:02	
2-Chlorotoluene	ND U	2.0	1	02/22/22 16:02	
4-Chlorotoluene	ND U	2.0	1	02/22/22 16:02	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 16:02	
Dibromochloromethane	ND U	0.50	1	02/22/22 16:02	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 16:02	
Dibromomethane	ND U	0.50	1	02/22/22 16:02	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 16:02	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 16:02	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 16:02	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 16:02	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 16:02	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:02	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:02	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 16:02	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 16:02	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 16:02	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 16:02	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:02	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:02	
Ethylbenzene	ND U	0.50	1	02/22/22 16:02	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 16:02	
2-Hexanone	ND U	20	1	02/22/22 16:02	*
Isopropylbenzene	ND U	2.0	1	02/22/22 16:02	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 16:02	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--06-1S	**Units:**	ug/L
Lab Code:	K2201630-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 16:02	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 16:02	
Methylene Chloride	ND U	2.0	1	02/22/22 16:02	
Naphthalene	ND U	2.0	1	02/22/22 16:02	*
n-Propylbenzene	ND U	2.0	1	02/22/22 16:02	
Styrene	ND U	0.50	1	02/22/22 16:02	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:02	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:02	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 16:02	
Toluene	ND U	0.50	1	02/22/22 16:02	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 16:02	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 16:02	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 16:02	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 16:02	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 16:02	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 16:02	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 16:02	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 16:02	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 16:02	
Vinyl Chloride	ND U	0.50	1	02/22/22 16:02	
o-Xylene	ND U	0.50	1	02/22/22 16:02	
m,p-Xylenes	ND U	0.50	1	02/22/22 16:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/22/22 16:02	
Dibromofluoromethane	105	73 - 122	02/22/22 16:02	
Toluene-d8	100	65 - 144	02/22/22 16:02	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--07-10DR	**Units:**	ug/L
Lab Code:	K2201630-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 16:28	
Benzene	ND U	0.50	1	02/22/22 16:28	
Bromobenzene	ND U	2.0	1	02/22/22 16:28	
Bromochloromethane	ND U	0.50	1	02/22/22 16:28	
Bromodichloromethane	ND U	0.50	1	02/22/22 16:28	*
Bromoform	ND U	0.50	1	02/22/22 16:28	
Bromomethane	ND U	0.50	1	02/22/22 16:28	
2-Butanone (MEK)	ND U	20	1	02/22/22 16:28	
n-Butylbenzene	ND U	4.0	1	02/22/22 16:28	
sec-Butylbenzene	ND U	2.0	1	02/22/22 16:28	
tert-Butylbenzene	ND U	2.0	1	02/22/22 16:28	
Carbon Disulfide	ND U	0.50	1	02/22/22 16:28	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 16:28	
Chlorobenzene	ND U	0.50	1	02/22/22 16:28	
Chloroethane	ND U	0.50	1	02/22/22 16:28	*
Chloroform	ND U	0.50	1	02/22/22 16:28	
Chloromethane	ND U	0.50	1	02/22/22 16:28	
2-Chlorotoluene	ND U	2.0	1	02/22/22 16:28	
4-Chlorotoluene	ND U	2.0	1	02/22/22 16:28	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 16:28	
Dibromochloromethane	ND U	0.50	1	02/22/22 16:28	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 16:28	
Dibromomethane	ND U	0.50	1	02/22/22 16:28	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 16:28	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 16:28	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 16:28	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 16:28	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 16:28	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:28	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:28	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 16:28	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 16:28	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 16:28	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 16:28	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:28	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:28	
Ethylbenzene	ND U	0.50	1	02/22/22 16:28	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 16:28	
2-Hexanone	ND U	20	1	02/22/22 16:28	*
Isopropylbenzene	ND U	2.0	1	02/22/22 16:28	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 16:28	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--07-10DR	**Units:**	ug/L
Lab Code:	K2201630-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 16:28	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 16:28	
Methylene Chloride	ND U	2.0	1	02/22/22 16:28	
Naphthalene	ND U	2.0	1	02/22/22 16:28	*
n-Propylbenzene	ND U	2.0	1	02/22/22 16:28	
Styrene	ND U	0.50	1	02/22/22 16:28	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:28	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:28	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 16:28	
Toluene	ND U	0.50	1	02/22/22 16:28	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 16:28	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 16:28	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 16:28	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 16:28	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 16:28	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 16:28	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 16:28	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 16:28	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 16:28	
Vinyl Chloride	ND U	0.50	1	02/22/22 16:28	
o-Xylene	ND U	0.50	1	02/22/22 16:28	
m,p-Xylenes	ND U	0.50	1	02/22/22 16:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	02/22/22 16:28	
Dibromofluoromethane	105	73 - 122	02/22/22 16:28	
Toluene-d8	98	65 - 144	02/22/22 16:28	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-08-10SR	**Units:**	ug/L
Lab Code:	K2201630-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 16:55	
Benzene	ND U	0.50	1	02/22/22 16:55	
Bromobenzene	ND U	2.0	1	02/22/22 16:55	
Bromochloromethane	ND U	0.50	1	02/22/22 16:55	
Bromodichloromethane	ND U	0.50	1	02/22/22 16:55	*
Bromoform	ND U	0.50	1	02/22/22 16:55	
Bromomethane	ND U	0.50	1	02/22/22 16:55	
2-Butanone (MEK)	ND U	20	1	02/22/22 16:55	
n-Butylbenzene	ND U	4.0	1	02/22/22 16:55	
sec-Butylbenzene	ND U	2.0	1	02/22/22 16:55	
tert-Butylbenzene	ND U	2.0	1	02/22/22 16:55	
Carbon Disulfide	ND U	0.50	1	02/22/22 16:55	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 16:55	
Chlorobenzene	ND U	0.50	1	02/22/22 16:55	
Chloroethane	ND U	0.50	1	02/22/22 16:55	*
Chloroform	ND U	0.50	1	02/22/22 16:55	
Chloromethane	ND U	0.50	1	02/22/22 16:55	
2-Chlorotoluene	ND U	2.0	1	02/22/22 16:55	
4-Chlorotoluene	ND U	2.0	1	02/22/22 16:55	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 16:55	
Dibromochloromethane	ND U	0.50	1	02/22/22 16:55	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 16:55	
Dibromomethane	ND U	0.50	1	02/22/22 16:55	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 16:55	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 16:55	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 16:55	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 16:55	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 16:55	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:55	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 16:55	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 16:55	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 16:55	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 16:55	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 16:55	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:55	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 16:55	
Ethylbenzene	ND U	0.50	1	02/22/22 16:55	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 16:55	
2-Hexanone	ND U	20	1	02/22/22 16:55	*
Isopropylbenzene	ND U	2.0	1	02/22/22 16:55	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 16:55	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-08-10SR	**Units:**	ug/L
Lab Code:	K2201630-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 16:55	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 16:55	
Methylene Chloride	ND U	2.0	1	02/22/22 16:55	
Naphthalene	ND U	2.0	1	02/22/22 16:55	*
n-Propylbenzene	ND U	2.0	1	02/22/22 16:55	
Styrene	ND U	0.50	1	02/22/22 16:55	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:55	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 16:55	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 16:55	
Toluene	ND U	0.50	1	02/22/22 16:55	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 16:55	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 16:55	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 16:55	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 16:55	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 16:55	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 16:55	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 16:55	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 16:55	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 16:55	
Vinyl Chloride	ND U	0.50	1	02/22/22 16:55	
o-Xylene	ND U	0.50	1	02/22/22 16:55	
m,p-Xylenes	ND U	0.50	1	02/22/22 16:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/22/22 16:55	
Dibromofluoromethane	106	73 - 122	02/22/22 16:55	
Toluene-d8	98	65 - 144	02/22/22 16:55	

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 08:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-01-3D	**Basis:**	NA
Lab Code:	K2201630-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**27**	ug/L	21	1	03/02/22 09:29	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:29	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 09:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-02-3S	**Basis:**	NA
Lab Code:	K2201630-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	03/02/22 09:47	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:47	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-03-Dup2	**Basis:**	NA
Lab Code:	K2201630-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	03/02/22 09:49	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:49	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-04-20S	**Basis:**	NA
Lab Code:	K2201630-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**30**	ug/L	21	1	03/02/22 09:52	02/25/22	
Manganese	6010C	**77.9**	ug/L	1.1	1	03/02/22 09:52	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-05-1D	**Basis:**	NA
Lab Code:	K2201630-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**25**	ug/L	21	1	03/02/22 09:55	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:55	02/25/22	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--06-1S	**Basis:**	NA
Lab Code:	K2201630-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**24**	ug/L	21	1	03/02/22 09:57	02/25/22	
Manganese	6010C	**1.8**	ug/L	1.1	1	03/02/22 09:57	02/25/22	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--07-10DR	**Basis:**	NA
Lab Code:	K2201630-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**29**	ug/L	21	1	03/02/22 10:00	02/25/22	
Manganese	6010C	**4.5**	ug/L	1.1	1	03/02/22 10:00	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-08-10SR	**Basis:**	NA
Lab Code:	K2201630-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**64**	ug/L	21	1	03/02/22 10:03	02/25/22	
Manganese	6010C	**1.4**	ug/L	1.1	1	03/02/22 10:03	02/25/22	

General Chemistry

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 08:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-01-3D	**Basis:**	NA
Lab Code:	K2201630-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.49**	mg/L	0.20	2	02/16/22 16:02	
Nitrate as Nitrogen	300.0	**4.06**	mg/L	0.10	2	02/16/22 16:02	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 08:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-01-3D	**Basis:**	NA
Lab Code:	K2201630-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**168**	mg/L	5.0	1	02/18/22 17:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 09:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-02-3S	**Basis:**	NA
Lab Code:	K2201630-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.19**	mg/L	0.20	2	02/16/22 16:09	
Nitrate as Nitrogen	300.0	**3.07**	mg/L	0.10	2	02/16/22 16:09	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 09:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-02-3S	**Basis:**	NA
Lab Code:	K2201630-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**155**	mg/L	5.0	1	02/18/22 17:25	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-03-Dup2	**Basis:**	NA
Lab Code:	K2201630-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.18**	mg/L	0.20	2	02/16/22 16:16	
Nitrate as Nitrogen	300.0	**3.06**	mg/L	0.10	2	02/16/22 16:16	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-03-Dup2	**Basis:**	NA
Lab Code:	K2201630-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**152**	mg/L	5.0	1	02/18/22 17:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-04-20S	**Basis:**	NA
Lab Code:	K2201630-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.65**	mg/L	0.20	2	02/16/22 16:22	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/16/22 16:22	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-04-20S	**Basis:**	NA
Lab Code:	K2201630-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**242**	mg/L	10	1	02/18/22 17:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-05-1D	**Basis:**	NA
Lab Code:	K2201630-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.11**	mg/L	0.20	2	02/16/22 16:43	
Nitrate as Nitrogen	300.0	**5.59**	mg/L	0.10	2	02/16/22 16:43	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-05-1D	**Basis:**	NA
Lab Code:	K2201630-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**166**	mg/L	5.0	1	02/18/22 17:25	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--06-1S	**Basis:**	NA
Lab Code:	K2201630-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.74**	mg/L	0.20	2	02/16/22 17:10	
Nitrate as Nitrogen	300.0	**2.40**	mg/L	0.10	2	02/16/22 17:10	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 12:50
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--06-1S	**Basis:**	NA
Lab Code:	K2201630-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**167**	mg/L	10	1	02/18/22 17:25	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--07-10DR	**Basis:**	NA
Lab Code:	K2201630-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.26**	mg/L	0.20	2	02/16/22 17:17	
Nitrate as Nitrogen	300.0	**3.17**	mg/L	0.10	2	02/16/22 17:17	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:00
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522--07-10DR	**Basis:**	NA
Lab Code:	K2201630-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**185**	mg/L	5.0	1	02/18/22 17:25	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-08-10SR	**Basis:**	NA
Lab Code:	K2201630-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.04**	mg/L	0.20	2	02/16/22 17:24	
Nitrate as Nitrogen	300.0	**5.95**	mg/L	0.10	2	02/16/22 17:24	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22 14:55
Sample Matrix:	Ground Water	**Date Received:**	02/16/22 13:05
Sample Name:	LB-021522-08-10SR	**Basis:**	NA
Lab Code:	K2201630-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**165**	mg/L	5.0	1	02/18/22 17:25	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:** K2201630

Project: Leichner Lanfill/04222030.13

Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TB2	K2201630-001	73	103	98
LB-021522-01-3D	K2201630-002	74	103	101
LB-021522-02-3S	K2201630-003	74	105	103
LB-021522-03-Dup2	K2201630-004	74	102	99
LB-021522-04-20S	K2201630-005	74	106	97
LB-021522-05-1D	K2201630-006	75	103	100
LB-021522--06-1S	K2201630-007	73	105	100
LB-021522--07-10DR	K2201630-008	75	105	98
LB-021522-08-10SR	K2201630-009	74	106	98
Method Blank	KQ2203062-05	73	102	100
Method Blank	KQ2203190-05	76	101	101
Lab Control Sample	KQ2203062-03	91	96	104
Duplicate Lab Control Sample	KQ2203062-04	91	95	103
Lab Control Sample	KQ2203190-03	93	95	105
Duplicate Lab Control Sample	KQ2203190-04	90	95	105

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203062-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/18/22 13:15	
Benzene	ND U	0.50	1	02/18/22 13:15	
Bromobenzene	ND U	2.0	1	02/18/22 13:15	
Bromochloromethane	ND U	0.50	1	02/18/22 13:15	
Bromodichloromethane	ND U	0.50	1	02/18/22 13:15	
Bromoform	ND U	0.50	1	02/18/22 13:15	
Bromomethane	ND U	0.50	1	02/18/22 13:15	
2-Butanone (MEK)	ND U	20	1	02/18/22 13:15	
n-Butylbenzene	ND U	4.0	1	02/18/22 13:15	
sec-Butylbenzene	ND U	2.0	1	02/18/22 13:15	
tert-Butylbenzene	ND U	2.0	1	02/18/22 13:15	
Carbon Disulfide	ND U	0.50	1	02/18/22 13:15	
Carbon Tetrachloride	ND U	0.50	1	02/18/22 13:15	
Chlorobenzene	ND U	0.50	1	02/18/22 13:15	
Chloroethane	ND U	0.50	1	02/18/22 13:15	
Chloroform	ND U	0.50	1	02/18/22 13:15	
Chloromethane	ND U	0.50	1	02/18/22 13:15	
2-Chlorotoluene	ND U	2.0	1	02/18/22 13:15	
4-Chlorotoluene	ND U	2.0	1	02/18/22 13:15	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/18/22 13:15	
Dibromochloromethane	ND U	0.50	1	02/18/22 13:15	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/18/22 13:15	
Dibromomethane	ND U	0.50	1	02/18/22 13:15	
1,2-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
1,3-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
1,4-Dichlorobenzene	ND U	0.50	1	02/18/22 13:15	
Dichlorodifluoromethane	ND U	0.50	1	02/18/22 13:15	
1,1-Dichloroethane	ND U	0.50	1	02/18/22 13:15	
cis-1,2-Dichloroethene	ND U	0.50	1	02/18/22 13:15	
trans-1,2-Dichloroethene	ND U	0.50	1	02/18/22 13:15	
1,2-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
1,3-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
2,2-Dichloropropane	ND U	0.50	1	02/18/22 13:15	
1,1-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
cis-1,3-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
trans-1,3-Dichloropropene	ND U	0.50	1	02/18/22 13:15	
Ethylbenzene	ND U	0.50	1	02/18/22 13:15	
Hexachlorobutadiene	ND U	2.0	1	02/18/22 13:15	
2-Hexanone	ND U	20	1	02/18/22 13:15	
Isopropylbenzene	ND U	2.0	1	02/18/22 13:15	
4-Isopropyltoluene	ND U	2.0	1	02/18/22 13:15	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203062-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/18/22 13:15	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/18/22 13:15	
Methylene Chloride	ND U	2.0	1	02/18/22 13:15	
Naphthalene	ND U	2.0	1	02/18/22 13:15	
n-Propylbenzene	ND U	2.0	1	02/18/22 13:15	
Styrene	ND U	0.50	1	02/18/22 13:15	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/18/22 13:15	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/18/22 13:15	
Tetrachloroethene (PCE)	ND U	0.50	1	02/18/22 13:15	
Toluene	ND U	0.50	1	02/18/22 13:15	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/18/22 13:15	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/18/22 13:15	
1,1,2-Trichloroethane	ND U	0.50	1	02/18/22 13:15	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/18/22 13:15	
Trichloroethene (TCE)	ND U	0.50	1	02/18/22 13:15	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/18/22 13:15	
1,2,3-Trichloropropane	ND U	0.50	1	02/18/22 13:15	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/18/22 13:15	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/18/22 13:15	
Vinyl Chloride	ND U	0.50	1	02/18/22 13:15	
o-Xylene	ND U	0.50	1	02/18/22 13:15	
m,p-Xylenes	ND U	0.50	1	02/18/22 13:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/18/22 13:15	
Dibromofluoromethane	102	73 - 122	02/18/22 13:15	
Toluene-d8	100	65 - 144	02/18/22 13:15	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203190-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 13:49	
Benzene	ND U	0.50	1	02/22/22 13:49	
Bromobenzene	ND U	2.0	1	02/22/22 13:49	
Bromochloromethane	ND U	0.50	1	02/22/22 13:49	
Bromodichloromethane	ND U	0.50	1	02/22/22 13:49	
Bromoform	ND U	0.50	1	02/22/22 13:49	
Bromomethane	ND U	0.50	1	02/22/22 13:49	
2-Butanone (MEK)	ND U	20	1	02/22/22 13:49	
n-Butylbenzene	ND U	4.0	1	02/22/22 13:49	
sec-Butylbenzene	ND U	2.0	1	02/22/22 13:49	
tert-Butylbenzene	ND U	2.0	1	02/22/22 13:49	
Carbon Disulfide	ND U	0.50	1	02/22/22 13:49	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 13:49	
Chlorobenzene	ND U	0.50	1	02/22/22 13:49	
Chloroethane	ND U	0.50	1	02/22/22 13:49	
Chloroform	ND U	0.50	1	02/22/22 13:49	
Chloromethane	ND U	0.50	1	02/22/22 13:49	
2-Chlorotoluene	ND U	2.0	1	02/22/22 13:49	
4-Chlorotoluene	ND U	2.0	1	02/22/22 13:49	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 13:49	
Dibromochloromethane	ND U	0.50	1	02/22/22 13:49	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 13:49	
Dibromomethane	ND U	0.50	1	02/22/22 13:49	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 13:49	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 13:49	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 13:49	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 13:49	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
Ethylbenzene	ND U	0.50	1	02/22/22 13:49	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 13:49	
2-Hexanone	ND U	20	1	02/22/22 13:49	
Isopropylbenzene	ND U	2.0	1	02/22/22 13:49	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 13:49	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203190-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 13:49	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 13:49	
Methylene Chloride	ND U	2.0	1	02/22/22 13:49	
Naphthalene	ND U	2.0	1	02/22/22 13:49	
n-Propylbenzene	ND U	2.0	1	02/22/22 13:49	
Styrene	ND U	0.50	1	02/22/22 13:49	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 13:49	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 13:49	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 13:49	
Toluene	ND U	0.50	1	02/22/22 13:49	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 13:49	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 13:49	
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 13:49	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 13:49	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 13:49	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 13:49	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 13:49	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 13:49	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 13:49	
Vinyl Chloride	ND U	0.50	1	02/22/22 13:49	
o-Xylene	ND U	0.50	1	02/22/22 13:49	
m,p-Xylenes	ND U	0.50	1	02/22/22 13:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	76	68 - 117	02/22/22 13:49	
Dibromofluoromethane	101	73 - 122	02/22/22 13:49	
Toluene-d8	101	65 - 144	02/22/22 13:49	

ALS Group USA, Corp.
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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755122

	Lab Control Sample KQ2203062-03			Duplicate Lab Control Sample KQ2203062-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	10.3	10.0	103	10.0	10.0	100	66-124	3	30
1,1,1-Trichloroethane (TCA)	10.3	10.0	103	9.85	10.0	99	59-136	4	30
1,1,2,2-Tetrachloroethane	10.6	10.0	106	10.3	10.0	103	70-127	2	30
1,1,2-Trichloroethane	10.1	10.0	101	9.90	10.0	99	74-118	2	30
1,1-Dichloroethane	10.9	10.0	109	10.5	10.0	105	68-132	3	30
1,1-Dichloropropene	10.2	10.0	102	9.98	10.0	100	59-134	2	30
1,2,3-Trichlorobenzene	7.27	10.0	73	7.83	10.0	78	68-120	7	30
1,2,3-Trichloropropane	10.7	10.0	107	10.3	10.0	103	69-123	4	30
1,2,4-Trichlorobenzene	7.64	10.0	76	7.81	10.0	78	58-126	2	30
1,2,4-Trimethylbenzene	9.47	10.0	95	9.38	10.0	94	63-122	<1	30
1,2-Dibromo-3-chloropropane	7.57	10.0	76	9.10	10.0	91	55-132	18	30
1,2-Dibromoethane (EDB)	9.27	10.0	93	9.05	10.0	91	74-118	2	30
1,2-Dichlorobenzene	9.47	10.0	95	9.36	10.0	94	72-115	1	30
1,2-Dichloropropane	10.5	10.0	105	10.2	10.0	102	67-126	3	30
1,3,5-Trimethylbenzene	9.47	10.0	95	9.22	10.0	92	62-126	3	30
1,3-Dichlorobenzene	9.10	10.0	91	9.12	10.0	91	70-116	<1	30
1,3-Dichloropropane	10.3	10.0	103	10.4	10.0	104	75-116	<1	30
1,4-Dichlorobenzene	9.29	10.0	93	9.29	10.0	93	73-115	<1	30
2,2-Dichloropropane	9.54	10.0	95	9.59	10.0	96	37-145	<1	30
2-Butanone (MEK)	51.6	50.0	103	50.2	50.0	100	71-149	3	30
2-Chlorotoluene	10.1	10.0	101	9.62	10.0	96	55-131	5	30
2-Hexanone	41.8	50.0	84	41.8	50.0	84	59-131	<1	30
4-Chlorotoluene	10.1	10.0	101	9.99	10.0	100	66-121	1	30
4-Isopropyltoluene	9.56	10.0	96	9.40	10.0	94	61-128	2	30
4-Methyl-2-pentanone (MIBK)	46.8	50.0	94	44.7	50.0	89	64-134	5	30
Acetone	52.4	50.0	105	52.6	50.0	105	68-135	<1	30
Benzene	10.9	10.0	109	10.6	10.0	106	69-124	3	30
Bromobenzene	9.12	10.0	91	9.40	10.0	94	72-116	3	30
Bromochloromethane	10.3	10.0	103	9.91	10.0	99	75-131	4	30
Bromodichloromethane	11.6	10.0	116	11.5	10.0	115	63-129	<1	30
Bromoform	9.69	10.0	97	9.66	10.0	97	52-144	<1	30
Bromomethane	8.16	10.0	82	7.51	10.0	75	35-113	8	30
Carbon Disulfide	22.5	20.0	112	21.6	20.0	108	46-144	4	30
Carbon Tetrachloride	11.2	10.0	112	10.7	10.0	107	55-140	4	30
Chlorobenzene	9.64	10.0	96	9.55	10.0	96	72-116	<1	30
Chloroethane	12.0	10.0	120	11.6	10.0	116	58-134	4	30
Chloroform	10.7	10.0	107	10.3	10.0	103	70-129	3	30
Chloromethane	10.1	10.0	101	9.74	10.0	97	34-130	4	30
cis-1,2-Dichloroethene	10.1	10.0	101	9.69	10.0	97	71-118	4	30
cis-1,3-Dichloropropene	10.8	10.0	108	10.6	10.0	106	62-132	2	30
Dibromochloromethane	11.1	10.0	111	10.6	10.0	106	67-126	5	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755122

	Lab Control Sample KQ2203062-03			Duplicate Lab Control Sample KQ2203062-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	10.0	10.0	100	9.77	10.0	98	69-128	3	30
Dichlorodifluoromethane	9.61	10.0	96	9.36	10.0	94	32-124	3	30
Ethylbenzene	9.44	10.0	94	8.89	10.0	89	67-121	6	30
Hexachlorobutadiene	9.67	10.0	97	9.08	10.0	91	57-119	6	30
Isopropylbenzene	8.97	10.0	90	8.84	10.0	88	67-129	1	30
m,p-Xylenes	19.1	20.0	96	18.7	20.0	93	69-121	2	30
Methyl tert-Butyl Ether	8.67	10.0	87	8.61	10.0	86	54-126	<1	30
Methylene Chloride	10.6	10.0	106	10.3	10.0	103	71-122	3	30
Naphthalene	6.62	10.0	66	6.85	10.0	69	64-126	3	30
n-Butylbenzene	8.87	10.0	89	8.84	10.0	88	55-130	<1	30
n-Propylbenzene	9.84	10.0	98	9.85	10.0	99	61-124	<1	30
o-Xylene	8.88	10.0	89	8.72	10.0	87	71-119	2	30
sec-Butylbenzene	9.36	10.0	94	9.29	10.0	93	59-128	<1	30
Styrene	9.01	10.0	90	8.99	10.0	90	74-121	<1	30
tert-Butylbenzene	8.89	10.0	89	8.95	10.0	90	61-127	<1	30
Tetrachloroethene (PCE)	9.48	10.0	95	9.22	10.0	92	62-126	3	30
Toluene	10.9	10.0	109	10.4	10.0	104	69-124	5	30
trans-1,2-Dichloroethene	10.3	10.0	103	10.1	10.0	101	67-125	2	30
trans-1,3-Dichloropropene	9.50	10.0	95	9.74	10.0	97	59-125	2	30
Trichloroethene (TCE)	10.2	10.0	102	9.72	10.0	97	67-128	5	30
Trichlorofluoromethane (CFC 11)	9.16	10.0	92	8.67	10.0	87	52-141	5	30
Vinyl Chloride	10.8	10.0	108	10.2	10.0	102	55-123	6	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/22/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755288

	Lab Control Sample KQ2203190-03			Duplicate Lab Control Sample KQ2203190-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	11.0	10.0	110	10.3	10.0	103	66-124	7	30
1,1,1-Trichloroethane (TCA)	11.0	10.0	110	10.2	10.0	102	59-136	7	30
1,1,2,2-Tetrachloroethane	9.90	10.0	99	9.65	10.0	97	70-127	3	30
1,1,2-Trichloroethane	10.4	10.0	104	9.59	10.0	96	74-118	8	30
1,1-Dichloroethane	11.5	10.0	115	10.6	10.0	106	68-132	8	30
1,1-Dichloropropene	10.7	10.0	107	10.5	10.0	105	59-134	2	30
1,2,3-Trichlorobenzene	7.39	10.0	74	7.67	10.0	77	68-120	4	30
1,2,3-Trichloropropane	10.4	10.0	104	9.84	10.0	98	69-123	6	30
1,2,4-Trichlorobenzene	7.74	10.0	77	7.63	10.0	76	58-126	1	30
1,2,4-Trimethylbenzene	9.49	10.0	95	9.26	10.0	93	63-122	2	30
1,2-Dibromo-3-chloropropane	8.10	10.0	81	8.64	10.0	86	55-132	6	30
1,2-Dibromoethane (EDB)	9.19	10.0	92	9.03	10.0	90	74-118	2	30
1,2-Dichlorobenzene	9.40	10.0	94	8.89	10.0	89	72-115	6	30
1,2-Dichloropropane	11.0	10.0	110	10.6	10.0	106	67-126	3	30
1,3,5-Trimethylbenzene	9.59	10.0	96	9.03	10.0	90	62-126	6	30
1,3-Dichlorobenzene	9.35	10.0	94	8.83	10.0	88	70-116	6	30
1,3-Dichloropropane	10.5	10.0	105	10.0	10.0	100	75-116	4	30
1,4-Dichlorobenzene	9.36	10.0	94	8.88	10.0	89	73-115	5	30
2,2-Dichloropropane	10.4	10.0	104	9.82	10.0	98	37-145	6	30
2-Butanone (MEK)	47.8	50.0	96	48.9	50.0	98	71-149	2	30
2-Chlorotoluene	10.1	10.0	101	9.72	10.0	97	55-131	4	30
2-Hexanone	41.6	50.0	83	39.8	50.0	80	59-131	5	30
4-Chlorotoluene	10.1	10.0	101	9.67	10.0	97	66-121	5	30
4-Isopropyltoluene	9.95	10.0	100	9.25	10.0	93	61-128	7	30
4-Methyl-2-pentanone (MIBK)	45.6	50.0	91	46.9	50.0	94	64-134	3	30
Acetone	52.6	50.0	105	52.0	50.0	104	68-135	1	30
Benzene	11.2	10.0	112	10.9	10.0	109	69-124	3	30
Bromobenzene	9.41	10.0	94	8.93	10.0	89	72-116	5	30
Bromochloromethane	10.4	10.0	104	10.0	10.0	100	75-131	4	30
Bromodichloromethane	12.0	10.0	120	11.6	10.0	116	63-129	3	30
Bromoform	10.4	10.0	104	9.87	10.0	99	52-144	5	30
Bromomethane	8.26	10.0	83	7.90	10.0	79	35-113	4	30
Carbon Disulfide	23.9	20.0	119	22.5	20.0	113	46-144	6	30
Carbon Tetrachloride	11.6	10.0	116	11.1	10.0	111	55-140	4	30
Chlorobenzene	10.2	10.0	102	9.74	10.0	97	72-116	5	30
Chloroethane	12.5	10.0	125	12.2	10.0	122	58-134	2	30
Chloroform	11.0	10.0	110	10.5	10.0	105	70-129	5	30
Chloromethane	10.4	10.0	104	10.2	10.0	102	34-130	2	30
cis-1,2-Dichloroethene	10.4	10.0	104	9.95	10.0	100	71-118	5	30
cis-1,3-Dichloropropene	11.2	10.0	112	11.1	10.0	111	62-132	<1	30
Dibromochloromethane	11.3	10.0	113	11.0	10.0	110	67-126	3	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/22/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755288

	Lab Control Sample KQ2203190-03			Duplicate Lab Control Sample KQ2203190-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	10.1	10.0	101	10.2	10.0	102	69-128	<1	30
Dichlorodifluoromethane	9.30	10.0	93	8.86	10.0	89	32-124	5	30
Ethylbenzene	9.67	10.0	97	9.23	10.0	92	67-121	5	30
Hexachlorobutadiene	9.84	10.0	98	9.39	10.0	94	57-119	5	30
Isopropylbenzene	9.39	10.0	94	8.94	10.0	89	67-129	5	30
m,p-Xylenes	19.7	20.0	99	18.7	20.0	94	69-121	5	30
Methyl tert-Butyl Ether	8.96	10.0	90	8.50	10.0	85	54-126	5	30
Methylene Chloride	10.9	10.0	109	10.7	10.0	107	71-122	2	30
Naphthalene	6.41	10.0	64	6.54	10.0	65	64-126	2	30
n-Butylbenzene	9.04	10.0	90	8.62	10.0	86	55-130	5	30
n-Propylbenzene	10.0	10.0	100	9.52	10.0	95	61-124	5	30
o-Xylene	9.26	10.0	93	8.79	10.0	88	71-119	5	30
sec-Butylbenzene	9.59	10.0	96	9.03	10.0	90	59-128	6	30
Styrene	9.51	10.0	95	8.79	10.0	88	74-121	8	30
tert-Butylbenzene	9.14	10.0	91	8.63	10.0	86	61-127	6	30
Tetrachloroethene (PCE)	10.1	10.0	101	9.51	10.0	95	62-126	6	30
Toluene	11.3	10.0	113	11.0	10.0	110	69-124	3	30
trans-1,2-Dichloroethene	10.6	10.0	106	10.4	10.0	104	67-125	2	30
trans-1,3-Dichloropropene	10.0	10.0	100	9.41	10.0	94	59-125	6	30
Trichloroethene (TCE)	10.4	10.0	104	10.1	10.0	101	67-128	4	30
Trichlorofluoromethane (CFC 11)	9.39	10.0	94	8.79	10.0	88	52-141	7	30
Vinyl Chloride	10.9	10.0	109	10.3	10.0	103	55-123	6	30

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2202691-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	03/02/22 09:24	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:24	02/25/22	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	03/2/22
		Date Extracted:	02/25/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	LB-021522-01-3D	**Units:**	ug/L
Lab Code:	K2201630-002	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2202691-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	27	1030	1000	100	75-125
Manganese	ND U	491	500	98	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	03/02/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	LB-021522-01-3D	**Units:**	ug/L
Lab Code:	K2201630-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample KQ2202691-04 Result	Average	RPD	RPD Limit
Iron	6010C	21	27	26	27	4	20
Manganese	6010C	1.1	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201630
Date Analyzed: 03/02/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2202691-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2670	2500	107	80-120
Manganese	6010C	1300	1250	104	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201630-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/16/22 11:55	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/16/22 11:55	

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201630-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/18/22 17:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201630-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/16/22 19:44	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/16/22 19:44	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201630-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/18/22 17:25	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	2/16/22

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name:	LB-021522-05-1D	**Units:**	mg/L
Lab Code:	K2201630-006	**Basis:**	NA

			Matrix Spike				Duplicate Matrix Spike				
			K2201630-006MS				K2201630-006DMS				
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	6.11	13.0	8.00	87 *	13.0	8.00	86 *	90-110	<1	20
Nitrate as Nitrogen	300.0	5.59	13.7	8.00	101	13.6	8.00	101	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	SCS Engineers	**Service Request:**	K2201630
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	02/18/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021522-01-3D	**Units:**	mg/L
Lab Code:	K2201630-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201630-002DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	168	165	166	2	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	02/16/22

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	LB-021522-05-1D	**Units:**	mg/L
Lab Code:	K2201630-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201630-006DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	6.11	6.00	6.05	2	20
Nitrate as Nitrogen	300.0	0.10	5.59	5.52	5.55	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201630
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/15/22
Sample Matrix:	Ground Water	**Date Received:**	02/16/22
		Date Analyzed:	02/18/22

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	LB-021522-08-10SR	**Units:**	mg/L
Lab Code:	K2201630-009	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201630-009DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	165	163	164	1	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201630
Date Analyzed: 02/16/22 - 02/18/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201630-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.64	5.00	93	90-110
Nitrate as Nitrogen	300.0	2.29	2.50	92	90-110
Solids, Total Dissolved	SM 2540 C	1760	1920	92	85-115

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QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201630
Date Analyzed: 02/16/22 - 02/18/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201630-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.70	5.00	94	90-110
Nitrate as Nitrogen	300.0	2.32	2.50	93	90-110
Solids, Total Dissolved	SM 2540 C	1850	1920	96	85-115

March 07, 2022 Service Request No:K2201694

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory February 17, 2022
For your reference, these analyses have been assigned our service request number **K2201694.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2201694
Date Received: 02/17/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten ground water samples were received for analysis at ALS Environmental on 02/17/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method 300.0, 02/17/2022:The matrix spike recoveries of Chloride for sample LB-021622-01-27D were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outliers suggested a potential low bias in this matrix. No further corrective action was appropriate.

Volatiles by GC/MS:

Method 8260C, 02/22/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 02/22/2022:The ALS minimum relative response factor criterion for Naphthalene was not met in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compound was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Approved by _____ Date 03/07/2022

SAMPLE DETECTION SUMMARY

CLIENT ID: LB-021622-01-27D			Lab ID: K2201694-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	205			5.0	mg/L	SM 2540 C
Chloride	7.29			0.20	mg/L	300.0
Nitrate as Nitrogen	3.82			0.10	mg/L	300.0
Iron, Dissolved	35			21	ug/L	6010C

CLIENT ID: LB-021622-02-27I			Lab ID: K2201694-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	176			5.0	mg/L	SM 2540 C
Chloride	5.77			0.20	mg/L	300.0
Nitrate as Nitrogen	2.48			0.10	mg/L	300.0
Iron, Dissolved	29			21	ug/L	6010C
Manganese, Dissolved	8.1			1.1	ug/L	6010C

CLIENT ID: LB-021622-03-13D			Lab ID: K2201694-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	173			5.0	mg/L	SM 2540 C
Chloride	5.03			0.20	mg/L	300.0
Nitrate as Nitrogen	4.40			0.10	mg/L	300.0
Iron, Dissolved	24			21	ug/L	6010C

CLIENT ID: LB-021622-04-13I			Lab ID: K2201694-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	194			5.0	mg/L	SM 2540 C
Chloride	6.20			0.20	mg/L	300.0
Nitrate as Nitrogen	3.84			0.10	mg/L	300.0
Iron, Dissolved	26			21	ug/L	6010C
Manganese, Dissolved	6.2			1.1	ug/L	6010C

CLIENT ID: LB-021622-06-26I			Lab ID: K2201694-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	186			5.0	mg/L	SM 2540 C
Chloride	5.82			0.20	mg/L	300.0
Nitrate as Nitrogen	4.25			0.10	mg/L	300.0
Iron, Dissolved	24			21	ug/L	6010C

CLIENT ID: LB-021622-07-26D			Lab ID: K2201694-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	175			5.0	mg/L	SM 2540 C
Chloride	5.54			0.20	mg/L	300.0
Nitrate as Nitrogen	4.52			0.10	mg/L	300.0
Iron, Dissolved	27			21	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: LB-021622-08-6S			Lab ID: K2201694-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	187			5.0	mg/L	SM 2540 C
Chloride	7.59			0.20	mg/L	300.0
Nitrate as Nitrogen	4.13			0.10	mg/L	300.0
Iron, Dissolved	23			21	ug/L	6010C

CLIENT ID: LB-021622-09-17I			Lab ID: K2201694-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	252			5.0	mg/L	SM 2540 C
Chloride	10.2			0.20	mg/L	300.0
Iron, Dissolved	11000			21	ug/L	6010C
Manganese, Dissolved	2410			1.1	ug/L	6010C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:**K2201694

Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2201694-001	TB3	2/16/2022	0700
K2201694-002	LB-021622-01-27D	2/16/2022	0835
K2201694-003	LB-021622-02-27I	2/16/2022	0935
K2201694-004	LB-021622-03-13D	2/16/2022	1025
K2201694-005	LB-021622-04-13I	2/16/2022	1115
K2201694-006	LB-021622-05-FB	2/16/2022	1135
K2201694-007	LB-021622-06-26I	2/16/2022	1220
K2201694-008	LB-021622-07-26D	2/16/2022	1310
K2201694-009	LB-021622-08-6S	2/16/2022	1410
K2201694-010	LB-021622-09-17I	2/16/2022	1510

CHAIN OF CUSTODY

ALS Environmental

1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# YZ201694

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 042222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: BLary@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☒ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond, Alk, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, ADS Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO_2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐	REMARKS
TB3	2-16-22	0700		W	2		X														
LB-021622-01-27D	2-16-22	0835		W	5		X						X		X						
LB-021622-02-27I	2-16-22	0935		W	5		X						X		X						
LB-021622-03-13D	2-16-22	1025		W	5		X						X		X						
LB-021622-04-13I	2-16-22	1115		W	5		X						X		X						
LB-021622-05-FB	2-16-22	1135		W	5		X						X		X						
LB-021622-06-26I	2-16-22	1220		W	5		X						X		X						
LB-021622-07-26D	2-16-22	1310		W	5		X						X		X						
LB-021622-08-6S	2-16-22	1410		W	5		X						X		X						
LB-021622-09-17I	2-16-22	1510		W	5		X						X		X						

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.
____ 5 day
____ Standard (15 working days)
____ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Metals are field filtered

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date/Time: 2/17/22 0930	Date/Time: 2/17/22	Date/Time: 2/17/22	Date/Time: 2/17/22 1120
Printed Name: I. Hultquist	Printed Name:	Printed Name: K Morrow	Printed Name: K Morrow
Firm: SCS	Firm: ALS 0935	Firm: ALS 1120	Firm: ALS

PM H2

Cooler Receipt and Preservation Form

Client SAS Service Request K22 01694

Received: 2/17/22 Opened: 2/17/22 By: [illegible] Unloaded: 2/17/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 2 Front
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID/ NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
1.6		IR01		—	—		

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2201694
Project: Leichner Lanfill/04222030.13

Sample Name: TB3 **Date Collected:** 02/16/22
Lab Code: K2201694-001 **Date Received:** 02/17/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		EWANOUS

Sample Name: LB-021622-01-27D **Date Collected:** 02/16/22
Lab Code: K2201694-002 **Date Received:** 02/17/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name: LB-021622-02-27I **Date Collected:** 02/16/22
Lab Code: K2201694-003 **Date Received:** 02/17/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name: LB-021622-03-13D **Date Collected:** 02/16/22
Lab Code: K2201694-004 **Date Received:** 02/17/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-021622-04-13I	**Date Collected:**	02/16/22
Lab Code:	K2201694-005	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021622-05-FB	**Date Collected:**	02/16/22
Lab Code:	K2201694-006	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021622-06-26I	**Date Collected:**	02/16/22
Lab Code:	K2201694-007	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021622-07-26D	**Date Collected:**	02/16/22
Lab Code:	K2201694-008	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-021622-07-26D	**Date Collected:**	02/16/22
Lab Code:	K2201694-008	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021622-08-6S	**Date Collected:**	02/16/22
Lab Code:	K2201694-009	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Name:	LB-021622-09-17I	**Date Collected:**	02/16/22
Lab Code:	K2201694-010	**Date Received:**	02/17/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN
6010C	SSOLADEY	AMCKORNEY
8260C		EWANOUS
SM 2540 C		JSANCHEZ

Sample Results

ALS Environmental—Kelso Laboratory
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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	TB3	**Units:**	ug/L
Lab Code:	K2201694-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 14:16	
Benzene	ND U	0.50	1	02/22/22 14:16	
Bromobenzene	ND U	2.0	1	02/22/22 14:16	
Bromochloromethane	ND U	0.50	1	02/22/22 14:16	
Bromodichloromethane	ND U	0.50	1	02/22/22 14:16	*
Bromoform	ND U	0.50	1	02/22/22 14:16	
Bromomethane	ND U	0.50	1	02/22/22 14:16	
2-Butanone (MEK)	ND U	20	1	02/22/22 14:16	
n-Butylbenzene	ND U	4.0	1	02/22/22 14:16	
sec-Butylbenzene	ND U	2.0	1	02/22/22 14:16	
tert-Butylbenzene	ND U	2.0	1	02/22/22 14:16	
Carbon Disulfide	ND U	0.50	1	02/22/22 14:16	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 14:16	
Chlorobenzene	ND U	0.50	1	02/22/22 14:16	
Chloroethane	ND U	0.50	1	02/22/22 14:16	*
Chloroform	ND U	0.50	1	02/22/22 14:16	
Chloromethane	ND U	0.50	1	02/22/22 14:16	
2-Chlorotoluene	ND U	2.0	1	02/22/22 14:16	
4-Chlorotoluene	ND U	2.0	1	02/22/22 14:16	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 14:16	
Dibromochloromethane	ND U	0.50	1	02/22/22 14:16	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 14:16	
Dibromomethane	ND U	0.50	1	02/22/22 14:16	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 14:16	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 14:16	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 14:16	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 14:16	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 14:16	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 14:16	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 14:16	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 14:16	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 14:16	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 14:16	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 14:16	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 14:16	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 14:16	
Ethylbenzene	ND U	0.50	1	02/22/22 14:16	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 14:16	
2-Hexanone	ND U	20	1	02/22/22 14:16	*
Isopropylbenzene	ND U	2.0	1	02/22/22 14:16	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 14:16	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	TB3	**Units:**	ug/L
Lab Code:	K2201694-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 14:16	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 14:16	
Methylene Chloride	ND U	2.0	1	02/22/22 14:16	
Naphthalene	ND U	2.0	1	02/22/22 14:16	*
n-Propylbenzene	ND U	2.0	1	02/22/22 14:16	
Styrene	ND U	0.50	1	02/22/22 14:16	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 14:16	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 14:16	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 14:16	
Toluene	ND U	0.50	1	02/22/22 14:16	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 14:16	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 14:16	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 14:16	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 14:16	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 14:16	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 14:16	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 14:16	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 14:16	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 14:16	
Vinyl Chloride	ND U	0.50	1	02/22/22 14:16	
o-Xylene	ND U	0.50	1	02/22/22 14:16	
m,p-Xylenes	ND U	0.50	1	02/22/22 14:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	77	68 - 117	02/22/22 14:16	
Dibromofluoromethane	104	73 - 122	02/22/22 14:16	
Toluene-d8	103	65 - 144	02/22/22 14:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-01-27D	**Units:**	ug/L
Lab Code:	K2201694-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 17:21	
Benzene	ND U	0.50	1	02/22/22 17:21	
Bromobenzene	ND U	2.0	1	02/22/22 17:21	
Bromochloromethane	ND U	0.50	1	02/22/22 17:21	
Bromodichloromethane	ND U	0.50	1	02/22/22 17:21	*
Bromoform	ND U	0.50	1	02/22/22 17:21	
Bromomethane	ND U	0.50	1	02/22/22 17:21	
2-Butanone (MEK)	ND U	20	1	02/22/22 17:21	
n-Butylbenzene	ND U	4.0	1	02/22/22 17:21	
sec-Butylbenzene	ND U	2.0	1	02/22/22 17:21	
tert-Butylbenzene	ND U	2.0	1	02/22/22 17:21	
Carbon Disulfide	ND U	0.50	1	02/22/22 17:21	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 17:21	
Chlorobenzene	ND U	0.50	1	02/22/22 17:21	
Chloroethane	ND U	0.50	1	02/22/22 17:21	*
Chloroform	ND U	0.50	1	02/22/22 17:21	
Chloromethane	ND U	0.50	1	02/22/22 17:21	
2-Chlorotoluene	ND U	2.0	1	02/22/22 17:21	
4-Chlorotoluene	ND U	2.0	1	02/22/22 17:21	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 17:21	
Dibromochloromethane	ND U	0.50	1	02/22/22 17:21	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 17:21	
Dibromomethane	ND U	0.50	1	02/22/22 17:21	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 17:21	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 17:21	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 17:21	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 17:21	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 17:21	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 17:21	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 17:21	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 17:21	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 17:21	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 17:21	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 17:21	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 17:21	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 17:21	
Ethylbenzene	ND U	0.50	1	02/22/22 17:21	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 17:21	
2-Hexanone	ND U	20	1	02/22/22 17:21	*
Isopropylbenzene	ND U	2.0	1	02/22/22 17:21	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 17:21	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-01-27D	**Units:**	ug/L
Lab Code:	K2201694-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 17:21	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 17:21	
Methylene Chloride	ND U	2.0	1	02/22/22 17:21	
Naphthalene	ND U	2.0	1	02/22/22 17:21	*
n-Propylbenzene	ND U	2.0	1	02/22/22 17:21	
Styrene	ND U	0.50	1	02/22/22 17:21	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 17:21	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 17:21	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 17:21	
Toluene	ND U	0.50	1	02/22/22 17:21	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 17:21	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 17:21	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 17:21	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 17:21	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 17:21	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 17:21	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 17:21	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 17:21	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 17:21	
Vinyl Chloride	ND U	0.50	1	02/22/22 17:21	
o-Xylene	ND U	0.50	1	02/22/22 17:21	
m,p-Xylenes	ND U	0.50	1	02/22/22 17:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	74	68 - 117	02/22/22 17:21	
Dibromofluoromethane	107	73 - 122	02/22/22 17:21	
Toluene-d8	100	65 - 144	02/22/22 17:21	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 09:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-02-27I	**Units:**	ug/L
Lab Code:	K2201694-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 17:48	
Benzene	ND U	0.50	1	02/22/22 17:48	
Bromobenzene	ND U	2.0	1	02/22/22 17:48	
Bromochloromethane	ND U	0.50	1	02/22/22 17:48	
Bromodichloromethane	ND U	0.50	1	02/22/22 17:48	*
Bromoform	ND U	0.50	1	02/22/22 17:48	
Bromomethane	ND U	0.50	1	02/22/22 17:48	
2-Butanone (MEK)	ND U	20	1	02/22/22 17:48	
n-Butylbenzene	ND U	4.0	1	02/22/22 17:48	
sec-Butylbenzene	ND U	2.0	1	02/22/22 17:48	
tert-Butylbenzene	ND U	2.0	1	02/22/22 17:48	
Carbon Disulfide	ND U	0.50	1	02/22/22 17:48	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 17:48	
Chlorobenzene	ND U	0.50	1	02/22/22 17:48	
Chloroethane	ND U	0.50	1	02/22/22 17:48	*
Chloroform	ND U	0.50	1	02/22/22 17:48	
Chloromethane	ND U	0.50	1	02/22/22 17:48	
2-Chlorotoluene	ND U	2.0	1	02/22/22 17:48	
4-Chlorotoluene	ND U	2.0	1	02/22/22 17:48	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 17:48	
Dibromochloromethane	ND U	0.50	1	02/22/22 17:48	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 17:48	
Dibromomethane	ND U	0.50	1	02/22/22 17:48	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 17:48	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 17:48	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 17:48	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 17:48	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 17:48	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 17:48	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 17:48	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 17:48	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 17:48	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 17:48	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 17:48	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 17:48	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 17:48	
Ethylbenzene	ND U	0.50	1	02/22/22 17:48	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 17:48	
2-Hexanone	ND U	20	1	02/22/22 17:48	*
Isopropylbenzene	ND U	2.0	1	02/22/22 17:48	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 17:48	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 09:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-02-27I	**Units:**	ug/L
Lab Code:	K2201694-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 17:48	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 17:48	
Methylene Chloride	ND U	2.0	1	02/22/22 17:48	
Naphthalene	ND U	2.0	1	02/22/22 17:48	*
n-Propylbenzene	ND U	2.0	1	02/22/22 17:48	
Styrene	ND U	0.50	1	02/22/22 17:48	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 17:48	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 17:48	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 17:48	
Toluene	ND U	0.50	1	02/22/22 17:48	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 17:48	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 17:48	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 17:48	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 17:48	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 17:48	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 17:48	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 17:48	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 17:48	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 17:48	
Vinyl Chloride	ND U	0.50	1	02/22/22 17:48	
o-Xylene	ND U	0.50	1	02/22/22 17:48	
m,p-Xylenes	ND U	0.50	1	02/22/22 17:48	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	02/22/22 17:48	
Dibromofluoromethane	106	73 - 122	02/22/22 17:48	
Toluene-d8	99	65 - 144	02/22/22 17:48	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-03-13D	**Units:**	ug/L
Lab Code:	K2201694-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 18:14	
Benzene	ND U	0.50	1	02/22/22 18:14	
Bromobenzene	ND U	2.0	1	02/22/22 18:14	
Bromochloromethane	ND U	0.50	1	02/22/22 18:14	
Bromodichloromethane	ND U	0.50	1	02/22/22 18:14	*
Bromoform	ND U	0.50	1	02/22/22 18:14	
Bromomethane	ND U	0.50	1	02/22/22 18:14	
2-Butanone (MEK)	ND U	20	1	02/22/22 18:14	
n-Butylbenzene	ND U	4.0	1	02/22/22 18:14	
sec-Butylbenzene	ND U	2.0	1	02/22/22 18:14	
tert-Butylbenzene	ND U	2.0	1	02/22/22 18:14	
Carbon Disulfide	ND U	0.50	1	02/22/22 18:14	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 18:14	
Chlorobenzene	ND U	0.50	1	02/22/22 18:14	
Chloroethane	ND U	0.50	1	02/22/22 18:14	*
Chloroform	ND U	0.50	1	02/22/22 18:14	
Chloromethane	ND U	0.50	1	02/22/22 18:14	
2-Chlorotoluene	ND U	2.0	1	02/22/22 18:14	
4-Chlorotoluene	ND U	2.0	1	02/22/22 18:14	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 18:14	
Dibromochloromethane	ND U	0.50	1	02/22/22 18:14	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 18:14	
Dibromomethane	ND U	0.50	1	02/22/22 18:14	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 18:14	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 18:14	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 18:14	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 18:14	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 18:14	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 18:14	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 18:14	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 18:14	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 18:14	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 18:14	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 18:14	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 18:14	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 18:14	
Ethylbenzene	ND U	0.50	1	02/22/22 18:14	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 18:14	
2-Hexanone	ND U	20	1	02/22/22 18:14	*
Isopropylbenzene	ND U	2.0	1	02/22/22 18:14	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 18:14	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-03-13D	**Units:**	ug/L
Lab Code:	K2201694-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 18:14	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 18:14	
Methylene Chloride	ND U	2.0	1	02/22/22 18:14	
Naphthalene	ND U	2.0	1	02/22/22 18:14	*
n-Propylbenzene	ND U	2.0	1	02/22/22 18:14	
Styrene	ND U	0.50	1	02/22/22 18:14	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 18:14	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 18:14	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 18:14	
Toluene	ND U	0.50	1	02/22/22 18:14	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 18:14	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 18:14	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 18:14	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 18:14	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 18:14	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 18:14	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 18:14	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 18:14	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 18:14	
Vinyl Chloride	ND U	0.50	1	02/22/22 18:14	
o-Xylene	ND U	0.50	1	02/22/22 18:14	
m,p-Xylenes	ND U	0.50	1	02/22/22 18:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	02/22/22 18:14	
Dibromofluoromethane	108	73 - 122	02/22/22 18:14	
Toluene-d8	102	65 - 144	02/22/22 18:14	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:15
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-04-13I	**Units:**	ug/L
Lab Code:	K2201694-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 18:41	
Benzene	ND U	0.50	1	02/22/22 18:41	
Bromobenzene	ND U	2.0	1	02/22/22 18:41	
Bromochloromethane	ND U	0.50	1	02/22/22 18:41	
Bromodichloromethane	ND U	0.50	1	02/22/22 18:41	*
Bromoform	ND U	0.50	1	02/22/22 18:41	
Bromomethane	ND U	0.50	1	02/22/22 18:41	
2-Butanone (MEK)	ND U	20	1	02/22/22 18:41	
n-Butylbenzene	ND U	4.0	1	02/22/22 18:41	
sec-Butylbenzene	ND U	2.0	1	02/22/22 18:41	
tert-Butylbenzene	ND U	2.0	1	02/22/22 18:41	
Carbon Disulfide	ND U	0.50	1	02/22/22 18:41	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 18:41	
Chlorobenzene	ND U	0.50	1	02/22/22 18:41	
Chloroethane	ND U	0.50	1	02/22/22 18:41	*
Chloroform	ND U	0.50	1	02/22/22 18:41	
Chloromethane	ND U	0.50	1	02/22/22 18:41	
2-Chlorotoluene	ND U	2.0	1	02/22/22 18:41	
4-Chlorotoluene	ND U	2.0	1	02/22/22 18:41	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 18:41	
Dibromochloromethane	ND U	0.50	1	02/22/22 18:41	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 18:41	
Dibromomethane	ND U	0.50	1	02/22/22 18:41	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 18:41	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 18:41	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 18:41	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 18:41	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 18:41	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 18:41	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 18:41	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 18:41	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 18:41	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 18:41	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 18:41	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 18:41	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 18:41	
Ethylbenzene	ND U	0.50	1	02/22/22 18:41	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 18:41	
2-Hexanone	ND U	20	1	02/22/22 18:41	*
Isopropylbenzene	ND U	2.0	1	02/22/22 18:41	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 18:41	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:15
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-04-13I	**Units:**	ug/L
Lab Code:	K2201694-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 18:41	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 18:41	
Methylene Chloride	ND U	2.0	1	02/22/22 18:41	
Naphthalene	ND U	2.0	1	02/22/22 18:41	*
n-Propylbenzene	ND U	2.0	1	02/22/22 18:41	
Styrene	ND U	0.50	1	02/22/22 18:41	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 18:41	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 18:41	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 18:41	
Toluene	ND U	0.50	1	02/22/22 18:41	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 18:41	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 18:41	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 18:41	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 18:41	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 18:41	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 18:41	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 18:41	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 18:41	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 18:41	
Vinyl Chloride	ND U	0.50	1	02/22/22 18:41	
o-Xylene	ND U	0.50	1	02/22/22 18:41	
m,p-Xylenes	ND U	0.50	1	02/22/22 18:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/22/22 18:41	
Dibromofluoromethane	106	73 - 122	02/22/22 18:41	
Toluene-d8	100	65 - 144	02/22/22 18:41	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-05-FB	**Units:**	ug/L
Lab Code:	K2201694-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 19:07	
Benzene	ND U	0.50	1	02/22/22 19:07	
Bromobenzene	ND U	2.0	1	02/22/22 19:07	
Bromochloromethane	ND U	0.50	1	02/22/22 19:07	
Bromodichloromethane	ND U	0.50	1	02/22/22 19:07	*
Bromoform	ND U	0.50	1	02/22/22 19:07	
Bromomethane	ND U	0.50	1	02/22/22 19:07	
2-Butanone (MEK)	ND U	20	1	02/22/22 19:07	
n-Butylbenzene	ND U	4.0	1	02/22/22 19:07	
sec-Butylbenzene	ND U	2.0	1	02/22/22 19:07	
tert-Butylbenzene	ND U	2.0	1	02/22/22 19:07	
Carbon Disulfide	ND U	0.50	1	02/22/22 19:07	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 19:07	
Chlorobenzene	ND U	0.50	1	02/22/22 19:07	
Chloroethane	ND U	0.50	1	02/22/22 19:07	*
Chloroform	ND U	0.50	1	02/22/22 19:07	
Chloromethane	ND U	0.50	1	02/22/22 19:07	
2-Chlorotoluene	ND U	2.0	1	02/22/22 19:07	
4-Chlorotoluene	ND U	2.0	1	02/22/22 19:07	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 19:07	
Dibromochloromethane	ND U	0.50	1	02/22/22 19:07	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 19:07	
Dibromomethane	ND U	0.50	1	02/22/22 19:07	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 19:07	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 19:07	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 19:07	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 19:07	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 19:07	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 19:07	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 19:07	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 19:07	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 19:07	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 19:07	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 19:07	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 19:07	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 19:07	
Ethylbenzene	ND U	0.50	1	02/22/22 19:07	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 19:07	
2-Hexanone	ND U	20	1	02/22/22 19:07	*
Isopropylbenzene	ND U	2.0	1	02/22/22 19:07	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 19:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-05-FB	**Units:**	ug/L
Lab Code:	K2201694-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 19:07	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 19:07	
Methylene Chloride	ND U	2.0	1	02/22/22 19:07	
Naphthalene	ND U	2.0	1	02/22/22 19:07	*
n-Propylbenzene	ND U	2.0	1	02/22/22 19:07	
Styrene	ND U	0.50	1	02/22/22 19:07	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 19:07	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 19:07	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 19:07	
Toluene	ND U	0.50	1	02/22/22 19:07	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 19:07	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 19:07	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 19:07	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 19:07	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 19:07	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 19:07	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 19:07	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 19:07	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 19:07	
Vinyl Chloride	ND U	0.50	1	02/22/22 19:07	
o-Xylene	ND U	0.50	1	02/22/22 19:07	
m,p-Xylenes	ND U	0.50	1	02/22/22 19:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	02/22/22 19:07	
Dibromofluoromethane	108	73 - 122	02/22/22 19:07	
Toluene-d8	101	65 - 144	02/22/22 19:07	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-06-26I	**Units:**	ug/L
Lab Code:	K2201694-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 19:34	
Benzene	ND U	0.50	1	02/22/22 19:34	
Bromobenzene	ND U	2.0	1	02/22/22 19:34	
Bromochloromethane	ND U	0.50	1	02/22/22 19:34	
Bromodichloromethane	ND U	0.50	1	02/22/22 19:34	*
Bromoform	ND U	0.50	1	02/22/22 19:34	
Bromomethane	ND U	0.50	1	02/22/22 19:34	
2-Butanone (MEK)	ND U	20	1	02/22/22 19:34	
n-Butylbenzene	ND U	4.0	1	02/22/22 19:34	
sec-Butylbenzene	ND U	2.0	1	02/22/22 19:34	
tert-Butylbenzene	ND U	2.0	1	02/22/22 19:34	
Carbon Disulfide	ND U	0.50	1	02/22/22 19:34	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 19:34	
Chlorobenzene	ND U	0.50	1	02/22/22 19:34	
Chloroethane	ND U	0.50	1	02/22/22 19:34	*
Chloroform	ND U	0.50	1	02/22/22 19:34	
Chloromethane	ND U	0.50	1	02/22/22 19:34	
2-Chlorotoluene	ND U	2.0	1	02/22/22 19:34	
4-Chlorotoluene	ND U	2.0	1	02/22/22 19:34	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 19:34	
Dibromochloromethane	ND U	0.50	1	02/22/22 19:34	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 19:34	
Dibromomethane	ND U	0.50	1	02/22/22 19:34	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 19:34	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 19:34	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 19:34	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 19:34	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 19:34	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 19:34	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 19:34	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 19:34	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 19:34	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 19:34	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 19:34	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 19:34	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 19:34	
Ethylbenzene	ND U	0.50	1	02/22/22 19:34	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 19:34	
2-Hexanone	ND U	20	1	02/22/22 19:34	*
Isopropylbenzene	ND U	2.0	1	02/22/22 19:34	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 19:34	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-06-26I	**Units:**	ug/L
Lab Code:	K2201694-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 19:34	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 19:34	
Methylene Chloride	ND U	2.0	1	02/22/22 19:34	
Naphthalene	ND U	2.0	1	02/22/22 19:34	*
n-Propylbenzene	ND U	2.0	1	02/22/22 19:34	
Styrene	ND U	0.50	1	02/22/22 19:34	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 19:34	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 19:34	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 19:34	
Toluene	ND U	0.50	1	02/22/22 19:34	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 19:34	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 19:34	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 19:34	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 19:34	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 19:34	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 19:34	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 19:34	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 19:34	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 19:34	
Vinyl Chloride	ND U	0.50	1	02/22/22 19:34	
o-Xylene	ND U	0.50	1	02/22/22 19:34	
m,p-Xylenes	ND U	0.50	1	02/22/22 19:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	02/22/22 19:34	
Dibromofluoromethane	105	73 - 122	02/22/22 19:34	
Toluene-d8	100	65 - 144	02/22/22 19:34	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-07-26D	**Units:**	ug/L
Lab Code:	K2201694-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 20:00	
Benzene	ND U	0.50	1	02/22/22 20:00	
Bromobenzene	ND U	2.0	1	02/22/22 20:00	
Bromochloromethane	ND U	0.50	1	02/22/22 20:00	
Bromodichloromethane	ND U	0.50	1	02/22/22 20:00	*
Bromoform	ND U	0.50	1	02/22/22 20:00	
Bromomethane	ND U	0.50	1	02/22/22 20:00	
2-Butanone (MEK)	ND U	20	1	02/22/22 20:00	
n-Butylbenzene	ND U	4.0	1	02/22/22 20:00	
sec-Butylbenzene	ND U	2.0	1	02/22/22 20:00	
tert-Butylbenzene	ND U	2.0	1	02/22/22 20:00	
Carbon Disulfide	ND U	0.50	1	02/22/22 20:00	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 20:00	
Chlorobenzene	ND U	0.50	1	02/22/22 20:00	
Chloroethane	ND U	0.50	1	02/22/22 20:00	*
Chloroform	ND U	0.50	1	02/22/22 20:00	
Chloromethane	ND U	0.50	1	02/22/22 20:00	
2-Chlorotoluene	ND U	2.0	1	02/22/22 20:00	
4-Chlorotoluene	ND U	2.0	1	02/22/22 20:00	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 20:00	
Dibromochloromethane	ND U	0.50	1	02/22/22 20:00	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 20:00	
Dibromomethane	ND U	0.50	1	02/22/22 20:00	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 20:00	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 20:00	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 20:00	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 20:00	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 20:00	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:00	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:00	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 20:00	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 20:00	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 20:00	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 20:00	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:00	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:00	
Ethylbenzene	ND U	0.50	1	02/22/22 20:00	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 20:00	
2-Hexanone	ND U	20	1	02/22/22 20:00	*
Isopropylbenzene	ND U	2.0	1	02/22/22 20:00	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 20:00	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-07-26D	**Units:**	ug/L
Lab Code:	K2201694-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 20:00	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 20:00	
Methylene Chloride	ND U	2.0	1	02/22/22 20:00	
Naphthalene	ND U	2.0	1	02/22/22 20:00	*
n-Propylbenzene	ND U	2.0	1	02/22/22 20:00	
Styrene	ND U	0.50	1	02/22/22 20:00	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:00	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:00	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 20:00	
Toluene	ND U	0.50	1	02/22/22 20:00	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 20:00	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 20:00	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 20:00	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 20:00	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 20:00	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 20:00	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 20:00	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 20:00	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 20:00	
Vinyl Chloride	ND U	0.50	1	02/22/22 20:00	
o-Xylene	ND U	0.50	1	02/22/22 20:00	
m,p-Xylenes	ND U	0.50	1	02/22/22 20:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	02/22/22 20:00	
Dibromofluoromethane	108	73 - 122	02/22/22 20:00	
Toluene-d8	100	65 - 144	02/22/22 20:00	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-08-6S	**Units:**	ug/L
Lab Code:	K2201694-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 20:26	
Benzene	ND U	0.50	1	02/22/22 20:26	
Bromobenzene	ND U	2.0	1	02/22/22 20:26	
Bromochloromethane	ND U	0.50	1	02/22/22 20:26	
Bromodichloromethane	ND U	0.50	1	02/22/22 20:26	*
Bromoform	ND U	0.50	1	02/22/22 20:26	
Bromomethane	ND U	0.50	1	02/22/22 20:26	
2-Butanone (MEK)	ND U	20	1	02/22/22 20:26	
n-Butylbenzene	ND U	4.0	1	02/22/22 20:26	
sec-Butylbenzene	ND U	2.0	1	02/22/22 20:26	
tert-Butylbenzene	ND U	2.0	1	02/22/22 20:26	
Carbon Disulfide	ND U	0.50	1	02/22/22 20:26	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 20:26	
Chlorobenzene	ND U	0.50	1	02/22/22 20:26	
Chloroethane	ND U	0.50	1	02/22/22 20:26	*
Chloroform	ND U	0.50	1	02/22/22 20:26	
Chloromethane	ND U	0.50	1	02/22/22 20:26	
2-Chlorotoluene	ND U	2.0	1	02/22/22 20:26	
4-Chlorotoluene	ND U	2.0	1	02/22/22 20:26	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 20:26	
Dibromochloromethane	ND U	0.50	1	02/22/22 20:26	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 20:26	
Dibromomethane	ND U	0.50	1	02/22/22 20:26	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 20:26	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 20:26	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 20:26	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 20:26	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 20:26	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:26	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:26	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 20:26	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 20:26	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 20:26	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 20:26	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:26	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:26	
Ethylbenzene	ND U	0.50	1	02/22/22 20:26	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 20:26	
2-Hexanone	ND U	20	1	02/22/22 20:26	*
Isopropylbenzene	ND U	2.0	1	02/22/22 20:26	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 20:26	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-08-6S	**Units:**	ug/L
Lab Code:	K2201694-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 20:26	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 20:26	
Methylene Chloride	ND U	2.0	1	02/22/22 20:26	
Naphthalene	ND U	2.0	1	02/22/22 20:26	*
n-Propylbenzene	ND U	2.0	1	02/22/22 20:26	
Styrene	ND U	0.50	1	02/22/22 20:26	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:26	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:26	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 20:26	
Toluene	ND U	0.50	1	02/22/22 20:26	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 20:26	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 20:26	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 20:26	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 20:26	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 20:26	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 20:26	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 20:26	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 20:26	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 20:26	
Vinyl Chloride	ND U	0.50	1	02/22/22 20:26	
o-Xylene	ND U	0.50	1	02/22/22 20:26	
m,p-Xylenes	ND U	0.50	1	02/22/22 20:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	02/22/22 20:26	
Dibromofluoromethane	105	73 - 122	02/22/22 20:26	
Toluene-d8	99	65 - 144	02/22/22 20:26	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 15:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-09-17I	**Units:**	ug/L
Lab Code:	K2201694-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 20:53	
Benzene	ND U	0.50	1	02/22/22 20:53	
Bromobenzene	ND U	2.0	1	02/22/22 20:53	
Bromochloromethane	ND U	0.50	1	02/22/22 20:53	
Bromodichloromethane	ND U	0.50	1	02/22/22 20:53	*
Bromoform	ND U	0.50	1	02/22/22 20:53	
Bromomethane	ND U	0.50	1	02/22/22 20:53	
2-Butanone (MEK)	ND U	20	1	02/22/22 20:53	
n-Butylbenzene	ND U	4.0	1	02/22/22 20:53	
sec-Butylbenzene	ND U	2.0	1	02/22/22 20:53	
tert-Butylbenzene	ND U	2.0	1	02/22/22 20:53	
Carbon Disulfide	ND U	0.50	1	02/22/22 20:53	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 20:53	
Chlorobenzene	ND U	0.50	1	02/22/22 20:53	
Chloroethane	ND U	0.50	1	02/22/22 20:53	*
Chloroform	ND U	0.50	1	02/22/22 20:53	
Chloromethane	ND U	0.50	1	02/22/22 20:53	
2-Chlorotoluene	ND U	2.0	1	02/22/22 20:53	
4-Chlorotoluene	ND U	2.0	1	02/22/22 20:53	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 20:53	
Dibromochloromethane	ND U	0.50	1	02/22/22 20:53	*
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 20:53	
Dibromomethane	ND U	0.50	1	02/22/22 20:53	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 20:53	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 20:53	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 20:53	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 20:53	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 20:53	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:53	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 20:53	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 20:53	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 20:53	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 20:53	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 20:53	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:53	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 20:53	
Ethylbenzene	ND U	0.50	1	02/22/22 20:53	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 20:53	
2-Hexanone	ND U	20	1	02/22/22 20:53	*
Isopropylbenzene	ND U	2.0	1	02/22/22 20:53	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 20:53	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 15:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-09-17I	**Units:**	ug/L
Lab Code:	K2201694-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 20:53	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 20:53	
Methylene Chloride	ND U	2.0	1	02/22/22 20:53	
Naphthalene	ND U	2.0	1	02/22/22 20:53	*
n-Propylbenzene	ND U	2.0	1	02/22/22 20:53	
Styrene	ND U	0.50	1	02/22/22 20:53	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:53	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 20:53	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 20:53	
Toluene	ND U	0.50	1	02/22/22 20:53	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 20:53	*
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 20:53	*
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 20:53	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 20:53	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 20:53	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 20:53	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 20:53	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 20:53	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 20:53	
Vinyl Chloride	ND U	0.50	1	02/22/22 20:53	
o-Xylene	ND U	0.50	1	02/22/22 20:53	
m,p-Xylenes	ND U	0.50	1	02/22/22 20:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	77	68 - 117	02/22/22 20:53	
Dibromofluoromethane	107	73 - 122	02/22/22 20:53	
Toluene-d8	99	65 - 144	02/22/22 20:53	

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-01-27D	**Basis:**	NA
Lab Code:	K2201694-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**35**	ug/L	21	1	03/02/22 10:05	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:05	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 09:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-02-27I	**Basis:**	NA
Lab Code:	K2201694-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**29**	ug/L	21	1	03/02/22 10:16	02/25/22	
Manganese	6010C	**8.1**	ug/L	1.1	1	03/02/22 10:16	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-03-13D	**Basis:**	NA
Lab Code:	K2201694-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**24**	ug/L	21	1	03/02/22 10:18	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:18	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:15
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-04-13I	**Basis:**	NA
Lab Code:	K2201694-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**26**	ug/L	21	1	03/02/22 10:21	02/25/22	
Manganese	6010C	**6.2**	ug/L	1.1	1	03/02/22 10:21	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-05-FB	**Basis:**	NA
Lab Code:	K2201694-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	03/02/22 10:24	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:24	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-06-26I	**Basis:**	NA
Lab Code:	K2201694-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**24**	ug/L	21	1	03/02/22 10:26	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:26	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-07-26D	**Basis:**	NA
Lab Code:	K2201694-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**27**	ug/L	21	1	03/02/22 10:29	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:29	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-08-6S	**Basis:**	NA
Lab Code:	K2201694-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**23**	ug/L	21	1	03/02/22 10:32	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 10:32	02/25/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 15:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-09-17I	**Basis:**	NA
Lab Code:	K2201694-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**11000**	ug/L	21	1	03/02/22 10:34	02/25/22	
Manganese	6010C	**2410**	ug/L	1.1	1	03/02/22 10:34	02/25/22	

General Chemistry

ALS Environmental—Kelso Laboratory
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Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-01-27D	**Basis:**	NA
Lab Code:	K2201694-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.29**	mg/L	0.20	2	02/17/22 15:40	
Nitrate as Nitrogen	300.0	**3.82**	mg/L	0.10	2	02/17/22 15:40	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-01-27D	**Basis:**	NA
Lab Code:	K2201694-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**205**	mg/L	5.0	1	02/22/22 18:09	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 09:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-02-27I	**Basis:**	NA
Lab Code:	K2201694-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.77**	mg/L	0.20	2	02/17/22 16:08	
Nitrate as Nitrogen	300.0	**2.48**	mg/L	0.10	2	02/17/22 16:08	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 09:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-02-27I	**Basis:**	NA
Lab Code:	K2201694-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**176**	mg/L	5.0	1	02/22/22 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-03-13D	**Basis:**	NA
Lab Code:	K2201694-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.03**	mg/L	0.20	2	02/17/22 16:15	
Nitrate as Nitrogen	300.0	**4.40**	mg/L	0.10	2	02/17/22 16:15	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 10:25
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-03-13D	**Basis:**	NA
Lab Code:	K2201694-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**173**	mg/L	5.0	1	02/22/22 18:09	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:15
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-04-13I	**Basis:**	NA
Lab Code:	K2201694-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.20**	mg/L	0.20	2	02/17/22 16:21	
Nitrate as Nitrogen	300.0	**3.84**	mg/L	0.10	2	02/17/22 16:21	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:15
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-04-13I	**Basis:**	NA
Lab Code:	K2201694-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**194**	mg/L	5.0	1	02/22/22 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-05-FB	**Basis:**	NA
Lab Code:	K2201694-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.20	2	02/17/22 16:28	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/17/22 16:28	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-05-FB	**Basis:**	NA
Lab Code:	K2201694-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/22/22 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-06-26I	**Basis:**	NA
Lab Code:	K2201694-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.82**	mg/L	0.20	2	02/17/22 16:49	
Nitrate as Nitrogen	300.0	**4.25**	mg/L	0.10	2	02/17/22 16:49	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-06-26I	**Basis:**	NA
Lab Code:	K2201694-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**186**	mg/L	5.0	1	02/22/22 18:09	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-07-26D	**Basis:**	NA
Lab Code:	K2201694-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.54**	mg/L	0.20	2	02/17/22 17:11	
Nitrate as Nitrogen	300.0	**4.52**	mg/L	0.10	2	02/17/22 18:26	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-07-26D	**Basis:**	NA
Lab Code:	K2201694-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**175**	mg/L	5.0	1	02/23/22 15:27	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-08-6S	**Basis:**	NA
Lab Code:	K2201694-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.59**	mg/L	0.20	2	02/17/22 17:18	
Nitrate as Nitrogen	300.0	**4.13**	mg/L	0.10	2	02/17/22 18:33	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-08-6S	**Basis:**	NA
Lab Code:	K2201694-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**187**	mg/L	5.0	1	02/23/22 15:27	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 15:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-09-17I	**Basis:**	NA
Lab Code:	K2201694-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**10.2**	mg/L	0.20	2	02/17/22 17:24	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/17/22 18:40	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22 15:10
Sample Matrix:	Ground Water	**Date Received:**	02/17/22 11:20
Sample Name:	LB-021622-09-17I	**Basis:**	NA
Lab Code:	K2201694-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**252**	mg/L	5.0	1	02/23/22 15:27	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:** K2201694
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TB3	K2201694-001	77	104	103
LB-021622-01-27D	K2201694-002	74	107	100
LB-021622-02-27I	K2201694-003	75	106	99
LB-021622-03-13D	K2201694-004	72	108	102
LB-021622-04-13I	K2201694-005	73	106	100
LB-021622-05-FB	K2201694-006	72	108	101
LB-021622-06-26I	K2201694-007	73	105	100
LB-021622-07-26D	K2201694-008	72	108	100
LB-021622-08-6S	K2201694-009	72	105	99
LB-021622-09-17I	K2201694-010	77	107	99
Method Blank	KQ2203190-05	76	101	101
Lab Control Sample	KQ2203190-03	93	95	105
Duplicate Lab Control Sample	KQ2203190-04	90	95	105

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203190-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	02/22/22 13:49	
Benzene	ND U	0.50	1	02/22/22 13:49	
Bromobenzene	ND U	2.0	1	02/22/22 13:49	
Bromochloromethane	ND U	0.50	1	02/22/22 13:49	
Bromodichloromethane	ND U	0.50	1	02/22/22 13:49	
Bromoform	ND U	0.50	1	02/22/22 13:49	
Bromomethane	ND U	0.50	1	02/22/22 13:49	
2-Butanone (MEK)	ND U	20	1	02/22/22 13:49	
n-Butylbenzene	ND U	4.0	1	02/22/22 13:49	
sec-Butylbenzene	ND U	2.0	1	02/22/22 13:49	
tert-Butylbenzene	ND U	2.0	1	02/22/22 13:49	
Carbon Disulfide	ND U	0.50	1	02/22/22 13:49	
Carbon Tetrachloride	ND U	0.50	1	02/22/22 13:49	
Chlorobenzene	ND U	0.50	1	02/22/22 13:49	
Chloroethane	ND U	0.50	1	02/22/22 13:49	
Chloroform	ND U	0.50	1	02/22/22 13:49	
Chloromethane	ND U	0.50	1	02/22/22 13:49	
2-Chlorotoluene	ND U	2.0	1	02/22/22 13:49	
4-Chlorotoluene	ND U	2.0	1	02/22/22 13:49	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/22/22 13:49	
Dibromochloromethane	ND U	0.50	1	02/22/22 13:49	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/22/22 13:49	
Dibromomethane	ND U	0.50	1	02/22/22 13:49	
1,2-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
1,3-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
1,4-Dichlorobenzene	ND U	0.50	1	02/22/22 13:49	
Dichlorodifluoromethane	ND U	0.50	1	02/22/22 13:49	
1,1-Dichloroethane	ND U	0.50	1	02/22/22 13:49	
cis-1,2-Dichloroethene	ND U	0.50	1	02/22/22 13:49	
trans-1,2-Dichloroethene	ND U	0.50	1	02/22/22 13:49	
1,2-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
1,3-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
2,2-Dichloropropane	ND U	0.50	1	02/22/22 13:49	
1,1-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
cis-1,3-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
trans-1,3-Dichloropropene	ND U	0.50	1	02/22/22 13:49	
Ethylbenzene	ND U	0.50	1	02/22/22 13:49	
Hexachlorobutadiene	ND U	2.0	1	02/22/22 13:49	
2-Hexanone	ND U	20	1	02/22/22 13:49	
Isopropylbenzene	ND U	2.0	1	02/22/22 13:49	
4-Isopropyltoluene	ND U	2.0	1	02/22/22 13:49	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2203190-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	02/22/22 13:49	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/22/22 13:49	
Methylene Chloride	ND U	2.0	1	02/22/22 13:49	
Naphthalene	ND U	2.0	1	02/22/22 13:49	
n-Propylbenzene	ND U	2.0	1	02/22/22 13:49	
Styrene	ND U	0.50	1	02/22/22 13:49	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/22/22 13:49	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/22/22 13:49	
Tetrachloroethene (PCE)	ND U	0.50	1	02/22/22 13:49	
Toluene	ND U	0.50	1	02/22/22 13:49	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/22/22 13:49	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/22/22 13:49	
1,1,2-Trichloroethane	ND U	0.50	1	02/22/22 13:49	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/22/22 13:49	
Trichloroethene (TCE)	ND U	0.50	1	02/22/22 13:49	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/22/22 13:49	
1,2,3-Trichloropropane	ND U	0.50	1	02/22/22 13:49	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/22/22 13:49	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/22/22 13:49	
Vinyl Chloride	ND U	0.50	1	02/22/22 13:49	
o-Xylene	ND U	0.50	1	02/22/22 13:49	
m,p-Xylenes	ND U	0.50	1	02/22/22 13:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	76	68 - 117	02/22/22 13:49	
Dibromofluoromethane	101	73 - 122	02/22/22 13:49	
Toluene-d8	101	65 - 144	02/22/22 13:49	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/22/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755288

	Lab Control Sample KQ2203190-03			Duplicate Lab Control Sample KQ2203190-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	11.0	10.0	110	10.3	10.0	103	66-124	7	30
1,1,1-Trichloroethane (TCA)	11.0	10.0	110	10.2	10.0	102	59-136	7	30
1,1,2,2-Tetrachloroethane	9.90	10.0	99	9.65	10.0	97	70-127	3	30
1,1,2-Trichloroethane	10.4	10.0	104	9.59	10.0	96	74-118	8	30
1,1-Dichloroethane	11.5	10.0	115	10.6	10.0	106	68-132	8	30
1,1-Dichloropropene	10.7	10.0	107	10.5	10.0	105	59-134	2	30
1,2,3-Trichlorobenzene	7.39	10.0	74	7.67	10.0	77	68-120	4	30
1,2,3-Trichloropropane	10.4	10.0	104	9.84	10.0	98	69-123	6	30
1,2,4-Trichlorobenzene	7.74	10.0	77	7.63	10.0	76	58-126	1	30
1,2,4-Trimethylbenzene	9.49	10.0	95	9.26	10.0	93	63-122	2	30
1,2-Dibromo-3-chloropropane	8.10	10.0	81	8.64	10.0	86	55-132	6	30
1,2-Dibromoethane (EDB)	9.19	10.0	92	9.03	10.0	90	74-118	2	30
1,2-Dichlorobenzene	9.40	10.0	94	8.89	10.0	89	72-115	6	30
1,2-Dichloropropane	11.0	10.0	110	10.6	10.0	106	67-126	3	30
1,3,5-Trimethylbenzene	9.59	10.0	96	9.03	10.0	90	62-126	6	30
1,3-Dichlorobenzene	9.35	10.0	94	8.83	10.0	88	70-116	6	30
1,3-Dichloropropane	10.5	10.0	105	10.0	10.0	100	75-116	4	30
1,4-Dichlorobenzene	9.36	10.0	94	8.88	10.0	89	73-115	5	30
2,2-Dichloropropane	10.4	10.0	104	9.82	10.0	98	37-145	6	30
2-Butanone (MEK)	47.8	50.0	96	48.9	50.0	98	71-149	2	30
2-Chlorotoluene	10.1	10.0	101	9.72	10.0	97	55-131	4	30
2-Hexanone	41.6	50.0	83	39.8	50.0	80	59-131	5	30
4-Chlorotoluene	10.1	10.0	101	9.67	10.0	97	66-121	5	30
4-Isopropyltoluene	9.95	10.0	100	9.25	10.0	93	61-128	7	30
4-Methyl-2-pentanone (MIBK)	45.6	50.0	91	46.9	50.0	94	64-134	3	30
Acetone	52.6	50.0	105	52.0	50.0	104	68-135	1	30
Benzene	11.2	10.0	112	10.9	10.0	109	69-124	3	30
Bromobenzene	9.41	10.0	94	8.93	10.0	89	72-116	5	30
Bromochloromethane	10.4	10.0	104	10.0	10.0	100	75-131	4	30
Bromodichloromethane	12.0	10.0	120	11.6	10.0	116	63-129	3	30
Bromoform	10.4	10.0	104	9.87	10.0	99	52-144	5	30
Bromomethane	8.26	10.0	83	7.90	10.0	79	35-113	4	30
Carbon Disulfide	23.9	20.0	119	22.5	20.0	113	46-144	6	30
Carbon Tetrachloride	11.6	10.0	116	11.1	10.0	111	55-140	4	30
Chlorobenzene	10.2	10.0	102	9.74	10.0	97	72-116	5	30
Chloroethane	12.5	10.0	125	12.2	10.0	122	58-134	2	30
Chloroform	11.0	10.0	110	10.5	10.0	105	70-129	5	30
Chloromethane	10.4	10.0	104	10.2	10.0	102	34-130	2	30
cis-1,2-Dichloroethene	10.4	10.0	104	9.95	10.0	100	71-118	5	30
cis-1,3-Dichloropropene	11.2	10.0	112	11.1	10.0	111	62-132	<1	30
Dibromochloromethane	11.3	10.0	113	11.0	10.0	110	67-126	3	30

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	02/22/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	755288

	Lab Control Sample KQ2203190-03			Duplicate Lab Control Sample KQ2203190-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	10.1	10.0	101	10.2	10.0	102	69-128	<1	30
Dichlorodifluoromethane	9.30	10.0	93	8.86	10.0	89	32-124	5	30
Ethylbenzene	9.67	10.0	97	9.23	10.0	92	67-121	5	30
Hexachlorobutadiene	9.84	10.0	98	9.39	10.0	94	57-119	5	30
Isopropylbenzene	9.39	10.0	94	8.94	10.0	89	67-129	5	30
m,p-Xylenes	19.7	20.0	99	18.7	20.0	94	69-121	5	30
Methyl tert-Butyl Ether	8.96	10.0	90	8.50	10.0	85	54-126	5	30
Methylene Chloride	10.9	10.0	109	10.7	10.0	107	71-122	2	30
Naphthalene	6.41	10.0	64	6.54	10.0	65	64-126	2	30
n-Butylbenzene	9.04	10.0	90	8.62	10.0	86	55-130	5	30
n-Propylbenzene	10.0	10.0	100	9.52	10.0	95	61-124	5	30
o-Xylene	9.26	10.0	93	8.79	10.0	88	71-119	5	30
sec-Butylbenzene	9.59	10.0	96	9.03	10.0	90	59-128	6	30
Styrene	9.51	10.0	95	8.79	10.0	88	74-121	8	30
tert-Butylbenzene	9.14	10.0	91	8.63	10.0	86	61-127	6	30
Tetrachloroethene (PCE)	10.1	10.0	101	9.51	10.0	95	62-126	6	30
Toluene	11.3	10.0	113	11.0	10.0	110	69-124	3	30
trans-1,2-Dichloroethene	10.6	10.0	106	10.4	10.0	104	67-125	2	30
trans-1,3-Dichloropropene	10.0	10.0	100	9.41	10.0	94	59-125	6	30
Trichloroethene (TCE)	10.4	10.0	104	10.1	10.0	101	67-128	4	30
Trichlorofluoromethane (CFC 11)	9.39	10.0	94	8.79	10.0	88	52-141	7	30
Vinyl Chloride	10.9	10.0	109	10.3	10.0	103	55-123	6	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2202691-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	03/02/22 09:24	02/25/22	
Manganese	6010C	ND U	ug/L	1.1	1	03/02/22 09:24	02/25/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201694
Date Analyzed: 03/02/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2202691-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2670	2500	107	80-120
Manganese	6010C	1300	1250	104	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/17/22 12:49	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/17/22 12:49	

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/22/22 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/17/22 17:03	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/17/22 17:03	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	02/22/22 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**5.0**	mg/L	5.0	1	02/23/22 15:27	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2201694-MB4		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**5.0**	mg/L	5.0	1	02/23/22 15:27	

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dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22
Sample Matrix:	Ground Water	**Date Received:**	02/17/22
		Date Analyzed:	2/17/22

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name:	LB-021622-01-27D	**Units:**	mg/L
Lab Code:	K2201694-002	**Basis:**	NA

			Matrix Spike			Duplicate Matrix Spike					
			K2201694-002MS			K2201694-002DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	7.29	14.0	8.00	84 *	14.0	8.00	84 *	90-110	<1	20
Nitrate as Nitrogen	300.0	3.82	11.7	8.00	99	11.8	8.00	99	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22
Sample Matrix:	Ground Water	**Date Received:**	02/17/22
		Date Analyzed:	02/17/22

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	LB-021622-01-27D	**Units:**	mg/L
Lab Code:	K2201694-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201694-002DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	7.29	7.20	7.24	1	20
Nitrate as Nitrogen	300.0	0.10	3.82	3.78	3.80	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	SCS Engineers	**Service Request:**	K2201694
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22
Sample Matrix:	Ground Water	**Date Received:**	02/17/22
		Date Analyzed:	02/22/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021622-05-FB	**Units:**	mg/L
Lab Code:	K2201694-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201694-006DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	ND U	ND U	NC	NC	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2201694
Project	Leichner Lanfill/04222030.13	**Date Collected:**	02/16/22
Sample Matrix:	Ground Water	**Date Received:**	02/17/22
		Date Analyzed:	02/23/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021622-07-26D	**Units:**	mg/L
Lab Code:	K2201694-008	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2201694-008DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	175	169	172	3	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201694
Date Analyzed: 02/17/22 - 02/22/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201694-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.84	5.00	97	90-110
Nitrate as Nitrogen	300.0	2.38	2.50	95	90-110
Solids, Total Dissolved	SM 2540 C	1840	1920	96	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201694
Date Analyzed: 02/17/22 - 02/23/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201694-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.56	5.00	91	90-110
Nitrate as Nitrogen	300.0	2.34	2.50	94	90-110
Solids, Total Dissolved	SM 2540 C	1850	1920	97	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2201694
Date Analyzed: 02/17/22 - 02/23/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2201694-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.75	5.00	95	90-110
Solids, Total Dissolved	SM 2540 C	1870	1920	98	85-115

Special Sampling Event – (April 2022)

April 25, 2022 Service Request No:K2203568

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory April 06, 2022
For your reference, these analyses have been assigned our service request number **K2203568.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
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Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2203568
Date Received: 04/06/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Four ground water samples were received for analysis at ALS Environmental on 04/06/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260C, 04/18/2022:A few analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by  Date 04/25/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: LB-040422-01-3S			Lab ID: K2203568-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloroform	0.82			0.50	ug/L	8260C

CLIENT ID: LB-040422-02-DUP			Lab ID: K2203568-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Bromodichloromethane	0.50			0.50	ug/L	8260C
Chloroform	0.80			0.50	ug/L	8260C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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Client: SCS Engineers **Service Request:**K2203568
Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2203568-001	LB-040422-01-3S	4/4/2022	1350
K2203568-002	LB-040422-02-DUP	4/4/2022	1355
K2203568-003	LB-040422-03-FB	4/4/2022	1410
K2203568-004	TB1	4/4/2022	0800

CHAIN OF CUSTODY

SR# K2203568

ALS Environmental
1317 South 13th Ave., Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1247 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260■ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TPPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS, Turb.	(circle) NH3-N, COD, TKN, TOC, DOC, NO2+NO3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO3☐ HCO3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO2☐ RSK 175☐ Methane☐ Ethane☐ Ethene☐				REMARKS
LB-040422-01-3S	04/04/22	1350		W	3		X																		
LB-040422-02-DUP	4/4/22	1355		W	3		X																		
LB-040422-03-FB	4/4/22	1410		W	3		X																		
TB1	4/1/22	0800		W	2		X																		

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
___ Standard (15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: ____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature	Signature	Signature	Signature
Date/Time: 4/6/22 9:30 AM	Date/Time: 4-6-22 0930	Date/Time: 4/6/22 1245	Date/Time: 4/6/22 1700
Printed Name: Brandon Raper	Printed Name:	Printed Name:	Printed Name:
Firm: SCS	Firm: ALS	Firm:	Firm: ALS

PM HZ

Cooler Receipt and Preservation Form

Client SCS Service Request K22 035688

Received: 4/6/22 Opened: 4/6/22 By: KN Unloaded: 4/6/22 By: KN

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* (*Courier*) *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / (NA)	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number (NA)	Filed
2.9		IR01		—	—		

4. Was a Temperature Blank present in cooler? NA (Y) N If yes, notate the temperature in the appropriate column above: KN
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

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www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2203568
Project: Leichner Lanfill/04222030.13

Sample Name: LB-040422-01-3S **Date Collected:** 04/4/22
Lab Code: K2203568-001 **Date Received:** 04/6/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-040422-02-DUP **Date Collected:** 04/4/22
Lab Code: K2203568-002 **Date Received:** 04/6/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-040422-03-FB **Date Collected:** 04/4/22
Lab Code: K2203568-003 **Date Received:** 04/6/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: TB1 **Date Collected:** 04/4/22
Lab Code: K2203568-004 **Date Received:** 04/6/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 13:50
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-01-3S	**Units:**	ug/L
Lab Code:	K2203568-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	04/18/22 13:59	
Benzene	ND U	0.50	1	04/18/22 13:59	
Bromobenzene	ND U	2.0	1	04/18/22 13:59	
Bromochloromethane	ND U	0.50	1	04/18/22 13:59	
Bromodichloromethane	ND U	0.50	1	04/18/22 13:59	
Bromoform	ND U	0.50	1	04/18/22 13:59	
Bromomethane	ND U	0.50	1	04/18/22 13:59	
2-Butanone (MEK)	ND U	20	1	04/18/22 13:59	
n-Butylbenzene	ND U	4.0	1	04/18/22 13:59	
sec-Butylbenzene	ND U	2.0	1	04/18/22 13:59	
tert-Butylbenzene	ND U	2.0	1	04/18/22 13:59	
Carbon Disulfide	ND U	0.50	1	04/18/22 13:59	
Carbon Tetrachloride	ND U	0.50	1	04/18/22 13:59	
Chlorobenzene	ND U	0.50	1	04/18/22 13:59	
Chloroethane	ND U	0.50	1	04/18/22 13:59	
Chloroform	**0.82**	0.50	1	04/18/22 13:59	
Chloromethane	ND U	0.50	1	04/18/22 13:59	
2-Chlorotoluene	ND U	2.0	1	04/18/22 13:59	
4-Chlorotoluene	ND U	2.0	1	04/18/22 13:59	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	04/18/22 13:59	
Dibromochloromethane	ND U	0.50	1	04/18/22 13:59	
1,2-Dibromoethane (EDB)	ND U	2.0	1	04/18/22 13:59	
Dibromomethane	ND U	0.50	1	04/18/22 13:59	
1,2-Dichlorobenzene	ND U	0.50	1	04/18/22 13:59	
1,3-Dichlorobenzene	ND U	0.50	1	04/18/22 13:59	
1,4-Dichlorobenzene	ND U	0.50	1	04/18/22 13:59	
Dichlorodifluoromethane	ND U	0.50	1	04/18/22 13:59	*
1,1-Dichloroethane	ND U	0.50	1	04/18/22 13:59	
cis-1,2-Dichloroethene	ND U	0.50	1	04/18/22 13:59	
trans-1,2-Dichloroethene	ND U	0.50	1	04/18/22 13:59	
1,2-Dichloropropane	ND U	0.50	1	04/18/22 13:59	
1,3-Dichloropropane	ND U	0.50	1	04/18/22 13:59	
2,2-Dichloropropane	ND U	0.50	1	04/18/22 13:59	
1,1-Dichloropropene	ND U	0.50	1	04/18/22 13:59	
cis-1,3-Dichloropropene	ND U	0.50	1	04/18/22 13:59	
trans-1,3-Dichloropropene	ND U	0.50	1	04/18/22 13:59	
Ethylbenzene	ND U	0.50	1	04/18/22 13:59	
Hexachlorobutadiene	ND U	2.0	1	04/18/22 13:59	
2-Hexanone	ND U	20	1	04/18/22 13:59	
Isopropylbenzene	ND U	2.0	1	04/18/22 13:59	
4-Isopropyltoluene	ND U	2.0	1	04/18/22 13:59	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 13:50
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-01-3S	**Units:**	ug/L
Lab Code:	K2203568-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	04/18/22 13:59	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	04/18/22 13:59	
Methylene Chloride	ND U	2.0	1	04/18/22 13:59	
Naphthalene	ND U	2.0	1	04/18/22 13:59	*
n-Propylbenzene	ND U	2.0	1	04/18/22 13:59	
Styrene	ND U	0.50	1	04/18/22 13:59	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	04/18/22 13:59	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	04/18/22 13:59	
Tetrachloroethene (PCE)	ND U	0.50	1	04/18/22 13:59	
Toluene	ND U	0.50	1	04/18/22 13:59	
1,2,3-Trichlorobenzene	ND U	2.0	1	04/18/22 13:59	*
1,2,4-Trichlorobenzene	ND U	2.0	1	04/18/22 13:59	
1,1,2-Trichloroethane	ND U	0.50	1	04/18/22 13:59	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	04/18/22 13:59	
Trichloroethene (TCE)	ND U	0.50	1	04/18/22 13:59	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	04/18/22 13:59	
1,2,3-Trichloropropane	ND U	0.50	1	04/18/22 13:59	
1,2,4-Trimethylbenzene	ND U	2.0	1	04/18/22 13:59	
1,3,5-Trimethylbenzene	ND U	2.0	1	04/18/22 13:59	
Vinyl Chloride	ND U	0.50	1	04/18/22 13:59	
o-Xylene	ND U	0.50	1	04/18/22 13:59	
m,p-Xylenes	ND U	0.50	1	04/18/22 13:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	84	68 - 117	04/18/22 13:59	
Dibromofluoromethane	100	73 - 122	04/18/22 13:59	
Toluene-d8	94	65 - 144	04/18/22 13:59	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 13:55
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-02-DUP	**Units:**	ug/L
Lab Code:	K2203568-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	04/18/22 14:26	
Benzene	ND U	0.50	1	04/18/22 14:26	
Bromobenzene	ND U	2.0	1	04/18/22 14:26	
Bromochloromethane	ND U	0.50	1	04/18/22 14:26	
Bromodichloromethane	**0.50**	0.50	1	04/18/22 14:26	
Bromoform	ND U	0.50	1	04/18/22 14:26	
Bromomethane	ND U	0.50	1	04/18/22 14:26	
2-Butanone (MEK)	ND U	20	1	04/18/22 14:26	
n-Butylbenzene	ND U	4.0	1	04/18/22 14:26	
sec-Butylbenzene	ND U	2.0	1	04/18/22 14:26	
tert-Butylbenzene	ND U	2.0	1	04/18/22 14:26	
Carbon Disulfide	ND U	0.50	1	04/18/22 14:26	
Carbon Tetrachloride	ND U	0.50	1	04/18/22 14:26	
Chlorobenzene	ND U	0.50	1	04/18/22 14:26	
Chloroethane	ND U	0.50	1	04/18/22 14:26	
Chloroform	**0.80**	0.50	1	04/18/22 14:26	
Chloromethane	ND U	0.50	1	04/18/22 14:26	
2-Chlorotoluene	ND U	2.0	1	04/18/22 14:26	
4-Chlorotoluene	ND U	2.0	1	04/18/22 14:26	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	04/18/22 14:26	
Dibromochloromethane	ND U	0.50	1	04/18/22 14:26	
1,2-Dibromoethane (EDB)	ND U	2.0	1	04/18/22 14:26	
Dibromomethane	ND U	0.50	1	04/18/22 14:26	
1,2-Dichlorobenzene	ND U	0.50	1	04/18/22 14:26	
1,3-Dichlorobenzene	ND U	0.50	1	04/18/22 14:26	
1,4-Dichlorobenzene	ND U	0.50	1	04/18/22 14:26	
Dichlorodifluoromethane	ND U	0.50	1	04/18/22 14:26	*
1,1-Dichloroethane	ND U	0.50	1	04/18/22 14:26	
cis-1,2-Dichloroethene	ND U	0.50	1	04/18/22 14:26	
trans-1,2-Dichloroethene	ND U	0.50	1	04/18/22 14:26	
1,2-Dichloropropane	ND U	0.50	1	04/18/22 14:26	
1,3-Dichloropropane	ND U	0.50	1	04/18/22 14:26	
2,2-Dichloropropane	ND U	0.50	1	04/18/22 14:26	
1,1-Dichloropropene	ND U	0.50	1	04/18/22 14:26	
cis-1,3-Dichloropropene	ND U	0.50	1	04/18/22 14:26	
trans-1,3-Dichloropropene	ND U	0.50	1	04/18/22 14:26	
Ethylbenzene	ND U	0.50	1	04/18/22 14:26	
Hexachlorobutadiene	ND U	2.0	1	04/18/22 14:26	
2-Hexanone	ND U	20	1	04/18/22 14:26	
Isopropylbenzene	ND U	2.0	1	04/18/22 14:26	
4-Isopropyltoluene	ND U	2.0	1	04/18/22 14:26	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 13:55
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-02-DUP	**Units:**	ug/L
Lab Code:	K2203568-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	04/18/22 14:26	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	04/18/22 14:26	
Methylene Chloride	ND U	2.0	1	04/18/22 14:26	
Naphthalene	ND U	2.0	1	04/18/22 14:26	*
n-Propylbenzene	ND U	2.0	1	04/18/22 14:26	
Styrene	ND U	0.50	1	04/18/22 14:26	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	04/18/22 14:26	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	04/18/22 14:26	
Tetrachloroethene (PCE)	ND U	0.50	1	04/18/22 14:26	
Toluene	ND U	0.50	1	04/18/22 14:26	
1,2,3-Trichlorobenzene	ND U	2.0	1	04/18/22 14:26	*
1,2,4-Trichlorobenzene	ND U	2.0	1	04/18/22 14:26	
1,1,2-Trichloroethane	ND U	0.50	1	04/18/22 14:26	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	04/18/22 14:26	
Trichloroethene (TCE)	ND U	0.50	1	04/18/22 14:26	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	04/18/22 14:26	
1,2,3-Trichloropropane	ND U	0.50	1	04/18/22 14:26	
1,2,4-Trimethylbenzene	ND U	2.0	1	04/18/22 14:26	
1,3,5-Trimethylbenzene	ND U	2.0	1	04/18/22 14:26	
Vinyl Chloride	ND U	0.50	1	04/18/22 14:26	
o-Xylene	ND U	0.50	1	04/18/22 14:26	
m,p-Xylenes	ND U	0.50	1	04/18/22 14:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	82	68 - 117	04/18/22 14:26	
Dibromofluoromethane	99	73 - 122	04/18/22 14:26	
Toluene-d8	93	65 - 144	04/18/22 14:26	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-03-FB	**Units:**	ug/L
Lab Code:	K2203568-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	04/18/22 14:53	
Benzene	ND U	0.50	1	04/18/22 14:53	
Bromobenzene	ND U	2.0	1	04/18/22 14:53	
Bromochloromethane	ND U	0.50	1	04/18/22 14:53	
Bromodichloromethane	ND U	0.50	1	04/18/22 14:53	
Bromoform	ND U	0.50	1	04/18/22 14:53	
Bromomethane	ND U	0.50	1	04/18/22 14:53	
2-Butanone (MEK)	ND U	20	1	04/18/22 14:53	
n-Butylbenzene	ND U	4.0	1	04/18/22 14:53	
sec-Butylbenzene	ND U	2.0	1	04/18/22 14:53	
tert-Butylbenzene	ND U	2.0	1	04/18/22 14:53	
Carbon Disulfide	ND U	0.50	1	04/18/22 14:53	
Carbon Tetrachloride	ND U	0.50	1	04/18/22 14:53	
Chlorobenzene	ND U	0.50	1	04/18/22 14:53	
Chloroethane	ND U	0.50	1	04/18/22 14:53	
Chloroform	ND U	0.50	1	04/18/22 14:53	
Chloromethane	ND U	0.50	1	04/18/22 14:53	
2-Chlorotoluene	ND U	2.0	1	04/18/22 14:53	
4-Chlorotoluene	ND U	2.0	1	04/18/22 14:53	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	04/18/22 14:53	
Dibromochloromethane	ND U	0.50	1	04/18/22 14:53	
1,2-Dibromoethane (EDB)	ND U	2.0	1	04/18/22 14:53	
Dibromomethane	ND U	0.50	1	04/18/22 14:53	
1,2-Dichlorobenzene	ND U	0.50	1	04/18/22 14:53	
1,3-Dichlorobenzene	ND U	0.50	1	04/18/22 14:53	
1,4-Dichlorobenzene	ND U	0.50	1	04/18/22 14:53	
Dichlorodifluoromethane	ND U	0.50	1	04/18/22 14:53	*
1,1-Dichloroethane	ND U	0.50	1	04/18/22 14:53	
cis-1,2-Dichloroethene	ND U	0.50	1	04/18/22 14:53	
trans-1,2-Dichloroethene	ND U	0.50	1	04/18/22 14:53	
1,2-Dichloropropane	ND U	0.50	1	04/18/22 14:53	
1,3-Dichloropropane	ND U	0.50	1	04/18/22 14:53	
2,2-Dichloropropane	ND U	0.50	1	04/18/22 14:53	
1,1-Dichloropropene	ND U	0.50	1	04/18/22 14:53	
cis-1,3-Dichloropropene	ND U	0.50	1	04/18/22 14:53	
trans-1,3-Dichloropropene	ND U	0.50	1	04/18/22 14:53	
Ethylbenzene	ND U	0.50	1	04/18/22 14:53	
Hexachlorobutadiene	ND U	2.0	1	04/18/22 14:53	
2-Hexanone	ND U	20	1	04/18/22 14:53	
Isopropylbenzene	ND U	2.0	1	04/18/22 14:53	
4-Isopropyltoluene	ND U	2.0	1	04/18/22 14:53	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 14:10
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	LB-040422-03-FB	**Units:**	ug/L
Lab Code:	K2203568-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	04/18/22 14:53	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	04/18/22 14:53	
Methylene Chloride	ND U	2.0	1	04/18/22 14:53	
Naphthalene	ND U	2.0	1	04/18/22 14:53	*
n-Propylbenzene	ND U	2.0	1	04/18/22 14:53	
Styrene	ND U	0.50	1	04/18/22 14:53	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	04/18/22 14:53	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	04/18/22 14:53	
Tetrachloroethene (PCE)	ND U	0.50	1	04/18/22 14:53	
Toluene	ND U	0.50	1	04/18/22 14:53	
1,2,3-Trichlorobenzene	ND U	2.0	1	04/18/22 14:53	*
1,2,4-Trichlorobenzene	ND U	2.0	1	04/18/22 14:53	
1,1,2-Trichloroethane	ND U	0.50	1	04/18/22 14:53	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	04/18/22 14:53	
Trichloroethene (TCE)	ND U	0.50	1	04/18/22 14:53	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	04/18/22 14:53	
1,2,3-Trichloropropane	ND U	0.50	1	04/18/22 14:53	
1,2,4-Trimethylbenzene	ND U	2.0	1	04/18/22 14:53	
1,3,5-Trimethylbenzene	ND U	2.0	1	04/18/22 14:53	
Vinyl Chloride	ND U	0.50	1	04/18/22 14:53	
o-Xylene	ND U	0.50	1	04/18/22 14:53	
m,p-Xylenes	ND U	0.50	1	04/18/22 14:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	80	68 - 117	04/18/22 14:53	
Dibromofluoromethane	98	73 - 122	04/18/22 14:53	
Toluene-d8	94	65 - 144	04/18/22 14:53	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 08:00
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2203568-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	04/18/22 15:19	
Benzene	ND U	0.50	1	04/18/22 15:19	
Bromobenzene	ND U	2.0	1	04/18/22 15:19	
Bromochloromethane	ND U	0.50	1	04/18/22 15:19	
Bromodichloromethane	ND U	0.50	1	04/18/22 15:19	
Bromoform	ND U	0.50	1	04/18/22 15:19	
Bromomethane	ND U	0.50	1	04/18/22 15:19	
2-Butanone (MEK)	ND U	20	1	04/18/22 15:19	
n-Butylbenzene	ND U	4.0	1	04/18/22 15:19	
sec-Butylbenzene	ND U	2.0	1	04/18/22 15:19	
tert-Butylbenzene	ND U	2.0	1	04/18/22 15:19	
Carbon Disulfide	ND U	0.50	1	04/18/22 15:19	
Carbon Tetrachloride	ND U	0.50	1	04/18/22 15:19	
Chlorobenzene	ND U	0.50	1	04/18/22 15:19	
Chloroethane	ND U	0.50	1	04/18/22 15:19	
Chloroform	ND U	0.50	1	04/18/22 15:19	
Chloromethane	ND U	0.50	1	04/18/22 15:19	
2-Chlorotoluene	ND U	2.0	1	04/18/22 15:19	
4-Chlorotoluene	ND U	2.0	1	04/18/22 15:19	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	04/18/22 15:19	
Dibromochloromethane	ND U	0.50	1	04/18/22 15:19	
1,2-Dibromoethane (EDB)	ND U	2.0	1	04/18/22 15:19	
Dibromomethane	ND U	0.50	1	04/18/22 15:19	
1,2-Dichlorobenzene	ND U	0.50	1	04/18/22 15:19	
1,3-Dichlorobenzene	ND U	0.50	1	04/18/22 15:19	
1,4-Dichlorobenzene	ND U	0.50	1	04/18/22 15:19	
Dichlorodifluoromethane	ND U	0.50	1	04/18/22 15:19	*
1,1-Dichloroethane	ND U	0.50	1	04/18/22 15:19	
cis-1,2-Dichloroethene	ND U	0.50	1	04/18/22 15:19	
trans-1,2-Dichloroethene	ND U	0.50	1	04/18/22 15:19	
1,2-Dichloropropane	ND U	0.50	1	04/18/22 15:19	
1,3-Dichloropropane	ND U	0.50	1	04/18/22 15:19	
2,2-Dichloropropane	ND U	0.50	1	04/18/22 15:19	
1,1-Dichloropropene	ND U	0.50	1	04/18/22 15:19	
cis-1,3-Dichloropropene	ND U	0.50	1	04/18/22 15:19	
trans-1,3-Dichloropropene	ND U	0.50	1	04/18/22 15:19	
Ethylbenzene	ND U	0.50	1	04/18/22 15:19	
Hexachlorobutadiene	ND U	2.0	1	04/18/22 15:19	
2-Hexanone	ND U	20	1	04/18/22 15:19	
Isopropylbenzene	ND U	2.0	1	04/18/22 15:19	
4-Isopropyltoluene	ND U	2.0	1	04/18/22 15:19	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	04/04/22 08:00
Sample Matrix:	Ground Water	**Date Received:**	04/06/22 12:00
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2203568-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	04/18/22 15:19	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	04/18/22 15:19	
Methylene Chloride	ND U	2.0	1	04/18/22 15:19	
Naphthalene	ND U	2.0	1	04/18/22 15:19	*
n-Propylbenzene	ND U	2.0	1	04/18/22 15:19	
Styrene	ND U	0.50	1	04/18/22 15:19	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	04/18/22 15:19	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	04/18/22 15:19	
Tetrachloroethene (PCE)	ND U	0.50	1	04/18/22 15:19	
Toluene	ND U	0.50	1	04/18/22 15:19	
1,2,3-Trichlorobenzene	ND U	2.0	1	04/18/22 15:19	*
1,2,4-Trichlorobenzene	ND U	2.0	1	04/18/22 15:19	
1,1,2-Trichloroethane	ND U	0.50	1	04/18/22 15:19	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	04/18/22 15:19	
Trichloroethene (TCE)	ND U	0.50	1	04/18/22 15:19	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	04/18/22 15:19	
1,2,3-Trichloropropane	ND U	0.50	1	04/18/22 15:19	
1,2,4-Trimethylbenzene	ND U	2.0	1	04/18/22 15:19	
1,3,5-Trimethylbenzene	ND U	2.0	1	04/18/22 15:19	
Vinyl Chloride	ND U	0.50	1	04/18/22 15:19	
o-Xylene	ND U	0.50	1	04/18/22 15:19	
m,p-Xylenes	ND U	0.50	1	04/18/22 15:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	79	68 - 117	04/18/22 15:19	
Dibromofluoromethane	103	73 - 122	04/18/22 15:19	
Toluene-d8	93	65 - 144	04/18/22 15:19	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:** K2203568
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
LB-040422-01-3S	K2203568-001	84	100	94
LB-040422-02-DUP	K2203568-002	82	99	93
LB-040422-03-FB	K2203568-003	80	98	94
TB1	K2203568-004	79	103	93
Method Blank	KQ2206309-06	79	100	96
Lab Control Sample	KQ2206309-04	92	95	100
Duplicate Lab Control Sample	KQ2206309-05	93	94	97

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2206309-06	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	04/18/22 13:33	
Benzene	ND U	0.50	1	04/18/22 13:33	
Bromobenzene	ND U	2.0	1	04/18/22 13:33	
Bromochloromethane	ND U	0.50	1	04/18/22 13:33	
Bromodichloromethane	ND U	0.50	1	04/18/22 13:33	
Bromoform	ND U	0.50	1	04/18/22 13:33	
Bromomethane	ND U	0.50	1	04/18/22 13:33	
2-Butanone (MEK)	ND U	20	1	04/18/22 13:33	
n-Butylbenzene	ND U	4.0	1	04/18/22 13:33	
sec-Butylbenzene	ND U	2.0	1	04/18/22 13:33	
tert-Butylbenzene	ND U	2.0	1	04/18/22 13:33	
Carbon Disulfide	ND U	0.50	1	04/18/22 13:33	
Carbon Tetrachloride	ND U	0.50	1	04/18/22 13:33	
Chlorobenzene	ND U	0.50	1	04/18/22 13:33	
Chloroethane	ND U	0.50	1	04/18/22 13:33	
Chloroform	ND U	0.50	1	04/18/22 13:33	
Chloromethane	ND U	0.50	1	04/18/22 13:33	
2-Chlorotoluene	ND U	2.0	1	04/18/22 13:33	
4-Chlorotoluene	ND U	2.0	1	04/18/22 13:33	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	04/18/22 13:33	
Dibromochloromethane	ND U	0.50	1	04/18/22 13:33	
1,2-Dibromoethane (EDB)	ND U	2.0	1	04/18/22 13:33	
Dibromomethane	ND U	0.50	1	04/18/22 13:33	
1,2-Dichlorobenzene	ND U	0.50	1	04/18/22 13:33	
1,3-Dichlorobenzene	ND U	0.50	1	04/18/22 13:33	
1,4-Dichlorobenzene	ND U	0.50	1	04/18/22 13:33	
Dichlorodifluoromethane	ND U	0.50	1	04/18/22 13:33	
1,1-Dichloroethane	ND U	0.50	1	04/18/22 13:33	
cis-1,2-Dichloroethene	ND U	0.50	1	04/18/22 13:33	
trans-1,2-Dichloroethene	ND U	0.50	1	04/18/22 13:33	
1,2-Dichloropropane	ND U	0.50	1	04/18/22 13:33	
1,3-Dichloropropane	ND U	0.50	1	04/18/22 13:33	
2,2-Dichloropropane	ND U	0.50	1	04/18/22 13:33	
1,1-Dichloropropene	ND U	0.50	1	04/18/22 13:33	
cis-1,3-Dichloropropene	ND U	0.50	1	04/18/22 13:33	
trans-1,3-Dichloropropene	ND U	0.50	1	04/18/22 13:33	
Ethylbenzene	ND U	0.50	1	04/18/22 13:33	
Hexachlorobutadiene	ND U	2.0	1	04/18/22 13:33	
2-Hexanone	ND U	20	1	04/18/22 13:33	
Isopropylbenzene	ND U	2.0	1	04/18/22 13:33	
4-Isopropyltoluene	ND U	2.0	1	04/18/22 13:33	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2206309-06	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	04/18/22 13:33	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	04/18/22 13:33	
Methylene Chloride	ND U	2.0	1	04/18/22 13:33	
Naphthalene	ND U	2.0	1	04/18/22 13:33	
n-Propylbenzene	ND U	2.0	1	04/18/22 13:33	
Styrene	ND U	0.50	1	04/18/22 13:33	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	04/18/22 13:33	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	04/18/22 13:33	
Tetrachloroethene (PCE)	ND U	0.50	1	04/18/22 13:33	
Toluene	ND U	0.50	1	04/18/22 13:33	
1,2,3-Trichlorobenzene	ND U	2.0	1	04/18/22 13:33	
1,2,4-Trichlorobenzene	ND U	2.0	1	04/18/22 13:33	
1,1,2-Trichloroethane	ND U	0.50	1	04/18/22 13:33	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	04/18/22 13:33	
Trichloroethene (TCE)	ND U	0.50	1	04/18/22 13:33	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	04/18/22 13:33	
1,2,3-Trichloropropane	ND U	0.50	1	04/18/22 13:33	
1,2,4-Trimethylbenzene	ND U	2.0	1	04/18/22 13:33	
1,3,5-Trimethylbenzene	ND U	2.0	1	04/18/22 13:33	
Vinyl Chloride	ND U	0.50	1	04/18/22 13:33	
o-Xylene	ND U	0.50	1	04/18/22 13:33	
m,p-Xylenes	ND U	0.50	1	04/18/22 13:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	79	68 - 117	04/18/22 13:33	
Dibromofluoromethane	100	73 - 122	04/18/22 13:33	
Toluene-d8	96	65 - 144	04/18/22 13:33	

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	04/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	760987

	Lab Control Sample KQ2206309-04			Duplicate Lab Control Sample KQ2206309-05					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	10.0	10.0	100	9.33	10.0	93	66-124	7	30
1,1,1-Trichloroethane (TCA)	9.69	10.0	97	9.15	10.0	92	59-136	6	30
1,1,2,2-Tetrachloroethane	10.3	10.0	103	10.1	10.0	101	70-127	3	30
1,1,2-Trichloroethane	9.96	10.0	100	9.60	10.0	96	74-118	4	30
1,1-Dichloroethane	11.4	10.0	114	10.0	10.0	100	68-132	13	30
1,1-Dichloropropene	9.72	10.0	97	9.14	10.0	91	59-134	6	30
1,2,3-Trichlorobenzene	7.14	10.0	71	7.60	10.0	76	68-120	6	30
1,2,3-Trichloropropane	10.2	10.0	102	10.0	10.0	100	69-123	2	30
1,2,4-Trichlorobenzene	8.05	10.0	81	8.07	10.0	81	58-126	<1	30
1,2,4-Trimethylbenzene	9.35	10.0	94	8.99	10.0	90	63-122	4	30
1,2-Dibromo-3-chloropropane	9.64	10.0	96	8.81	10.0	88	55-132	9	30
1,2-Dibromoethane (EDB)	9.13	10.0	91	9.07	10.0	91	74-118	<1	30
1,2-Dichlorobenzene	9.56	10.0	96	9.34	10.0	93	72-115	2	30
1,2-Dichloropropane	10.4	10.0	104	9.70	10.0	97	67-126	7	30
1,3,5-Trimethylbenzene	8.77	10.0	88	8.66	10.0	87	62-126	1	30
1,3-Dichlorobenzene	9.21	10.0	92	8.90	10.0	89	70-116	3	30
1,3-Dichloropropane	10.3	10.0	103	9.99	10.0	100	75-116	3	30
1,4-Dichlorobenzene	9.30	10.0	93	8.99	10.0	90	73-115	3	30
2,2-Dichloropropane	9.31	10.0	93	8.65	10.0	87	37-145	7	30
2-Butanone (MEK)	58.8	50.0	118	52.7	50.0	105	71-149	11	30
2-Chlorotoluene	9.68	10.0	97	9.56	10.0	96	55-131	1	30
2-Hexanone	47.6	50.0	95	49.3	50.0	99	59-131	3	30
4-Chlorotoluene	9.84	10.0	98	9.48	10.0	95	66-121	4	30
4-Isopropyltoluene	8.84	10.0	88	8.66	10.0	87	61-128	2	30
4-Methyl-2-pentanone (MIBK)	53.3	50.0	107	50.5	50.0	101	64-134	5	30
Acetone	55.4	50.0	111	53.6	50.0	107	68-135	3	30
Benzene	10.3	10.0	103	9.74	10.0	97	69-124	6	30
Bromobenzene	9.19	10.0	92	8.83	10.0	88	72-116	4	30
Bromochloromethane	10.2	10.0	102	9.46	10.0	95	75-131	8	30
Bromodichloromethane	11.1	10.0	111	10.5	10.0	105	63-129	6	30
Bromoform	9.79	10.0	98	9.25	10.0	93	52-144	6	30
Bromomethane	7.98	10.0	80	7.59	10.0	76	35-113	5	30
Carbon Disulfide	20.5	20.0	102	19.0	20.0	95	46-144	7	30
Carbon Tetrachloride	9.87	10.0	99	9.31	10.0	93	55-140	6	30
Chlorobenzene	9.33	10.0	93	9.03	10.0	90	72-116	3	30
Chloroethane	11.0	10.0	110	10.3	10.0	103	58-134	6	30
Chloroform	10.6	10.0	106	9.93	10.0	99	70-129	6	30
Chloromethane	8.82	10.0	88	8.22	10.0	82	34-130	7	30
cis-1,2-Dichloroethene	10.3	10.0	103	9.53	10.0	95	71-118	8	30
cis-1,3-Dichloropropene	11.0	10.0	110	10.2	10.0	102	62-132	7	30
Dibromochloromethane	10.6	10.0	106	10.0	10.0	100	67-126	5	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2203568
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	04/18/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	760987

	Lab Control Sample KQ2206309-04			Duplicate Lab Control Sample KQ2206309-05					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.45	10.0	95	8.86	10.0	89	69-128	6	30
Dichlorodifluoromethane	6.58	10.0	66	6.11	10.0	61	32-124	7	30
Ethylbenzene	8.64	10.0	86	8.35	10.0	84	67-121	3	30
Hexachlorobutadiene	8.82	10.0	88	9.02	10.0	90	57-119	2	30
Isopropylbenzene	8.61	10.0	86	8.22	10.0	82	67-129	5	30
m,p-Xylenes	17.8	20.0	89	17.0	20.0	85	69-121	5	30
Methyl tert-Butyl Ether	9.75	10.0	98	9.33	10.0	93	54-126	4	30
Methylene Chloride	10.5	10.0	105	9.92	10.0	99	71-122	5	30
Naphthalene	7.15	10.0	72	7.54	10.0	75	64-126	5	30
n-Butylbenzene	8.59	10.0	86	8.17	10.0	82	55-130	5	30
n-Propylbenzene	9.14	10.0	91	8.81	10.0	88	61-124	4	30
o-Xylene	8.67	10.0	87	8.32	10.0	83	71-119	4	30
sec-Butylbenzene	8.66	10.0	87	8.33	10.0	83	59-128	4	30
Styrene	8.67	10.0	87	8.39	10.0	84	74-121	3	30
tert-Butylbenzene	8.45	10.0	85	8.13	10.0	81	61-127	4	30
Tetrachloroethene (PCE)	8.51	10.0	85	8.20	10.0	82	62-126	4	30
Toluene	9.99	10.0	100	9.39	10.0	94	69-124	6	30
trans-1,2-Dichloroethene	10.4	10.0	104	9.61	10.0	96	67-125	8	30
trans-1,3-Dichloropropene	9.91	10.0	99	9.32	10.0	93	59-125	6	30
Trichloroethene (TCE)	9.43	10.0	94	8.98	10.0	90	67-128	5	30
Trichlorofluoromethane (CFC 11)	7.85	10.0	79	7.27	10.0	73	52-141	8	30
Vinyl Chloride	9.15	10.0	92	8.38	10.0	84	55-123	9	30

Special Sampling Event – (May 2022)

June 21, 2022 Service Request No:K2205761

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory May 26, 2022
For your reference, these analyses have been assigned our service request number **K2205761.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2205761
Date Received: 05/26/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six ground water samples were received for analysis at ALS Environmental on 05/26/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 05/27/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by  Date 06/21/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: LB-052522-01-1S			Lab ID: K2205761-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	6.97			0.20	mg/L	300.0
Nitrate as Nitrogen	3.94			0.10	mg/L	300.0

CLIENT ID: LB-052522-02-20S			Lab ID: K2205761-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	24.8			5.0	mg/L	300.0

CLIENT ID: LB-052522-03-FB1			Lab ID: K2205761-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Toluene	1.7			0.50	ug/L	8260C

CLIENT ID: LB-052522-04-3S			Lab ID: K2205761-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.81			0.20	mg/L	300.0
Nitrate as Nitrogen	3.61			0.10	mg/L	300.0
Bromodichloromethane	0.53			0.50	ug/L	8260C
Chloroform	0.89			0.50	ug/L	8260C

CLIENT ID: LB-052522-05-DUP1			Lab ID: K2205761-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	6.09			0.20	mg/L	300.0
Nitrate as Nitrogen	3.62			0.10	mg/L	300.0
Chloroform	0.89			0.50	ug/L	8260C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Client: SCS Engineers **Service Request:**K2205761

Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205761-001	LB-052522-01-1S	5/25/2022	1220
K2205761-002	LB-052522-02-20S	5/25/2022	1340
K2205761-003	LB-052522-03-FB1	5/25/2022	1355
K2205761-004	LB-052522-04-3S	5/25/2022	1430
K2205761-005	LB-052522-05-DUP1	5/25/2022	1435
K2205761-006	TBI	5/25/2022	0800

CHAIN OF CUSTODY

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SR# K22057161

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 042222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland Or, 97224
E-MAIL ADDRESS: BLary@SCSEngineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., Cl, SO_4, PO_4, F, NO_2, O_2, BOD, TSS, TDS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity ☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐	REMARKS
LB-052522-01-16	5/25/22	1220		W	4		X							X							
LB-052522-02-20	5/25/22	1340		W	4		X							X							
LB-052522-03-FB1	5/25/22	1355		W	4		X							X							
LB-052522-04-35	5/25/22	1430		W	4		X							X							
LB-052522-05-DUP1	5/25/22	1435		W	4		X							X							
TB1	5/25/22	0800		W	2		X														

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
___ Standard (15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Container Supply Number

124020

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature	Signature	Signature	Signature
5/25/22 Date/Time	5/25/22 0940 Date/Time	5/25/22 1655 Date/Time	5/26/22 1055 Date/Time
B. Rapozo Printed Name	Printed Name	Printed Name	Printed Name
SCS Firm	Firm	Firm	Firm

PM HZ

Cooler Receipt and Preservation Form

Client SCS Service Request K22 057461

Received: 5/26/22 Opened: 5/26/22 By: [illegible] Unloaded: 5/26/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
4.0		IR01	124020				

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, Resolutions: _____

_____

Miscellaneous Forms

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www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2205761
Project: Leichner Lanfill/04222030.13

Sample Name: LB-052522-01-1S **Date Collected:** 05/25/22
Lab Code: K2205761-001 **Date Received:** 05/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER

Sample Name: LB-052522-02-20S **Date Collected:** 05/25/22
Lab Code: K2205761-002 **Date Received:** 05/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER

Sample Name: LB-052522-03-FB1 **Date Collected:** 05/25/22
Lab Code: K2205761-003 **Date Received:** 05/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER

Sample Name: LB-052522-04-3S **Date Collected:** 05/25/22
Lab Code: K2205761-004 **Date Received:** 05/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-052522-05-DUP1	**Date Collected:**	05/25/22
Lab Code:	K2205761-005	**Date Received:**	05/26/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER

Sample Name:	TBI	**Date Collected:**	05/25/22
Lab Code:	K2205761-006	**Date Received:**	05/26/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Results

ALS Environmental—Kelso Laboratory
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Volatile Organic Compounds by GC/MS

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www.alsglobal.com

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-01-1S	**Units:**	ug/L
Lab Code:	K2205761-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 14:11	
Benzene	ND U	0.50	1	05/27/22 14:11	
Bromobenzene	ND U	2.0	1	05/27/22 14:11	
Bromochloromethane	ND U	0.50	1	05/27/22 14:11	
Bromodichloromethane	ND U	0.50	1	05/27/22 14:11	
Bromoform	ND U	0.50	1	05/27/22 14:11	
Bromomethane	ND U	0.50	1	05/27/22 14:11	
2-Butanone (MEK)	ND U	20	1	05/27/22 14:11	
n-Butylbenzene	ND U	4.0	1	05/27/22 14:11	
sec-Butylbenzene	ND U	2.0	1	05/27/22 14:11	
tert-Butylbenzene	ND U	2.0	1	05/27/22 14:11	
Carbon Disulfide	ND U	0.50	1	05/27/22 14:11	*
Carbon Tetrachloride	ND U	0.50	1	05/27/22 14:11	
Chlorobenzene	ND U	0.50	1	05/27/22 14:11	
Chloroethane	ND U	0.50	1	05/27/22 14:11	*
Chloroform	ND U	0.50	1	05/27/22 14:11	
Chloromethane	ND U	0.50	1	05/27/22 14:11	
2-Chlorotoluene	ND U	2.0	1	05/27/22 14:11	
4-Chlorotoluene	ND U	2.0	1	05/27/22 14:11	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 14:11	
Dibromochloromethane	ND U	0.50	1	05/27/22 14:11	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 14:11	
Dibromomethane	ND U	0.50	1	05/27/22 14:11	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 14:11	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 14:11	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 14:11	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 14:11	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 14:11	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 14:11	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 14:11	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 14:11	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 14:11	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 14:11	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 14:11	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 14:11	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 14:11	
Ethylbenzene	ND U	0.50	1	05/27/22 14:11	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 14:11	
2-Hexanone	ND U	20	1	05/27/22 14:11	
Isopropylbenzene	ND U	2.0	1	05/27/22 14:11	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 14:11	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-01-1S	**Units:**	ug/L
Lab Code:	K2205761-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 14:11	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 14:11	
Methylene Chloride	ND U	2.0	1	05/27/22 14:11	
Naphthalene	ND U	2.0	1	05/27/22 14:11	*
n-Propylbenzene	ND U	2.0	1	05/27/22 14:11	
Styrene	ND U	0.50	1	05/27/22 14:11	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 14:11	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 14:11	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 14:11	
Toluene	ND U	0.50	1	05/27/22 14:11	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 14:11	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 14:11	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 14:11	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 14:11	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 14:11	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 14:11	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 14:11	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 14:11	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 14:11	
Vinyl Chloride	ND U	0.50	1	05/27/22 14:11	
o-Xylene	ND U	0.50	1	05/27/22 14:11	
m,p-Xylenes	ND U	0.50	1	05/27/22 14:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	05/27/22 14:11	
Dibromofluoromethane	103	73 - 122	05/27/22 14:11	
Toluene-d8	92	65 - 144	05/27/22 14:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:40
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-02-20S	**Units:**	ug/L
Lab Code:	K2205761-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 14:37	
Benzene	ND U	0.50	1	05/27/22 14:37	
Bromobenzene	ND U	2.0	1	05/27/22 14:37	
Bromochloromethane	ND U	0.50	1	05/27/22 14:37	
Bromodichloromethane	ND U	0.50	1	05/27/22 14:37	
Bromoform	ND U	0.50	1	05/27/22 14:37	
Bromomethane	ND U	0.50	1	05/27/22 14:37	
2-Butanone (MEK)	ND U	20	1	05/27/22 14:37	
n-Butylbenzene	ND U	4.0	1	05/27/22 14:37	
sec-Butylbenzene	ND U	2.0	1	05/27/22 14:37	
tert-Butylbenzene	ND U	2.0	1	05/27/22 14:37	
Carbon Disulfide	ND U	0.50	1	05/27/22 14:37	*
Carbon Tetrachloride	ND U	0.50	1	05/27/22 14:37	
Chlorobenzene	ND U	0.50	1	05/27/22 14:37	
Chloroethane	ND U	0.50	1	05/27/22 14:37	*
Chloroform	ND U	0.50	1	05/27/22 14:37	
Chloromethane	ND U	0.50	1	05/27/22 14:37	
2-Chlorotoluene	ND U	2.0	1	05/27/22 14:37	
4-Chlorotoluene	ND U	2.0	1	05/27/22 14:37	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 14:37	
Dibromochloromethane	ND U	0.50	1	05/27/22 14:37	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 14:37	
Dibromomethane	ND U	0.50	1	05/27/22 14:37	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 14:37	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 14:37	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 14:37	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 14:37	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 14:37	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 14:37	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 14:37	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 14:37	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 14:37	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 14:37	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 14:37	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 14:37	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 14:37	
Ethylbenzene	ND U	0.50	1	05/27/22 14:37	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 14:37	
2-Hexanone	ND U	20	1	05/27/22 14:37	
Isopropylbenzene	ND U	2.0	1	05/27/22 14:37	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 14:37	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:40
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-02-20S	**Units:**	ug/L
Lab Code:	K2205761-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 14:37	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 14:37	
Methylene Chloride	ND U	2.0	1	05/27/22 14:37	
Naphthalene	ND U	2.0	1	05/27/22 14:37	*
n-Propylbenzene	ND U	2.0	1	05/27/22 14:37	
Styrene	ND U	0.50	1	05/27/22 14:37	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 14:37	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 14:37	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 14:37	
Toluene	ND U	0.50	1	05/27/22 14:37	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 14:37	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 14:37	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 14:37	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 14:37	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 14:37	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 14:37	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 14:37	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 14:37	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 14:37	
Vinyl Chloride	ND U	0.50	1	05/27/22 14:37	
o-Xylene	ND U	0.50	1	05/27/22 14:37	
m,p-Xylenes	ND U	0.50	1	05/27/22 14:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	05/27/22 14:37	
Dibromofluoromethane	104	73 - 122	05/27/22 14:37	
Toluene-d8	94	65 - 144	05/27/22 14:37	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:55
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-03-FB1	**Units:**	ug/L
Lab Code:	K2205761-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 15:03	
Benzene	ND U	0.50	1	05/27/22 15:03	
Bromobenzene	ND U	2.0	1	05/27/22 15:03	
Bromochloromethane	ND U	0.50	1	05/27/22 15:03	
Bromodichloromethane	ND U	0.50	1	05/27/22 15:03	
Bromoform	ND U	0.50	1	05/27/22 15:03	
Bromomethane	ND U	0.50	1	05/27/22 15:03	
2-Butanone (MEK)	ND U	20	1	05/27/22 15:03	
n-Butylbenzene	ND U	4.0	1	05/27/22 15:03	
sec-Butylbenzene	ND U	2.0	1	05/27/22 15:03	
tert-Butylbenzene	ND U	2.0	1	05/27/22 15:03	
Carbon Disulfide	ND U	0.50	1	05/27/22 15:03	*
Carbon Tetrachloride	ND U	0.50	1	05/27/22 15:03	
Chlorobenzene	ND U	0.50	1	05/27/22 15:03	
Chloroethane	ND U	0.50	1	05/27/22 15:03	*
Chloroform	ND U	0.50	1	05/27/22 15:03	
Chloromethane	ND U	0.50	1	05/27/22 15:03	
2-Chlorotoluene	ND U	2.0	1	05/27/22 15:03	
4-Chlorotoluene	ND U	2.0	1	05/27/22 15:03	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 15:03	
Dibromochloromethane	ND U	0.50	1	05/27/22 15:03	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 15:03	
Dibromomethane	ND U	0.50	1	05/27/22 15:03	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 15:03	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 15:03	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 15:03	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 15:03	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 15:03	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 15:03	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 15:03	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 15:03	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 15:03	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 15:03	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 15:03	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 15:03	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 15:03	
Ethylbenzene	ND U	0.50	1	05/27/22 15:03	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 15:03	
2-Hexanone	ND U	20	1	05/27/22 15:03	
Isopropylbenzene	ND U	2.0	1	05/27/22 15:03	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 15:03	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:55
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-03-FB1	**Units:**	ug/L
Lab Code:	K2205761-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 15:03	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 15:03	
Methylene Chloride	ND U	2.0	1	05/27/22 15:03	
Naphthalene	ND U	2.0	1	05/27/22 15:03	*
n-Propylbenzene	ND U	2.0	1	05/27/22 15:03	
Styrene	ND U	0.50	1	05/27/22 15:03	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:03	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:03	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 15:03	
Toluene	**1.7**	0.50	1	05/27/22 15:03	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 15:03	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 15:03	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 15:03	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 15:03	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 15:03	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 15:03	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 15:03	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 15:03	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 15:03	
Vinyl Chloride	ND U	0.50	1	05/27/22 15:03	
o-Xylene	ND U	0.50	1	05/27/22 15:03	
m,p-Xylenes	ND U	0.50	1	05/27/22 15:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	73	68 - 117	05/27/22 15:03	
Dibromofluoromethane	106	73 - 122	05/27/22 15:03	
Toluene-d8	92	65 - 144	05/27/22 15:03	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:30
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-04-3S	**Units:**	ug/L
Lab Code:	K2205761-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	ND	U	20	1	05/27/22 15:30	
Benzene	ND	U	0.50	1	05/27/22 15:30	
Bromobenzene	ND	U	2.0	1	05/27/22 15:30	
Bromochloromethane	ND	U	0.50	1	05/27/22 15:30	
Bromodichloromethane	**0.53**		0.50	1	05/27/22 15:30	
Bromoform	ND	U	0.50	1	05/27/22 15:30	
Bromomethane	ND	U	0.50	1	05/27/22 15:30	
2-Butanone (MEK)	ND	U	20	1	05/27/22 15:30	
n-Butylbenzene	ND	U	4.0	1	05/27/22 15:30	
sec-Butylbenzene	ND	U	2.0	1	05/27/22 15:30	
tert-Butylbenzene	ND	U	2.0	1	05/27/22 15:30	
Carbon Disulfide	ND	U	0.50	1	05/27/22 15:30	*
Carbon Tetrachloride	ND	U	0.50	1	05/27/22 15:30	
Chlorobenzene	ND	U	0.50	1	05/27/22 15:30	
Chloroethane	ND	U	0.50	1	05/27/22 15:30	*
Chloroform	**0.89**		0.50	1	05/27/22 15:30	
Chloromethane	ND	U	0.50	1	05/27/22 15:30	
2-Chlorotoluene	ND	U	2.0	1	05/27/22 15:30	
4-Chlorotoluene	ND	U	2.0	1	05/27/22 15:30	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	05/27/22 15:30	
Dibromochloromethane	ND	U	0.50	1	05/27/22 15:30	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	05/27/22 15:30	
Dibromomethane	ND	U	0.50	1	05/27/22 15:30	
1,2-Dichlorobenzene	ND	U	0.50	1	05/27/22 15:30	
1,3-Dichlorobenzene	ND	U	0.50	1	05/27/22 15:30	
1,4-Dichlorobenzene	ND	U	0.50	1	05/27/22 15:30	
Dichlorodifluoromethane	ND	U	0.50	1	05/27/22 15:30	
1,1-Dichloroethane	ND	U	0.50	1	05/27/22 15:30	
cis-1,2-Dichloroethene	ND	U	0.50	1	05/27/22 15:30	
trans-1,2-Dichloroethene	ND	U	0.50	1	05/27/22 15:30	
1,2-Dichloropropane	ND	U	0.50	1	05/27/22 15:30	
1,3-Dichloropropane	ND	U	0.50	1	05/27/22 15:30	
2,2-Dichloropropane	ND	U	0.50	1	05/27/22 15:30	
1,1-Dichloropropene	ND	U	0.50	1	05/27/22 15:30	
cis-1,3-Dichloropropene	ND	U	0.50	1	05/27/22 15:30	
trans-1,3-Dichloropropene	ND	U	0.50	1	05/27/22 15:30	
Ethylbenzene	ND	U	0.50	1	05/27/22 15:30	
Hexachlorobutadiene	ND	U	2.0	1	05/27/22 15:30	
2-Hexanone	ND	U	20	1	05/27/22 15:30	
Isopropylbenzene	ND	U	2.0	1	05/27/22 15:30	
4-Isopropyltoluene	ND	U	2.0	1	05/27/22 15:30	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:30
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-04-3S	**Units:**	ug/L
Lab Code:	K2205761-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 15:30	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 15:30	
Methylene Chloride	ND U	2.0	1	05/27/22 15:30	
Naphthalene	ND U	2.0	1	05/27/22 15:30	*
n-Propylbenzene	ND U	2.0	1	05/27/22 15:30	
Styrene	ND U	0.50	1	05/27/22 15:30	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:30	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:30	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 15:30	
Toluene	ND U	0.50	1	05/27/22 15:30	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 15:30	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 15:30	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 15:30	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 15:30	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 15:30	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 15:30	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 15:30	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 15:30	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 15:30	
Vinyl Chloride	ND U	0.50	1	05/27/22 15:30	
o-Xylene	ND U	0.50	1	05/27/22 15:30	
m,p-Xylenes	ND U	0.50	1	05/27/22 15:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	05/27/22 15:30	
Dibromofluoromethane	102	73 - 122	05/27/22 15:30	
Toluene-d8	90	65 - 144	05/27/22 15:30	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:35
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-05-DUP1	**Units:**	ug/L
Lab Code:	K2205761-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 15:57	
Benzene	ND U	0.50	1	05/27/22 15:57	
Bromobenzene	ND U	2.0	1	05/27/22 15:57	
Bromochloromethane	ND U	0.50	1	05/27/22 15:57	
Bromodichloromethane	ND U	0.50	1	05/27/22 15:57	
Bromoform	ND U	0.50	1	05/27/22 15:57	
Bromomethane	ND U	0.50	1	05/27/22 15:57	
2-Butanone (MEK)	ND U	20	1	05/27/22 15:57	
n-Butylbenzene	ND U	4.0	1	05/27/22 15:57	
sec-Butylbenzene	ND U	2.0	1	05/27/22 15:57	
tert-Butylbenzene	ND U	2.0	1	05/27/22 15:57	
Carbon Disulfide	ND U	0.50	1	05/27/22 15:57	*
Carbon Tetrachloride	ND U	0.50	1	05/27/22 15:57	
Chlorobenzene	ND U	0.50	1	05/27/22 15:57	
Chloroethane	ND U	0.50	1	05/27/22 15:57	*
Chloroform	**0.89**	0.50	1	05/27/22 15:57	
Chloromethane	ND U	0.50	1	05/27/22 15:57	
2-Chlorotoluene	ND U	2.0	1	05/27/22 15:57	
4-Chlorotoluene	ND U	2.0	1	05/27/22 15:57	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 15:57	
Dibromochloromethane	ND U	0.50	1	05/27/22 15:57	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 15:57	
Dibromomethane	ND U	0.50	1	05/27/22 15:57	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 15:57	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 15:57	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 15:57	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 15:57	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 15:57	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 15:57	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 15:57	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 15:57	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 15:57	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 15:57	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 15:57	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 15:57	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 15:57	
Ethylbenzene	ND U	0.50	1	05/27/22 15:57	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 15:57	
2-Hexanone	ND U	20	1	05/27/22 15:57	
Isopropylbenzene	ND U	2.0	1	05/27/22 15:57	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 15:57	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:35
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-05-DUP1	**Units:**	ug/L
Lab Code:	K2205761-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 15:57	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 15:57	
Methylene Chloride	ND U	2.0	1	05/27/22 15:57	
Naphthalene	ND U	2.0	1	05/27/22 15:57	*
n-Propylbenzene	ND U	2.0	1	05/27/22 15:57	
Styrene	ND U	0.50	1	05/27/22 15:57	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:57	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 15:57	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 15:57	
Toluene	ND U	0.50	1	05/27/22 15:57	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 15:57	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 15:57	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 15:57	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 15:57	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 15:57	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 15:57	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 15:57	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 15:57	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 15:57	
Vinyl Chloride	ND U	0.50	1	05/27/22 15:57	
o-Xylene	ND U	0.50	1	05/27/22 15:57	
m,p-Xylenes	ND U	0.50	1	05/27/22 15:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	05/27/22 15:57	
Dibromofluoromethane	104	73 - 122	05/27/22 15:57	
Toluene-d8	95	65 - 144	05/27/22 15:57	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 08:00
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	TBI	**Units:**	ug/L
Lab Code:	K2205761-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 13:18	
Benzene	ND U	0.50	1	05/27/22 13:18	
Bromobenzene	ND U	2.0	1	05/27/22 13:18	
Bromochloromethane	ND U	0.50	1	05/27/22 13:18	
Bromodichloromethane	ND U	0.50	1	05/27/22 13:18	
Bromoform	ND U	0.50	1	05/27/22 13:18	
Bromomethane	ND U	0.50	1	05/27/22 13:18	
2-Butanone (MEK)	ND U	20	1	05/27/22 13:18	
n-Butylbenzene	ND U	4.0	1	05/27/22 13:18	
sec-Butylbenzene	ND U	2.0	1	05/27/22 13:18	
tert-Butylbenzene	ND U	2.0	1	05/27/22 13:18	
Carbon Disulfide	ND U	0.50	1	05/27/22 13:18	*
Carbon Tetrachloride	ND U	0.50	1	05/27/22 13:18	
Chlorobenzene	ND U	0.50	1	05/27/22 13:18	
Chloroethane	ND U	0.50	1	05/27/22 13:18	*
Chloroform	ND U	0.50	1	05/27/22 13:18	
Chloromethane	ND U	0.50	1	05/27/22 13:18	
2-Chlorotoluene	ND U	2.0	1	05/27/22 13:18	
4-Chlorotoluene	ND U	2.0	1	05/27/22 13:18	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 13:18	
Dibromochloromethane	ND U	0.50	1	05/27/22 13:18	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 13:18	
Dibromomethane	ND U	0.50	1	05/27/22 13:18	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 13:18	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 13:18	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 13:18	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 13:18	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 13:18	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 13:18	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 13:18	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 13:18	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 13:18	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 13:18	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 13:18	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 13:18	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 13:18	
Ethylbenzene	ND U	0.50	1	05/27/22 13:18	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 13:18	
2-Hexanone	ND U	20	1	05/27/22 13:18	
Isopropylbenzene	ND U	2.0	1	05/27/22 13:18	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 13:18	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 08:00
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	TBI	**Units:**	ug/L
Lab Code:	K2205761-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 13:18	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 13:18	
Methylene Chloride	ND U	2.0	1	05/27/22 13:18	
Naphthalene	ND U	2.0	1	05/27/22 13:18	*
n-Propylbenzene	ND U	2.0	1	05/27/22 13:18	
Styrene	ND U	0.50	1	05/27/22 13:18	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 13:18	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 13:18	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 13:18	
Toluene	ND U	0.50	1	05/27/22 13:18	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 13:18	*
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 13:18	*
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 13:18	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 13:18	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 13:18	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 13:18	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 13:18	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 13:18	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 13:18	
Vinyl Chloride	ND U	0.50	1	05/27/22 13:18	
o-Xylene	ND U	0.50	1	05/27/22 13:18	
m,p-Xylenes	ND U	0.50	1	05/27/22 13:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	72	68 - 117	05/27/22 13:18	
Dibromofluoromethane	101	73 - 122	05/27/22 13:18	
Toluene-d8	93	65 - 144	05/27/22 13:18	

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 12:20
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-01-1S	**Basis:**	NA
Lab Code:	K2205761-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.97**	mg/L	0.20	2	05/26/22 14:37	
Nitrate as Nitrogen	300.0	**3.94**	mg/L	0.10	2	05/26/22 14:37	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:40
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-02-20S	**Basis:**	NA
Lab Code:	K2205761-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**24.8**	mg/L	5.0	50	06/16/22 22:12	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	05/26/22 15:27	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 13:55
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-03-FB1	**Basis:**	NA
Lab Code:	K2205761-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.20	2	05/26/22 15:38	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	05/26/22 15:38	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:30
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-04-3S	**Basis:**	NA
Lab Code:	K2205761-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.81**	mg/L	0.20	2	05/26/22 15:49	
Nitrate as Nitrogen	300.0	**3.61**	mg/L	0.10	2	05/26/22 15:49	

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22 14:35
Sample Matrix:	Ground Water	**Date Received:**	05/26/22 10:55
Sample Name:	LB-052522-05-DUP1	**Basis:**	NA
Lab Code:	K2205761-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.09**	mg/L	0.20	2	05/26/22 16:00	
Nitrate as Nitrogen	300.0	**3.62**	mg/L	0.10	2	05/26/22 16:00	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Client: SCS Engineers **Service Request:** K2205761

Project: Leichner Lanfill/04222030.13

Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
LB-052522-01-1S	K2205761-001	75	103	92
LB-052522-02-20S	K2205761-002	73	104	94
LB-052522-03-FB1	K2205761-003	73	106	92
LB-052522-04-3S	K2205761-004	75	102	90
LB-052522-05-DUP1	K2205761-005	72	104	95
TBI	K2205761-006	72	101	93
Method Blank	KQ2208980-05	75	103	95
Lab Control Sample	KQ2208980-03	90	92	102
Duplicate Lab Control Sample	KQ2208980-04	90	92	103

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2208980-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	05/27/22 12:51	
Benzene	ND U	0.50	1	05/27/22 12:51	
Bromobenzene	ND U	2.0	1	05/27/22 12:51	
Bromochloromethane	ND U	0.50	1	05/27/22 12:51	
Bromodichloromethane	ND U	0.50	1	05/27/22 12:51	
Bromoform	ND U	0.50	1	05/27/22 12:51	
Bromomethane	ND U	0.50	1	05/27/22 12:51	
2-Butanone (MEK)	ND U	20	1	05/27/22 12:51	
n-Butylbenzene	ND U	4.0	1	05/27/22 12:51	
sec-Butylbenzene	ND U	2.0	1	05/27/22 12:51	
tert-Butylbenzene	ND U	2.0	1	05/27/22 12:51	
Carbon Disulfide	ND U	0.50	1	05/27/22 12:51	
Carbon Tetrachloride	ND U	0.50	1	05/27/22 12:51	
Chlorobenzene	ND U	0.50	1	05/27/22 12:51	
Chloroethane	ND U	0.50	1	05/27/22 12:51	
Chloroform	ND U	0.50	1	05/27/22 12:51	
Chloromethane	ND U	0.50	1	05/27/22 12:51	
2-Chlorotoluene	ND U	2.0	1	05/27/22 12:51	
4-Chlorotoluene	ND U	2.0	1	05/27/22 12:51	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	05/27/22 12:51	
Dibromochloromethane	ND U	0.50	1	05/27/22 12:51	
1,2-Dibromoethane (EDB)	ND U	2.0	1	05/27/22 12:51	
Dibromomethane	ND U	0.50	1	05/27/22 12:51	
1,2-Dichlorobenzene	ND U	0.50	1	05/27/22 12:51	
1,3-Dichlorobenzene	ND U	0.50	1	05/27/22 12:51	
1,4-Dichlorobenzene	ND U	0.50	1	05/27/22 12:51	
Dichlorodifluoromethane	ND U	0.50	1	05/27/22 12:51	
1,1-Dichloroethane	ND U	0.50	1	05/27/22 12:51	
cis-1,2-Dichloroethene	ND U	0.50	1	05/27/22 12:51	
trans-1,2-Dichloroethene	ND U	0.50	1	05/27/22 12:51	
1,2-Dichloropropane	ND U	0.50	1	05/27/22 12:51	
1,3-Dichloropropane	ND U	0.50	1	05/27/22 12:51	
2,2-Dichloropropane	ND U	0.50	1	05/27/22 12:51	
1,1-Dichloropropene	ND U	0.50	1	05/27/22 12:51	
cis-1,3-Dichloropropene	ND U	0.50	1	05/27/22 12:51	
trans-1,3-Dichloropropene	ND U	0.50	1	05/27/22 12:51	
Ethylbenzene	ND U	0.50	1	05/27/22 12:51	
Hexachlorobutadiene	ND U	2.0	1	05/27/22 12:51	
2-Hexanone	ND U	20	1	05/27/22 12:51	
Isopropylbenzene	ND U	2.0	1	05/27/22 12:51	
4-Isopropyltoluene	ND U	2.0	1	05/27/22 12:51	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2208980-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	05/27/22 12:51	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	05/27/22 12:51	
Methylene Chloride	ND U	2.0	1	05/27/22 12:51	
Naphthalene	ND U	2.0	1	05/27/22 12:51	
n-Propylbenzene	ND U	2.0	1	05/27/22 12:51	
Styrene	ND U	0.50	1	05/27/22 12:51	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	05/27/22 12:51	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	05/27/22 12:51	
Tetrachloroethene (PCE)	ND U	0.50	1	05/27/22 12:51	
Toluene	ND U	0.50	1	05/27/22 12:51	
1,2,3-Trichlorobenzene	ND U	2.0	1	05/27/22 12:51	
1,2,4-Trichlorobenzene	ND U	2.0	1	05/27/22 12:51	
1,1,2-Trichloroethane	ND U	0.50	1	05/27/22 12:51	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	05/27/22 12:51	
Trichloroethene (TCE)	ND U	0.50	1	05/27/22 12:51	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	05/27/22 12:51	
1,2,3-Trichloropropane	ND U	0.50	1	05/27/22 12:51	
1,2,4-Trimethylbenzene	ND U	2.0	1	05/27/22 12:51	
1,3,5-Trimethylbenzene	ND U	2.0	1	05/27/22 12:51	
Vinyl Chloride	ND U	0.50	1	05/27/22 12:51	
o-Xylene	ND U	0.50	1	05/27/22 12:51	
m,p-Xylenes	ND U	0.50	1	05/27/22 12:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	68 - 117	05/27/22 12:51	
Dibromofluoromethane	103	73 - 122	05/27/22 12:51	
Toluene-d8	95	65 - 144	05/27/22 12:51	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	05/27/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	765716

	Lab Control Sample KQ2208980-03			Duplicate Lab Control Sample KQ2208980-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	9.45	10.0	95	9.46	10.0	95	66-124	<1	30
1,1,1-Trichloroethane (TCA)	10.8	10.0	108	10.4	10.0	104	59-136	4	30
1,1,2,2-Tetrachloroethane	10.2	10.0	102	10.4	10.0	104	70-127	2	30
1,1,2-Trichloroethane	9.55	10.0	96	9.86	10.0	99	74-118	3	30
1,1-Dichloroethane	12.3	10.0	123	11.7	10.0	117	68-132	6	30
1,1-Dichloropropene	10.9	10.0	109	10.6	10.0	106	59-134	3	30
1,2,3-Trichlorobenzene	7.13	10.0	71	7.40	10.0	74	68-120	4	30
1,2,3-Trichloropropane	9.93	10.0	99	9.55	10.0	96	69-123	4	30
1,2,4-Trichlorobenzene	7.45	10.0	75	7.79	10.0	78	58-126	4	30
1,2,4-Trimethylbenzene	9.06	10.0	91	9.19	10.0	92	63-122	1	30
1,2-Dibromo-3-chloropropane	8.29	10.0	83	8.93	10.0	89	55-132	7	30
1,2-Dibromoethane (EDB)	8.65	10.0	87	8.86	10.0	89	74-118	2	30
1,2-Dichlorobenzene	8.94	10.0	89	9.09	10.0	91	72-115	2	30
1,2-Dichloropropane	11.1	10.0	111	11.1	10.0	111	67-126	<1	30
1,3,5-Trimethylbenzene	8.86	10.0	89	8.87	10.0	89	62-126	<1	30
1,3-Dichlorobenzene	9.04	10.0	90	9.23	10.0	92	70-116	2	30
1,3-Dichloropropane	9.82	10.0	98	10.1	10.0	101	75-116	3	30
1,4-Dichlorobenzene	9.02	10.0	90	8.97	10.0	90	73-115	<1	30
2,2-Dichloropropane	10.6	10.0	106	10.5	10.0	105	37-145	1	30
2-Butanone (MEK)	55.3	50.0	111	58.0	50.0	116	71-149	5	30
2-Chlorotoluene	9.81	10.0	98	9.84	10.0	98	55-131	<1	30
2-Hexanone	43.5	50.0	87	45.5	50.0	91	59-131	4	30
4-Chlorotoluene	9.71	10.0	97	9.64	10.0	96	66-121	<1	30
4-Isopropyltoluene	8.96	10.0	90	9.03	10.0	90	61-128	<1	30
4-Methyl-2-pentanone (MIBK)	52.8	50.0	106	52.6	50.0	105	64-134	<1	30
Acetone	56.8	50.0	114	57.1	50.0	114	68-135	<1	30
Benzene	11.5	10.0	115	11.5	10.0	115	69-124	<1	30
Bromobenzene	8.82	10.0	88	8.83	10.0	88	72-116	<1	30
Bromochloromethane	10.1	10.0	101	10.4	10.0	104	75-131	3	30
Bromodichloromethane	11.2	10.0	112	10.8	10.0	108	63-129	3	30
Bromoform	8.75	10.0	88	8.90	10.0	89	52-144	2	30
Bromomethane	8.39	10.0	84	8.59	10.0	86	35-113	2	30
Carbon Disulfide	25.1	20.0	126	24.4	20.0	122	46-144	3	30
Carbon Tetrachloride	10.7	10.0	107	10.3	10.0	103	55-140	4	30
Chlorobenzene	9.05	10.0	91	9.17	10.0	92	72-116	1	30
Chloroethane	13.0	10.0	130	12.8	10.0	128	58-134	2	30
Chloroform	10.9	10.0	109	10.8	10.0	108	70-129	<1	30
Chloromethane	11.0	10.0	110	11.0	10.0	110	34-130	<1	30
cis-1,2-Dichloroethene	11.1	10.0	111	10.4	10.0	104	71-118	6	30
cis-1,3-Dichloropropene	10.9	10.0	109	10.9	10.0	109	62-132	<1	30
Dibromochloromethane	9.91	10.0	99	9.90	10.0	99	67-126	<1	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	05/27/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	765716

	Lab Control Sample KQ2208980-03			Duplicate Lab Control Sample KQ2208980-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.43	10.0	94	9.45	10.0	95	69-128	<1	30
Dichlorodifluoromethane	9.43	10.0	94	9.12	10.0	91	32-124	3	30
Ethylbenzene	8.66	10.0	87	8.75	10.0	88	67-121	1	30
Hexachlorobutadiene	9.93	10.0	99	9.93	10.0	99	57-119	<1	30
Isopropylbenzene	8.49	10.0	85	8.54	10.0	85	67-129	<1	30
m,p-Xylenes	18.1	20.0	90	17.8	20.0	89	69-121	1	30
Methyl tert-Butyl Ether	9.49	10.0	95	9.51	10.0	95	54-126	<1	30
Methylene Chloride	11.4	10.0	114	11.0	10.0	110	71-122	3	30
Naphthalene	6.44	10.0	64	6.65	10.0	67	64-126	3	30
n-Butylbenzene	8.50	10.0	85	8.48	10.0	85	55-130	<1	30
n-Propylbenzene	9.34	10.0	93	9.41	10.0	94	61-124	<1	30
o-Xylene	8.33	10.0	83	8.45	10.0	85	71-119	1	30
sec-Butylbenzene	8.88	10.0	89	8.99	10.0	90	59-128	1	30
Styrene	8.30	10.0	83	8.02	10.0	80	74-121	3	30
tert-Butylbenzene	8.43	10.0	84	8.48	10.0	85	61-127	<1	30
Tetrachloroethene (PCE)	9.41	10.0	94	9.41	10.0	94	62-126	<1	30
Toluene	10.8	10.0	108	10.7	10.0	107	69-124	1	30
trans-1,2-Dichloroethene	11.1	10.0	111	10.7	10.0	107	67-125	4	30
trans-1,3-Dichloropropene	9.22	10.0	92	9.41	10.0	94	59-125	2	30
Trichloroethene (TCE)	9.96	10.0	100	9.99	10.0	100	67-128	<1	30
Trichlorofluoromethane (CFC 11)	8.99	10.0	90	8.73	10.0	87	52-141	3	30
Vinyl Chloride	11.4	10.0	114	11.4	10.0	114	55-123	<1	30

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2205761-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	05/26/22 14:26	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	05/26/22 14:26	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2205761-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	06/16/22 17:40	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2205761-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	06/16/22 21:43	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22
Sample Matrix:	Ground Water	**Date Received:**	05/26/22
		Date Analyzed:	5/26/22

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name:	LB-052522-01-1S	**Units:**	mg/L
Lab Code:	K2205761-001	**Basis:**	NA

			Matrix Spike			Duplicate Matrix Spike					
			K2205761-001MS			K2205761-001DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	6.97	15.0	8.00	100	15.0	8.00	101	90-110	<1	20
Nitrate as Nitrogen	300.0	3.94	8.00	4.00	101	8.01	4.00	102	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project	Leichner Lanfill/04222030.13	**Date Collected:**	05/25/22
Sample Matrix:	Ground Water	**Date Received:**	05/26/22
		Date Analyzed:	05/26/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-052522-01-1S	**Units:**	mg/L
Lab Code:	K2205761-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2205761-001DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	6.97	6.97	6.97	<1	20
Nitrate as Nitrogen	300.0	0.10	3.94	3.94	3.94	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2205761
Date Analyzed: 05/26/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2205761-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	0.97	1.00	97	90-110
Nitrate as Nitrogen	300.0	0.488	0.500	98	90-110

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	06/16/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Lab Control Sample Summary
Chloride

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	767732

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2205761-LCS2	4.84	5.00	97	90-110

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2205761
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	06/16/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Lab Control Sample Summary
Chloride

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	767732

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2205761-LCS3	4.85	5.00	97	90-110

Third Quarter (July) 2022 Laboratory Reports

July 31, 2022 Service Request No:K2208415

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory July 26, 2022
For your reference, these analyses have been assigned our service request number **K2208415.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2208415
Date Received: 07/26/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Seven ground water samples were received for analysis at ALS Environmental on 07/26/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 07/27/2022:cis-1,3-Dichloropropene was flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by _____ Date 07/31/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: LB-072522-02-5S			Lab ID: K2208415-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	153			5.0	mg/L	SM 2540 C
Chloride	3.59			0.20	mg/L	300.0
Nitrate as Nitrogen	4.50			0.10	mg/L	300.0

CLIENT ID: LB-072522-03-27I			Lab ID: K2208415-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	205			5.0	mg/L	SM 2540 C
Chloride	2.65			0.20	mg/L	300.0
Nitrate as Nitrogen	1.33			0.10	mg/L	300.0
Iron, Dissolved	44			21	ug/L	6010C
Manganese, Dissolved	25.9			1.1	ug/L	6010C

CLIENT ID: LB-072522-04-13I			Lab ID: K2208415-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	192			5.0	mg/L	SM 2540 C
Chloride	6.21			0.20	mg/L	300.0
Nitrate as Nitrogen	4.10			0.10	mg/L	300.0
Iron, Dissolved	21			21	ug/L	6010C
Manganese, Dissolved	6.3			1.1	ug/L	6010C

CLIENT ID: LB-072522-05-26I			Lab ID: K2208415-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	194			5.0	mg/L	SM 2540 C
Chloride	6.68			0.20	mg/L	300.0
Nitrate as Nitrogen	3.65			0.10	mg/L	300.0
Manganese, Dissolved	5.8			1.1	ug/L	6010C

CLIENT ID: LB-072522-06-6S			Lab ID: K2208415-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	154			5.0	mg/L	SM 2540 C
Chloride	5.49			0.20	mg/L	300.0
Nitrate as Nitrogen	2.23			0.10	mg/L	300.0

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Client: SCS Engineers **Service Request:**K2208415
Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2208415-001	TB1	7/25/2022	1045
K2208415-002	LB-072522-01-FB	7/25/2022	1120
K2208415-003	LB-072522-02-5S	7/25/2022	1155
K2208415-004	LB-072522-03-27I	7/25/2022	1245
K2208415-005	LB-072522-04-13I	7/25/2022	1330
K2208415-006	LB-072522-05-26I	7/25/2022	1420
K2208415-007	LB-072522-06-6S	7/25/2022	1505

CHAIN OF CUSTODY

SR# 1122084115

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 042222030.13
PROJECT MANAGER: Barb Lary
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blary@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., SO4, PO4, F, NO2, NO3, BOD, TSS, Turb.	(circle) NH3-N, COD, TKN, TOC, DOC, NO2+NO3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO3☐ HCO3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases CO2☐ RSK 175☐Methane☐Ethane☐Ethene☐	REMARKS
TB1	7/25/22	1045		W	2		X														
LB-072522-01-FB	7/25/22	1120		W	5		X						X		X						
LB-072522-02-SS	7/25/22	1155		W	5		X						X		X						
LB-072522-03-27I	7/25/22	1245		W	5		X						X		X						
LB-072522-04-13I	7/25/22	1330		W	5		X						X		X						
LB-072522-05-26I	7/25/22	1420		W	5		X						X		X						
LB-072522-06-6S	7/25/22	1505		W	5		X						X		X						

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
X Standard (15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Short hold - NO3

Container Supply Number

125071

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Barbara E. Lary	Signature:	Signature:	Signature:
Date/Time: 7/26/2017	Date/Time: 7-26-22 10:17	Date/Time: 7-26-22 11:30	Date/Time: 7/26/22 1130
Printed Name: BARBARA E. LARY	Printed Name:	Printed Name:	Printed Name:
Firm: SCS	Firm: ALS	Firm: AB	Firm: AB

PM 1+2

Cooler Receipt and Preservation Form

Client SCS Service Request K22 08415

Received: 7/26/22 Opened: 7/26/22 By: AP Unloaded: 7/26/22 By: AP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* (*Courier*) *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 Front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID/ NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.3	5.3	1401					

4. Was a Temperature Blank present in cooler? NA (Y) N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: (*Inserts*) (*Baggies*) *Bubble Wrap* *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, Resolutions: _____

: _____

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2208415
Project: Leichner Lanfill/04222030.13

Sample Name: TB1 **Date Collected:** 07/25/22
Lab Code: K2208415-001 **Date Received:** 07/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-072522-01-FB **Date Collected:** 07/25/22
Lab Code: K2208415-002 **Date Received:** 07/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name: LB-072522-02-5S **Date Collected:** 07/25/22
Lab Code: K2208415-003 **Date Received:** 07/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name: LB-072522-03-27I **Date Collected:** 07/25/22
Lab Code: K2208415-004 **Date Received:** 07/26/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-072522-04-13I	**Date Collected:**	07/25/22
Lab Code:	K2208415-005	**Date Received:**	07/26/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name:	LB-072522-05-26I	**Date Collected:**	07/25/22
Lab Code:	K2208415-006	**Date Received:**	07/26/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name:	LB-072522-06-6S	**Date Collected:**	07/25/22
Lab Code:	K2208415-007	**Date Received:**	07/26/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 10:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2208415-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 19:32	
Benzene	ND U	0.50	1	07/27/22 19:32	
Bromobenzene	ND U	2.0	1	07/27/22 19:32	
Bromochloromethane	ND U	0.50	1	07/27/22 19:32	
Bromodichloromethane	ND U	0.50	1	07/27/22 19:32	
Bromoform	ND U	0.50	1	07/27/22 19:32	
Bromomethane	ND U	0.50	1	07/27/22 19:32	
2-Butanone (MEK)	ND U	20	1	07/27/22 19:32	
n-Butylbenzene	ND U	4.0	1	07/27/22 19:32	
sec-Butylbenzene	ND U	2.0	1	07/27/22 19:32	
tert-Butylbenzene	ND U	2.0	1	07/27/22 19:32	
Carbon Disulfide	ND U	0.50	1	07/27/22 19:32	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 19:32	
Chlorobenzene	ND U	0.50	1	07/27/22 19:32	
Chloroethane	ND U	0.50	1	07/27/22 19:32	
Chloroform	ND U	0.50	1	07/27/22 19:32	
Chloromethane	ND U	0.50	1	07/27/22 19:32	
2-Chlorotoluene	ND U	2.0	1	07/27/22 19:32	
4-Chlorotoluene	ND U	2.0	1	07/27/22 19:32	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 19:32	
Dibromochloromethane	ND U	0.50	1	07/27/22 19:32	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 19:32	
Dibromomethane	ND U	0.50	1	07/27/22 19:32	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 19:32	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 19:32	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 19:32	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 19:32	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 19:32	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 19:32	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 19:32	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 19:32	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 19:32	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 19:32	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 19:32	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 19:32	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 19:32	
Ethylbenzene	ND U	0.50	1	07/27/22 19:32	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 19:32	
2-Hexanone	ND U	20	1	07/27/22 19:32	
Isopropylbenzene	ND U	2.0	1	07/27/22 19:32	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 19:32	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 10:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2208415-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 19:32	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 19:32	
Methylene Chloride	ND U	2.0	1	07/27/22 19:32	
Naphthalene	ND U	2.0	1	07/27/22 19:32	
n-Propylbenzene	ND U	2.0	1	07/27/22 19:32	
Styrene	ND U	0.50	1	07/27/22 19:32	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 19:32	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 19:32	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 19:32	
Toluene	ND U	0.50	1	07/27/22 19:32	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 19:32	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 19:32	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 19:32	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 19:32	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 19:32	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 19:32	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 19:32	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 19:32	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 19:32	
Vinyl Chloride	ND U	0.50	1	07/27/22 19:32	
o-Xylene	ND U	0.50	1	07/27/22 19:32	
m,p-Xylenes	ND U	0.50	1	07/27/22 19:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	68 - 117	07/27/22 19:32	
Dibromofluoromethane	100	73 - 122	07/27/22 19:32	
Toluene-d8	87	65 - 144	07/27/22 19:32	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-01-FB	**Units:**	ug/L
Lab Code:	K2208415-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 19:57	
Benzene	ND U	0.50	1	07/27/22 19:57	
Bromobenzene	ND U	2.0	1	07/27/22 19:57	
Bromochloromethane	ND U	0.50	1	07/27/22 19:57	
Bromodichloromethane	ND U	0.50	1	07/27/22 19:57	
Bromoform	ND U	0.50	1	07/27/22 19:57	
Bromomethane	ND U	0.50	1	07/27/22 19:57	
2-Butanone (MEK)	ND U	20	1	07/27/22 19:57	
n-Butylbenzene	ND U	4.0	1	07/27/22 19:57	
sec-Butylbenzene	ND U	2.0	1	07/27/22 19:57	
tert-Butylbenzene	ND U	2.0	1	07/27/22 19:57	
Carbon Disulfide	ND U	0.50	1	07/27/22 19:57	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 19:57	
Chlorobenzene	ND U	0.50	1	07/27/22 19:57	
Chloroethane	ND U	0.50	1	07/27/22 19:57	
Chloroform	ND U	0.50	1	07/27/22 19:57	
Chloromethane	ND U	0.50	1	07/27/22 19:57	
2-Chlorotoluene	ND U	2.0	1	07/27/22 19:57	
4-Chlorotoluene	ND U	2.0	1	07/27/22 19:57	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 19:57	
Dibromochloromethane	ND U	0.50	1	07/27/22 19:57	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 19:57	
Dibromomethane	ND U	0.50	1	07/27/22 19:57	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 19:57	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 19:57	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 19:57	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 19:57	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 19:57	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 19:57	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 19:57	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 19:57	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 19:57	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 19:57	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 19:57	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 19:57	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 19:57	
Ethylbenzene	ND U	0.50	1	07/27/22 19:57	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 19:57	
2-Hexanone	ND U	20	1	07/27/22 19:57	
Isopropylbenzene	ND U	2.0	1	07/27/22 19:57	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 19:57	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-01-FB	**Units:**	ug/L
Lab Code:	K2208415-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 19:57	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 19:57	
Methylene Chloride	ND U	2.0	1	07/27/22 19:57	
Naphthalene	ND U	2.0	1	07/27/22 19:57	
n-Propylbenzene	ND U	2.0	1	07/27/22 19:57	
Styrene	ND U	0.50	1	07/27/22 19:57	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 19:57	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 19:57	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 19:57	
Toluene	ND U	0.50	1	07/27/22 19:57	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 19:57	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 19:57	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 19:57	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 19:57	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 19:57	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 19:57	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 19:57	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 19:57	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 19:57	
Vinyl Chloride	ND U	0.50	1	07/27/22 19:57	
o-Xylene	ND U	0.50	1	07/27/22 19:57	
m,p-Xylenes	ND U	0.50	1	07/27/22 19:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	68 - 117	07/27/22 19:57	
Dibromofluoromethane	103	73 - 122	07/27/22 19:57	
Toluene-d8	88	65 - 144	07/27/22 19:57	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-02-5S	**Units:**	ug/L
Lab Code:	K2208415-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 20:21	
Benzene	ND U	0.50	1	07/27/22 20:21	
Bromobenzene	ND U	2.0	1	07/27/22 20:21	
Bromochloromethane	ND U	0.50	1	07/27/22 20:21	
Bromodichloromethane	ND U	0.50	1	07/27/22 20:21	
Bromoform	ND U	0.50	1	07/27/22 20:21	
Bromomethane	ND U	0.50	1	07/27/22 20:21	
2-Butanone (MEK)	ND U	20	1	07/27/22 20:21	
n-Butylbenzene	ND U	4.0	1	07/27/22 20:21	
sec-Butylbenzene	ND U	2.0	1	07/27/22 20:21	
tert-Butylbenzene	ND U	2.0	1	07/27/22 20:21	
Carbon Disulfide	ND U	0.50	1	07/27/22 20:21	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 20:21	
Chlorobenzene	ND U	0.50	1	07/27/22 20:21	
Chloroethane	ND U	0.50	1	07/27/22 20:21	
Chloroform	ND U	0.50	1	07/27/22 20:21	
Chloromethane	ND U	0.50	1	07/27/22 20:21	
2-Chlorotoluene	ND U	2.0	1	07/27/22 20:21	
4-Chlorotoluene	ND U	2.0	1	07/27/22 20:21	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 20:21	
Dibromochloromethane	ND U	0.50	1	07/27/22 20:21	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 20:21	
Dibromomethane	ND U	0.50	1	07/27/22 20:21	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 20:21	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 20:21	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 20:21	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 20:21	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 20:21	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 20:21	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 20:21	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 20:21	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 20:21	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 20:21	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 20:21	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 20:21	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 20:21	
Ethylbenzene	ND U	0.50	1	07/27/22 20:21	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 20:21	
2-Hexanone	ND U	20	1	07/27/22 20:21	
Isopropylbenzene	ND U	2.0	1	07/27/22 20:21	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 20:21	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-02-5S	**Units:**	ug/L
Lab Code:	K2208415-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 20:21	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 20:21	
Methylene Chloride	ND U	2.0	1	07/27/22 20:21	
Naphthalene	ND U	2.0	1	07/27/22 20:21	
n-Propylbenzene	ND U	2.0	1	07/27/22 20:21	
Styrene	ND U	0.50	1	07/27/22 20:21	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 20:21	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 20:21	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 20:21	
Toluene	ND U	0.50	1	07/27/22 20:21	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 20:21	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 20:21	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 20:21	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 20:21	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 20:21	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 20:21	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 20:21	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 20:21	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 20:21	
Vinyl Chloride	ND U	0.50	1	07/27/22 20:21	
o-Xylene	ND U	0.50	1	07/27/22 20:21	
m,p-Xylenes	ND U	0.50	1	07/27/22 20:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	68 - 117	07/27/22 20:21	
Dibromofluoromethane	97	73 - 122	07/27/22 20:21	
Toluene-d8	81	65 - 144	07/27/22 20:21	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 12:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-03-27I	**Units:**	ug/L
Lab Code:	K2208415-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 20:46	
Benzene	ND U	0.50	1	07/27/22 20:46	
Bromobenzene	ND U	2.0	1	07/27/22 20:46	
Bromochloromethane	ND U	0.50	1	07/27/22 20:46	
Bromodichloromethane	ND U	0.50	1	07/27/22 20:46	
Bromoform	ND U	0.50	1	07/27/22 20:46	
Bromomethane	ND U	0.50	1	07/27/22 20:46	
2-Butanone (MEK)	ND U	20	1	07/27/22 20:46	
n-Butylbenzene	ND U	4.0	1	07/27/22 20:46	
sec-Butylbenzene	ND U	2.0	1	07/27/22 20:46	
tert-Butylbenzene	ND U	2.0	1	07/27/22 20:46	
Carbon Disulfide	ND U	0.50	1	07/27/22 20:46	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 20:46	
Chlorobenzene	ND U	0.50	1	07/27/22 20:46	
Chloroethane	ND U	0.50	1	07/27/22 20:46	
Chloroform	ND U	0.50	1	07/27/22 20:46	
Chloromethane	ND U	0.50	1	07/27/22 20:46	
2-Chlorotoluene	ND U	2.0	1	07/27/22 20:46	
4-Chlorotoluene	ND U	2.0	1	07/27/22 20:46	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 20:46	
Dibromochloromethane	ND U	0.50	1	07/27/22 20:46	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 20:46	
Dibromomethane	ND U	0.50	1	07/27/22 20:46	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 20:46	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 20:46	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 20:46	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 20:46	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 20:46	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 20:46	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 20:46	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 20:46	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 20:46	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 20:46	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 20:46	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 20:46	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 20:46	
Ethylbenzene	ND U	0.50	1	07/27/22 20:46	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 20:46	
2-Hexanone	ND U	20	1	07/27/22 20:46	
Isopropylbenzene	ND U	2.0	1	07/27/22 20:46	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 20:46	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 12:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-03-27I	**Units:**	ug/L
Lab Code:	K2208415-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 20:46	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 20:46	
Methylene Chloride	ND U	2.0	1	07/27/22 20:46	
Naphthalene	ND U	2.0	1	07/27/22 20:46	
n-Propylbenzene	ND U	2.0	1	07/27/22 20:46	
Styrene	ND U	0.50	1	07/27/22 20:46	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 20:46	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 20:46	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 20:46	
Toluene	ND U	0.50	1	07/27/22 20:46	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 20:46	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 20:46	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 20:46	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 20:46	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 20:46	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 20:46	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 20:46	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 20:46	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 20:46	
Vinyl Chloride	ND U	0.50	1	07/27/22 20:46	
o-Xylene	ND U	0.50	1	07/27/22 20:46	
m,p-Xylenes	ND U	0.50	1	07/27/22 20:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	68 - 117	07/27/22 20:46	
Dibromofluoromethane	97	73 - 122	07/27/22 20:46	
Toluene-d8	88	65 - 144	07/27/22 20:46	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 13:30
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-04-13I	**Units:**	ug/L
Lab Code:	K2208415-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 21:11	
Benzene	ND U	0.50	1	07/27/22 21:11	
Bromobenzene	ND U	2.0	1	07/27/22 21:11	
Bromochloromethane	ND U	0.50	1	07/27/22 21:11	
Bromodichloromethane	ND U	0.50	1	07/27/22 21:11	
Bromoform	ND U	0.50	1	07/27/22 21:11	
Bromomethane	ND U	0.50	1	07/27/22 21:11	
2-Butanone (MEK)	ND U	20	1	07/27/22 21:11	
n-Butylbenzene	ND U	4.0	1	07/27/22 21:11	
sec-Butylbenzene	ND U	2.0	1	07/27/22 21:11	
tert-Butylbenzene	ND U	2.0	1	07/27/22 21:11	
Carbon Disulfide	ND U	0.50	1	07/27/22 21:11	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 21:11	
Chlorobenzene	ND U	0.50	1	07/27/22 21:11	
Chloroethane	ND U	0.50	1	07/27/22 21:11	
Chloroform	ND U	0.50	1	07/27/22 21:11	
Chloromethane	ND U	0.50	1	07/27/22 21:11	
2-Chlorotoluene	ND U	2.0	1	07/27/22 21:11	
4-Chlorotoluene	ND U	2.0	1	07/27/22 21:11	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 21:11	
Dibromochloromethane	ND U	0.50	1	07/27/22 21:11	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 21:11	
Dibromomethane	ND U	0.50	1	07/27/22 21:11	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 21:11	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 21:11	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 21:11	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 21:11	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 21:11	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 21:11	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 21:11	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 21:11	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 21:11	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 21:11	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 21:11	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 21:11	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 21:11	
Ethylbenzene	ND U	0.50	1	07/27/22 21:11	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 21:11	
2-Hexanone	ND U	20	1	07/27/22 21:11	
Isopropylbenzene	ND U	2.0	1	07/27/22 21:11	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 21:11	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 13:30
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-04-13I	**Units:**	ug/L
Lab Code:	K2208415-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 21:11	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 21:11	
Methylene Chloride	ND U	2.0	1	07/27/22 21:11	
Naphthalene	ND U	2.0	1	07/27/22 21:11	
n-Propylbenzene	ND U	2.0	1	07/27/22 21:11	
Styrene	ND U	0.50	1	07/27/22 21:11	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 21:11	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 21:11	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 21:11	
Toluene	ND U	0.50	1	07/27/22 21:11	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 21:11	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 21:11	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 21:11	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 21:11	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 21:11	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 21:11	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 21:11	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 21:11	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 21:11	
Vinyl Chloride	ND U	0.50	1	07/27/22 21:11	
o-Xylene	ND U	0.50	1	07/27/22 21:11	
m,p-Xylenes	ND U	0.50	1	07/27/22 21:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	68 - 117	07/27/22 21:11	
Dibromofluoromethane	102	73 - 122	07/27/22 21:11	
Toluene-d8	88	65 - 144	07/27/22 21:11	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 14:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-05-26I	**Units:**	ug/L
Lab Code:	K2208415-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 21:35	
Benzene	ND U	0.50	1	07/27/22 21:35	
Bromobenzene	ND U	2.0	1	07/27/22 21:35	
Bromochloromethane	ND U	0.50	1	07/27/22 21:35	
Bromodichloromethane	ND U	0.50	1	07/27/22 21:35	
Bromoform	ND U	0.50	1	07/27/22 21:35	
Bromomethane	ND U	0.50	1	07/27/22 21:35	
2-Butanone (MEK)	ND U	20	1	07/27/22 21:35	
n-Butylbenzene	ND U	4.0	1	07/27/22 21:35	
sec-Butylbenzene	ND U	2.0	1	07/27/22 21:35	
tert-Butylbenzene	ND U	2.0	1	07/27/22 21:35	
Carbon Disulfide	ND U	0.50	1	07/27/22 21:35	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 21:35	
Chlorobenzene	ND U	0.50	1	07/27/22 21:35	
Chloroethane	ND U	0.50	1	07/27/22 21:35	
Chloroform	ND U	0.50	1	07/27/22 21:35	
Chloromethane	ND U	0.50	1	07/27/22 21:35	
2-Chlorotoluene	ND U	2.0	1	07/27/22 21:35	
4-Chlorotoluene	ND U	2.0	1	07/27/22 21:35	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 21:35	
Dibromochloromethane	ND U	0.50	1	07/27/22 21:35	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 21:35	
Dibromomethane	ND U	0.50	1	07/27/22 21:35	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 21:35	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 21:35	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 21:35	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 21:35	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 21:35	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 21:35	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 21:35	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 21:35	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 21:35	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 21:35	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 21:35	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 21:35	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 21:35	
Ethylbenzene	ND U	0.50	1	07/27/22 21:35	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 21:35	
2-Hexanone	ND U	20	1	07/27/22 21:35	
Isopropylbenzene	ND U	2.0	1	07/27/22 21:35	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 21:35	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 14:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-05-26I	**Units:**	ug/L
Lab Code:	K2208415-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 21:35	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 21:35	
Methylene Chloride	ND U	2.0	1	07/27/22 21:35	
Naphthalene	ND U	2.0	1	07/27/22 21:35	
n-Propylbenzene	ND U	2.0	1	07/27/22 21:35	
Styrene	ND U	0.50	1	07/27/22 21:35	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 21:35	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 21:35	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 21:35	
Toluene	ND U	0.50	1	07/27/22 21:35	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 21:35	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 21:35	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 21:35	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 21:35	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 21:35	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 21:35	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 21:35	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 21:35	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 21:35	
Vinyl Chloride	ND U	0.50	1	07/27/22 21:35	
o-Xylene	ND U	0.50	1	07/27/22 21:35	
m,p-Xylenes	ND U	0.50	1	07/27/22 21:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	68 - 117	07/27/22 21:35	
Dibromofluoromethane	104	73 - 122	07/27/22 21:35	
Toluene-d8	86	65 - 144	07/27/22 21:35	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 15:05
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-06-6S	**Units:**	ug/L
Lab Code:	K2208415-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 22:00	
Benzene	ND U	0.50	1	07/27/22 22:00	
Bromobenzene	ND U	2.0	1	07/27/22 22:00	
Bromochloromethane	ND U	0.50	1	07/27/22 22:00	
Bromodichloromethane	ND U	0.50	1	07/27/22 22:00	
Bromoform	ND U	0.50	1	07/27/22 22:00	
Bromomethane	ND U	0.50	1	07/27/22 22:00	
2-Butanone (MEK)	ND U	20	1	07/27/22 22:00	
n-Butylbenzene	ND U	4.0	1	07/27/22 22:00	
sec-Butylbenzene	ND U	2.0	1	07/27/22 22:00	
tert-Butylbenzene	ND U	2.0	1	07/27/22 22:00	
Carbon Disulfide	ND U	0.50	1	07/27/22 22:00	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 22:00	
Chlorobenzene	ND U	0.50	1	07/27/22 22:00	
Chloroethane	ND U	0.50	1	07/27/22 22:00	
Chloroform	ND U	0.50	1	07/27/22 22:00	
Chloromethane	ND U	0.50	1	07/27/22 22:00	
2-Chlorotoluene	ND U	2.0	1	07/27/22 22:00	
4-Chlorotoluene	ND U	2.0	1	07/27/22 22:00	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 22:00	
Dibromochloromethane	ND U	0.50	1	07/27/22 22:00	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 22:00	
Dibromomethane	ND U	0.50	1	07/27/22 22:00	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 22:00	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 22:00	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 22:00	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 22:00	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 22:00	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 22:00	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 22:00	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 22:00	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 22:00	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 22:00	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 22:00	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 22:00	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 22:00	
Ethylbenzene	ND U	0.50	1	07/27/22 22:00	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 22:00	
2-Hexanone	ND U	20	1	07/27/22 22:00	
Isopropylbenzene	ND U	2.0	1	07/27/22 22:00	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 22:00	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 15:05
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-06-6S	**Units:**	ug/L
Lab Code:	K2208415-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 22:00	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 22:00	
Methylene Chloride	ND U	2.0	1	07/27/22 22:00	
Naphthalene	ND U	2.0	1	07/27/22 22:00	
n-Propylbenzene	ND U	2.0	1	07/27/22 22:00	
Styrene	ND U	0.50	1	07/27/22 22:00	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 22:00	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 22:00	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 22:00	
Toluene	ND U	0.50	1	07/27/22 22:00	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 22:00	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 22:00	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 22:00	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 22:00	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 22:00	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 22:00	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 22:00	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 22:00	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 22:00	
Vinyl Chloride	ND U	0.50	1	07/27/22 22:00	
o-Xylene	ND U	0.50	1	07/27/22 22:00	
m,p-Xylenes	ND U	0.50	1	07/27/22 22:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	68 - 117	07/27/22 22:00	
Dibromofluoromethane	100	73 - 122	07/27/22 22:00	
Toluene-d8	87	65 - 144	07/27/22 22:00	

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-01-FB	**Basis:**	NA
Lab Code:	K2208415-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:28	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 08:28	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-02-5S	**Basis:**	NA
Lab Code:	K2208415-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:31	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 08:31	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 12:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-03-27I	**Basis:**	NA
Lab Code:	K2208415-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**44**	ug/L	21	1	07/29/22 08:42	07/28/22	
Manganese	6010C	**25.9**	ug/L	1.1	1	07/29/22 08:42	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 13:30
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-04-13I	**Basis:**	NA
Lab Code:	K2208415-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**21**	ug/L	21	1	07/29/22 08:44	07/28/22	
Manganese	6010C	**6.3**	ug/L	1.1	1	07/29/22 08:44	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 14:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-05-26I	**Basis:**	NA
Lab Code:	K2208415-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:47	07/28/22	
Manganese	6010C	**5.8**	ug/L	1.1	1	07/29/22 08:47	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 15:05
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-06-6S	**Basis:**	NA
Lab Code:	K2208415-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:58	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 08:58	07/28/22	

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-01-FB	**Basis:**	NA
Lab Code:	K2208415-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.20	2	07/26/22 17:36	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	07/26/22 17:36	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-01-FB	**Basis:**	NA
Lab Code:	K2208415-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	07/26/22 16:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-02-5S	**Basis:**	NA
Lab Code:	K2208415-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**3.59**	mg/L	0.20	2	07/26/22 18:19	
Nitrate as Nitrogen	300.0	**4.50**	mg/L	0.10	2	07/26/22 18:19	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 11:55
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-02-5S	**Basis:**	NA
Lab Code:	K2208415-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**153**	mg/L	5.0	1	07/26/22 16:29	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 12:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-03-27I	**Basis:**	NA
Lab Code:	K2208415-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**2.65**	mg/L	0.20	2	07/26/22 18:30	
Nitrate as Nitrogen	300.0	**1.33**	mg/L	0.10	2	07/26/22 18:30	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 12:45
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-03-27I	**Basis:**	NA
Lab Code:	K2208415-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**205**	mg/L	5.0	1	07/26/22 16:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 13:30
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-04-13I	**Basis:**	NA
Lab Code:	K2208415-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.21**	mg/L	0.20	2	07/26/22 18:41	
Nitrate as Nitrogen	300.0	**4.10**	mg/L	0.10	2	07/26/22 18:41	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 13:30
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-04-13I	**Basis:**	NA
Lab Code:	K2208415-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**192**	mg/L	5.0	1	07/26/22 16:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 14:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-05-26I	**Basis:**	NA
Lab Code:	K2208415-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.68**	mg/L	0.20	2	07/26/22 18:52	
Nitrate as Nitrogen	300.0	**3.65**	mg/L	0.10	2	07/26/22 18:52	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 14:20
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-05-26I	**Basis:**	NA
Lab Code:	K2208415-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**194**	mg/L	5.0	1	07/26/22 16:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 15:05
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-06-6S	**Basis:**	NA
Lab Code:	K2208415-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.49**	mg/L	0.20	2	07/26/22 19:03	
Nitrate as Nitrogen	300.0	**2.23**	mg/L	0.10	2	07/26/22 19:03	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22 15:05
Sample Matrix:	Ground Water	**Date Received:**	07/26/22 11:30
Sample Name:	LB-072522-06-6S	**Basis:**	NA
Lab Code:	K2208415-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**154**	mg/L	5.0	1	07/26/22 16:29	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:** K2208415
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TB1	K2208415-001	89	100	87
LB-072522-01-FB	K2208415-002	88	103	88
LB-072522-02-5S	K2208415-003	88	97	81
LB-072522-03-27I	K2208415-004	88	97	88
LB-072522-04-13I	K2208415-005	90	102	88
LB-072522-05-26I	K2208415-006	88	104	86
LB-072522-06-6S	K2208415-007	87	100	87
Method Blank	KQ2212361-05	90	100	88
Lab Control Sample	KQ2212361-03	108	96	88
Duplicate Lab Control Sample	KQ2212361-04	107	99	96

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2212361-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/27/22 16:41	
Benzene	ND U	0.50	1	07/27/22 16:41	
Bromobenzene	ND U	2.0	1	07/27/22 16:41	
Bromochloromethane	ND U	0.50	1	07/27/22 16:41	
Bromodichloromethane	ND U	0.50	1	07/27/22 16:41	
Bromoform	ND U	0.50	1	07/27/22 16:41	
Bromomethane	ND U	0.50	1	07/27/22 16:41	
2-Butanone (MEK)	ND U	20	1	07/27/22 16:41	
n-Butylbenzene	ND U	4.0	1	07/27/22 16:41	
sec-Butylbenzene	ND U	2.0	1	07/27/22 16:41	
tert-Butylbenzene	ND U	2.0	1	07/27/22 16:41	
Carbon Disulfide	ND U	0.50	1	07/27/22 16:41	
Carbon Tetrachloride	ND U	0.50	1	07/27/22 16:41	
Chlorobenzene	ND U	0.50	1	07/27/22 16:41	
Chloroethane	ND U	0.50	1	07/27/22 16:41	
Chloroform	ND U	0.50	1	07/27/22 16:41	
Chloromethane	ND U	0.50	1	07/27/22 16:41	
2-Chlorotoluene	ND U	2.0	1	07/27/22 16:41	
4-Chlorotoluene	ND U	2.0	1	07/27/22 16:41	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/27/22 16:41	
Dibromochloromethane	ND U	0.50	1	07/27/22 16:41	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/27/22 16:41	
Dibromomethane	ND U	0.50	1	07/27/22 16:41	
1,2-Dichlorobenzene	ND U	0.50	1	07/27/22 16:41	
1,3-Dichlorobenzene	ND U	0.50	1	07/27/22 16:41	
1,4-Dichlorobenzene	ND U	0.50	1	07/27/22 16:41	
Dichlorodifluoromethane	ND U	0.50	1	07/27/22 16:41	
1,1-Dichloroethane	ND U	0.50	1	07/27/22 16:41	
cis-1,2-Dichloroethene	ND U	0.50	1	07/27/22 16:41	
trans-1,2-Dichloroethene	ND U	0.50	1	07/27/22 16:41	
1,2-Dichloropropane	ND U	0.50	1	07/27/22 16:41	
1,3-Dichloropropane	ND U	0.50	1	07/27/22 16:41	
2,2-Dichloropropane	ND U	0.50	1	07/27/22 16:41	
1,1-Dichloropropene	ND U	0.50	1	07/27/22 16:41	
cis-1,3-Dichloropropene	ND U	0.50	1	07/27/22 16:41	
trans-1,3-Dichloropropene	ND U	0.50	1	07/27/22 16:41	
Ethylbenzene	ND U	0.50	1	07/27/22 16:41	
Hexachlorobutadiene	ND U	2.0	1	07/27/22 16:41	
2-Hexanone	ND U	20	1	07/27/22 16:41	
Isopropylbenzene	ND U	2.0	1	07/27/22 16:41	
4-Isopropyltoluene	ND U	2.0	1	07/27/22 16:41	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2212361-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/27/22 16:41	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/27/22 16:41	
Methylene Chloride	ND U	2.0	1	07/27/22 16:41	
Naphthalene	ND U	2.0	1	07/27/22 16:41	
n-Propylbenzene	ND U	2.0	1	07/27/22 16:41	
Styrene	ND U	0.50	1	07/27/22 16:41	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/27/22 16:41	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/27/22 16:41	
Tetrachloroethene (PCE)	ND U	0.50	1	07/27/22 16:41	
Toluene	ND U	0.50	1	07/27/22 16:41	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/27/22 16:41	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/27/22 16:41	
1,1,2-Trichloroethane	ND U	0.50	1	07/27/22 16:41	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/27/22 16:41	
Trichloroethene (TCE)	ND U	0.50	1	07/27/22 16:41	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/27/22 16:41	
1,2,3-Trichloropropane	ND U	0.50	1	07/27/22 16:41	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/27/22 16:41	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/27/22 16:41	
Vinyl Chloride	ND U	0.50	1	07/27/22 16:41	
o-Xylene	ND U	0.50	1	07/27/22 16:41	
m,p-Xylenes	ND U	0.50	1	07/27/22 16:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	68 - 117	07/27/22 16:41	
Dibromofluoromethane	100	73 - 122	07/27/22 16:41	
Toluene-d8	88	65 - 144	07/27/22 16:41	

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	07/27/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	771945

	Lab Control Sample KQ2212361-03			Duplicate Lab Control Sample KQ2212361-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.90	10.0	89	8.20	10.0	82	66-124	8	30
1,1,1-Trichloroethane (TCA)	9.33	10.0	93	8.95	10.0	90	59-136	4	30
1,1,2,2-Tetrachloroethane	10.7	10.0	107	10.1	10.0	101	70-127	6	30
1,1,2-Trichloroethane	10.1	10.0	101	9.47	10.0	95	74-118	6	30
1,1-Dichloroethane	9.71	10.0	97	9.42	10.0	94	68-132	3	30
1,1-Dichloropropene	9.03	10.0	90	8.72	10.0	87	59-134	3	30
1,2,3-Trichlorobenzene	10.6	10.0	106	10.2	10.0	102	68-120	4	30
1,2,3-Trichloropropane	11.1	10.0	111	10.5	10.0	105	69-123	6	30
1,2,4-Trichlorobenzene	9.54	10.0	95	9.06	10.0	91	58-126	5	30
1,2,4-Trimethylbenzene	10.6	10.0	106	10.1	10.0	101	63-122	5	30
1,2-Dibromo-3-chloropropane	10.3	10.0	103	9.77	10.0	98	55-132	5	30
1,2-Dibromoethane (EDB)	9.90	10.0	99	9.20	10.0	92	74-118	7	30
1,2-Dichlorobenzene	10.5	10.0	105	9.72	10.0	97	72-115	7	30
1,2-Dichloropropane	8.76	10.0	88	8.13	10.0	81	67-126	7	30
1,3,5-Trimethylbenzene	10.7	10.0	107	10.1	10.0	101	62-126	6	30
1,3-Dichlorobenzene	9.90	10.0	99	9.38	10.0	94	70-116	5	30
1,3-Dichloropropane	10.1	10.0	101	9.78	10.0	98	75-116	3	30
1,4-Dichlorobenzene	9.76	10.0	98	9.19	10.0	92	73-115	6	30
2,2-Dichloropropane	8.79	10.0	88	8.59	10.0	86	37-145	2	30
2-Butanone (MEK)	45.1	50.0	90	42.8	50.0	86	71-149	5	30
2-Chlorotoluene	10.4	10.0	104	9.75	10.0	98	55-131	7	30
2-Hexanone	56.6	50.0	113	53.3	50.0	107	59-131	6	30
4-Chlorotoluene	10.7	10.0	107	10.3	10.0	103	66-121	4	30
4-Isopropyltoluene	9.55	10.0	96	8.94	10.0	89	61-128	7	30
4-Methyl-2-pentanone (MIBK)	47.0	50.0	94	47.6	50.0	95	64-134	1	30
Acetone	59.0	50.0	118	57.5	50.0	115	68-135	3	30
Benzene	9.03	10.0	90	8.31	10.0	83	69-124	8	30
Bromobenzene	9.38	10.0	94	8.66	10.0	87	72-116	8	30
Bromochloromethane	8.75	10.0	88	8.58	10.0	86	75-131	2	30
Bromodichloromethane	8.34	10.0	83	8.03	10.0	80	63-129	4	30
Bromoform	8.01	10.0	80	7.76	10.0	78	52-144	3	30
Bromomethane	7.22	10.0	72	7.41	10.0	74	35-113	3	30
Carbon Disulfide	20.0	20.0	100	19.1	20.0	96	46-144	4	30
Carbon Tetrachloride	9.14	10.0	91	8.72	10.0	87	55-140	5	30
Chlorobenzene	8.97	10.0	90	8.39	10.0	84	72-116	7	30
Chloroethane	9.33	10.0	93	9.10	10.0	91	58-134	2	30
Chloroform	9.66	10.0	97	9.44	10.0	94	70-129	2	30
Chloromethane	7.91	10.0	79	7.62	10.0	76	34-130	4	30
cis-1,2-Dichloroethene	8.67	10.0	87	8.38	10.0	84	71-118	3	30
cis-1,3-Dichloropropene	7.48	10.0	75	7.38	10.0	74	62-132	1	30
Dibromochloromethane	9.02	10.0	90	8.28	10.0	83	67-126	9	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	07/27/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	771945

	Lab Control Sample KQ2212361-03			Duplicate Lab Control Sample KQ2212361-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	8.89	10.0	89	8.54	10.0	85	69-128	4	30
Dichlorodifluoromethane	7.31	10.0	73	6.86	10.0	69	32-124	6	30
Ethylbenzene	9.08	10.0	91	8.43	10.0	84	67-121	7	30
Hexachlorobutadiene	9.67	10.0	97	9.21	10.0	92	57-119	5	30
Isopropylbenzene	9.93	10.0	99	9.19	10.0	92	67-129	8	30
m,p-Xylenes	19.3	20.0	97	18.2	20.0	91	69-121	6	30
Methyl tert-Butyl Ether	9.24	10.0	92	9.12	10.0	91	54-126	1	30
Methylene Chloride	8.47	10.0	85	8.27	10.0	83	71-122	2	30
Naphthalene	9.46	10.0	95	9.06	10.0	91	64-126	4	30
n-Butylbenzene	10.7	10.0	107	9.94	10.0	99	55-130	8	30
n-Propylbenzene	10.2	10.0	102	9.65	10.0	97	61-124	5	30
o-Xylene	9.37	10.0	94	8.81	10.0	88	71-119	6	30
sec-Butylbenzene	10.7	10.0	107	10.1	10.0	101	59-128	6	30
Styrene	8.75	10.0	88	7.92	10.0	79	74-121	10	30
tert-Butylbenzene	10.2	10.0	102	9.52	10.0	95	61-127	6	30
Tetrachloroethene (PCE)	8.27	10.0	83	7.91	10.0	79	62-126	4	30
Toluene	7.96	10.0	80	7.95	10.0	80	69-124	<1	30
trans-1,2-Dichloroethene	8.56	10.0	86	8.50	10.0	85	67-125	<1	30
trans-1,3-Dichloropropene	7.98	10.0	80	7.62	10.0	76	59-125	5	30
Trichloroethene (TCE)	8.76	10.0	88	8.34	10.0	83	67-128	5	30
Trichlorofluoromethane (CFC 11)	9.60	10.0	96	9.22	10.0	92	52-141	4	30
Vinyl Chloride	9.01	10.0	90	8.68	10.0	87	55-123	4	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2212370-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:23	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 08:23	07/28/22	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22
Sample Matrix:	Ground Water	**Date Received:**	07/26/22
		Date Analyzed:	07/29/22
		Date Extracted:	07/28/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	LB-072522-02-5S	**Units:**	ug/L
Lab Code:	K2208415-003	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2212370-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	ND U	1000	1000	100	75-125
Manganese	ND U	485	500	97	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22
Sample Matrix:	Ground Water	**Date Received:**	07/26/22
		Date Analyzed:	07/29/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	LB-072522-02-5S	**Units:**	ug/L
Lab Code:	K2208415-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample KQ2212370-03 Result	Average	RPD	RPD Limit
Iron	6010C	21	ND U	ND U	ND	-	20
Manganese	6010C	1.1	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2208415
Date Analyzed: 07/29/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2212370-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2420	2500	97	80-120
Manganese	6010C	1180	1250	95	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208415-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	07/26/22 13:12	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	07/26/22 13:12	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208415-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	07/26/22 16:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208415-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	07/26/22 19:57	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	07/26/22 19:57	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208415-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	07/26/22 16:29	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22
Sample Matrix:	Ground Water	**Date Received:**	07/26/22
		Date Analyzed:	7/26/22

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name:	LB-072522-01-FB	**Units:**	mg/L
Lab Code:	K2208415-002	**Basis:**	NA

			Matrix Spike			Duplicate Matrix Spike					
			K2208415-002MS			K2208415-002DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	ND U	7.22	8.00	90	7.19	8.00	90	90-110	<1	20
Nitrate as Nitrogen	300.0	ND U	3.66	4.00	92	3.65	4.00	91	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22
Sample Matrix:	Ground Water	**Date Received:**	07/26/22
		Date Analyzed:	07/26/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-072522-01-FB	**Units:**	mg/L
Lab Code:	K2208415-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2208415-002DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	ND U	ND U	NC	NC	20
Nitrate as Nitrogen	300.0	0.10	ND U	ND U	NC	NC	20
Solids, Total Dissolved	SM 2540 C	5.0	ND U	ND U	NC	NC	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208415
Project	Leichner Lanfill/04222030.13	**Date Collected:**	07/25/22
Sample Matrix:	Ground Water	**Date Received:**	07/26/22
		Date Analyzed:	07/26/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-072522-05-26I	**Units:**	mg/L
Lab Code:	K2208415-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2208415-006DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	194	193	193	<1	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2208415
Date Analyzed: 07/26/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2208415-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.95	5.00	99	90-110
Nitrate as Nitrogen	300.0	2.52	2.50	101	90-110
Solids, Total Dissolved	SM 2540 C	1910	1920	100	85-115

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QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2208415
Date Analyzed: 07/26/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2208415-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.94	5.00	99	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	101	90-110
Solids, Total Dissolved	SM 2540 C	1920	1920	100	85-115

August 03, 2022 Service Request No:K2208489

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Lanfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory July 27, 2022
For your reference, these analyses have been assigned our service request number **K2208489.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

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Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: SCS Engineers
Project: Leichner Lanfill
Sample Matrix: Ground Water

Service Request: K2208489
Date Received: 07/27/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six ground water samples were received for analysis at ALS Environmental on 07/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 07/28/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 07/28/2022:The advisory criterion was exceeded for Hexachlorobutadiene in Laboratory Control Sample (LCS). As per the ALS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only. No further corrective action was required.

Approved by  Date 08/03/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: LB-072622-01-20S			Lab ID: K2208489-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	302			5.0	mg/L	SM 2540 C
Chloride	43.8			1.0	mg/L	300.0
Iron, Dissolved	40			21	ug/L	6010C
Manganese, Dissolved	445			1.1	ug/L	6010C

CLIENT ID: LB-072622-02-1S			Lab ID: K2208489-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	197			5.0	mg/L	SM 2540 C
Chloride	5.61			0.20	mg/L	300.0
Nitrate as Nitrogen	4.17			0.10	mg/L	300.0

CLIENT ID: LB-072622-03-3S			Lab ID: K2208489-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	159			5.0	mg/L	SM 2540 C
Chloride	4.80			0.20	mg/L	300.0
Nitrate as Nitrogen	3.37			0.10	mg/L	300.0
Chloroform	0.70			0.50	ug/L	8260C

CLIENT ID: LB-072622-04-DUP			Lab ID: K2208489-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	156			5.0	mg/L	SM 2540 C
Chloride	4.50			0.20	mg/L	300.0
Nitrate as Nitrogen	3.36			0.10	mg/L	300.0
Chloroform	0.80			0.50	ug/L	8260C

CLIENT ID: LB-072622-05-10SR			Lab ID: K2208489-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Solids, Total Dissolved	131			5.0	mg/L	SM 2540 C
Chloride	3.75			0.20	mg/L	300.0
Nitrate as Nitrogen	3.20			0.10	mg/L	300.0
Iron, Dissolved	22			21	ug/L	6010C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:**K2208489

Project: Leichner Lanfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2208489-001	TB2	7/26/2022	0700
K2208489-002	LB-072622-01-20S	7/26/2022	0835
K2208489-003	LB-072622-02-1S	7/26/2022	0925
K2208489-004	LB-072622-03-3S	7/26/2022	1035
K2208489-005	LB-072622-04-DUP	7/26/2022	1040
K2208489-006	LB-072622-05-10SR	7/26/2022	1135

CHAIN OF CUSTODY

SR# 1K2208489

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

PAGE 1 OF 1 COC#

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 042220301.13
PROJECT MANAGER: Barb Lavy
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: Blavy@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ SIM PAH☐	Volatile Organics 624☐ 8260☒	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total & Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond., SO_4, PO_4, F, NO_2, NO_3 BOD, TSS, Turb.	(circle) NH_3-N, COD, TKN, TOC, DOC, NO_2+NO_3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO_3☐ HCO_3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ CO_2☐ Methane☐ Ethane☐ Ethene☐	REMARKS
TB2	7-26-22	0700		W	2		X														
LB-072622-01-20S	7-26-22	0835		W	5		X						X		X						
LB-072622-02-1S	7-26-22	0925		W	5		X						X		X						Time Sampled 0925
LB-072622-03-3S	7-26-22	1035		W	5		X						X		X						
LB-072622-04-DUP	7-26-22	1040		W	5		X						X		X						
LB-072622-05-10SR	7-26-22	1135		W	5		X						X		X						

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 day
X Standard (15 working days)
___ Provide FAX Results
_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu (Fe) Pb Mg (Mn) Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Short hold - NO_3
Dissolved metals are field filtered

Container Supply Number: 125071

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: T. Hultquist	Printed Name:	Printed Name: K Morrow	Printed Name: K Morrow
Firm: SCS	Firm: ALS	Firm: ALS	Firm: ALS
Date/Time: 7/27/22 1045	Date/Time: 7/27/22 1045	Date/Time: 7/27/22 1340	Date/Time: 7/27/22 1340

PM HH

Cooler Receipt and Preservation Form

Client SCS Service Request K22 08489

Received: 7/27/22 Opened: 7/27/22 By: [signature] Unloaded: 7/27/22 By: [signature]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* (*Courier*) *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 Front.
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
2.4		IR01	125071	—	—		

4. Was a Temperature Blank present in cooler? NA (Y) N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: (*Inserts*) *Baggies* *Bubble Wrap* *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
	SHORT HOLD TIME								

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

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Phone (360) 577-7222 Fax (360) 425-9096
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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: SCS Engineers **Service Request:** K2208489
Project: Leichner Lanfill/04222030.13

Sample Name: TB2 **Date Collected:** 07/26/22
Lab Code: K2208489-001 **Date Received:** 07/27/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MKANALY

Sample Name: LB-072622-01-20S **Date Collected:** 07/26/22
Lab Code: K2208489-002 **Date Received:** 07/27/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		MKANALY
SM 2540 C		JBYMAN

Sample Name: LB-072622-02-1S **Date Collected:** 07/26/22
Lab Code: K2208489-003 **Date Received:** 07/27/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		MKANALY
SM 2540 C		JBYMAN

Sample Name: LB-072622-03-3S **Date Collected:** 07/26/22
Lab Code: K2208489-004 **Date Received:** 07/27/22
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		MKANALY
SM 2540 C		JBYMAN

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13		

Sample Name:	LB-072622-04-DUP	**Date Collected:**	07/26/22
Lab Code:	K2208489-005	**Date Received:**	07/27/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		MKANALY
SM 2540 C		JBYMAN

Sample Name:	LB-072622-05-10SR	**Date Collected:**	07/26/22
Lab Code:	K2208489-006	**Date Received:**	07/27/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY
8260C		MKANALY
SM 2540 C		JBYMAN

Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2208489-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 18:29	
Benzene	ND U	0.50	1	07/28/22 18:29	
Bromobenzene	ND U	2.0	1	07/28/22 18:29	
Bromochloromethane	ND U	0.50	1	07/28/22 18:29	
Bromodichloromethane	ND U	0.50	1	07/28/22 18:29	
Bromoform	ND U	0.50	1	07/28/22 18:29	
Bromomethane	ND U	0.50	1	07/28/22 18:29	
2-Butanone (MEK)	ND U	20	1	07/28/22 18:29	*
n-Butylbenzene	ND U	4.0	1	07/28/22 18:29	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 18:29	
tert-Butylbenzene	ND U	2.0	1	07/28/22 18:29	
Carbon Disulfide	ND U	0.50	1	07/28/22 18:29	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 18:29	
Chlorobenzene	ND U	0.50	1	07/28/22 18:29	
Chloroethane	ND U	0.50	1	07/28/22 18:29	
Chloroform	ND U	0.50	1	07/28/22 18:29	
Chloromethane	ND U	0.50	1	07/28/22 18:29	
2-Chlorotoluene	ND U	2.0	1	07/28/22 18:29	
4-Chlorotoluene	ND U	2.0	1	07/28/22 18:29	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 18:29	
Dibromochloromethane	ND U	0.50	1	07/28/22 18:29	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 18:29	
Dibromomethane	ND U	0.50	1	07/28/22 18:29	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 18:29	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 18:29	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 18:29	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 18:29	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 18:29	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 18:29	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 18:29	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 18:29	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 18:29	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 18:29	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 18:29	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 18:29	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 18:29	
Ethylbenzene	ND U	0.50	1	07/28/22 18:29	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 18:29	*
2-Hexanone	ND U	20	1	07/28/22 18:29	
Isopropylbenzene	ND U	2.0	1	07/28/22 18:29	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 18:29	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2208489-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 18:29	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 18:29	
Methylene Chloride	ND U	2.0	1	07/28/22 18:29	
Naphthalene	ND U	2.0	1	07/28/22 18:29	
n-Propylbenzene	ND U	2.0	1	07/28/22 18:29	
Styrene	ND U	0.50	1	07/28/22 18:29	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 18:29	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 18:29	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 18:29	
Toluene	ND U	0.50	1	07/28/22 18:29	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 18:29	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 18:29	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 18:29	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 18:29	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 18:29	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 18:29	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 18:29	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 18:29	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 18:29	
Vinyl Chloride	ND U	0.50	1	07/28/22 18:29	
o-Xylene	ND U	0.50	1	07/28/22 18:29	
m,p-Xylenes	ND U	0.50	1	07/28/22 18:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	68 - 117	07/28/22 18:29	
Dibromofluoromethane	98	73 - 122	07/28/22 18:29	
Toluene-d8	89	65 - 144	07/28/22 18:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-01-20S	**Units:**	ug/L
Lab Code:	K2208489-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 18:54	
Benzene	ND U	0.50	1	07/28/22 18:54	
Bromobenzene	ND U	2.0	1	07/28/22 18:54	
Bromochloromethane	ND U	0.50	1	07/28/22 18:54	
Bromodichloromethane	ND U	0.50	1	07/28/22 18:54	
Bromoform	ND U	0.50	1	07/28/22 18:54	
Bromomethane	ND U	0.50	1	07/28/22 18:54	
2-Butanone (MEK)	ND U	20	1	07/28/22 18:54	*
n-Butylbenzene	ND U	4.0	1	07/28/22 18:54	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 18:54	
tert-Butylbenzene	ND U	2.0	1	07/28/22 18:54	
Carbon Disulfide	ND U	0.50	1	07/28/22 18:54	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 18:54	
Chlorobenzene	ND U	0.50	1	07/28/22 18:54	
Chloroethane	ND U	0.50	1	07/28/22 18:54	
Chloroform	ND U	0.50	1	07/28/22 18:54	
Chloromethane	ND U	0.50	1	07/28/22 18:54	
2-Chlorotoluene	ND U	2.0	1	07/28/22 18:54	
4-Chlorotoluene	ND U	2.0	1	07/28/22 18:54	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 18:54	
Dibromochloromethane	ND U	0.50	1	07/28/22 18:54	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 18:54	
Dibromomethane	ND U	0.50	1	07/28/22 18:54	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 18:54	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 18:54	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 18:54	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 18:54	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 18:54	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 18:54	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 18:54	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 18:54	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 18:54	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 18:54	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 18:54	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 18:54	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 18:54	
Ethylbenzene	ND U	0.50	1	07/28/22 18:54	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 18:54	*
2-Hexanone	ND U	20	1	07/28/22 18:54	
Isopropylbenzene	ND U	2.0	1	07/28/22 18:54	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 18:54	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-01-20S	**Units:**	ug/L
Lab Code:	K2208489-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 18:54	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 18:54	
Methylene Chloride	ND U	2.0	1	07/28/22 18:54	
Naphthalene	ND U	2.0	1	07/28/22 18:54	
n-Propylbenzene	ND U	2.0	1	07/28/22 18:54	
Styrene	ND U	0.50	1	07/28/22 18:54	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 18:54	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 18:54	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 18:54	
Toluene	ND U	0.50	1	07/28/22 18:54	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 18:54	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 18:54	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 18:54	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 18:54	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 18:54	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 18:54	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 18:54	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 18:54	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 18:54	
Vinyl Chloride	ND U	0.50	1	07/28/22 18:54	
o-Xylene	ND U	0.50	1	07/28/22 18:54	
m,p-Xylenes	ND U	0.50	1	07/28/22 18:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	68 - 117	07/28/22 18:54	
Dibromofluoromethane	96	73 - 122	07/28/22 18:54	
Toluene-d8	88	65 - 144	07/28/22 18:54	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 09:25
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-02-1S	**Units:**	ug/L
Lab Code:	K2208489-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 19:18	
Benzene	ND U	0.50	1	07/28/22 19:18	
Bromobenzene	ND U	2.0	1	07/28/22 19:18	
Bromochloromethane	ND U	0.50	1	07/28/22 19:18	
Bromodichloromethane	ND U	0.50	1	07/28/22 19:18	
Bromoform	ND U	0.50	1	07/28/22 19:18	
Bromomethane	ND U	0.50	1	07/28/22 19:18	
2-Butanone (MEK)	ND U	20	1	07/28/22 19:18	*
n-Butylbenzene	ND U	4.0	1	07/28/22 19:18	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 19:18	
tert-Butylbenzene	ND U	2.0	1	07/28/22 19:18	
Carbon Disulfide	ND U	0.50	1	07/28/22 19:18	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 19:18	
Chlorobenzene	ND U	0.50	1	07/28/22 19:18	
Chloroethane	ND U	0.50	1	07/28/22 19:18	
Chloroform	ND U	0.50	1	07/28/22 19:18	
Chloromethane	ND U	0.50	1	07/28/22 19:18	
2-Chlorotoluene	ND U	2.0	1	07/28/22 19:18	
4-Chlorotoluene	ND U	2.0	1	07/28/22 19:18	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 19:18	
Dibromochloromethane	ND U	0.50	1	07/28/22 19:18	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 19:18	
Dibromomethane	ND U	0.50	1	07/28/22 19:18	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 19:18	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 19:18	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 19:18	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 19:18	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 19:18	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 19:18	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 19:18	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 19:18	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 19:18	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 19:18	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 19:18	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 19:18	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 19:18	
Ethylbenzene	ND U	0.50	1	07/28/22 19:18	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 19:18	*
2-Hexanone	ND U	20	1	07/28/22 19:18	
Isopropylbenzene	ND U	2.0	1	07/28/22 19:18	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 19:18	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 09:25
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-02-1S	**Units:**	ug/L
Lab Code:	K2208489-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 19:18	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 19:18	
Methylene Chloride	ND U	2.0	1	07/28/22 19:18	
Naphthalene	ND U	2.0	1	07/28/22 19:18	
n-Propylbenzene	ND U	2.0	1	07/28/22 19:18	
Styrene	ND U	0.50	1	07/28/22 19:18	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 19:18	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 19:18	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 19:18	
Toluene	ND U	0.50	1	07/28/22 19:18	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 19:18	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 19:18	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 19:18	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 19:18	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 19:18	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 19:18	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 19:18	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 19:18	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 19:18	
Vinyl Chloride	ND U	0.50	1	07/28/22 19:18	
o-Xylene	ND U	0.50	1	07/28/22 19:18	
m,p-Xylenes	ND U	0.50	1	07/28/22 19:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	68 - 117	07/28/22 19:18	
Dibromofluoromethane	96	73 - 122	07/28/22 19:18	
Toluene-d8	89	65 - 144	07/28/22 19:18	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-03-3S	**Units:**	ug/L
Lab Code:	K2208489-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 19:43	
Benzene	ND U	0.50	1	07/28/22 19:43	
Bromobenzene	ND U	2.0	1	07/28/22 19:43	
Bromochloromethane	ND U	0.50	1	07/28/22 19:43	
Bromodichloromethane	ND U	0.50	1	07/28/22 19:43	
Bromoform	ND U	0.50	1	07/28/22 19:43	
Bromomethane	ND U	0.50	1	07/28/22 19:43	
2-Butanone (MEK)	ND U	20	1	07/28/22 19:43	*
n-Butylbenzene	ND U	4.0	1	07/28/22 19:43	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 19:43	
tert-Butylbenzene	ND U	2.0	1	07/28/22 19:43	
Carbon Disulfide	ND U	0.50	1	07/28/22 19:43	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 19:43	
Chlorobenzene	ND U	0.50	1	07/28/22 19:43	
Chloroethane	ND U	0.50	1	07/28/22 19:43	
Chloroform	**0.70**	0.50	1	07/28/22 19:43	
Chloromethane	ND U	0.50	1	07/28/22 19:43	
2-Chlorotoluene	ND U	2.0	1	07/28/22 19:43	
4-Chlorotoluene	ND U	2.0	1	07/28/22 19:43	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 19:43	
Dibromochloromethane	ND U	0.50	1	07/28/22 19:43	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 19:43	
Dibromomethane	ND U	0.50	1	07/28/22 19:43	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 19:43	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 19:43	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 19:43	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 19:43	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 19:43	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 19:43	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 19:43	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 19:43	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 19:43	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 19:43	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 19:43	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 19:43	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 19:43	
Ethylbenzene	ND U	0.50	1	07/28/22 19:43	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 19:43	*
2-Hexanone	ND U	20	1	07/28/22 19:43	
Isopropylbenzene	ND U	2.0	1	07/28/22 19:43	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 19:43	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-03-3S	**Units:**	ug/L
Lab Code:	K2208489-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 19:43	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 19:43	
Methylene Chloride	ND U	2.0	1	07/28/22 19:43	
Naphthalene	ND U	2.0	1	07/28/22 19:43	
n-Propylbenzene	ND U	2.0	1	07/28/22 19:43	
Styrene	ND U	0.50	1	07/28/22 19:43	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 19:43	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 19:43	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 19:43	
Toluene	ND U	0.50	1	07/28/22 19:43	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 19:43	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 19:43	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 19:43	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 19:43	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 19:43	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 19:43	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 19:43	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 19:43	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 19:43	
Vinyl Chloride	ND U	0.50	1	07/28/22 19:43	
o-Xylene	ND U	0.50	1	07/28/22 19:43	
m,p-Xylenes	ND U	0.50	1	07/28/22 19:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	68 - 117	07/28/22 19:43	
Dibromofluoromethane	98	73 - 122	07/28/22 19:43	
Toluene-d8	88	65 - 144	07/28/22 19:43	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:40
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-04-DUP	**Units:**	ug/L
Lab Code:	K2208489-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 20:07	
Benzene	ND U	0.50	1	07/28/22 20:07	
Bromobenzene	ND U	2.0	1	07/28/22 20:07	
Bromochloromethane	ND U	0.50	1	07/28/22 20:07	
Bromodichloromethane	ND U	0.50	1	07/28/22 20:07	
Bromoform	ND U	0.50	1	07/28/22 20:07	
Bromomethane	ND U	0.50	1	07/28/22 20:07	
2-Butanone (MEK)	ND U	20	1	07/28/22 20:07	*
n-Butylbenzene	ND U	4.0	1	07/28/22 20:07	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 20:07	
tert-Butylbenzene	ND U	2.0	1	07/28/22 20:07	
Carbon Disulfide	ND U	0.50	1	07/28/22 20:07	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 20:07	
Chlorobenzene	ND U	0.50	1	07/28/22 20:07	
Chloroethane	ND U	0.50	1	07/28/22 20:07	
Chloroform	**0.80**	0.50	1	07/28/22 20:07	
Chloromethane	ND U	0.50	1	07/28/22 20:07	
2-Chlorotoluene	ND U	2.0	1	07/28/22 20:07	
4-Chlorotoluene	ND U	2.0	1	07/28/22 20:07	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 20:07	
Dibromochloromethane	ND U	0.50	1	07/28/22 20:07	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 20:07	
Dibromomethane	ND U	0.50	1	07/28/22 20:07	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 20:07	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 20:07	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 20:07	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 20:07	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 20:07	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 20:07	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 20:07	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 20:07	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 20:07	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 20:07	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 20:07	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 20:07	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 20:07	
Ethylbenzene	ND U	0.50	1	07/28/22 20:07	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 20:07	*
2-Hexanone	ND U	20	1	07/28/22 20:07	
Isopropylbenzene	ND U	2.0	1	07/28/22 20:07	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 20:07	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:40
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-04-DUP	**Units:**	ug/L
Lab Code:	K2208489-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 20:07	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 20:07	
Methylene Chloride	ND U	2.0	1	07/28/22 20:07	
Naphthalene	ND U	2.0	1	07/28/22 20:07	
n-Propylbenzene	ND U	2.0	1	07/28/22 20:07	
Styrene	ND U	0.50	1	07/28/22 20:07	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 20:07	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 20:07	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 20:07	
Toluene	ND U	0.50	1	07/28/22 20:07	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 20:07	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 20:07	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 20:07	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 20:07	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 20:07	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 20:07	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 20:07	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 20:07	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 20:07	
Vinyl Chloride	ND U	0.50	1	07/28/22 20:07	
o-Xylene	ND U	0.50	1	07/28/22 20:07	
m,p-Xylenes	ND U	0.50	1	07/28/22 20:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	68 - 117	07/28/22 20:07	
Dibromofluoromethane	100	73 - 122	07/28/22 20:07	
Toluene-d8	89	65 - 144	07/28/22 20:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-05-10SR	**Units:**	ug/L
Lab Code:	K2208489-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 20:32	
Benzene	ND U	0.50	1	07/28/22 20:32	
Bromobenzene	ND U	2.0	1	07/28/22 20:32	
Bromochloromethane	ND U	0.50	1	07/28/22 20:32	
Bromodichloromethane	ND U	0.50	1	07/28/22 20:32	
Bromoform	ND U	0.50	1	07/28/22 20:32	
Bromomethane	ND U	0.50	1	07/28/22 20:32	
2-Butanone (MEK)	ND U	20	1	07/28/22 20:32	*
n-Butylbenzene	ND U	4.0	1	07/28/22 20:32	*
sec-Butylbenzene	ND U	2.0	1	07/28/22 20:32	
tert-Butylbenzene	ND U	2.0	1	07/28/22 20:32	
Carbon Disulfide	ND U	0.50	1	07/28/22 20:32	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 20:32	
Chlorobenzene	ND U	0.50	1	07/28/22 20:32	
Chloroethane	ND U	0.50	1	07/28/22 20:32	
Chloroform	ND U	0.50	1	07/28/22 20:32	
Chloromethane	ND U	0.50	1	07/28/22 20:32	
2-Chlorotoluene	ND U	2.0	1	07/28/22 20:32	
4-Chlorotoluene	ND U	2.0	1	07/28/22 20:32	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 20:32	
Dibromochloromethane	ND U	0.50	1	07/28/22 20:32	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 20:32	
Dibromomethane	ND U	0.50	1	07/28/22 20:32	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 20:32	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 20:32	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 20:32	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 20:32	*
1,1-Dichloroethane	ND U	0.50	1	07/28/22 20:32	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 20:32	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 20:32	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 20:32	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 20:32	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 20:32	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 20:32	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 20:32	*
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 20:32	
Ethylbenzene	ND U	0.50	1	07/28/22 20:32	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 20:32	*
2-Hexanone	ND U	20	1	07/28/22 20:32	
Isopropylbenzene	ND U	2.0	1	07/28/22 20:32	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 20:32	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-05-10SR	**Units:**	ug/L
Lab Code:	K2208489-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 20:32	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 20:32	
Methylene Chloride	ND U	2.0	1	07/28/22 20:32	
Naphthalene	ND U	2.0	1	07/28/22 20:32	
n-Propylbenzene	ND U	2.0	1	07/28/22 20:32	
Styrene	ND U	0.50	1	07/28/22 20:32	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 20:32	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 20:32	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 20:32	
Toluene	ND U	0.50	1	07/28/22 20:32	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 20:32	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 20:32	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 20:32	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 20:32	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 20:32	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 20:32	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 20:32	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 20:32	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 20:32	
Vinyl Chloride	ND U	0.50	1	07/28/22 20:32	
o-Xylene	ND U	0.50	1	07/28/22 20:32	
m,p-Xylenes	ND U	0.50	1	07/28/22 20:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	68 - 117	07/28/22 20:32	
Dibromofluoromethane	100	73 - 122	07/28/22 20:32	
Toluene-d8	89	65 - 144	07/28/22 20:32	

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-01-20S	**Basis:**	NA
Lab Code:	K2208489-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**40**	ug/L	21	1	07/29/22 09:01	07/28/22	
Manganese	6010C	**445**	ug/L	1.1	1	07/29/22 09:01	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 09:25
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-02-1S	**Basis:**	NA
Lab Code:	K2208489-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 09:04	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 09:04	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-03-3S	**Basis:**	NA
Lab Code:	K2208489-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 09:06	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 09:06	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:40
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-04-DUP	**Basis:**	NA
Lab Code:	K2208489-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 09:09	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 09:09	07/28/22	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-05-10SR	**Basis:**	NA
Lab Code:	K2208489-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**22**	ug/L	21	1	07/29/22 09:12	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 09:12	07/28/22	

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-01-20S	**Basis:**	NA
Lab Code:	K2208489-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**43.8**	mg/L	1.0	10	07/28/22 11:38	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	07/27/22 17:41	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 08:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-01-20S	**Basis:**	NA
Lab Code:	K2208489-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**302**	mg/L	5.0	1	07/29/22 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 09:25
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-02-1S	**Basis:**	NA
Lab Code:	K2208489-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.61**	mg/L	0.20	2	07/27/22 18:24	
Nitrate as Nitrogen	300.0	**4.17**	mg/L	0.10	2	07/27/22 18:24	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 09:25
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-02-1S	**Basis:**	NA
Lab Code:	K2208489-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**197**	mg/L	5.0	1	07/29/22 16:39	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-03-3S	**Basis:**	NA
Lab Code:	K2208489-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.80**	mg/L	0.20	2	07/27/22 18:35	
Nitrate as Nitrogen	300.0	**3.37**	mg/L	0.10	2	07/27/22 18:35	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-03-3S	**Basis:**	NA
Lab Code:	K2208489-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**159**	mg/L	5.0	1	07/29/22 16:39	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:40
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-04-DUP	**Basis:**	NA
Lab Code:	K2208489-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.50**	mg/L	0.20	2	07/27/22 18:46	
Nitrate as Nitrogen	300.0	**3.36**	mg/L	0.10	2	07/27/22 18:46	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 10:40
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-04-DUP	**Basis:**	NA
Lab Code:	K2208489-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**156**	mg/L	5.0	1	07/29/22 16:39	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-05-10SR	**Basis:**	NA
Lab Code:	K2208489-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**3.75**	mg/L	0.20	2	07/27/22 18:56	
Nitrate as Nitrogen	300.0	**3.20**	mg/L	0.10	2	07/27/22 18:56	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22 11:35
Sample Matrix:	Ground Water	**Date Received:**	07/27/22 13:40
Sample Name:	LB-072622-05-10SR	**Basis:**	NA
Lab Code:	K2208489-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**131**	mg/L	5.0	1	07/29/22 16:39	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: SCS Engineers **Service Request:** K2208489
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TB2	K2208489-001	92	98	89
LB-072622-01-20S	K2208489-002	90	96	88
LB-072622-02-1S	K2208489-003	92	96	89
LB-072622-03-3S	K2208489-004	90	98	88
LB-072622-04-DUP	K2208489-005	91	100	89
LB-072622-05-10SR	K2208489-006	89	100	89
Method Blank	KQ2212460-05	92	94	89
Lab Control Sample	KQ2212460-03	105	95	92
Duplicate Lab Control Sample	KQ2212460-04	106	96	92

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2212460-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	07/28/22 13:35	
Benzene	ND U	0.50	1	07/28/22 13:35	
Bromobenzene	ND U	2.0	1	07/28/22 13:35	
Bromochloromethane	ND U	0.50	1	07/28/22 13:35	
Bromodichloromethane	ND U	0.50	1	07/28/22 13:35	
Bromoform	ND U	0.50	1	07/28/22 13:35	
Bromomethane	ND U	0.50	1	07/28/22 13:35	
2-Butanone (MEK)	ND U	20	1	07/28/22 13:35	
n-Butylbenzene	ND U	4.0	1	07/28/22 13:35	
sec-Butylbenzene	ND U	2.0	1	07/28/22 13:35	
tert-Butylbenzene	ND U	2.0	1	07/28/22 13:35	
Carbon Disulfide	ND U	0.50	1	07/28/22 13:35	
Carbon Tetrachloride	ND U	0.50	1	07/28/22 13:35	
Chlorobenzene	ND U	0.50	1	07/28/22 13:35	
Chloroethane	ND U	0.50	1	07/28/22 13:35	
Chloroform	ND U	0.50	1	07/28/22 13:35	
Chloromethane	ND U	0.50	1	07/28/22 13:35	
2-Chlorotoluene	ND U	2.0	1	07/28/22 13:35	
4-Chlorotoluene	ND U	2.0	1	07/28/22 13:35	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	07/28/22 13:35	
Dibromochloromethane	ND U	0.50	1	07/28/22 13:35	
1,2-Dibromoethane (EDB)	ND U	2.0	1	07/28/22 13:35	
Dibromomethane	ND U	0.50	1	07/28/22 13:35	
1,2-Dichlorobenzene	ND U	0.50	1	07/28/22 13:35	
1,3-Dichlorobenzene	ND U	0.50	1	07/28/22 13:35	
1,4-Dichlorobenzene	ND U	0.50	1	07/28/22 13:35	
Dichlorodifluoromethane	ND U	0.50	1	07/28/22 13:35	
1,1-Dichloroethane	ND U	0.50	1	07/28/22 13:35	
cis-1,2-Dichloroethene	ND U	0.50	1	07/28/22 13:35	
trans-1,2-Dichloroethene	ND U	0.50	1	07/28/22 13:35	
1,2-Dichloropropane	ND U	0.50	1	07/28/22 13:35	
1,3-Dichloropropane	ND U	0.50	1	07/28/22 13:35	
2,2-Dichloropropane	ND U	0.50	1	07/28/22 13:35	
1,1-Dichloropropene	ND U	0.50	1	07/28/22 13:35	
cis-1,3-Dichloropropene	ND U	0.50	1	07/28/22 13:35	
trans-1,3-Dichloropropene	ND U	0.50	1	07/28/22 13:35	
Ethylbenzene	ND U	0.50	1	07/28/22 13:35	
Hexachlorobutadiene	ND U	2.0	1	07/28/22 13:35	
2-Hexanone	ND U	20	1	07/28/22 13:35	
Isopropylbenzene	ND U	2.0	1	07/28/22 13:35	
4-Isopropyltoluene	ND U	2.0	1	07/28/22 13:35	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2212460-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	07/28/22 13:35	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	07/28/22 13:35	
Methylene Chloride	ND U	2.0	1	07/28/22 13:35	
Naphthalene	ND U	2.0	1	07/28/22 13:35	
n-Propylbenzene	ND U	2.0	1	07/28/22 13:35	
Styrene	ND U	0.50	1	07/28/22 13:35	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	07/28/22 13:35	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	07/28/22 13:35	
Tetrachloroethene (PCE)	ND U	0.50	1	07/28/22 13:35	
Toluene	ND U	0.50	1	07/28/22 13:35	
1,2,3-Trichlorobenzene	ND U	2.0	1	07/28/22 13:35	
1,2,4-Trichlorobenzene	ND U	2.0	1	07/28/22 13:35	
1,1,2-Trichloroethane	ND U	0.50	1	07/28/22 13:35	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	07/28/22 13:35	
Trichloroethene (TCE)	ND U	0.50	1	07/28/22 13:35	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	07/28/22 13:35	
1,2,3-Trichloropropane	ND U	0.50	1	07/28/22 13:35	
1,2,4-Trimethylbenzene	ND U	2.0	1	07/28/22 13:35	
1,3,5-Trimethylbenzene	ND U	2.0	1	07/28/22 13:35	
Vinyl Chloride	ND U	0.50	1	07/28/22 13:35	
o-Xylene	ND U	0.50	1	07/28/22 13:35	
m,p-Xylenes	ND U	0.50	1	07/28/22 13:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	68 - 117	07/28/22 13:35	
Dibromofluoromethane	94	73 - 122	07/28/22 13:35	
Toluene-d8	89	65 - 144	07/28/22 13:35	

ALS Group USA, Corp.
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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	07/28/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	772214

	Lab Control Sample KQ2212460-03			Duplicate Lab Control Sample KQ2212460-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.84	10.0	88	8.48	10.0	85	66-124	4	30
1,1,1-Trichloroethane (TCA)	10.7	10.0	107	10.3	10.0	103	59-136	4	30
1,1,2,2-Tetrachloroethane	10.4	10.0	104	10.6	10.0	106	70-127	1	30
1,1,2-Trichloroethane	9.79	10.0	98	9.65	10.0	97	74-118	1	30
1,1-Dichloroethane	10.1	10.0	101	9.55	10.0	96	68-132	5	30
1,1-Dichloropropene	10.5	10.0	105	10.1	10.0	101	59-134	4	30
1,2,3-Trichlorobenzene	11.3	10.0	113	11.9	10.0	119	68-120	6	30
1,2,3-Trichloropropane	11.0	10.0	110	10.6	10.0	106	69-123	3	30
1,2,4-Trichlorobenzene	10.8	10.0	108	10.8	10.0	108	58-126	<1	30
1,2,4-Trimethylbenzene	11.7	10.0	117	11.1	10.0	111	63-122	5	30
1,2-Dibromo-3-chloropropane	9.84	10.0	98	10.3	10.0	103	55-132	5	30
1,2-Dibromoethane (EDB)	9.53	10.0	95	9.53	10.0	95	74-118	<1	30
1,2-Dichlorobenzene	10.6	10.0	106	10.3	10.0	103	72-115	2	30
1,2-Dichloropropane	8.67	10.0	87	8.57	10.0	86	67-126	1	30
1,3,5-Trimethylbenzene	12.0	10.0	120	11.3	10.0	113	62-126	6	30
1,3-Dichlorobenzene	10.4	10.0	104	10.0	10.0	100	70-116	4	30
1,3-Dichloropropane	9.93	10.0	99	9.96	10.0	100	75-116	<1	30
1,4-Dichlorobenzene	10.2	10.0	102	9.84	10.0	98	73-115	3	30
2,2-Dichloropropane	10.7	10.0	107	10.4	10.0	104	37-145	3	30
2-Butanone (MEK)	42.3	50.0	85	41.3	50.0	83	71-149	2	30
2-Chlorotoluene	11.1	10.0	111	10.6	10.0	106	55-131	5	30
2-Hexanone	54.1	50.0	108	55.9	50.0	112	59-131	3	30
4-Chlorotoluene	11.2	10.0	112	10.7	10.0	107	66-121	5	30
4-Isopropyltoluene	11.0	10.0	110	10.4	10.0	104	61-128	5	30
4-Methyl-2-pentanone (MIBK)	46.6	50.0	93	48.4	50.0	97	64-134	4	30
Acetone	58.1	50.0	116	59.7	50.0	119	68-135	3	30
Benzene	9.31	10.0	93	8.97	10.0	90	69-124	4	30
Bromobenzene	9.61	10.0	96	9.24	10.0	92	72-116	4	30
Bromochloromethane	8.53	10.0	85	8.31	10.0	83	75-131	3	30
Bromodichloromethane	8.22	10.0	82	8.10	10.0	81	63-129	1	30
Bromoform	7.73	10.0	77	7.86	10.0	79	52-144	2	30
Bromomethane	8.47	10.0	85	8.10	10.0	81	35-113	4	30
Carbon Disulfide	21.4	20.0	107	20.4	20.0	102	46-144	5	30
Carbon Tetrachloride	10.5	10.0	105	10.0	10.0	100	55-140	5	30
Chlorobenzene	8.98	10.0	90	8.71	10.0	87	72-116	3	30
Chloroethane	10.2	10.0	102	9.90	10.0	99	58-134	3	30
Chloroform	9.98	10.0	100	9.61	10.0	96	70-129	4	30
Chloromethane	8.30	10.0	83	8.09	10.0	81	34-130	3	30
cis-1,2-Dichloroethene	8.80	10.0	88	8.40	10.0	84	71-118	5	30
cis-1,3-Dichloropropene	7.59	10.0	76	7.48	10.0	75	62-132	1	30
Dibromochloromethane	8.39	10.0	84	8.51	10.0	85	67-126	1	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Analyzed:**	07/28/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	772214

	Lab Control Sample KQ2212460-03			Duplicate Lab Control Sample KQ2212460-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	8.42	10.0	84	8.65	10.0	87	69-128	3	30
Dichlorodifluoromethane	8.84	10.0	88	8.42	10.0	84	32-124	5	30
Ethylbenzene	9.56	10.0	96	9.05	10.0	91	67-121	5	30
Hexachlorobutadiene	12.0	10.0	120 *	11.4	10.0	114	57-119	5	30
Isopropylbenzene	11.0	10.0	110	10.6	10.0	106	67-129	4	30
m,p-Xylenes	20.5	20.0	102	19.6	20.0	98	69-121	5	30
Methyl tert-Butyl Ether	9.45	10.0	95	9.61	10.0	96	54-126	2	30
Methylene Chloride	8.23	10.0	82	8.11	10.0	81	71-122	1	30
Naphthalene	10.2	10.0	102	10.7	10.0	107	64-126	5	30
n-Butylbenzene	12.7	10.0	127	12.0	10.0	120	55-130	6	30
n-Propylbenzene	11.5	10.0	115	11.0	10.0	110	61-124	5	30
o-Xylene	9.81	10.0	98	9.57	10.0	96	71-119	2	30
sec-Butylbenzene	12.5	10.0	125	11.8	10.0	118	59-128	6	30
Styrene	8.52	10.0	85	8.42	10.0	84	74-121	1	30
tert-Butylbenzene	11.9	10.0	119	11.1	10.0	111	61-127	7	30
Tetrachloroethene (PCE)	9.56	10.0	96	9.17	10.0	92	62-126	4	30
Toluene	8.49	10.0	85	8.24	10.0	82	69-124	3	30
trans-1,2-Dichloroethene	9.12	10.0	91	8.79	10.0	88	67-125	4	30
trans-1,3-Dichloropropene	8.13	10.0	81	8.12	10.0	81	59-125	<1	30
Trichloroethene (TCE)	9.38	10.0	94	8.81	10.0	88	67-128	6	30
Trichlorofluoromethane (CFC 11)	11.4	10.0	114	11.1	10.0	111	52-141	3	30
Vinyl Chloride	10.3	10.0	103	9.96	10.0	100	55-123	3	30

Metals

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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2212370-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	21	1	07/29/22 08:23	07/28/22	
Manganese	6010C	ND U	ug/L	1.1	1	07/29/22 08:23	07/28/22	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2208489
Date Analyzed: 07/29/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2212370-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2420	2500	97	80-120
Manganese	6010C	1180	1250	95	80-120

General Chemistry

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Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208489-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	07/27/22 15:08	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	07/27/22 15:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208489-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	07/29/22 16:39	

Client:	SCS Engineers	**Service Request:**	K2208489
Project:	Leichner Lanfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2208489-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	07/29/22 16:39	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2208489
Project	Leichner Lanfill/04222030.13	**Date Collected:**	07/26/22
Sample Matrix:	Ground Water	**Date Received:**	07/27/22
		Date Analyzed:	07/29/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-072622-02-1S	**Units:**	mg/L
Lab Code:	K2208489-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2208489-003DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	197	192	194	3	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: SCS Engineers
Project: Leichner Lanfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2208489
Date Analyzed: 07/27/22 - 07/29/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2208489-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.92	5.00	98	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	100	90-110
Solids, Total Dissolved	SM 2540 C	1870	1920	97	85-115

Fourth Quarter (November) 2022 Laboratory Reports

January 23, 2023 Service Request No:K2213993

Barbara Lary
SCS Engineers
15940 SW 72nd Ave
Portland, OR 97224

Laboratory Results for: Leichner Landfill

Dear Barbara,

Enclosed are the results of the sample(s) submitted to our laboratory November 29, 2022
For your reference, these analyses have been assigned our service request number **K2213993.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers
Project: Leichner Landfill
Sample Matrix: Ground Water

Service Request: K2213993
Date Received: 11/29/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six ground water samples were received for analysis at ALS Environmental on 11/29/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 12/02/2022:Chloromethane, Dichlorodifluoromethane, and Toluene-d8 were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.
Method 8260C, 12/02/2022:The upper control criterion was exceeded for 4-Bromofluorobenzene in Laboratory Control Sample (LCS)KQ2221639-03 and Duplicate Laboratory Control Sample (DLCS) KQ2221639-04. The spike recoveries for all target analytes were acceptable for the LCS/DLCS. The quality of the sample data was not significantly affected. No further corrective action was appropriate.
Method 8260C, 12/02/2022:The upper control criterion was exceeded for Dibromofluoromethane in sample LB-112922-04-FB. No target analytes were detected in the sample. The error associated with an elevated recovery equated to a high bias. The quality of the sample data was not significantly affected. No further corrective action was appropriate.

Approved by  Date 01/23/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: LB-112922-01-1S			Lab ID: K2213993-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.20			0.20	mg/L	300.0
Nitrate as Nitrogen	4.49			0.10	mg/L	300.0
Solids, Total Dissolved	177			5.0	mg/L	SM 2540 C

CLIENT ID: LB-112922-02-DUP			Lab ID: K2213993-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.16			0.20	mg/L	300.0
Nitrate as Nitrogen	4.43			0.10	mg/L	300.0
Solids, Total Dissolved	173			5.0	mg/L	SM 2540 C

CLIENT ID: LB-112922-03-20S			Lab ID: K2213993-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	33.5			1.0	mg/L	300.0
Solids, Total Dissolved	370			5.0	mg/L	SM 2540 C

CLIENT ID: LB-112922-05-3S			Lab ID: K2213993-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.57			0.20	mg/L	300.0
Chloroform	0.66			0.50	ug/L	8260C
Nitrate as Nitrogen	3.79			0.10	mg/L	300.0
Solids, Total Dissolved	155			5.0	mg/L	SM 2540 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:**K2213993
Project: Leichner Landfill/04222030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2213993-001	TB1	11/29/2022	0700
K2213993-002	LB-112922-01-1S	11/29/2022	1000
K2213993-003	LB-112922-02-DUP	11/29/2022	1005
K2213993-004	LB-112922-03-20S	11/29/2022	1105
K2213993-005	LB-112922-04-FB	11/29/2022	1130
K2213993-006	LB-112922-05-3S	11/29/2022	1210

ALS

CHAIN OF CUSTODY

SR# K2213993

1317 South 13th Ave., Kelso, WA 98626 | +1 360 577 7222 | +1 800 695 7222 | +1 360 636 1068 (fax)

PAGE 1 OF 1 COC# ____

PROJECT NAME: Leichner Landfill
PROJECT NUMBER: 04222030.13
PROJECT MANAGER: Barb Lory
COMPANY NAME: SCS Engineers
ADDRESS: 15940 SW 72nd Ave
CITY/STATE/ZIP: Portland OR 97224
E-MAIL ADDRESS: BLory@scsengineers.com
PHONE #: (971) 284-1297 FAX #:
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS		Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐ SIM PAH☐	Volatile Organics 624☐ 8260☒ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCBs Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081☐ 8141☐ 8151☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	Metals, Total or Dissolved (See List below)	Cyanide☐ Hex-Chrom☐	(circle) pH, Cond, Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS, Turb.	(circle) NH3-N, COD, TKN, TOC, DOC, NO2+NO3, T-Phos	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity☐ CO3☐ HCO3☐	Dioxins/Furans 1613☐ 8290☐	Dissolved Gases RSK 175☐ Methane☐ Ethane☐ CO2☐ Ethane☐ Ethene☐				REMARKS
TB1	11-29-22	0700		W	2			X																	
LB-112922-01-15	11-29-22	1000		W	4			X								X									
LB-112922-02-Dup	11-29-22	1005		W	4			X								X									
LB-112922-03-205	11-29-22	1105		W	4			X								X									
LB-112922-04-FB	11-29-22	1130		W	4			X								X									
LB-112922-05 35	11-29-22	1210		W	4			X								X									

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # ____

Bill To: ____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 day

X Standard (15 working days)

___ Provide FAX Results

____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: ____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Container Supply Number
127333

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 11-29-22 @ 1230	Signature: Greg Rich Date/Time: 11/29/22 1230	Signature: Greg Rich Date/Time: 11/29/22 1320	Signature: [signature] Date/Time: 11/29/22 1320
Printed Name: I. Hultquist Firm: SCS	Printed Name: Greg Rich Firm: ALS	Printed Name: Greg Rich Firm: ALS	Printed Name: [illegible] Firm: ALS

PM 1 of 2

Cooler Receipt and Preservation Form

Client SCS Service Request K22 13993

Received: 11/29/22 Opened: 11/29/22 By: [illegible] Unloaded: 11/29/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* 1 front *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified if out of temp	Tracking Number (NA)	Filed
	0.5	IR01	1of2				
	2.5	IR01	2of2				

4. Was a Temperature Blank present in cooler? NA Y (N) If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
	SHORT HOLD TIME								

Notes, Discrepancies, Resolutions: _____

1/13/22 *Page of*

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13		

Sample Name:	TB1	**Date Collected:**	11/29/22
Lab Code:	K2213993-001	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name:	LB-112922-01-1S	**Date Collected:**	11/29/22
Lab Code:	K2213993-002	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name:	LB-112922-02-DUP	**Date Collected:**	11/29/22
Lab Code:	K2213993-003	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name:	LB-112922-03-20S	**Date Collected:**	11/29/22
Lab Code:	K2213993-004	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER
SM 2540 C		JBYMAN

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13		

Sample Name:	LB-112922-04-FB	**Date Collected:**	11/29/22
Lab Code:	K2213993-005	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Name:	LB-112922-05-3S	**Date Collected:**	11/29/22
Lab Code:	K2213993-006	**Date Received:**	11/29/22
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
8260C		GROETTGER
SM 2540 C		JBYMAN

Sample Results

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Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2213993-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 15:16	
Benzene	ND U	0.50	1	12/02/22 15:16	
Bromobenzene	ND U	2.0	1	12/02/22 15:16	
Bromochloromethane	ND U	0.50	1	12/02/22 15:16	
Bromodichloromethane	ND U	0.50	1	12/02/22 15:16	
Bromoform	ND U	0.50	1	12/02/22 15:16	
Bromomethane	ND U	0.50	1	12/02/22 15:16	
2-Butanone (MEK)	ND U	20	1	12/02/22 15:16	
n-Butylbenzene	ND U	4.0	1	12/02/22 15:16	
sec-Butylbenzene	ND U	2.0	1	12/02/22 15:16	
tert-Butylbenzene	ND U	2.0	1	12/02/22 15:16	
Carbon Disulfide	ND U	0.50	1	12/02/22 15:16	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 15:16	
Chlorobenzene	ND U	0.50	1	12/02/22 15:16	
Chloroethane	ND U	0.50	1	12/02/22 15:16	
Chloroform	ND U	0.50	1	12/02/22 15:16	
Chloromethane	ND U	0.50	1	12/02/22 15:16	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 15:16	
4-Chlorotoluene	ND U	2.0	1	12/02/22 15:16	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 15:16	
Dibromochloromethane	ND U	0.50	1	12/02/22 15:16	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 15:16	
Dibromomethane	ND U	0.50	1	12/02/22 15:16	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 15:16	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 15:16	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 15:16	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 15:16	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 15:16	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 15:16	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 15:16	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 15:16	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 15:16	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 15:16	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 15:16	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 15:16	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 15:16	
Ethylbenzene	ND U	0.50	1	12/02/22 15:16	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 15:16	
2-Hexanone	ND U	20	1	12/02/22 15:16	
Isopropylbenzene	ND U	2.0	1	12/02/22 15:16	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 15:16	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 07:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2213993-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 15:16	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 15:16	
Methylene Chloride	ND U	2.0	1	12/02/22 15:16	
Naphthalene	ND U	2.0	1	12/02/22 15:16	
n-Propylbenzene	ND U	2.0	1	12/02/22 15:16	
Styrene	ND U	0.50	1	12/02/22 15:16	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 15:16	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 15:16	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 15:16	
Toluene	ND U	0.50	1	12/02/22 15:16	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 15:16	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 15:16	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 15:16	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 15:16	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 15:16	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 15:16	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 15:16	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 15:16	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 15:16	
Vinyl Chloride	ND U	0.50	1	12/02/22 15:16	
o-Xylene	ND U	0.50	1	12/02/22 15:16	
m,p-Xylenes	ND U	0.50	1	12/02/22 15:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	68 - 117	12/02/22 15:16	
Dibromofluoromethane	120	73 - 122	12/02/22 15:16	
Toluene-d8	119	65 - 144	12/02/22 15:16	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-01-1S	**Units:**	ug/L
Lab Code:	K2213993-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 15:40	
Benzene	ND U	0.50	1	12/02/22 15:40	
Bromobenzene	ND U	2.0	1	12/02/22 15:40	
Bromochloromethane	ND U	0.50	1	12/02/22 15:40	
Bromodichloromethane	ND U	0.50	1	12/02/22 15:40	
Bromoform	ND U	0.50	1	12/02/22 15:40	
Bromomethane	ND U	0.50	1	12/02/22 15:40	
2-Butanone (MEK)	ND U	20	1	12/02/22 15:40	
n-Butylbenzene	ND U	4.0	1	12/02/22 15:40	
sec-Butylbenzene	ND U	2.0	1	12/02/22 15:40	
tert-Butylbenzene	ND U	2.0	1	12/02/22 15:40	
Carbon Disulfide	ND U	0.50	1	12/02/22 15:40	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 15:40	
Chlorobenzene	ND U	0.50	1	12/02/22 15:40	
Chloroethane	ND U	0.50	1	12/02/22 15:40	
Chloroform	ND U	0.50	1	12/02/22 15:40	
Chloromethane	ND U	0.50	1	12/02/22 15:40	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 15:40	
4-Chlorotoluene	ND U	2.0	1	12/02/22 15:40	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 15:40	
Dibromochloromethane	ND U	0.50	1	12/02/22 15:40	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 15:40	
Dibromomethane	ND U	0.50	1	12/02/22 15:40	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 15:40	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 15:40	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 15:40	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 15:40	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 15:40	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 15:40	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 15:40	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 15:40	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 15:40	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 15:40	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 15:40	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 15:40	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 15:40	
Ethylbenzene	ND U	0.50	1	12/02/22 15:40	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 15:40	
2-Hexanone	ND U	20	1	12/02/22 15:40	
Isopropylbenzene	ND U	2.0	1	12/02/22 15:40	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 15:40	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-01-1S	**Units:**	ug/L
Lab Code:	K2213993-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 15:40	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 15:40	
Methylene Chloride	ND U	2.0	1	12/02/22 15:40	
Naphthalene	ND U	2.0	1	12/02/22 15:40	
n-Propylbenzene	ND U	2.0	1	12/02/22 15:40	
Styrene	ND U	0.50	1	12/02/22 15:40	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 15:40	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 15:40	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 15:40	
Toluene	ND U	0.50	1	12/02/22 15:40	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 15:40	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 15:40	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 15:40	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 15:40	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 15:40	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 15:40	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 15:40	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 15:40	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 15:40	
Vinyl Chloride	ND U	0.50	1	12/02/22 15:40	
o-Xylene	ND U	0.50	1	12/02/22 15:40	
m,p-Xylenes	ND U	0.50	1	12/02/22 15:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	68 - 117	12/02/22 15:40	
Dibromofluoromethane	120	73 - 122	12/02/22 15:40	
Toluene-d8	120	65 - 144	12/02/22 15:40	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-02-DUP	**Units:**	ug/L
Lab Code:	K2213993-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 16:04	
Benzene	ND U	0.50	1	12/02/22 16:04	
Bromobenzene	ND U	2.0	1	12/02/22 16:04	
Bromochloromethane	ND U	0.50	1	12/02/22 16:04	
Bromodichloromethane	ND U	0.50	1	12/02/22 16:04	
Bromoform	ND U	0.50	1	12/02/22 16:04	
Bromomethane	ND U	0.50	1	12/02/22 16:04	
2-Butanone (MEK)	ND U	20	1	12/02/22 16:04	
n-Butylbenzene	ND U	4.0	1	12/02/22 16:04	
sec-Butylbenzene	ND U	2.0	1	12/02/22 16:04	
tert-Butylbenzene	ND U	2.0	1	12/02/22 16:04	
Carbon Disulfide	ND U	0.50	1	12/02/22 16:04	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 16:04	
Chlorobenzene	ND U	0.50	1	12/02/22 16:04	
Chloroethane	ND U	0.50	1	12/02/22 16:04	
Chloroform	ND U	0.50	1	12/02/22 16:04	
Chloromethane	ND U	0.50	1	12/02/22 16:04	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 16:04	
4-Chlorotoluene	ND U	2.0	1	12/02/22 16:04	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 16:04	
Dibromochloromethane	ND U	0.50	1	12/02/22 16:04	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 16:04	
Dibromomethane	ND U	0.50	1	12/02/22 16:04	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 16:04	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 16:04	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 16:04	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 16:04	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 16:04	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:04	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:04	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 16:04	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 16:04	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 16:04	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 16:04	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:04	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:04	
Ethylbenzene	ND U	0.50	1	12/02/22 16:04	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 16:04	
2-Hexanone	ND U	20	1	12/02/22 16:04	
Isopropylbenzene	ND U	2.0	1	12/02/22 16:04	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 16:04	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-02-DUP	**Units:**	ug/L
Lab Code:	K2213993-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 16:04	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 16:04	
Methylene Chloride	ND U	2.0	1	12/02/22 16:04	
Naphthalene	ND U	2.0	1	12/02/22 16:04	
n-Propylbenzene	ND U	2.0	1	12/02/22 16:04	
Styrene	ND U	0.50	1	12/02/22 16:04	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:04	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:04	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 16:04	
Toluene	ND U	0.50	1	12/02/22 16:04	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 16:04	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 16:04	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 16:04	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 16:04	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 16:04	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 16:04	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 16:04	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 16:04	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 16:04	
Vinyl Chloride	ND U	0.50	1	12/02/22 16:04	
o-Xylene	ND U	0.50	1	12/02/22 16:04	
m,p-Xylenes	ND U	0.50	1	12/02/22 16:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	68 - 117	12/02/22 16:04	
Dibromofluoromethane	122	73 - 122	12/02/22 16:04	
Toluene-d8	117	65 - 144	12/02/22 16:04	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-03-20S	**Units:**	ug/L
Lab Code:	K2213993-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 16:28	
Benzene	ND U	0.50	1	12/02/22 16:28	
Bromobenzene	ND U	2.0	1	12/02/22 16:28	
Bromochloromethane	ND U	0.50	1	12/02/22 16:28	
Bromodichloromethane	ND U	0.50	1	12/02/22 16:28	
Bromoform	ND U	0.50	1	12/02/22 16:28	
Bromomethane	ND U	0.50	1	12/02/22 16:28	
2-Butanone (MEK)	ND U	20	1	12/02/22 16:28	
n-Butylbenzene	ND U	4.0	1	12/02/22 16:28	
sec-Butylbenzene	ND U	2.0	1	12/02/22 16:28	
tert-Butylbenzene	ND U	2.0	1	12/02/22 16:28	
Carbon Disulfide	ND U	0.50	1	12/02/22 16:28	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 16:28	
Chlorobenzene	ND U	0.50	1	12/02/22 16:28	
Chloroethane	ND U	0.50	1	12/02/22 16:28	
Chloroform	ND U	0.50	1	12/02/22 16:28	
Chloromethane	ND U	0.50	1	12/02/22 16:28	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 16:28	
4-Chlorotoluene	ND U	2.0	1	12/02/22 16:28	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 16:28	
Dibromochloromethane	ND U	0.50	1	12/02/22 16:28	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 16:28	
Dibromomethane	ND U	0.50	1	12/02/22 16:28	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 16:28	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 16:28	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 16:28	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 16:28	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 16:28	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:28	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:28	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 16:28	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 16:28	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 16:28	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 16:28	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:28	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:28	
Ethylbenzene	ND U	0.50	1	12/02/22 16:28	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 16:28	
2-Hexanone	ND U	20	1	12/02/22 16:28	
Isopropylbenzene	ND U	2.0	1	12/02/22 16:28	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 16:28	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-03-20S	**Units:**	ug/L
Lab Code:	K2213993-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 16:28	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 16:28	
Methylene Chloride	ND U	2.0	1	12/02/22 16:28	
Naphthalene	ND U	2.0	1	12/02/22 16:28	
n-Propylbenzene	ND U	2.0	1	12/02/22 16:28	
Styrene	ND U	0.50	1	12/02/22 16:28	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:28	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:28	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 16:28	
Toluene	ND U	0.50	1	12/02/22 16:28	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 16:28	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 16:28	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 16:28	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 16:28	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 16:28	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 16:28	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 16:28	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 16:28	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 16:28	
Vinyl Chloride	ND U	0.50	1	12/02/22 16:28	
o-Xylene	ND U	0.50	1	12/02/22 16:28	
m,p-Xylenes	ND U	0.50	1	12/02/22 16:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	68 - 117	12/02/22 16:28	
Dibromofluoromethane	121	73 - 122	12/02/22 16:28	
Toluene-d8	117	65 - 144	12/02/22 16:28	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:30
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-04-FB	**Units:**	ug/L
Lab Code:	K2213993-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 16:52	
Benzene	ND U	0.50	1	12/02/22 16:52	
Bromobenzene	ND U	2.0	1	12/02/22 16:52	
Bromochloromethane	ND U	0.50	1	12/02/22 16:52	
Bromodichloromethane	ND U	0.50	1	12/02/22 16:52	
Bromoform	ND U	0.50	1	12/02/22 16:52	
Bromomethane	ND U	0.50	1	12/02/22 16:52	
2-Butanone (MEK)	ND U	20	1	12/02/22 16:52	
n-Butylbenzene	ND U	4.0	1	12/02/22 16:52	
sec-Butylbenzene	ND U	2.0	1	12/02/22 16:52	
tert-Butylbenzene	ND U	2.0	1	12/02/22 16:52	
Carbon Disulfide	ND U	0.50	1	12/02/22 16:52	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 16:52	
Chlorobenzene	ND U	0.50	1	12/02/22 16:52	
Chloroethane	ND U	0.50	1	12/02/22 16:52	
Chloroform	ND U	0.50	1	12/02/22 16:52	
Chloromethane	ND U	0.50	1	12/02/22 16:52	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 16:52	
4-Chlorotoluene	ND U	2.0	1	12/02/22 16:52	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 16:52	
Dibromochloromethane	ND U	0.50	1	12/02/22 16:52	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 16:52	
Dibromomethane	ND U	0.50	1	12/02/22 16:52	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 16:52	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 16:52	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 16:52	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 16:52	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 16:52	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:52	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 16:52	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 16:52	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 16:52	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 16:52	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 16:52	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:52	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 16:52	
Ethylbenzene	ND U	0.50	1	12/02/22 16:52	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 16:52	
2-Hexanone	ND U	20	1	12/02/22 16:52	
Isopropylbenzene	ND U	2.0	1	12/02/22 16:52	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 16:52	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:30
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-04-FB	**Units:**	ug/L
Lab Code:	K2213993-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 16:52	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 16:52	
Methylene Chloride	ND U	2.0	1	12/02/22 16:52	
Naphthalene	ND U	2.0	1	12/02/22 16:52	
n-Propylbenzene	ND U	2.0	1	12/02/22 16:52	
Styrene	ND U	0.50	1	12/02/22 16:52	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:52	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 16:52	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 16:52	
Toluene	ND U	0.50	1	12/02/22 16:52	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 16:52	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 16:52	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 16:52	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 16:52	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 16:52	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 16:52	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 16:52	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 16:52	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 16:52	
Vinyl Chloride	ND U	0.50	1	12/02/22 16:52	
o-Xylene	ND U	0.50	1	12/02/22 16:52	
m,p-Xylenes	ND U	0.50	1	12/02/22 16:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	113	68 - 117	12/02/22 16:52	
Dibromofluoromethane	123	73 - 122	12/02/22 16:52	*
Toluene-d8	122	65 - 144	12/02/22 16:52	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 12:10
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-05-3S	**Units:**	ug/L
Lab Code:	K2213993-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 17:16	
Benzene	ND U	0.50	1	12/02/22 17:16	
Bromobenzene	ND U	2.0	1	12/02/22 17:16	
Bromochloromethane	ND U	0.50	1	12/02/22 17:16	
Bromodichloromethane	ND U	0.50	1	12/02/22 17:16	
Bromoform	ND U	0.50	1	12/02/22 17:16	
Bromomethane	ND U	0.50	1	12/02/22 17:16	
2-Butanone (MEK)	ND U	20	1	12/02/22 17:16	
n-Butylbenzene	ND U	4.0	1	12/02/22 17:16	
sec-Butylbenzene	ND U	2.0	1	12/02/22 17:16	
tert-Butylbenzene	ND U	2.0	1	12/02/22 17:16	
Carbon Disulfide	ND U	0.50	1	12/02/22 17:16	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 17:16	
Chlorobenzene	ND U	0.50	1	12/02/22 17:16	
Chloroethane	ND U	0.50	1	12/02/22 17:16	
Chloroform	**0.66**	0.50	1	12/02/22 17:16	
Chloromethane	ND U	0.50	1	12/02/22 17:16	*
2-Chlorotoluene	ND U	2.0	1	12/02/22 17:16	
4-Chlorotoluene	ND U	2.0	1	12/02/22 17:16	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 17:16	
Dibromochloromethane	ND U	0.50	1	12/02/22 17:16	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 17:16	
Dibromomethane	ND U	0.50	1	12/02/22 17:16	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 17:16	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 17:16	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 17:16	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 17:16	*
1,1-Dichloroethane	ND U	0.50	1	12/02/22 17:16	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 17:16	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 17:16	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 17:16	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 17:16	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 17:16	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 17:16	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 17:16	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 17:16	
Ethylbenzene	ND U	0.50	1	12/02/22 17:16	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 17:16	
2-Hexanone	ND U	20	1	12/02/22 17:16	
Isopropylbenzene	ND U	2.0	1	12/02/22 17:16	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 17:16	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 12:10
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-05-3S	**Units:**	ug/L
Lab Code:	K2213993-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 17:16	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 17:16	
Methylene Chloride	ND U	2.0	1	12/02/22 17:16	
Naphthalene	ND U	2.0	1	12/02/22 17:16	
n-Propylbenzene	ND U	2.0	1	12/02/22 17:16	
Styrene	ND U	0.50	1	12/02/22 17:16	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 17:16	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 17:16	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 17:16	
Toluene	ND U	0.50	1	12/02/22 17:16	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 17:16	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 17:16	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 17:16	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 17:16	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 17:16	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 17:16	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 17:16	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 17:16	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 17:16	
Vinyl Chloride	ND U	0.50	1	12/02/22 17:16	
o-Xylene	ND U	0.50	1	12/02/22 17:16	
m,p-Xylenes	ND U	0.50	1	12/02/22 17:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	68 - 117	12/02/22 17:16	
Dibromofluoromethane	122	73 - 122	12/02/22 17:16	
Toluene-d8	119	65 - 144	12/02/22 17:16	

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-01-1S	**Basis:**	NA
Lab Code:	K2213993-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.20**	mg/L	0.20	2	11/30/22 04:12	
Nitrate as Nitrogen	300.0	**4.49**	mg/L	0.10	2	11/30/22 04:12	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:00
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-01-1S	**Basis:**	NA
Lab Code:	K2213993-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**177**	mg/L	5.0	1	12/01/22 11:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-02-DUP	**Basis:**	NA
Lab Code:	K2213993-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.16**	mg/L	0.20	2	11/30/22 04:21	
Nitrate as Nitrogen	300.0	**4.43**	mg/L	0.10	2	11/30/22 04:21	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 10:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-02-DUP	**Basis:**	NA
Lab Code:	K2213993-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**173**	mg/L	5.0	1	12/01/22 11:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-03-20S	**Basis:**	NA
Lab Code:	K2213993-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**33.5**	mg/L	1.0	10	11/30/22 15:32	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	11/30/22 04:29	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:05
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-03-20S	**Basis:**	NA
Lab Code:	K2213993-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**370**	mg/L	5.0	1	12/01/22 11:25	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:30
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-04-FB	**Basis:**	NA
Lab Code:	K2213993-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.20	2	11/30/22 04:38	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	11/30/22 04:38	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 11:30
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-04-FB	**Basis:**	NA
Lab Code:	K2213993-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	12/01/22 11:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 12:10
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-05-3S	**Basis:**	NA
Lab Code:	K2213993-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.57**	mg/L	0.20	2	11/30/22 04:47	
Nitrate as Nitrogen	300.0	**3.79**	mg/L	0.10	2	11/30/22 04:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22 12:10
Sample Matrix:	Ground Water	**Date Received:**	11/29/22 13:20
Sample Name:	LB-112922-05-3S	**Basis:**	NA
Lab Code:	K2213993-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**155**	mg/L	5.0	1	12/01/22 11:25	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: SCS Engineers **Service Request:** K2213993
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene 68-117	Dibromofluoromethane 73-122	Toluene-d8 65-144
TB1	K2213993-001	109	120	119
LB-112922-01-1S	K2213993-002	110	120	120
LB-112922-02-DUP	K2213993-003	112	122	117
LB-112922-03-20S	K2213993-004	112	121	117
LB-112922-04-FB	K2213993-005	113	123*	122
LB-112922-05-3S	K2213993-006	110	122	119
Method Blank	KQ2221639-05	112	120	116
Lab Control Sample	KQ2221639-03	118*	118	119
Duplicate Lab Control Sample	KQ2221639-04	121*	120	122

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2221639-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	20	1	12/02/22 14:52	
Benzene	ND U	0.50	1	12/02/22 14:52	
Bromobenzene	ND U	2.0	1	12/02/22 14:52	
Bromochloromethane	ND U	0.50	1	12/02/22 14:52	
Bromodichloromethane	ND U	0.50	1	12/02/22 14:52	
Bromoform	ND U	0.50	1	12/02/22 14:52	
Bromomethane	ND U	0.50	1	12/02/22 14:52	
2-Butanone (MEK)	ND U	20	1	12/02/22 14:52	
n-Butylbenzene	ND U	4.0	1	12/02/22 14:52	
sec-Butylbenzene	ND U	2.0	1	12/02/22 14:52	
tert-Butylbenzene	ND U	2.0	1	12/02/22 14:52	
Carbon Disulfide	ND U	0.50	1	12/02/22 14:52	
Carbon Tetrachloride	ND U	0.50	1	12/02/22 14:52	
Chlorobenzene	ND U	0.50	1	12/02/22 14:52	
Chloroethane	ND U	0.50	1	12/02/22 14:52	
Chloroform	ND U	0.50	1	12/02/22 14:52	
Chloromethane	ND U	0.50	1	12/02/22 14:52	
2-Chlorotoluene	ND U	2.0	1	12/02/22 14:52	
4-Chlorotoluene	ND U	2.0	1	12/02/22 14:52	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	12/02/22 14:52	
Dibromochloromethane	ND U	0.50	1	12/02/22 14:52	
1,2-Dibromoethane (EDB)	ND U	2.0	1	12/02/22 14:52	
Dibromomethane	ND U	0.50	1	12/02/22 14:52	
1,2-Dichlorobenzene	ND U	0.50	1	12/02/22 14:52	
1,3-Dichlorobenzene	ND U	0.50	1	12/02/22 14:52	
1,4-Dichlorobenzene	ND U	0.50	1	12/02/22 14:52	
Dichlorodifluoromethane	ND U	0.50	1	12/02/22 14:52	
1,1-Dichloroethane	ND U	0.50	1	12/02/22 14:52	
cis-1,2-Dichloroethene	ND U	0.50	1	12/02/22 14:52	
trans-1,2-Dichloroethene	ND U	0.50	1	12/02/22 14:52	
1,2-Dichloropropane	ND U	0.50	1	12/02/22 14:52	
1,3-Dichloropropane	ND U	0.50	1	12/02/22 14:52	
2,2-Dichloropropane	ND U	0.50	1	12/02/22 14:52	
1,1-Dichloropropene	ND U	0.50	1	12/02/22 14:52	
cis-1,3-Dichloropropene	ND U	0.50	1	12/02/22 14:52	
trans-1,3-Dichloropropene	ND U	0.50	1	12/02/22 14:52	
Ethylbenzene	ND U	0.50	1	12/02/22 14:52	
Hexachlorobutadiene	ND U	2.0	1	12/02/22 14:52	
2-Hexanone	ND U	20	1	12/02/22 14:52	
Isopropylbenzene	ND U	2.0	1	12/02/22 14:52	
4-Isopropyltoluene	ND U	2.0	1	12/02/22 14:52	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2221639-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methyl tert-Butyl Ether	ND U	0.50	1	12/02/22 14:52	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	12/02/22 14:52	
Methylene Chloride	ND U	2.0	1	12/02/22 14:52	
Naphthalene	ND U	2.0	1	12/02/22 14:52	
n-Propylbenzene	ND U	2.0	1	12/02/22 14:52	
Styrene	ND U	0.50	1	12/02/22 14:52	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	12/02/22 14:52	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	12/02/22 14:52	
Tetrachloroethene (PCE)	ND U	0.50	1	12/02/22 14:52	
Toluene	ND U	0.50	1	12/02/22 14:52	
1,2,3-Trichlorobenzene	ND U	2.0	1	12/02/22 14:52	
1,2,4-Trichlorobenzene	ND U	2.0	1	12/02/22 14:52	
1,1,2-Trichloroethane	ND U	0.50	1	12/02/22 14:52	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	12/02/22 14:52	
Trichloroethene (TCE)	ND U	0.50	1	12/02/22 14:52	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	12/02/22 14:52	
1,2,3-Trichloropropane	ND U	0.50	1	12/02/22 14:52	
1,2,4-Trimethylbenzene	ND U	2.0	1	12/02/22 14:52	
1,3,5-Trimethylbenzene	ND U	2.0	1	12/02/22 14:52	
Vinyl Chloride	ND U	0.50	1	12/02/22 14:52	
o-Xylene	ND U	0.50	1	12/02/22 14:52	
m,p-Xylenes	ND U	0.50	1	12/02/22 14:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	68 - 117	12/02/22 14:52	
Dibromofluoromethane	120	73 - 122	12/02/22 14:52	
Toluene-d8	116	65 - 144	12/02/22 14:52	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Analyzed:**	12/02/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	787183

	Lab Control Sample KQ2221639-03			Duplicate Lab Control Sample KQ2221639-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	9.65	10.0	97	9.63	10.0	96	66-124	<1	30
1,1,1-Trichloroethane (TCA)	9.69	10.0	97	9.94	10.0	99	59-136	3	30
1,1,2,2-Tetrachloroethane	9.68	10.0	97	9.95	10.0	100	70-127	3	30
1,1,2-Trichloroethane	9.13	10.0	91	9.78	10.0	98	74-118	7	30
1,1-Dichloroethane	9.94	10.0	99	9.50	10.0	95	68-132	5	30
1,1-Dichloropropene	9.28	10.0	93	9.56	10.0	96	59-134	3	30
1,2,3-Trichlorobenzene	9.03	10.0	90	10.1	10.0	101	68-120	11	30
1,2,3-Trichloropropane	9.89	10.0	99	10.2	10.0	102	69-123	3	30
1,2,4-Trichlorobenzene	9.13	10.0	91	9.56	10.0	96	58-126	5	30
1,2,4-Trimethylbenzene	10.8	10.0	108	10.6	10.0	106	63-122	1	30
1,2-Dibromo-3-chloropropane	9.05	10.0	91	9.88	10.0	99	55-132	9	30
1,2-Dibromoethane (EDB)	9.28	10.0	93	9.83	10.0	98	74-118	6	30
1,2-Dichlorobenzene	9.72	10.0	97	9.80	10.0	98	72-115	<1	30
1,2-Dichloropropane	9.00	10.0	90	9.18	10.0	92	67-126	2	30
1,3,5-Trimethylbenzene	10.4	10.0	104	10.3	10.0	103	62-126	2	30
1,3-Dichlorobenzene	9.72	10.0	97	9.75	10.0	98	70-116	<1	30
1,3-Dichloropropane	9.48	10.0	95	9.47	10.0	95	75-116	<1	30
1,4-Dichlorobenzene	9.70	10.0	97	9.70	10.0	97	73-115	<1	30
2,2-Dichloropropane	9.44	10.0	94	9.59	10.0	96	37-145	2	30
2-Butanone (MEK)	43.1	50.0	86	51.8	50.0	104	71-149	18	30
2-Chlorotoluene	10.5	10.0	105	10.6	10.0	106	55-131	<1	30
2-Hexanone	47.4	50.0	95	55.1	50.0	110	59-131	15	30
4-Chlorotoluene	10.4	10.0	104	10.4	10.0	104	66-121	<1	30
4-Isopropyltoluene	10.6	10.0	106	10.4	10.0	104	61-128	2	30
4-Methyl-2-pentanone (MIBK)	50.3	50.0	101	53.7	50.0	107	64-134	7	30
Acetone	51.1	50.0	102	54.8	50.0	110	68-135	7	30
Benzene	8.95	10.0	90	9.23	10.0	92	69-124	3	30
Bromobenzene	9.77	10.0	98	10.1	10.0	101	72-116	3	30
Bromochloromethane	9.42	10.0	94	9.40	10.0	94	75-131	<1	30
Bromodichloromethane	9.82	10.0	98	9.85	10.0	99	63-129	<1	30
Bromoform	9.69	10.0	97	10.2	10.0	102	52-144	5	30
Bromomethane	10.2	10.0	102	11.1	10.0	111	35-113	9	30
Carbon Disulfide	15.2	20.0	76	15.3	20.0	76	46-144	<1	30
Carbon Tetrachloride	9.71	10.0	97	9.78	10.0	98	55-140	<1	30
Chlorobenzene	9.35	10.0	94	9.54	10.0	95	72-116	2	30
Chloroethane	8.75	10.0	88	8.76	10.0	88	58-134	<1	30
Chloroform	9.81	10.0	98	10.1	10.0	101	70-129	3	30
Chloromethane	8.49	10.0	85	8.64	10.0	86	34-130	2	30
cis-1,2-Dichloroethene	9.04	10.0	90	9.39	10.0	94	71-118	4	30
cis-1,3-Dichloropropene	9.87	10.0	99	10.1	10.0	101	62-132	2	30
Dibromochloromethane	9.52	10.0	95	9.64	10.0	96	67-126	1	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Analyzed:**	12/02/22
Sample Matrix:	Ground Water	**Date Extracted:**	NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Units:**	ug/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	787183

	Lab Control Sample KQ2221639-03			Duplicate Lab Control Sample KQ2221639-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.17	10.0	92	9.48	10.0	95	69-128	3	30
Dichlorodifluoromethane	8.67	10.0	87	8.96	10.0	90	32-124	3	30
Ethylbenzene	9.13	10.0	91	9.30	10.0	93	67-121	2	30
Hexachlorobutadiene	8.66	10.0	87	8.96	10.0	90	57-119	3	30
Isopropylbenzene	9.49	10.0	95	9.59	10.0	96	67-129	1	30
m,p-Xylenes	18.8	20.0	94	19.1	20.0	95	69-121	1	30
Methyl tert-Butyl Ether	9.50	10.0	95	10.0	10.0	100	54-126	5	30
Methylene Chloride	10.1	10.0	101	10.5	10.0	105	71-122	4	30
Naphthalene	9.55	10.0	96	10.5	10.0	105	64-126	9	30
n-Butylbenzene	10.2	10.0	102	10.1	10.0	101	55-130	<1	30
n-Propylbenzene	10.4	10.0	104	10.4	10.0	104	61-124	<1	30
o-Xylene	9.71	10.0	97	9.70	10.0	97	71-119	<1	30
sec-Butylbenzene	10.4	10.0	104	10.4	10.0	104	59-128	<1	30
Styrene	9.73	10.0	97	9.95	10.0	100	74-121	2	30
tert-Butylbenzene	9.79	10.0	98	9.83	10.0	98	61-127	<1	30
Tetrachloroethene (PCE)	8.68	10.0	87	8.96	10.0	90	62-126	3	30
Toluene	9.20	10.0	92	9.54	10.0	95	69-124	4	30
trans-1,2-Dichloroethene	8.87	10.0	89	9.21	10.0	92	67-125	4	30
trans-1,3-Dichloropropene	10.0	10.0	100	10.0	10.0	100	59-125	<1	30
Trichloroethene (TCE)	9.50	10.0	95	9.37	10.0	94	67-128	1	30
Trichlorofluoromethane (CFC 11)	10.3	10.0	103	10.2	10.0	102	52-141	<1	30
Vinyl Chloride	8.89	10.0	89	8.76	10.0	88	55-123	1	30

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	11/29/22 20:22	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	11/29/22 20:22	

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	12/01/22 11:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	11/30/22 00:08	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	11/30/22 00:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	5.0	1	12/01/22 11:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	11/30/22 03:55	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	11/30/22 03:55	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2213993-MB4		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	11/30/22 12:30	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	11/30/22 12:30	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project	Leichner Landfill/04222030.13	**Date Collected:**	11/29/22
Sample Matrix:	Ground Water	**Date Received:**	11/29/22
		Date Analyzed:	12/01/22

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	LB-112922-03-20S	**Units:**	mg/L
Lab Code:	K2213993-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2213993-004DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	5.0	370	372	371	<1	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2213993
Date Analyzed: 11/29/22 - 12/01/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2213993-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.92	5.00	98	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	100	90-110
Solids, Total Dissolved	SM 2540 C	1880	1920	98	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2213993
Project:	Leichner Landfill/04222030.13	**Date Analyzed:**	11/30/22
Sample Matrix:	Ground Water		

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2213993-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.96	5.00	99	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	100	90-110

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2213993
Date Analyzed: 11/30/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2213993-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.97	5.00	99	90-110
Nitrate as Nitrogen	300.0	2.52	2.50	101	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04222030.13
Sample Matrix: Ground Water

Service Request: K2213993
Date Analyzed: 11/30/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2213993-LCS4

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.98	5.00	100	90-110
Nitrate as Nitrogen	300.0	2.53	2.50	101	90-110

APPENDIX D

2022 Groundwater Elevation Data and Groundwater Elevation Hydrographs

Table D-1
2022 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-R2	2/17/2021	222.27	49.69	172.58
LB-R2	8/9/2021	222.27	50.68	171.59
LB-R2	2/14/2022	222.27	48.88	173.39
LB-R2	7/25/2022	222.27	46.26	176.01
LB-1S	2/17/2021	210.12	37.36	172.76
LB-1S	8/9/2021	210.12	38.36	171.76
LB-1S	2/14/2022	210.12	39.34	170.78
LB-1S	7/25/2022	210.12	34.28	175.84
LB-1D	2/17/2021	209.74	40.43	169.31
LB-1D	8/9/2021	209.74	41.17	168.57
LB-1D	2/14/2022	209.74	38.42	171.32
LB-1D	7/25/2022	209.74	37.06	172.68
LB-3S	2/17/2021	218.25	43.64	174.61
LB-3S	8/9/2021	218.25	43.59	174.66
LB-3S	2/14/2022	218.25	41.71	176.54
LB-3S	7/25/2022	218.25	39.54	178.71
LB-3D	2/17/2021	219.29	43.61	175.68
LB-3D	8/9/2021	219.29	44.91	174.38
LB-3D	2/14/2022	219.29	42.69	176.60
LB-3D	7/25/2022	219.29	40.53	178.76
LB-5S	2/17/2021	206.89	16.42	190.47
LB-5S	8/9/2021	206.89	17.13	189.76
LB-5S	2/14/2022	206.89	16.15	190.74
LB-5S	7/25/2022	206.89	15.69	191.20
LB-5C	2/17/2021	206.70	37.38	169.32
LB-5C	8/9/2021	206.70	38.42	168.28
LB-5C	2/14/2022	206.70	36.07	170.63
LB-5C	7/25/2022	206.70	37.77	168.93
LB-5D	2/17/2021	207.56	41.41	166.15
LB-5D	8/9/2021	207.56	42.84	164.72
LB-5D	2/14/2022	207.56	40.18	167.38
LB-5D	7/25/2022	207.56	38.36	169.20

Table D-1
2022 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-6S	2/17/2021	202.80	31.11	171.69
LB-6S	8/9/2021	202.80	32.17	170.63
LB-6S	2/14/2022	202.80	30.35	172.45
LB-6S	7/25/2022	202.80	28.10	174.70
LB-9S(R)	2/17/2021	217.94	39.34	178.60
LB-9S(R)	8/9/2021	217.94	40.55	177.39
LB-10SR	2/17/2021	204.04	35.20	168.84
LB-10SR	8/9/2021	204.04	36.62	167.42
LB-10SR	2/14/2022	204.04	34.47	169.57
LB-10SR	7/25/2022	204.04	31.99	172.05
LB-10CR	2/17/2021	203.05	34.09	168.96
LB-10CR	8/9/2021	203.05	35.50	167.55
LB-10CR	2/14/2022	203.05	33.37	169.68
LB-10CR	7/25/2022	203.05	30.91	172.14
LB-10DR	2/17/2021	203.36	46.70	156.66
LB-10DR	8/9/2021	203.36	48.58	154.78
LB-10DR	2/14/2022	203.36	45.74	157.62
LB-10DR	7/25/2022	203.36	43.43	159.93
LB-13I	2/17/2021	202.36	31.75	170.61
LB-13I	8/9/2021	202.36	32.89	169.47
LB-13I	2/14/2022	202.36	31.16	171.20
LB-13I	7/25/2022	202.36	28.80	173.56
LB-13C	2/17/2021	202.68	32.13	170.55
LB-13C	8/9/2021	202.68	33.30	169.38
LB-13C	2/14/2022	202.68	31.73	170.95
LB-13C	7/25/2022	202.68	29.21	173.47
LB-13D	2/17/2021	202.96	32.54	170.42
LB-13D	8/9/2021	202.96	33.68	169.28
LB-13D	2/14/2022	202.96	31.62	171.34
LB-13D	7/25/2022	202.96	29.50	173.46

Table D-1
2022 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-17S	2/17/2021	208.18	Dry	NA
LB-17S	8/9/2021	208.18	Dry	NA
LB-17S	2/14/2022	208.18	Dry	NA
LB-17S	7/25/2022	208.18	32.11	176.07
LB-17I	2/17/2021	212.96	40.58	172.38
LB-17I	8/9/2021	212.96	41.57	171.39
LB-17I	2/14/2022	212.96	39.58	173.38
LB-17I	7/25/2022	212.96	37.23	175.73
LB-17C	2/17/2021	207.97	34.25	173.72
LB-17C	8/9/2021	207.97	35.26	172.71
LB-17C	2/14/2022	207.97	33.28	174.69
LB-17C	7/25/2022	207.97	30.93	177.04
LB-17D	2/17/2021	213.17	41.51	171.66
LB-17D	8/9/2021	213.17	42.49	170.68
LB-17D	2/14/2022	213.17	40.51	172.66
LB-17D	7/25/2022	213.17	38.20	174.97
LB-20S	2/17/2021	221.22	43.92	177.30
LB-20S	8/9/2021	221.22	44.60	176.62
LB-20S	2/14/2022	221.22	43.45	177.77
LB-20S	7/25/2022	221.22	40.88	180.34
LB-21S	2/17/2021	223.35	40.99	182.36
LB-21S	8/9/2021	223.35	41.90	181.45
LB-21S	2/14/2022	223.35	40.08	183.27
LB-21S	7/25/2022	223.35	38.77	184.58
LB-21C	2/17/2021	223.32	41.42	181.90
LB-21C	8/9/2021	223.32	42.81	180.51
LB-21C	2/14/2022	223.32	40.46	182.86
LB-21C	7/25/2022	223.32	39.10	184.22
LB-21D	2/17/2021	223.63	44.31	179.32
LB-21D	8/9/2021	223.63	45.56	178.07
LB-21D	2/14/2022	223.63	43.38	180.25
LB-21D	7/25/2022	223.63	41.92	181.71

Table D-1
2022 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-22S	2/17/2021	208.42	8.88	199.54
LB-22S	8/9/2021	208.42	9.82	198.60
LB-23S	2/17/2021	229.19	33.30	195.89
LB-23S	8/9/2021	229.19	33.88	195.31
LB-23S	2/14/2022	229.19	34.63	194.56
LB-23S	7/25/2022	229.19	31.01	198.18
LB-24S	2/17/2021	235.13	40.36	194.77
LB-24S	8/9/2021	235.13	40.96	194.17
LB-24S	2/14/2022	235.13	39.56	195.57
LB-24S	7/25/2022	235.13	38.61	196.52
LB-26I	2/17/2021	200.22	29.10	171.12
LB-26I	8/9/2021	200.22	30.21	170.01
LB-26I	2/14/2022	200.22	28.43	171.79
LB-26I	7/25/2022	200.22	26.13	174.09
LB-26D	2/17/2021	200.75	28.94	171.81
LB-26D	8/9/2021	200.75	30.06	170.69
LB-26D	2/14/2022	200.75	29.41	171.34
LB-26D	7/25/2022	200.75	25.92	174.83
LB-27I	2/17/2021	205.35	35.12	170.23
LB-27I	8/9/2021	205.35	36.33	169.02
LB-27I	2/14/2022	205.35	36.42	168.93
LB-27I	7/25/2022	205.35	32.13	173.22
LB-27D	2/17/2021	204.63	42.06	162.57
LB-27D	8/9/2021	204.63	43.41	161.22
LB-27D	2/14/2022	204.63	40.61	164.02
LB-27D	7/25/2022	204.63	38.51	166.12
MW-1 N	2/17/2021	216.58	Dry	NA
MW-1 N	8/9/2021	216.58	Dry	NA
MW-1 N	2/14/2022	216.58	Dry	NA
MW-1 N	7/25/2022	216.58	Dry	NA

Table D-1
2022 Groundwater Elevation Data
Leichner Landfill

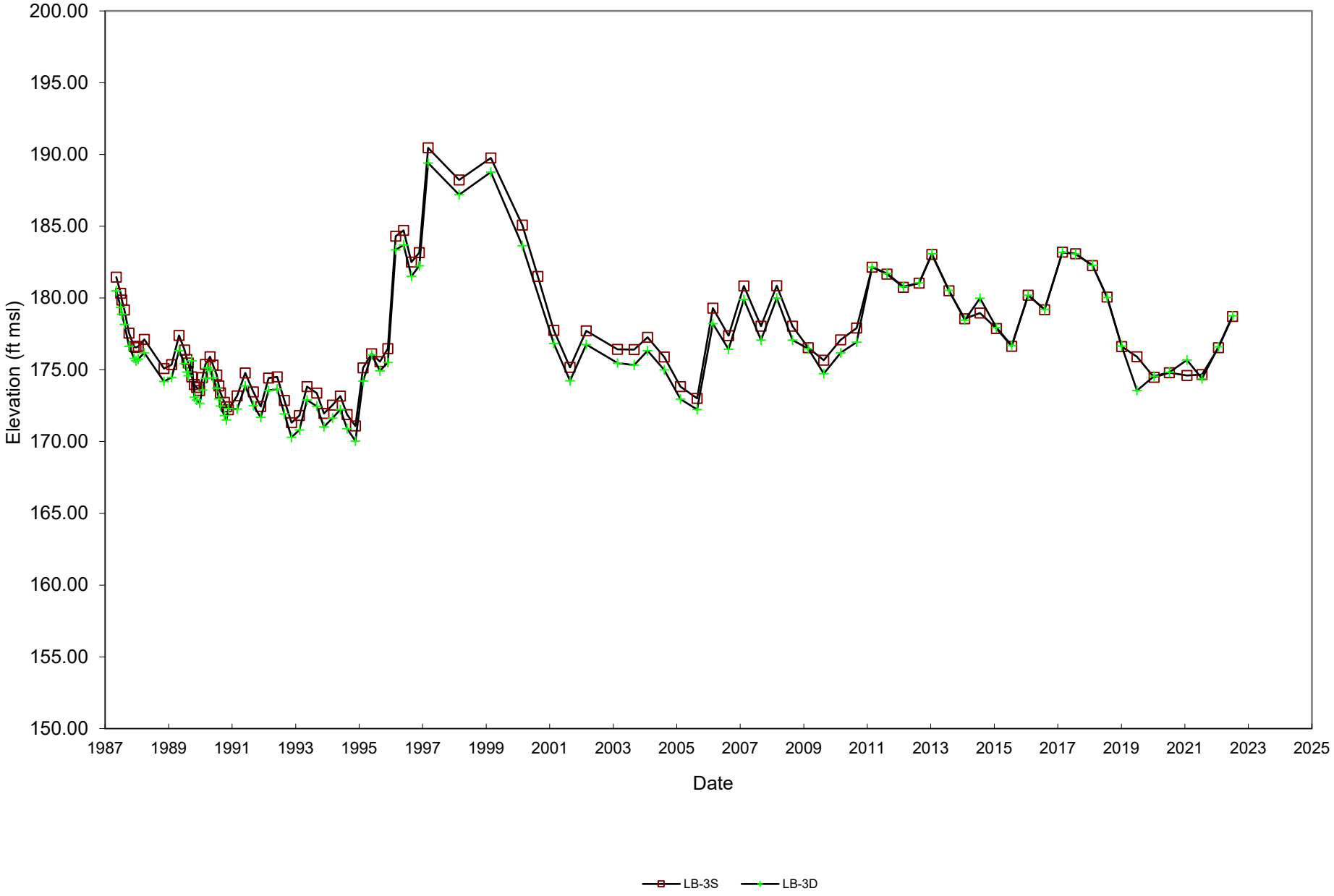
Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
MW-1 S	2/17/2021	216.13	41.71	174.42
MW-1 S	8/9/2021	216.13	42.62	173.51
MW-1 S	2/14/2022	216.13	39.34	176.79
MW-1 S	7/25/2022	216.13	38.59	177.54
MW-1 E	2/17/2021	216.45	Dry	NA
MW-1 E	8/9/2021	216.45	Dry	NA
MW-1 E	2/14/2022	216.45	Dry	NA
MW-1 E	7/25/2022	216.45	Dry	NA
MW-NE	2/17/2021	220.06	16.54	203.52
MW-NE	8/9/2021	220.06	17.51	202.55
MW-NE	2/14/2022	220.06	16.31	203.75
MW-NE	7/25/2022	220.06	14.14	205.92

Notes: LB-9S and LB-22S were abandoned in July 2021 in preparation for a street extension across the northern portion of the landfill.

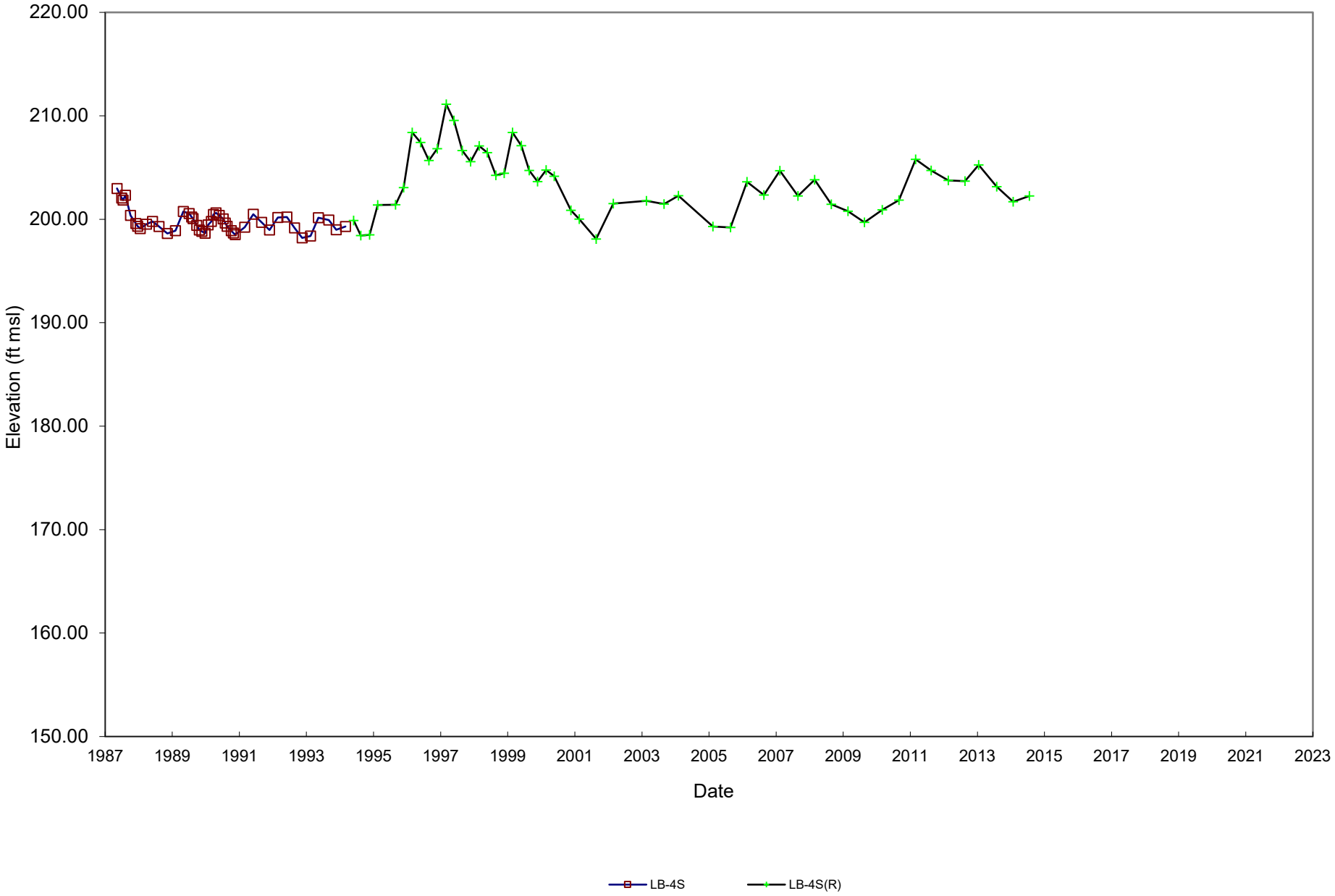
AMSL = above mean sea level
BTOC = below top of casing
NA = not applicable.

LB-1S and LB-1D Hydrographs
Leichner Landfill

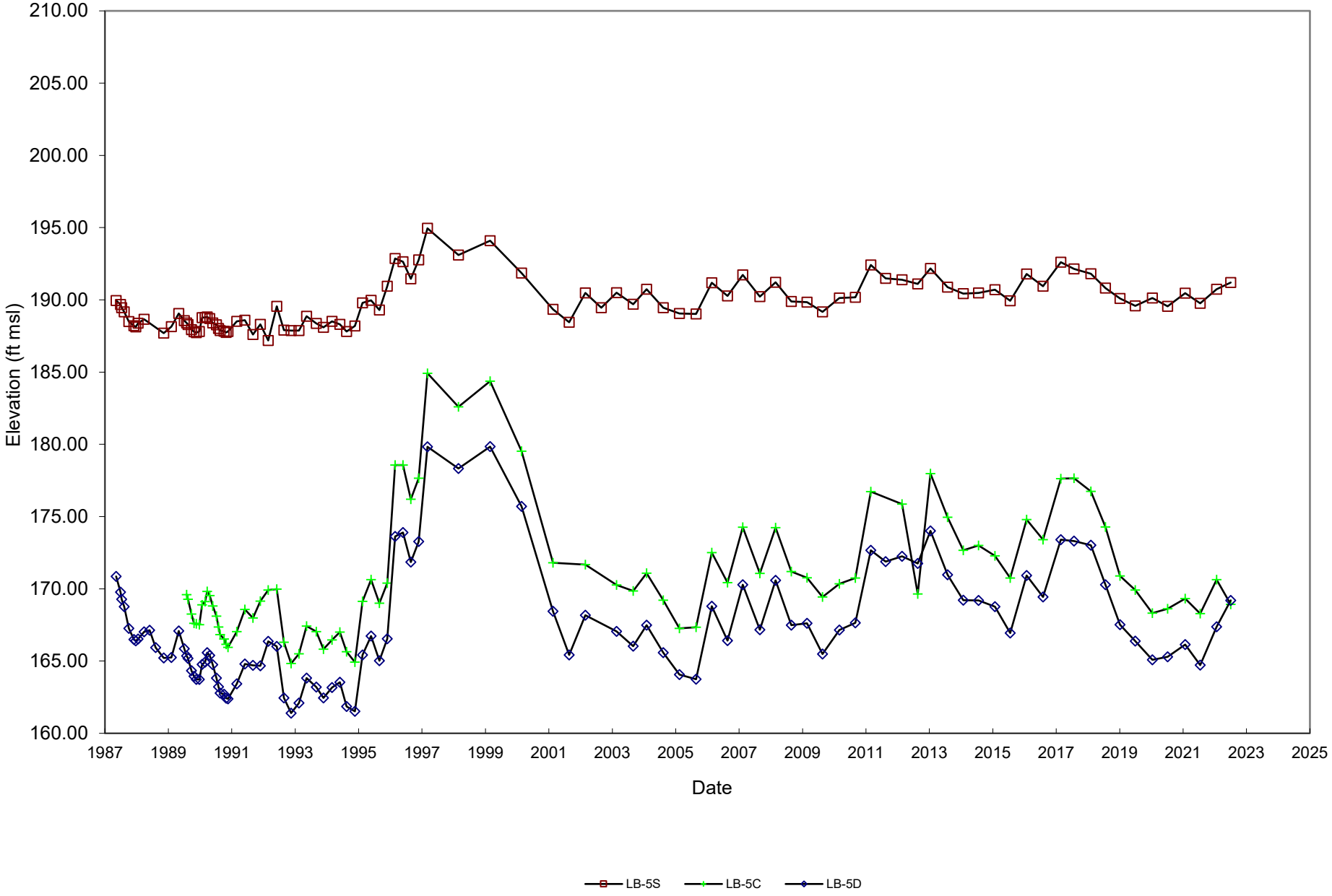
LB-3S and LB-3D Hydrographs
Leichner Landfill



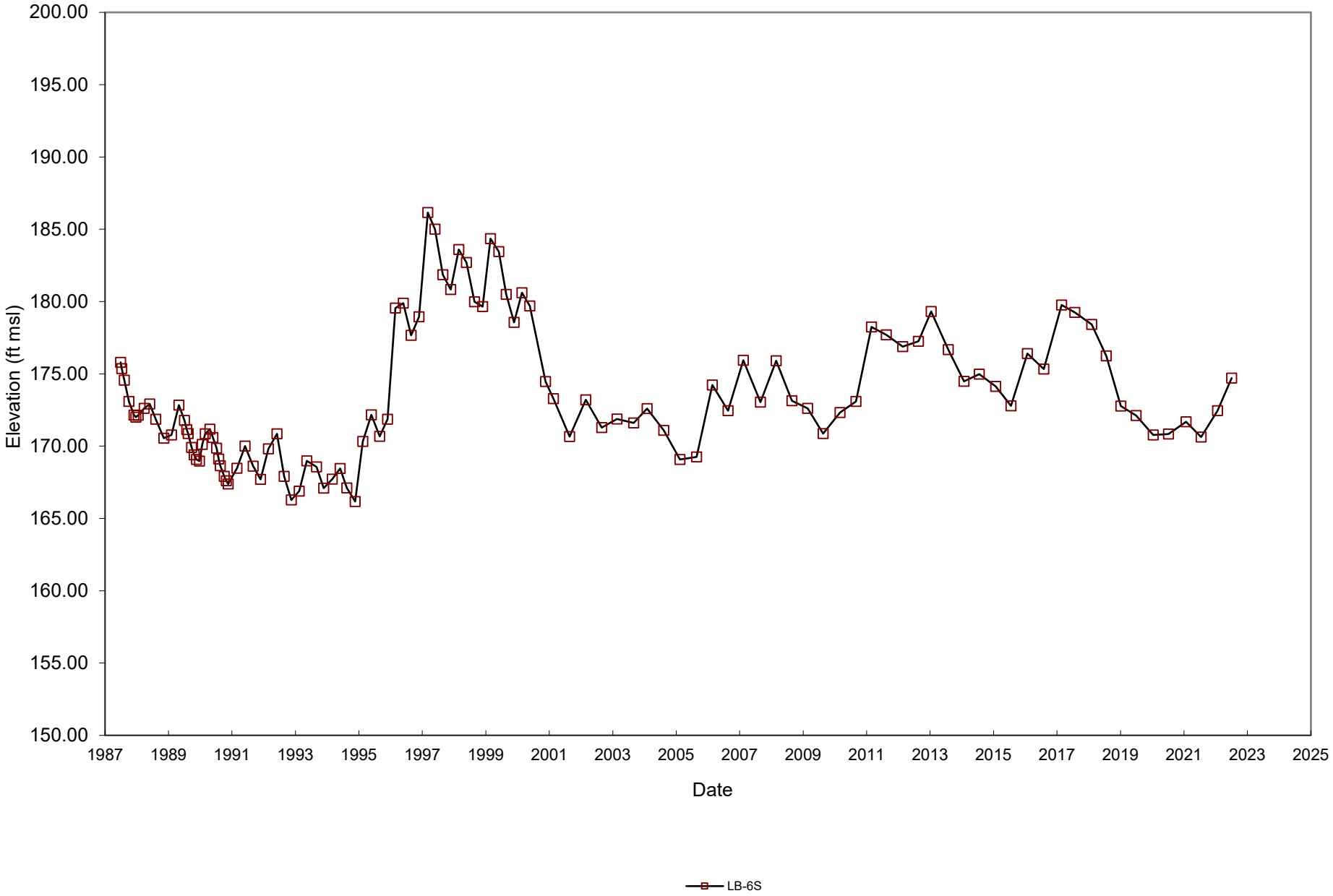
LB-4s, and LB-4S(R)Hydrographs
Leichner Landfill



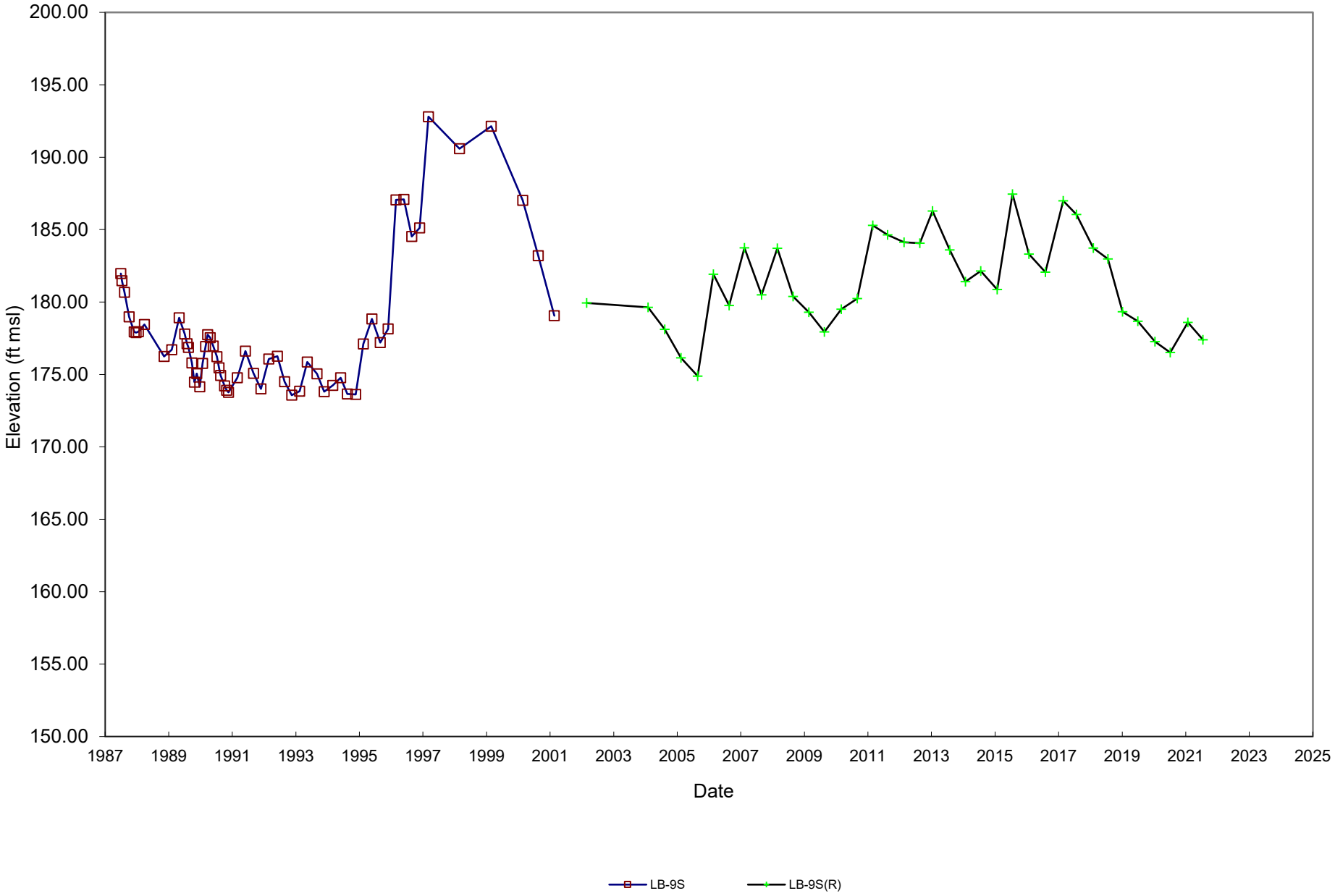
LB 5S, LB-5C, and LB-5D Hydrographs
Leichner Landfill

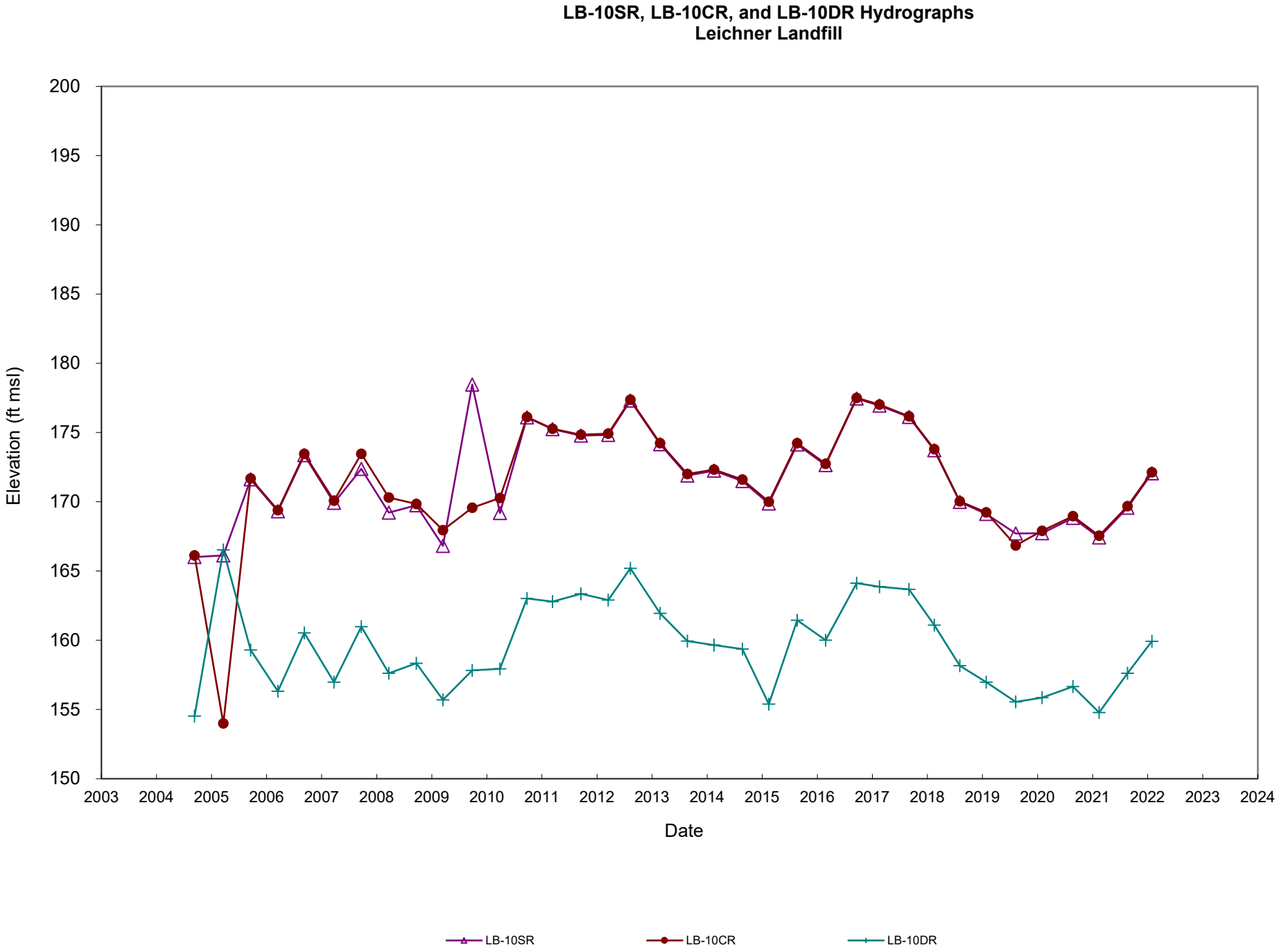


LB-6S Hydrograph
Leichner Landfill

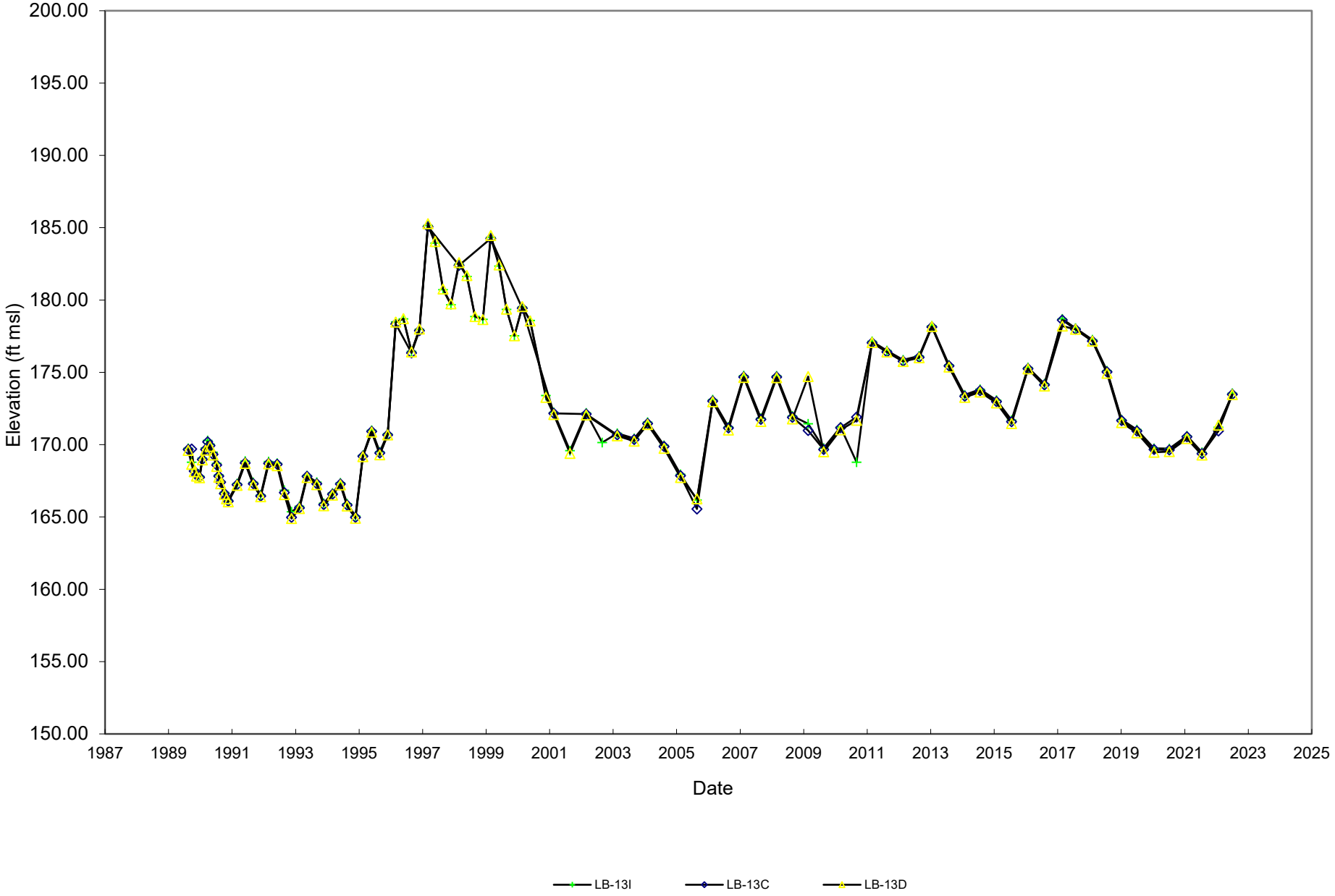


LB-9s, and LB-9S(R) Hydrographs
Leichner Landfill



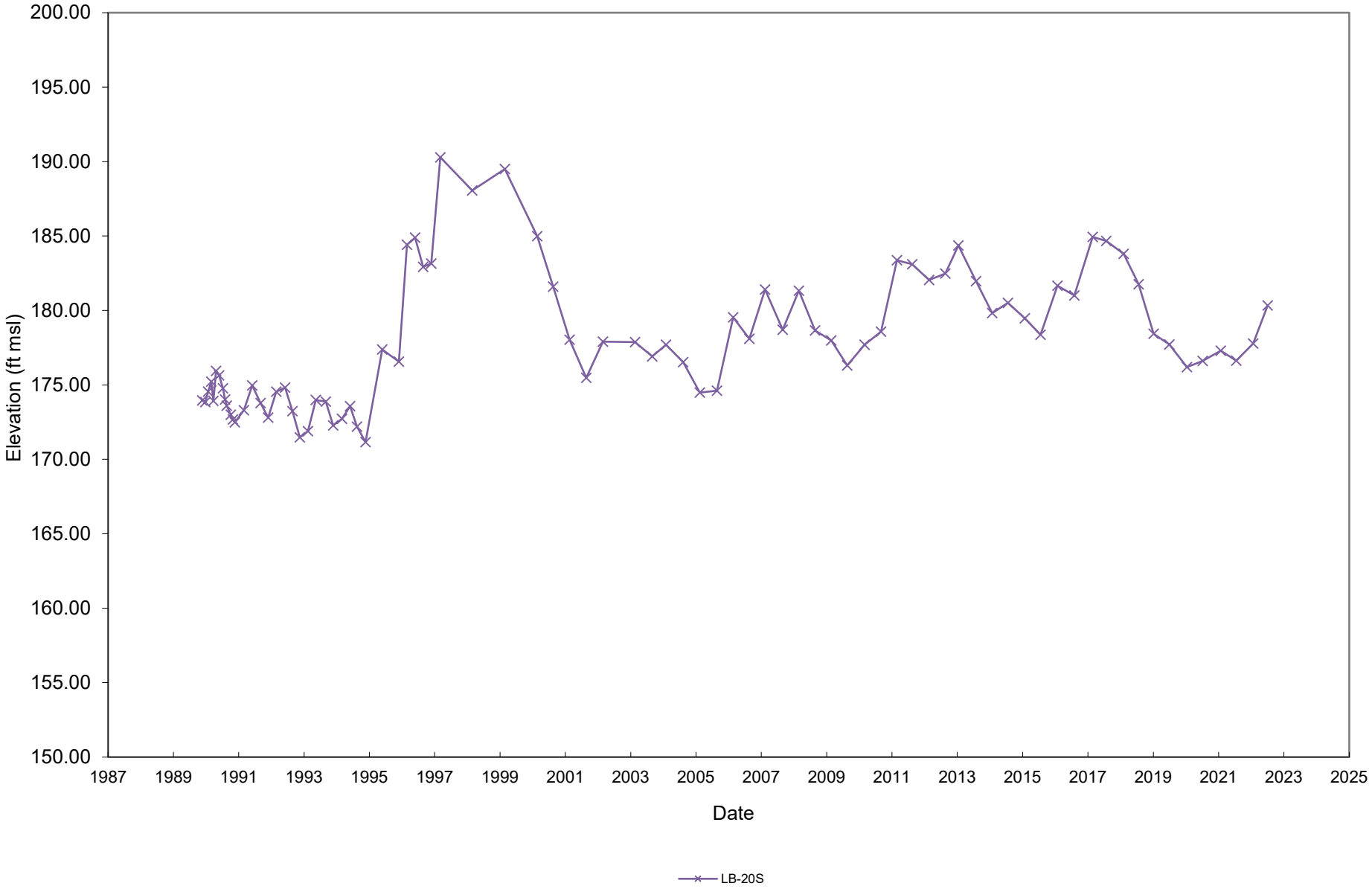

LB-10SR, LB-10CR, and LB-10DR Hydrographs
Leichner Landfill
Elevation (ft msl)
200
195
190
185
180
175
170
165
160
155
150
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Date
LB-10SR
LB-10CR
LB-10DR

LB-13I, LB-13C, and LB-13D Hydrographs
Leichner Landfill

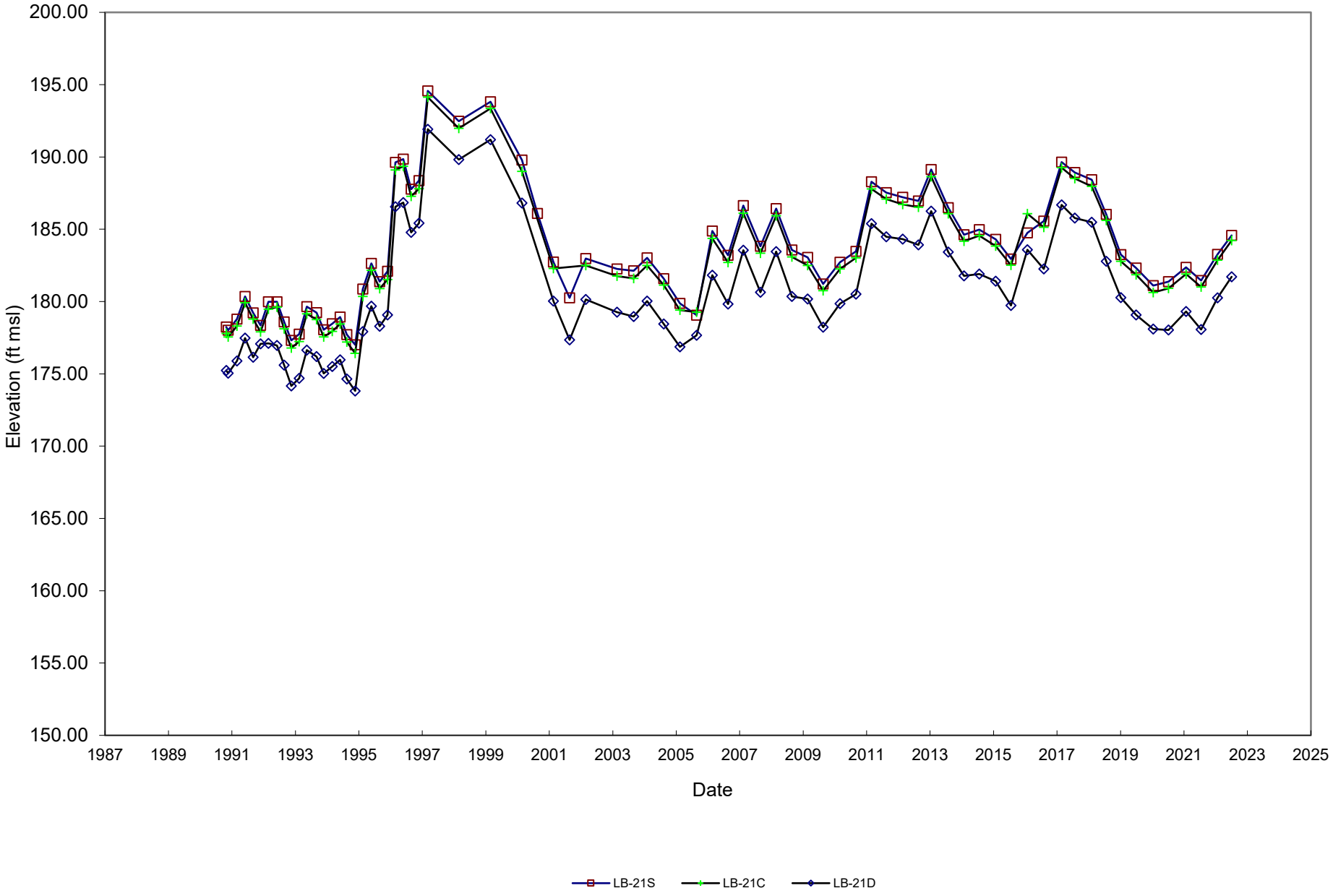


LB-17I and LB-17D Hydrographs
Leichner Landfill

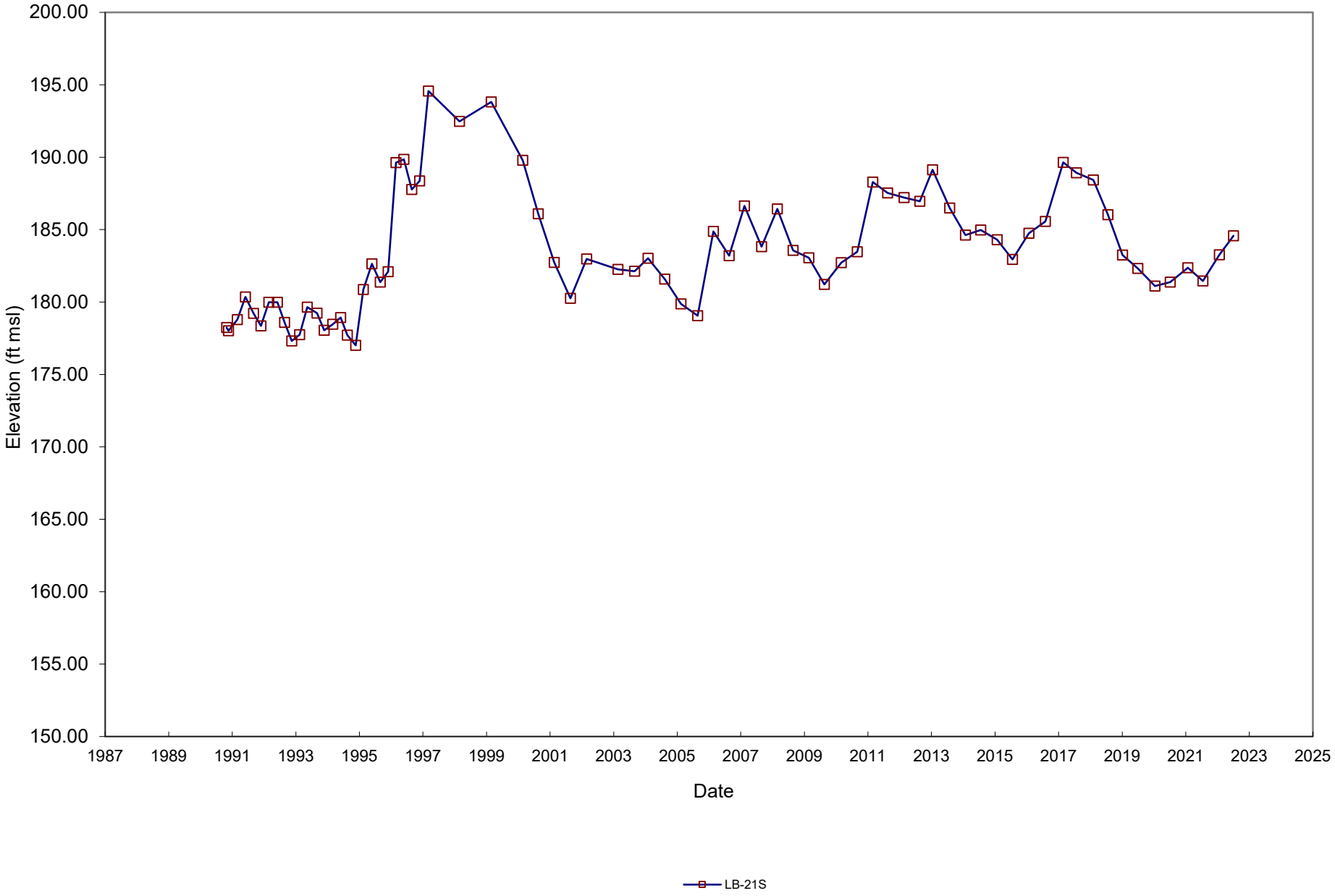
LB-20S Hydrograph
Leichner Landfill



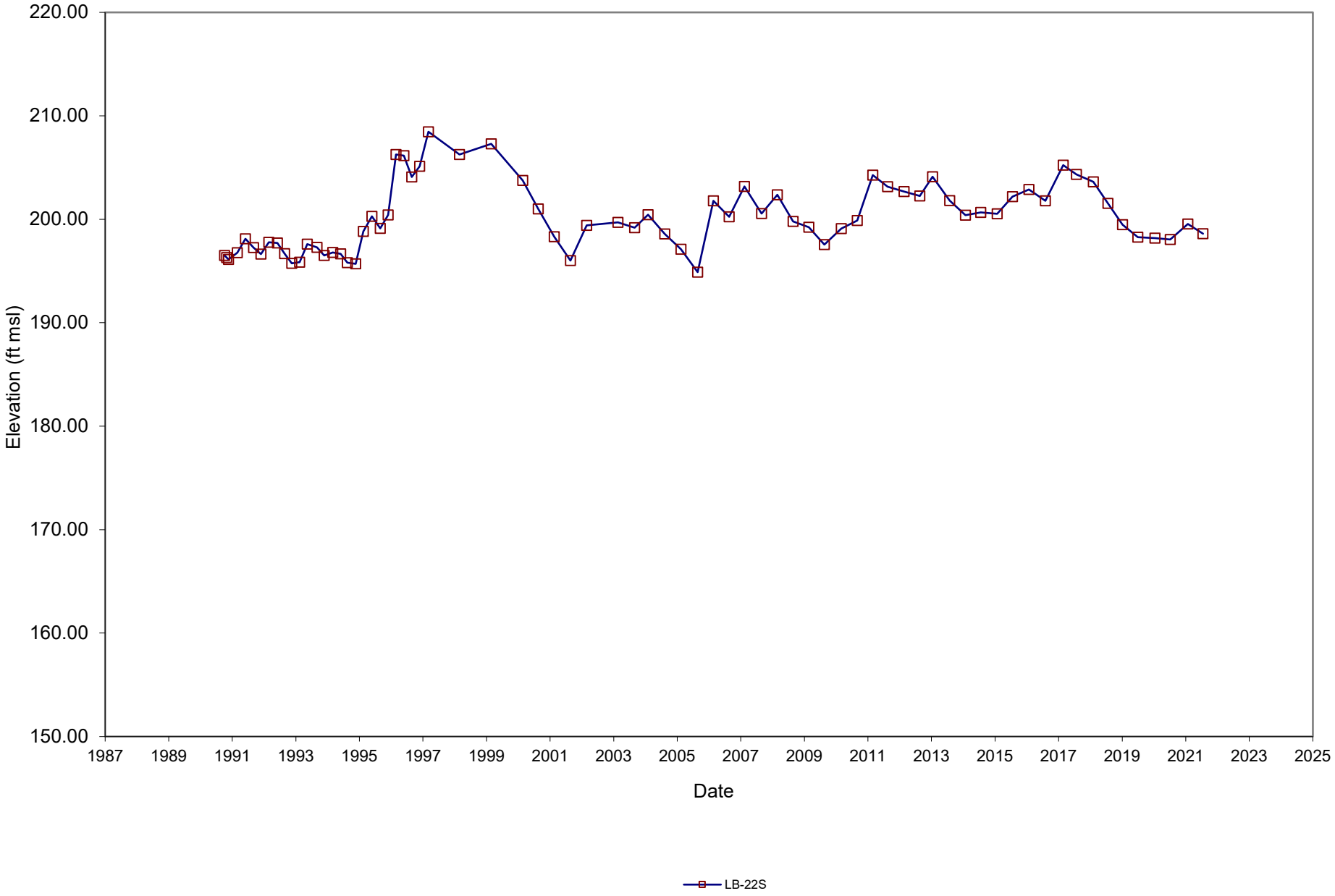
LB-21S, LB-21C, and LB-21D Hydrographs
Leichner Landfill



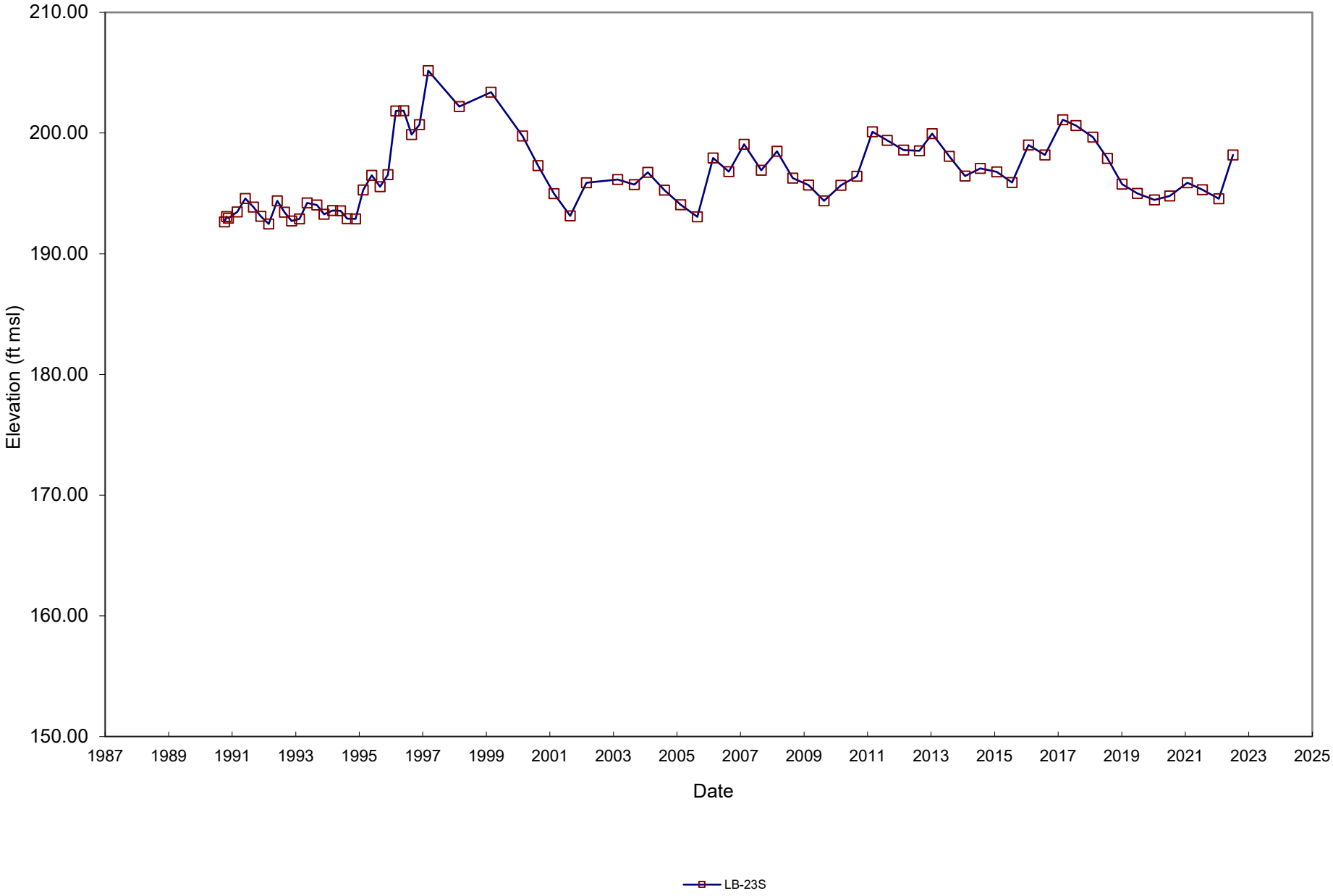
LB-21S Hydrograph
Leichner Landfill



LB-22S Hydrograph
Leichner Landfill

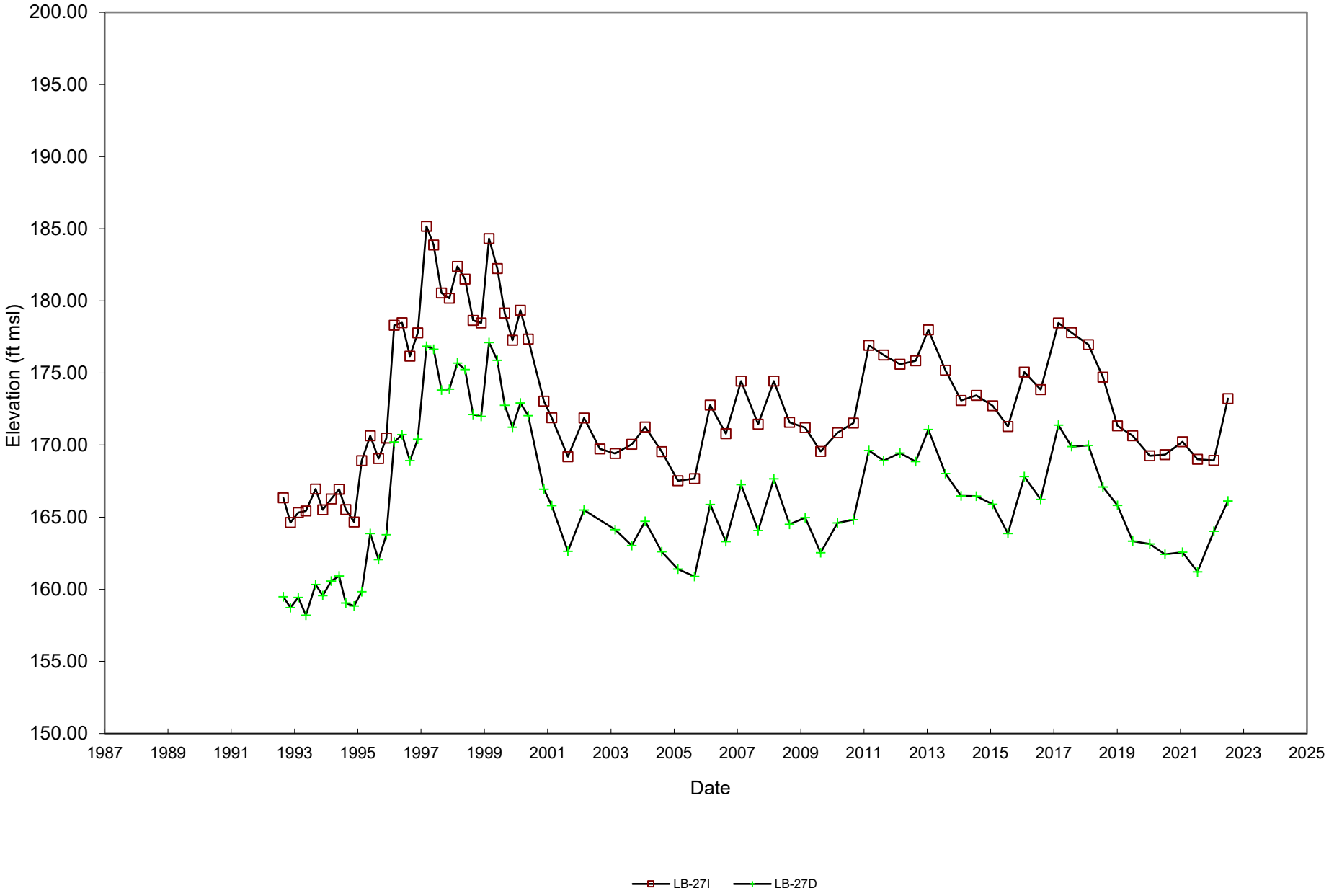


LB-23S Hydrograph
Leichner Landfill



LB-26I and LB-26D Hydrographs
Leichner Landfill

LB-27I and LB-27D Hydrographs
Leichner Landfill



APPENDIX E

Quality Assurance/Quality Control Reviews of 2022 Laboratory Analytical Data

First Quarter (February) 2022 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 1Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2201572

Samples: LB-021422-01-5D (LB-5D), LB-021422-02-DUP1 (LB-5D), LB-021422-03-5S (LB-5S), LB-021422-04-17D (LB-17D) and TB1 (Trip Blank).

Sample Date: 02/14/2022
Laboratory Sample Received Date: 02/15/2022
Sample Receipt Temperature: 0.7ºC
Laboratory Data Received Date: 03/03/2022
QA/QC Review Date: 03/29/2022 (IH)

VOCs

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

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits..

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-021422-02-DUP1 (DUP1) was collected at monitoring well LB-5D (LB- LB-021422-02-5D) on 02/14/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank (TB1) was carried into the field on 02/14/2022 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.

DQR
A DQR was initiated on 3/11/2022 to confirm the dissolved iron concentration (0.326 mg/L) in monitoring well LB-17D.The sample was rerun and confirmed the dissolved iron concentration (0.3 mg/L) on 3/17/2022.

Notes
Method 8260C, 02/18/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Data Validation

Upon final review of lab report K2201572 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/29/2022; IH).

SCS Engineers QA/QC Review
Groundwater - 1Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2201630

Samples: LB-021522-01-3D (LB-3D), LB-021522-02-3S (LB-3S), LB-021522-03-DUP2 (LB-3S), LB-021522-04-20S (LB-20S), LB-021522-05-1D (LB-1D), LB-021522-06-1S (LB-1S), LB-021522-07-10DR (LB-10DR), LB-021522-08-10SR (LB-10SR), and TB2 (Trip Blank).

Sample Date: 02/15/2022
Laboratory Sample Received Date: 02/16/2022
Sample Receipt Temperature: 0.9ºC
Laboratory Data Received Date: 03/02/2022
QA/QC Review Date: 03/29/2022 (IH)

VOCs

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

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits.
MS	All spike recoveries were within control limits.
Replicate	All RPDs were within control limits.

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
MS	All % recoveries were within control limits except for chloride in batch K2201630-006MS (* flag). This is noted and qualified for in the case narrative.
MSD	All RPDs were within control limits.
Replicate	All RPDs were within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-021522-03-DUP2 (LB-3S) (DUP2) was collected at monitoring well LB-3S (LB-021522-02-3S) on 2/15/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 02/15/2022 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.

DQR
A DQR was initiated on 3/11/2022 to check the detection of chloroform and dichlorobromomethane in the LB-3S sample (LB-021522-02-3S) and chloroform in the DUP2 sample (LB-021522-03-DUP2 (LB-3S)). The lab confirmed the VOC results on 3/29/2022.

Notes

Method 8260C, 02/22/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 02/22/2022:The ALS minimum relative response factor criterion for Naphthalene was not met in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compound was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Data Validation

Upon final review of lab report K2201630 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/29/2022; IH).

SCS Engineers QA/QC Review
Groundwater - 1Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2201694

Samples: LB-021622-01-27D (LB-27D), LB-021622-02-27I (LB-27I), LB-021622-03-13D (LB-13D), LB-021622-04-13I (LB-13I), LB-021622-05-FB (Field Blank), LB-021622-06-26I (LB-26I), LB-021622-07-26D (LB-10D), LB-021622-08-6S (LB-6S), LB-021622-09-17I and TB3 (Trip Blank).

Sample Date: 02/16/2022
Laboratory Sample Received Date: 02/17/2022
Sample Receipt Temperature: 1.6ºC
Laboratory Data Received Date: 03/07/2022
QA/QC Review Date: 03/31/2022 (IH)

VOCs

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

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits.
MS	All spike recoveries were within control limits.
Replicate	All RPDs were within control limits.

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
MS	All % recoveries were within control limits except for chloride in batch K2201694-002MS (* flag). This is noted and qualified for in the case narrative.
MSD	All RPDs were within control limits.
Replicate	All RPDs were within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Blank
A field blank sample LB-021622-05-FB (LB-13I) (Field Blank) was collected near monitoring well LB-13I (LB-021622-04-13I) on 2/16/2022. All reported analytes were reported as non-detect.

Trip Blank
A laboratory supplied trip blank (TB3) was carried into the field on 02/16/2022 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.

DQR
None.

Notes

Method 8260C, 02/22/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 02/22/2022:The ALS minimum relative response factor criterion for Naphthalene was not met in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compound was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Data Validation

Upon final review of lab report K2201694 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (03/31/2022; IH).

Special Groundwater Sampling Event
(April) 2022 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 1Q 2022 3S Resample Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2203568

Samples: LB-040422-01-3S (LB-3S), LB-040422-02-DUP (LB-3S), LB-040422-03-FB (LB-3S), TB1 (Trip Blank)

Sample Date: 04/04/2022
Laboratory Sample Received Date: 04/06/2022
Sample Receipt Temperature: 2.9ºC
Laboratory Data Received Date: 04/25/2022
QA/QC Review Date: 01/23/2023 (BR)

VOCs

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

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits..

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-040422-02-DUP (LB-3S) was collected at monitoring well LB-3S on 04/04/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank (TB1) was carried into the field on 04/04/2022 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.

DQR
None.

Notes

Data Validation
Upon final review of lab report K2203568 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (01/23/2023; BR).

Second Quarter (May) 2022 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 2Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2205761

Samples: LB-052522-01-1S (LB-1S), LB-052522-02-20S (LB-20S), LB-052522-03-FB1 (LB-3S), LB-052522-04-3S (LB-3S), LB-052522-05-DUP1 (LB-3S), and TB1 (Trip Blank).

Sample Date: 05/25/2022
Laboratory Sample Received Date: 05/26/2022
Sample Receipt Temperature: 4.0°C
Laboratory Data Received Date: 06/21/2022
QA/QC Review Date: 06/22/2022 (BR)

VOCs

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

General Chemistry

Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries within control limits.
MS	All % recoveries were within control limits.
MSD	All RPDs were within control limits.
Replicate	All RPDs were within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-052522-05-DUP1 (LB-3S) was collected at monitoring well LB-3S (LB-052522-04-3S) on 5/25/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 05/25/2022 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.

DQR
None.

Notes
Method 8260C, 05/27/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Data Validation
Upon final review of lab report K2205761 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (06/22/2022; BR).

Third Quarter (July) 2022 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 3Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2208415

Samples: LB-072522-01-FB (LB-5S), LB-072522-02-5S (LB-5S), LB-072522-03-27I (LB-27I), LB-072522-04-13I (LB-13I), LB-072522-05-26I (LB-26I), LB-072522-06-6S (LB-6S) and TB1 (Trip Blank).

Sample Date: 07/25/2022
Laboratory Sample Received Date: 07/26/2022
Sample Receipt Temperature: 5.3ºC
Laboratory Data Received Date: 08/01/2022
QA/QC Review Date: 08/05/2022 (BR)

VOCs

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

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits..

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Trip Blank
A laboratory supplied trip blank (TB1) was carried into the field on 07/25/2022 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.

DQR
None.

Notes
Method 8260C, 07/27/2022:cis-1,3-Dichloropropene was flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Data Validation
Upon preliminary review of lab report K2208415 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (08/05/2022;BR).

SCS Engineers QA/QC Review
Groundwater - 3Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2208489

Samples: LB-072622-01-20S (LB-20S), LB-072622-02-1S (LB-1S), LB-072622-03-3S (LB-3S), LB-072622-04-DUP (LB-3S), LB-072622-05-10SR (LB-10SR), and TB2

Sample Date: 07/26/2022
Laboratory Sample Received Date: 07/27/2022
Sample Receipt Temperature: 2.7ºC
Laboratory Data Received Date: 08/03/2022
QA/QC Review Date: 08/05/2022 (BR)

VOCs

Method Blanks	All analytes were reported as non-detect.
Surrogates	All sample surrogates were within QC limits.
LCS	All % recoveries were within QC limits, and all surrogate recoveries were within control limits except hexachlorobutadiene in batch KQ2212460-03 (* flag). This is noted and qualified in the case narrative.
LCSD	All RPDs were within QC limits.

Dissolved Metals

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries were within control limits.
MS	All spike recoveries were within control limits.
Replicate	All RPDs were within control limits.

General Chemistry

Method Blanks	All analytes were reported as non-detect.
LCS	All % recoveries within control limits.
MS	All % recoveries were within control limits.
MSD	All RPDs were within control limits.
Replicate	All RPDs were within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-072622-04 (LB-3S) was collected at monitoring well LB-3S (LB-072622-03-3S) on 7/22/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 07/26/2022 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.

DQR
None.

Notes
Method 8260C, 07/28/2022:Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes

must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 07/28/2022:The advisory criterion was exceeded for Hexachlorobutadiene in Laboratory Control Sample (LCS). As per the ALS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only. No further corrective action was required.

Data Validation

Upon final review of lab report K2208489 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (08/05/2022;BR).

Fourth Quarter (November) 2022 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 4Q 2022 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2213993

Samples: LB-112922-01-1S (LB-1S), LB-112922-02-DUP (LB-1S), LB-112922-03-20S (LB-20S), LB-112922-04-FB (LB-3S), LB-112922-05-3S (LB-3S)

Sample Date: 11/29/2022
Laboratory Sample Received Date: 11/29/2022
Sample Receipt Temperature: 0.5 and 2.5ºC
Laboratory Data Received Date: 01/23/2023
QA/QC Review Date: 01/23/2023 (BR)

VOCs

Method Blanks	All analytes reported as non-detect.
Surrogates	All sample surrogates were within QC limits except 4-bromofluorobenzene in batches KQ2221639-03 and KQ2221639-04, and dibromofluoromethane in batch K2213993-005 (* flags). This is noted and qualified for in the case narrative.
LCS	All % recoveries were within QC limits, and all surrogate recoveries were within control limits.
LCSD	All RPDs were within QC limits.

General Chemistry

Method Blanks	All analytes reported as non-detect.
LCS	All % recoveries within control limits.
MS	All % recoveries were within control limits.
MSD	All RPDs were within control limits.
Replicate	All RPDs were within control limits.

Hold Times
All analytical hold times were met.

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

Field QA/QC
Field Duplicate
A field duplicate sample LB-112922-02-DUP (LB-1S) was collected at monitoring well LB-1S on 11/29/2022. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 11/29/2022 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.

DQR
None.

Notes
Method 8260C, 12/02/2022:Chloromethane, Dichlorodifluoromethane, and Toluene-d8 were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Method 8260C, 12/02/2022:The upper control criterion was exceeded for 4-Bromofluorobenzene in Laboratory Control Sample (LCS)KQ2221639-03 and Duplicate Laboratory Control Sample (DLCS) KQ2221639-04. The spike recoveries for all target analytes were acceptable for the LCS/DLCS. The quality of the sample data was not significantly affected. No further corrective action was appropriate.

Method 8260C, 12/02/2022:The upper control criterion was exceeded for Dibromofluoromethane in sample LB-112922-04-FB. No target analytes were detected in the sample. The error associated with an elevated recovery equated to a high bias. The quality of the sample data was not significantly affected. No further corrective action was appropriate.

Data Validation

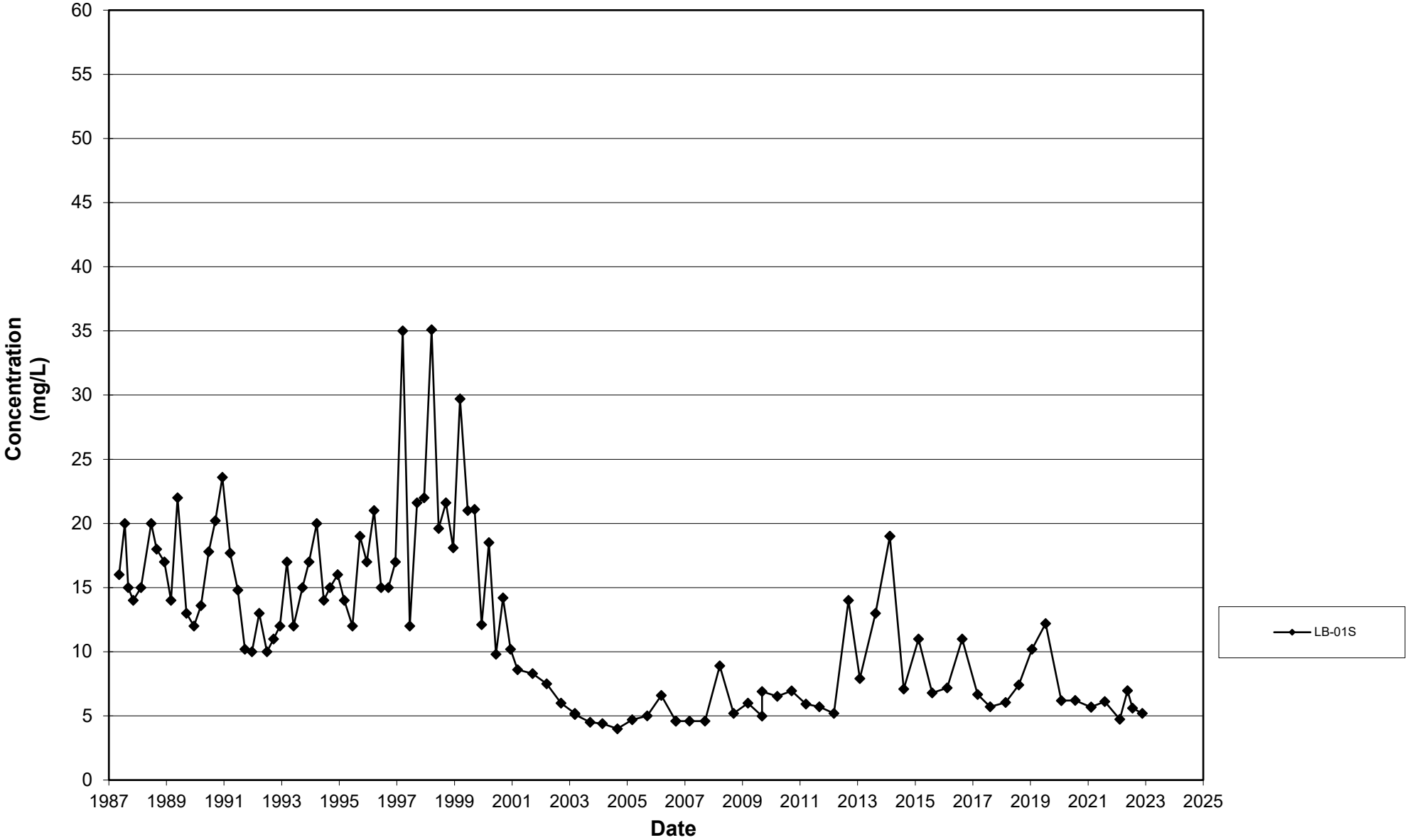
Upon final review of lab report K2213993 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (01/23/2023).

APPENDIX F

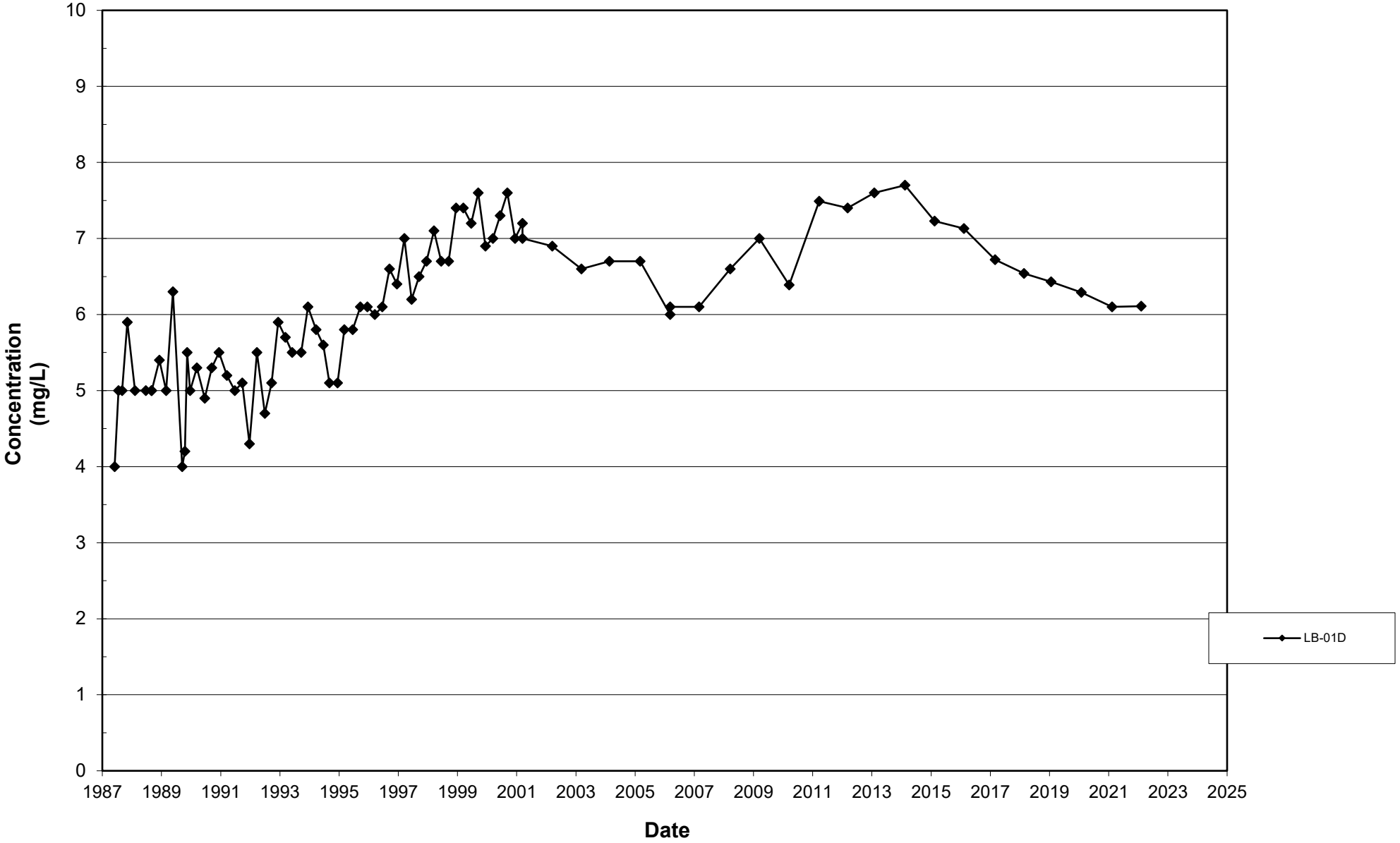
Groundwater Time-Concentration Graphs

Chloride

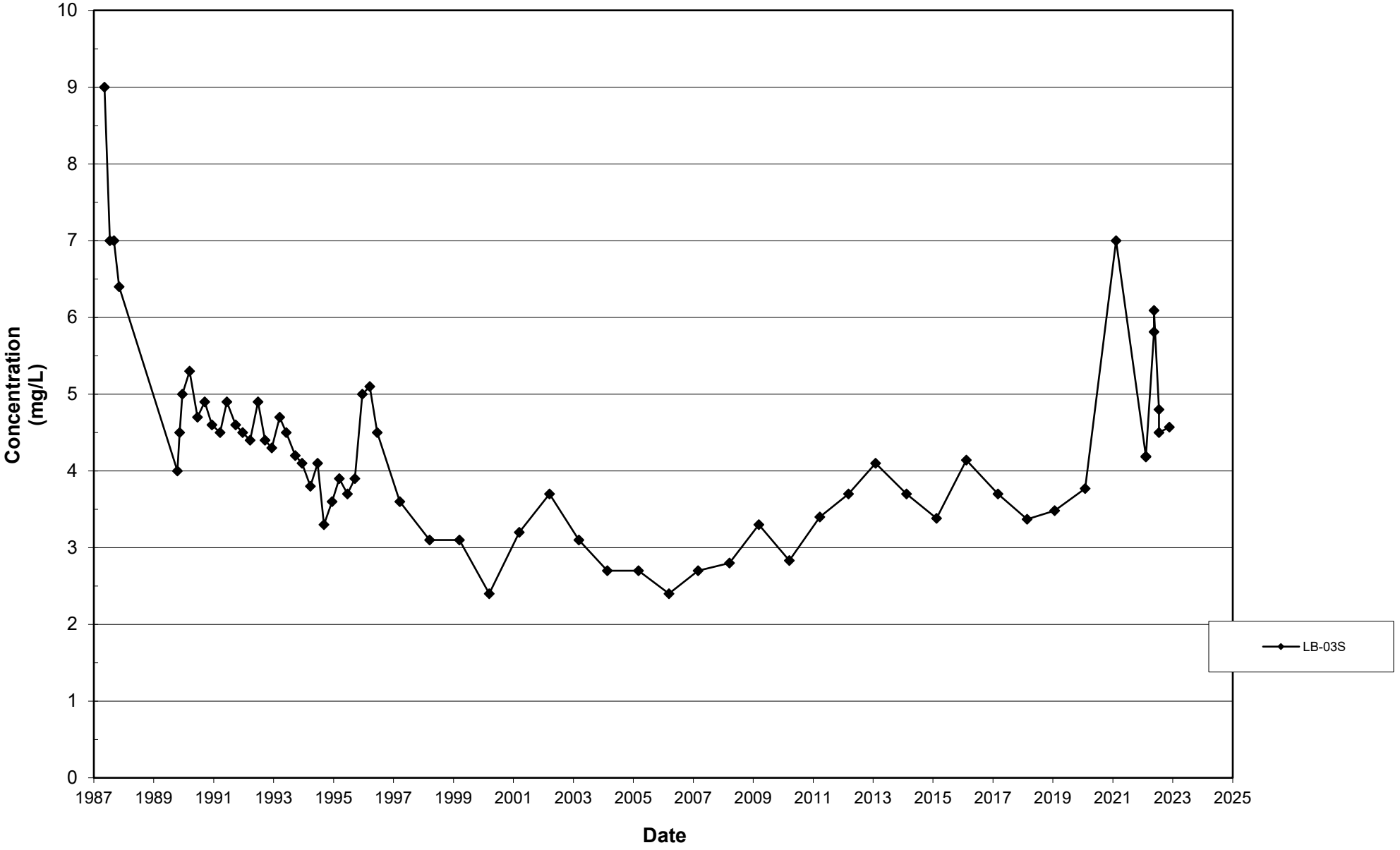
Leichner Landfill
Chloride, LB-01S
1987 - 2022



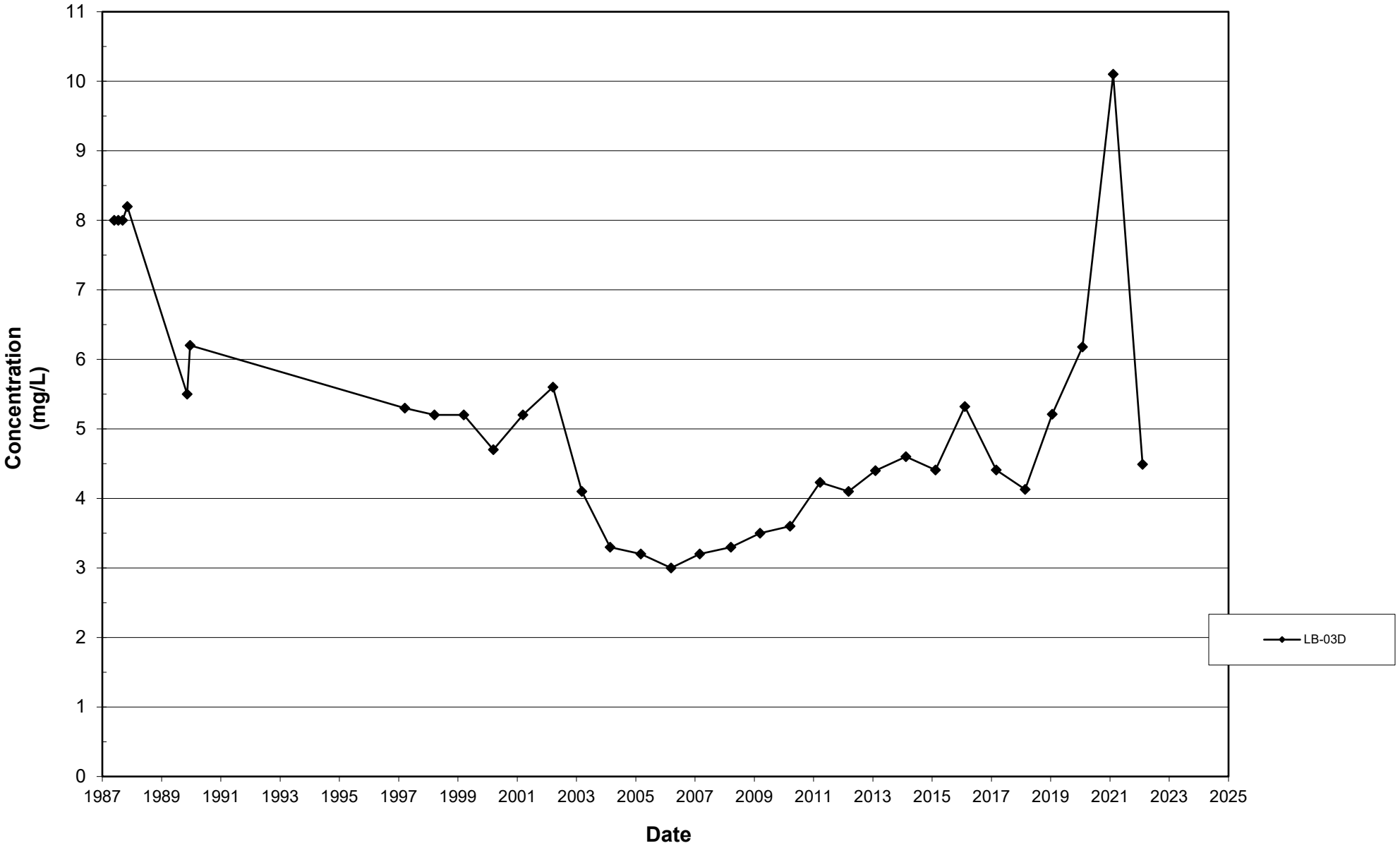
Leichner Landfill
Chloride, LB-01D
1987 - 2022



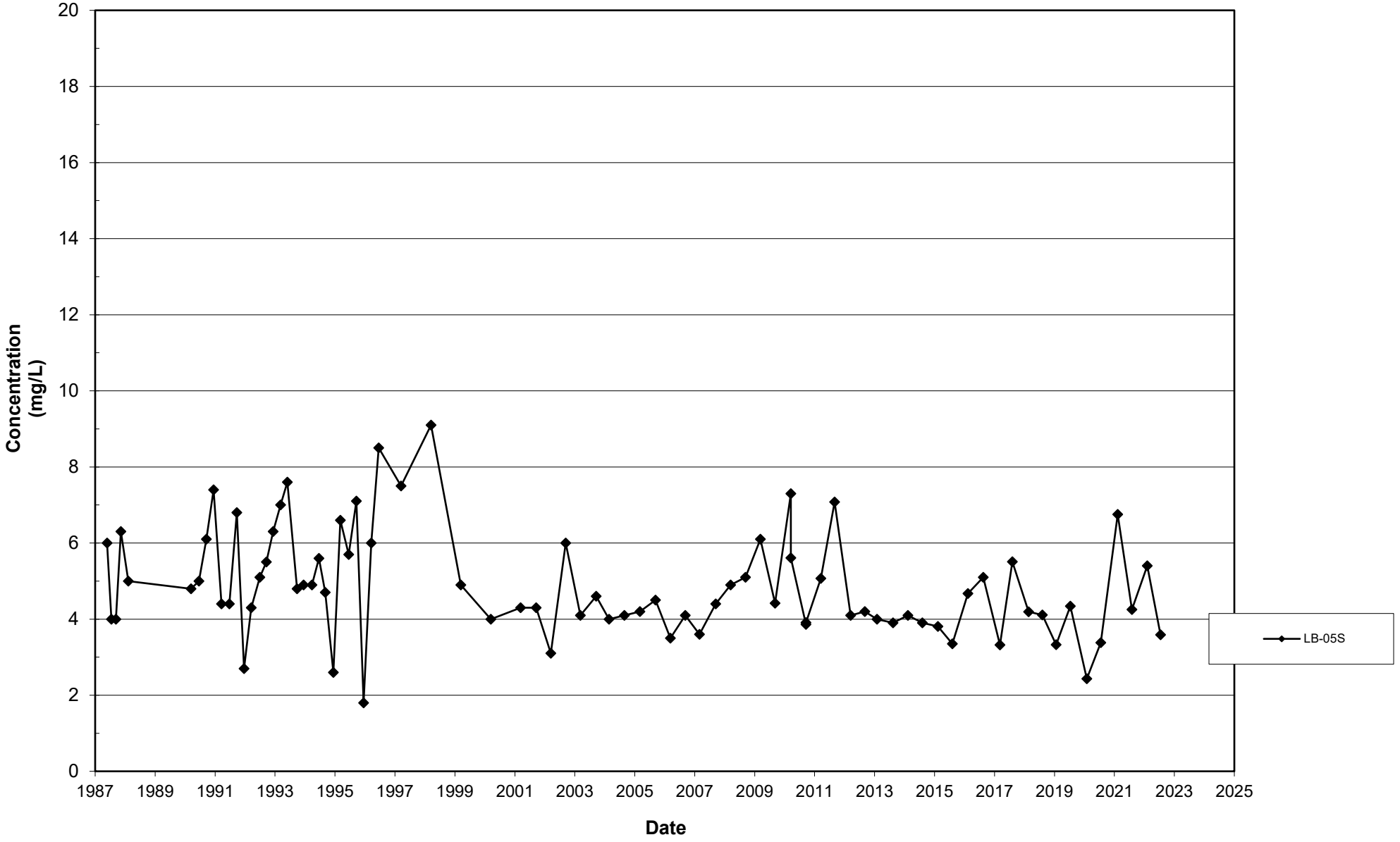
Leichner Landfill
Chloride, LB-03S
1987 - 2022



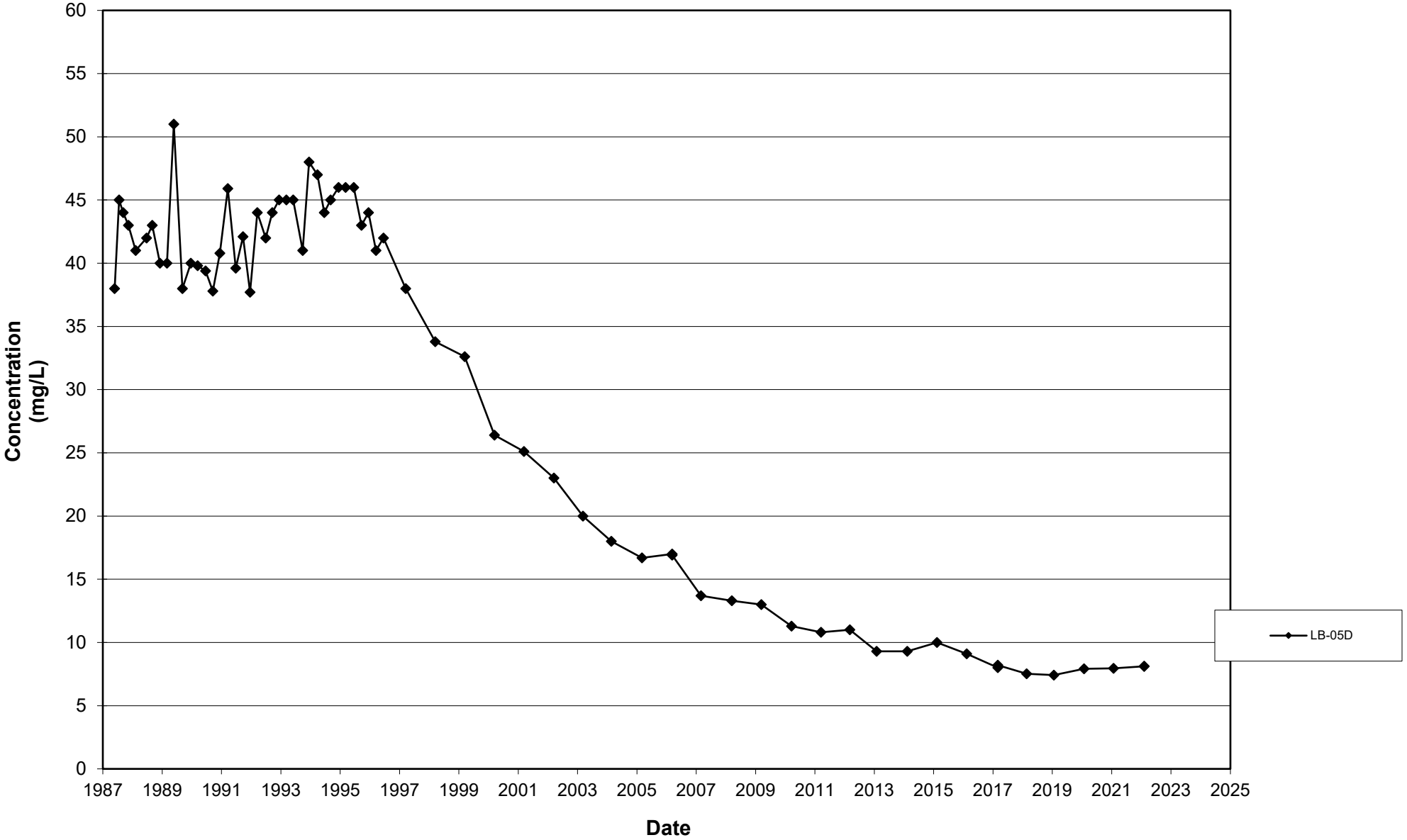
Leichner Landfill
Chloride, LB-03D
1987 - 2022



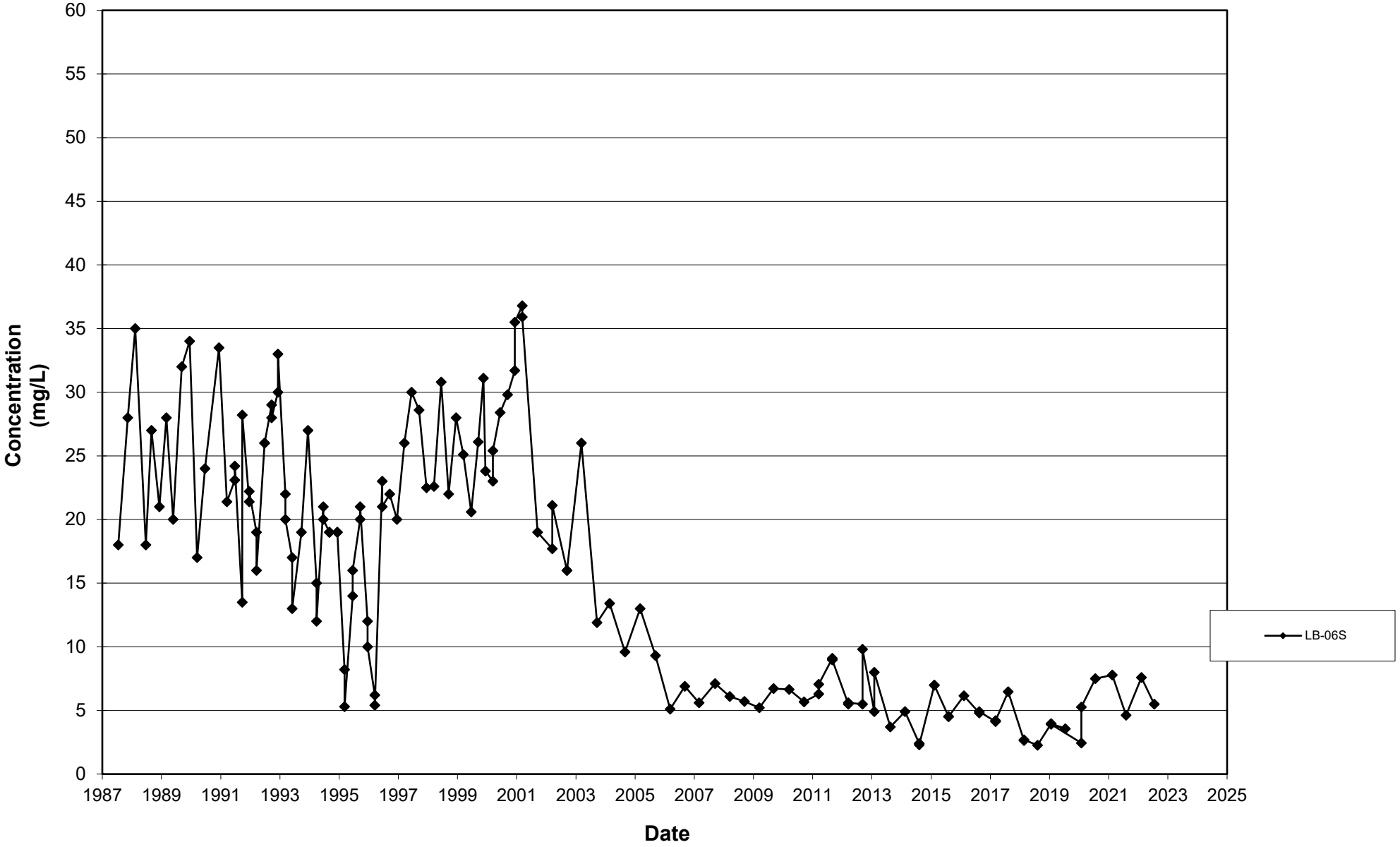
Leichner Landfill
Chloride, LB-05S
1987 - 2022



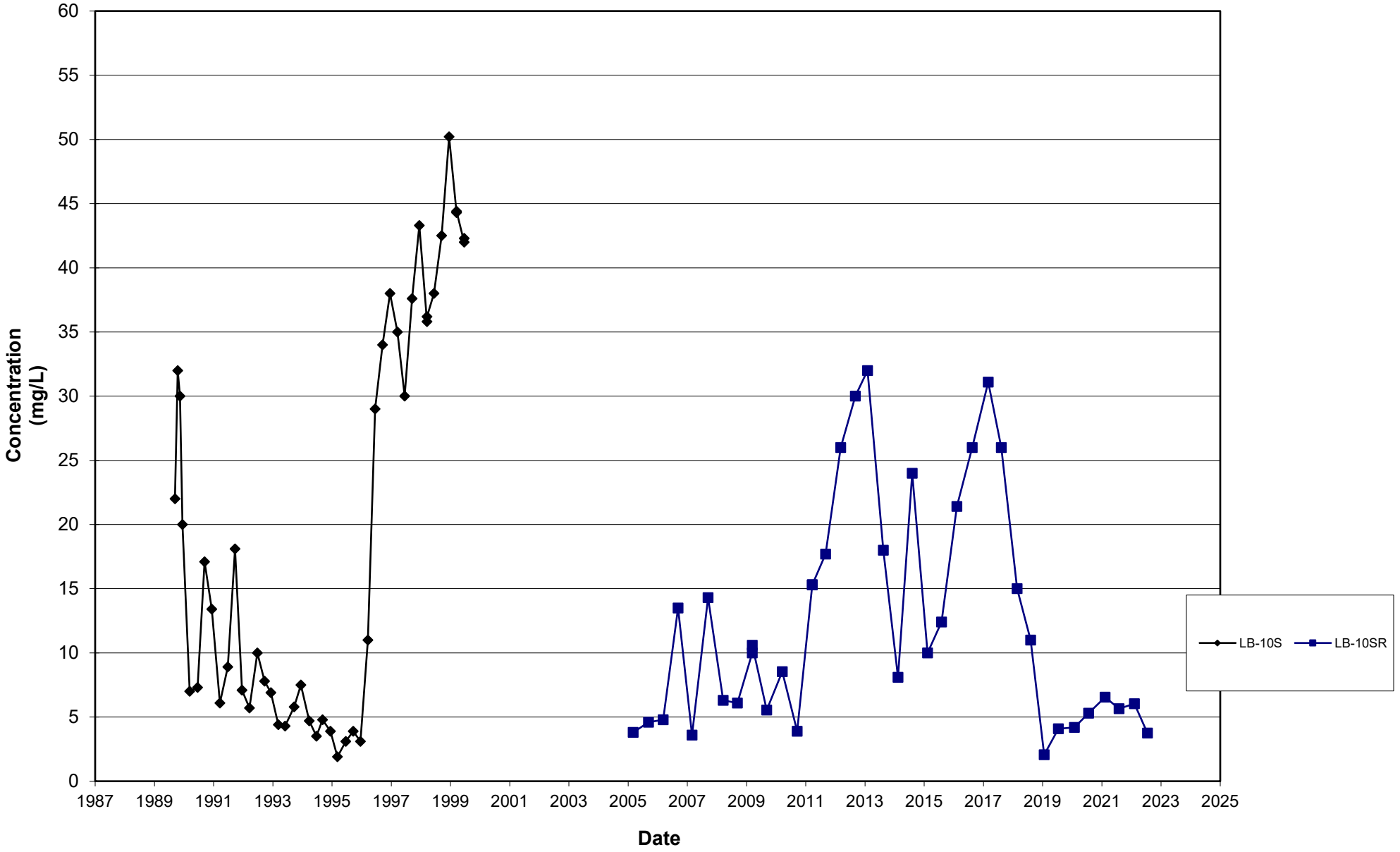
Leichner Landfill
Chloride, LB-05D
1987 - 2022



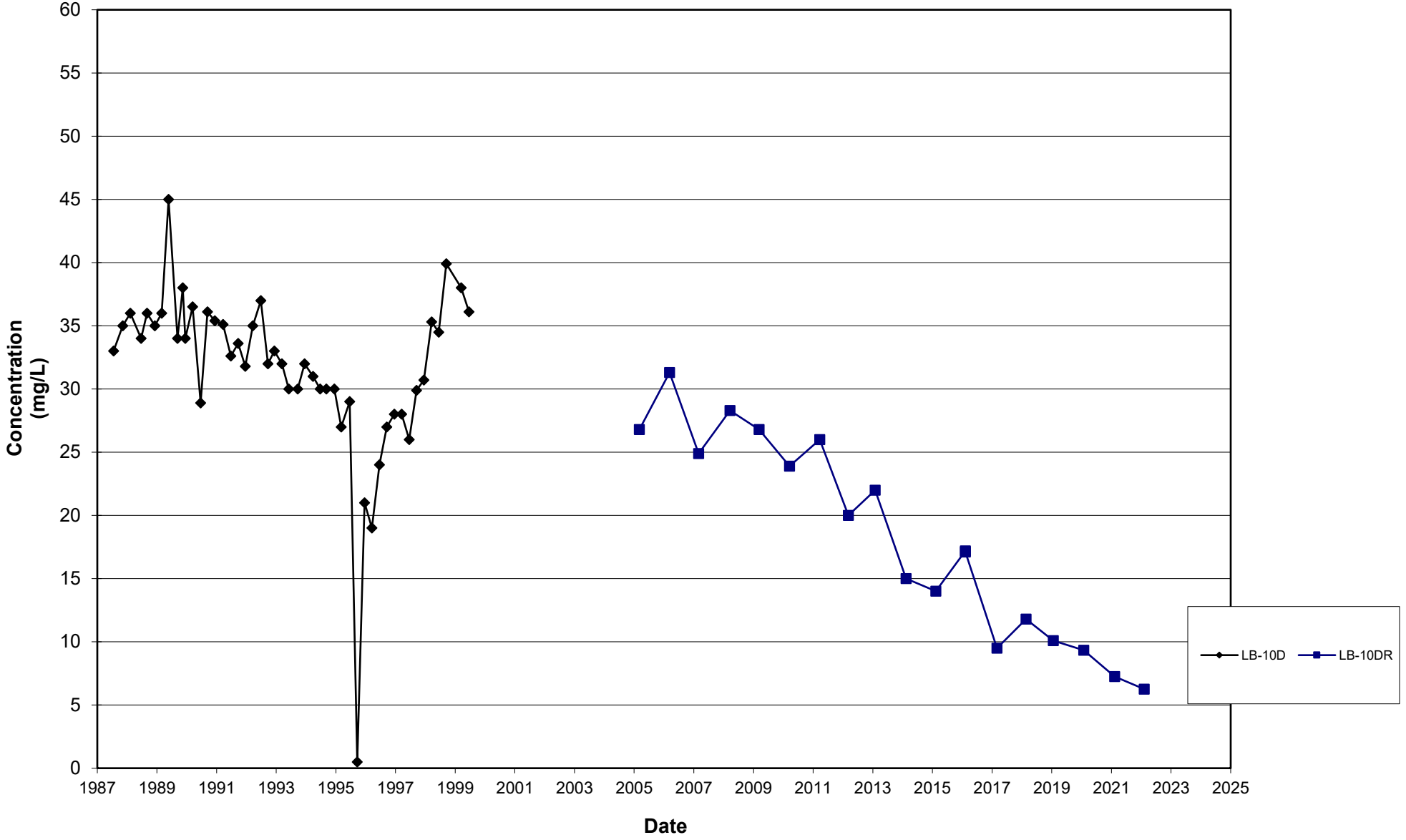
Leichner Landfill
Chloride, LB-06S
1987 - 2022



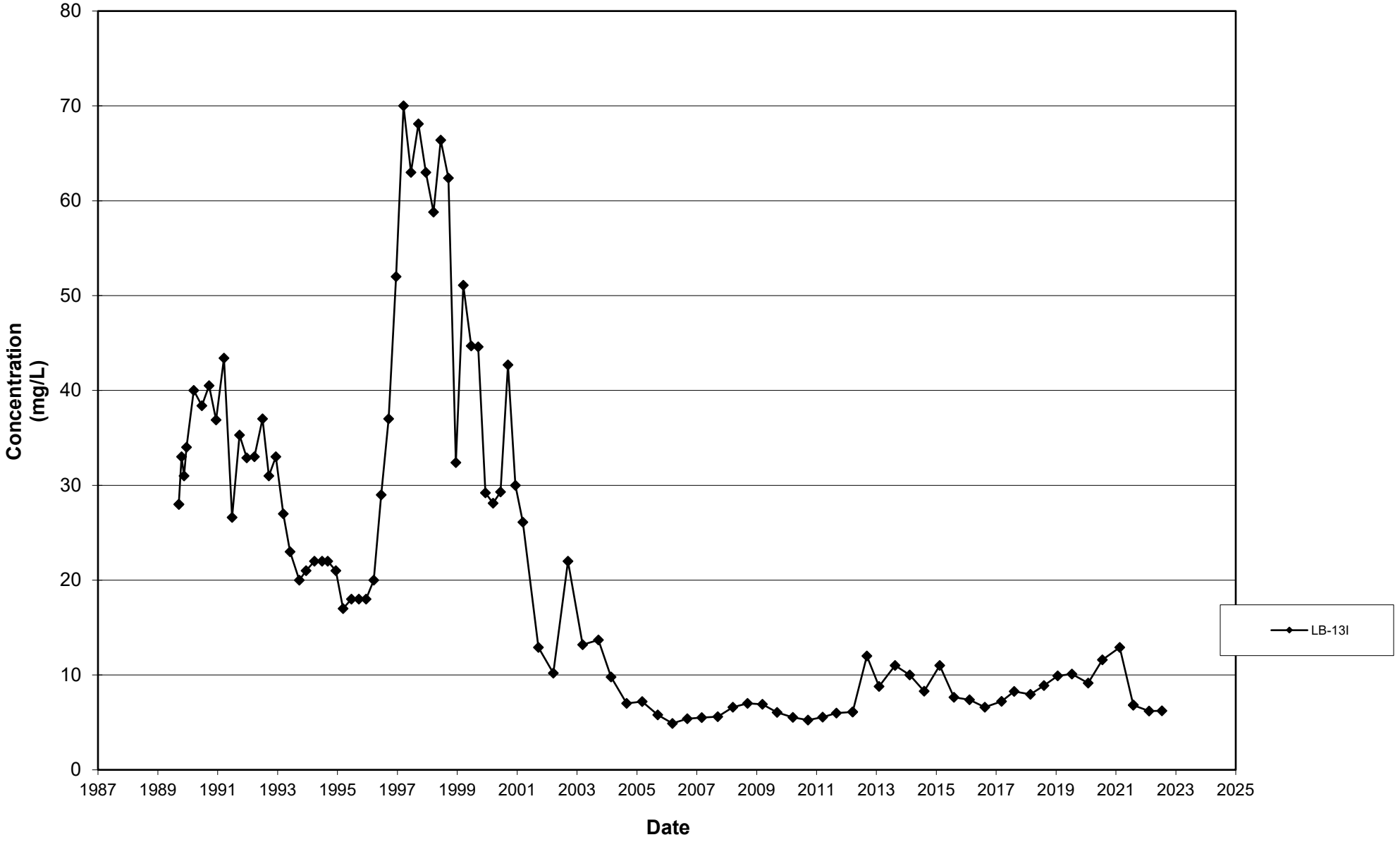
Leichner Landfill
Chloride, LB-10S and LB-10SR
1987 - 2022



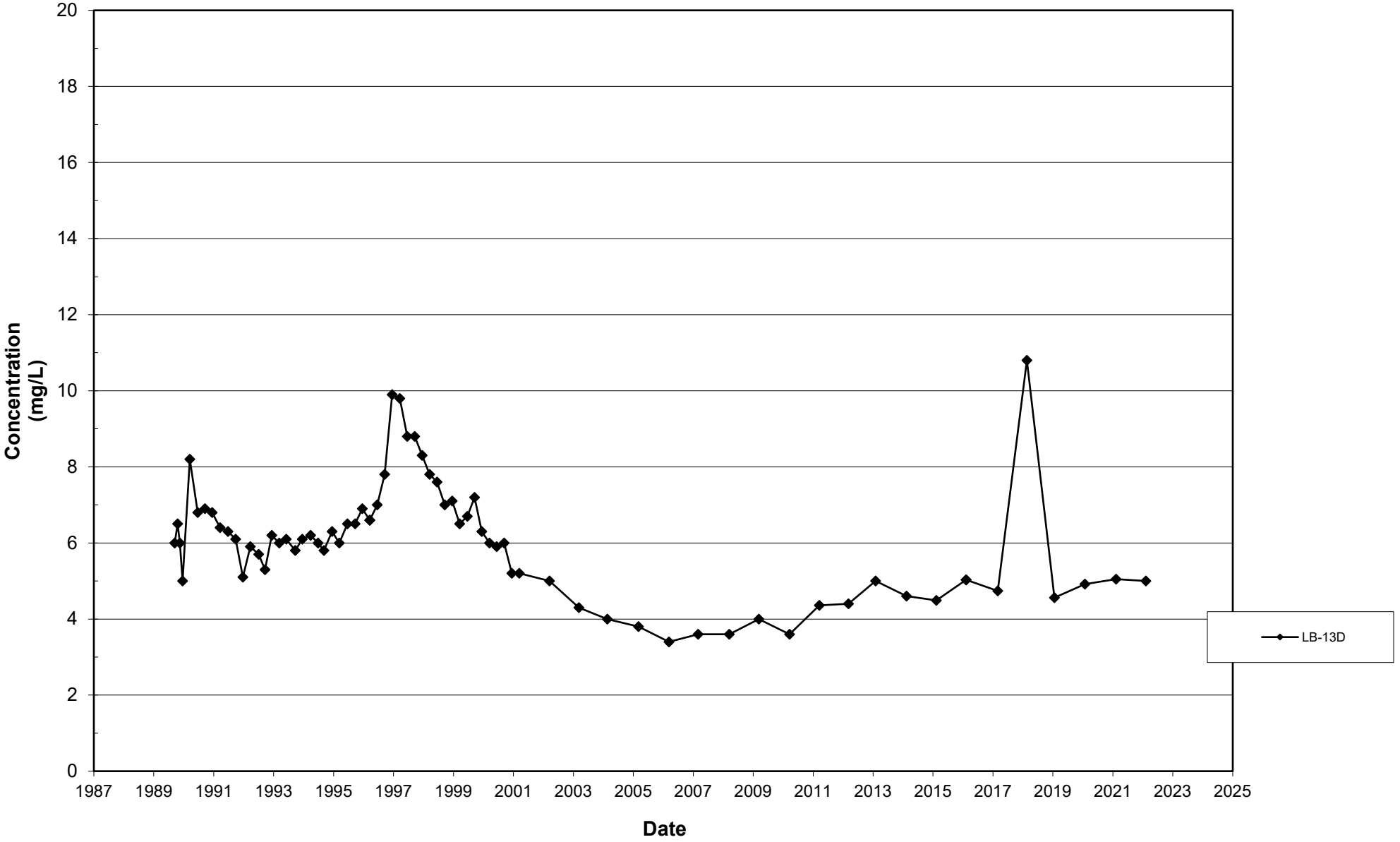
Leichner Landfill
Chloride, LB-10D and LB-10DR
1987 - 2022



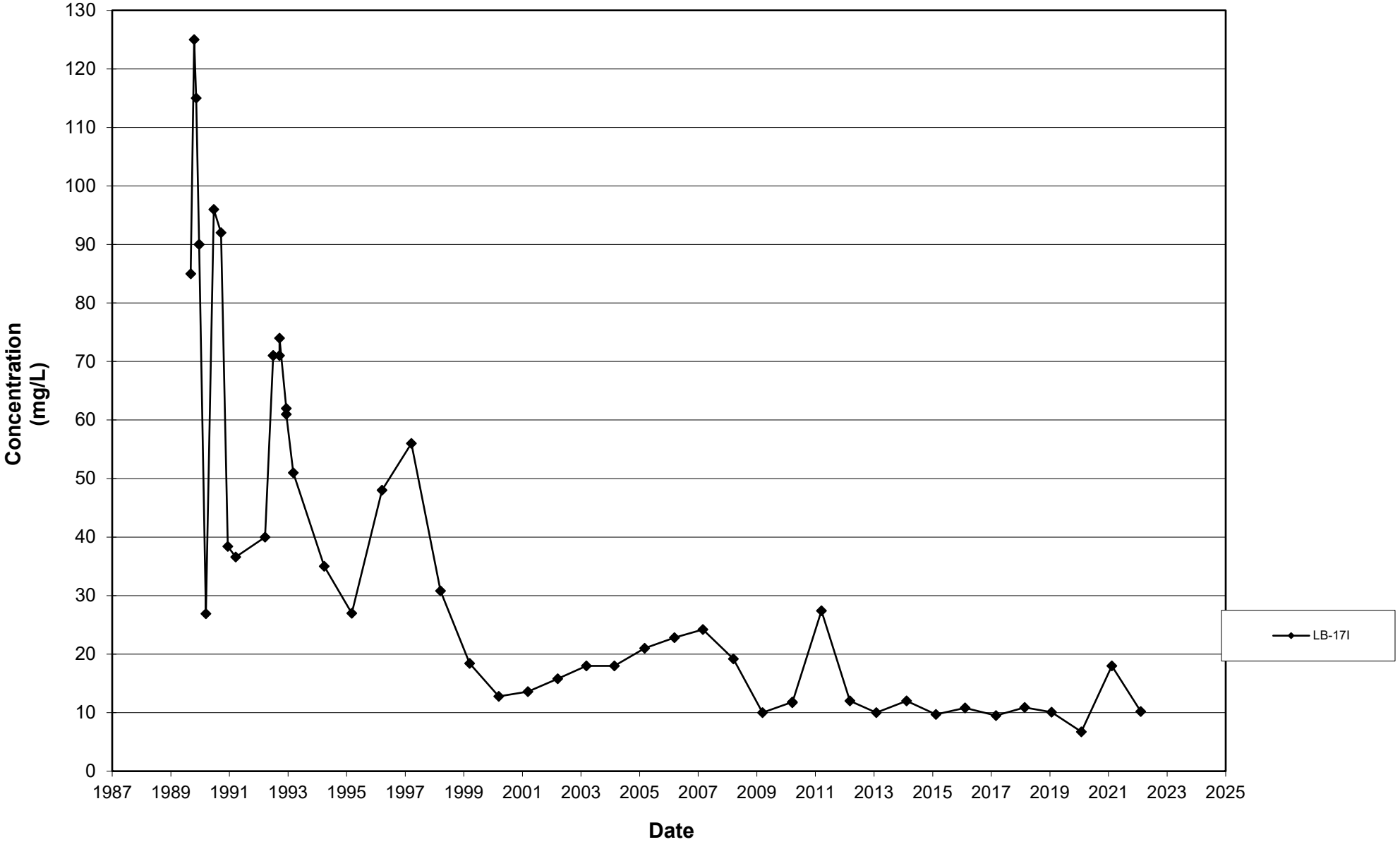
Leichner Landfill
Chloride, LB-13I
1987 - 2022



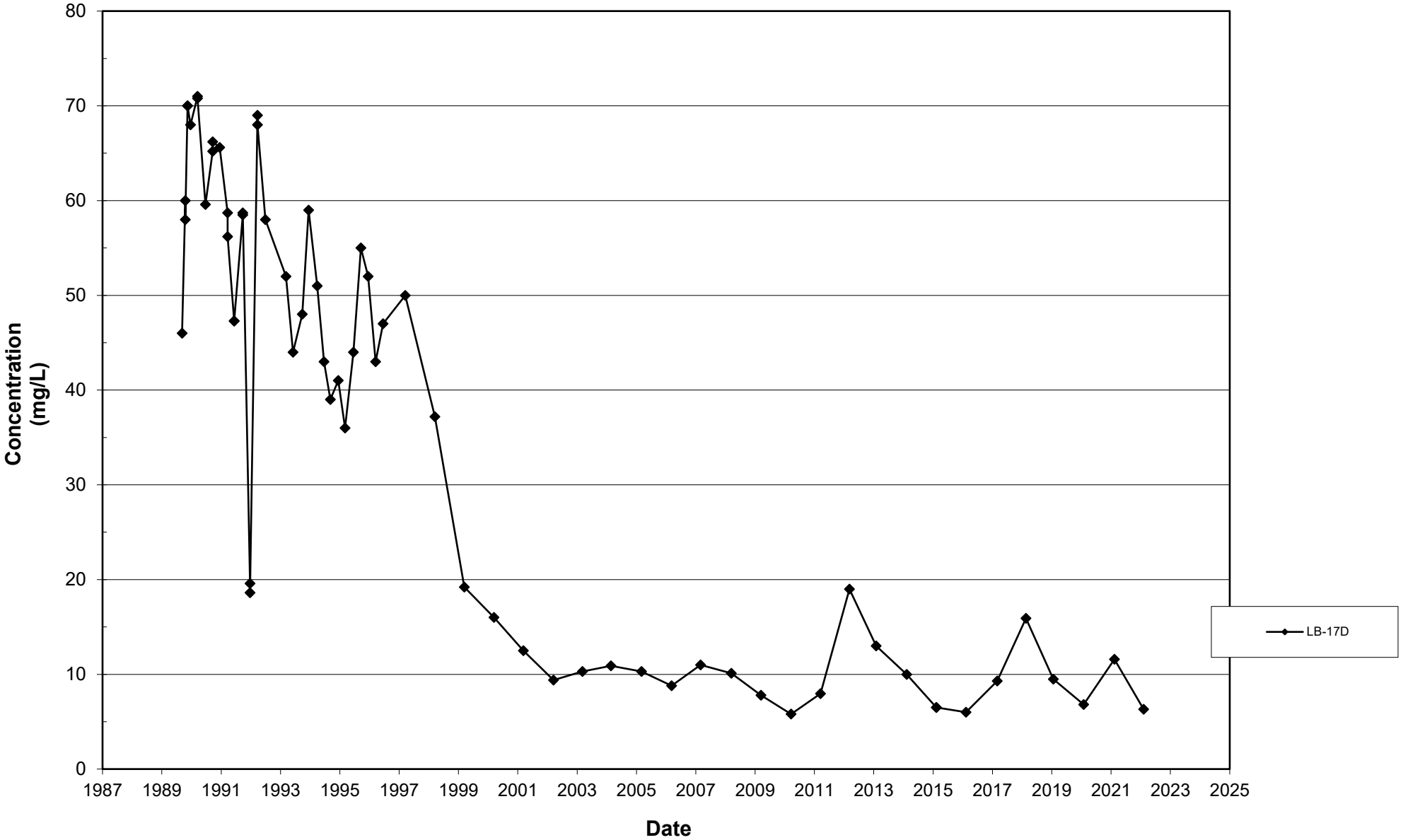
Leichner Landfill
Chloride, LB-13D
1987 - 2022



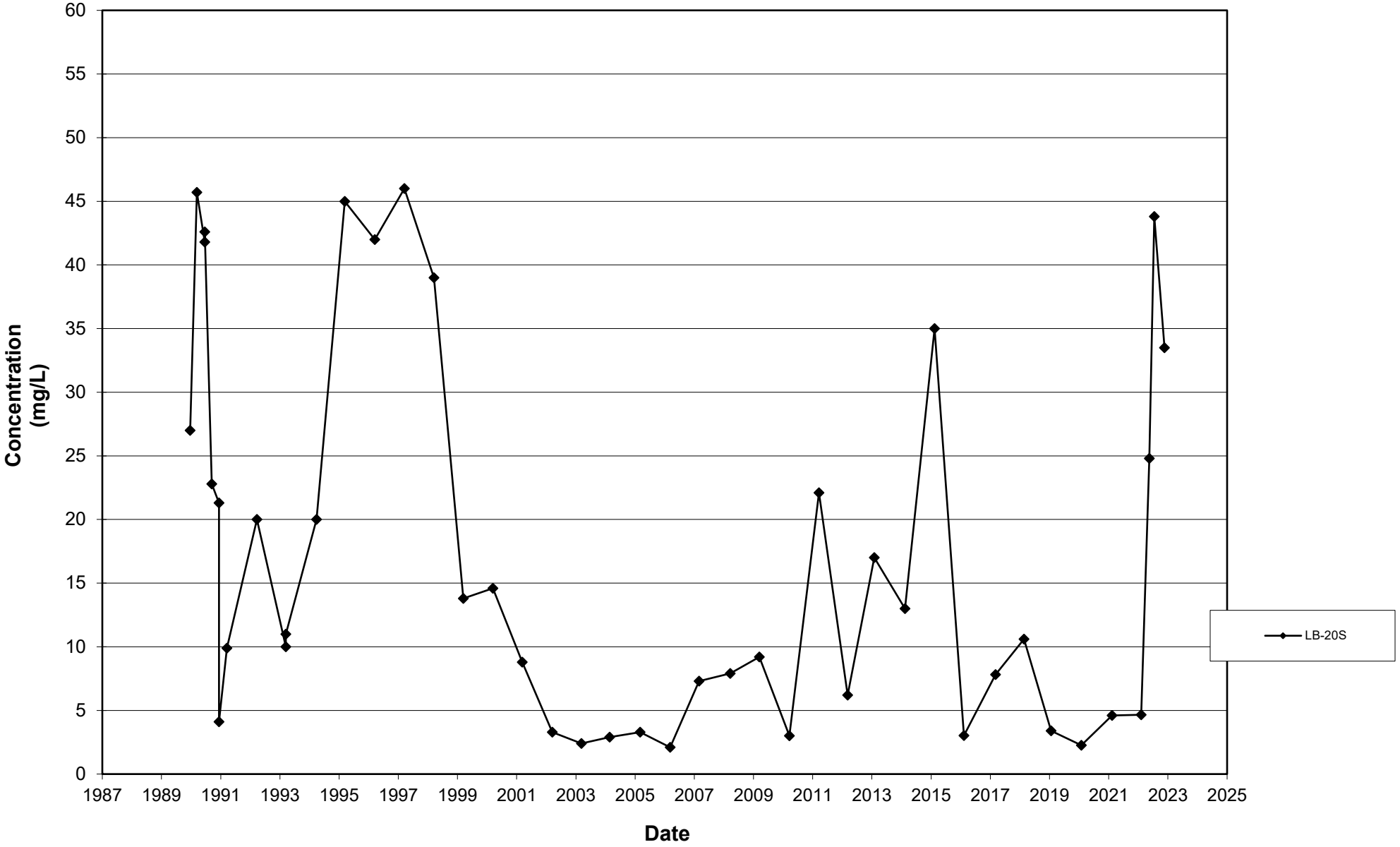
Leichner Landfill
Chloride, LB-17I
1987 - 2022



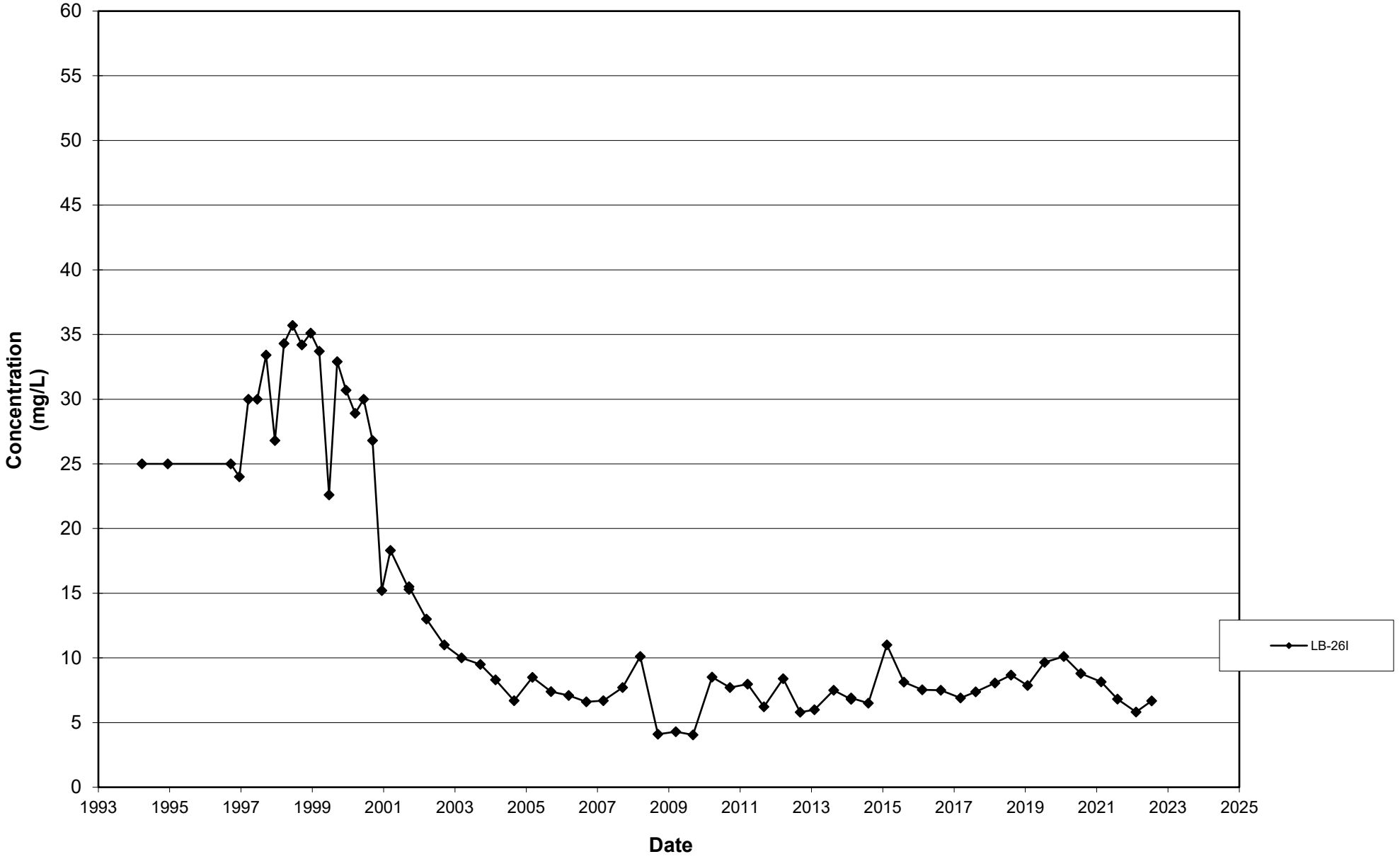
Leichner Landfill
Chloride, LB-17D
1987 - 2022



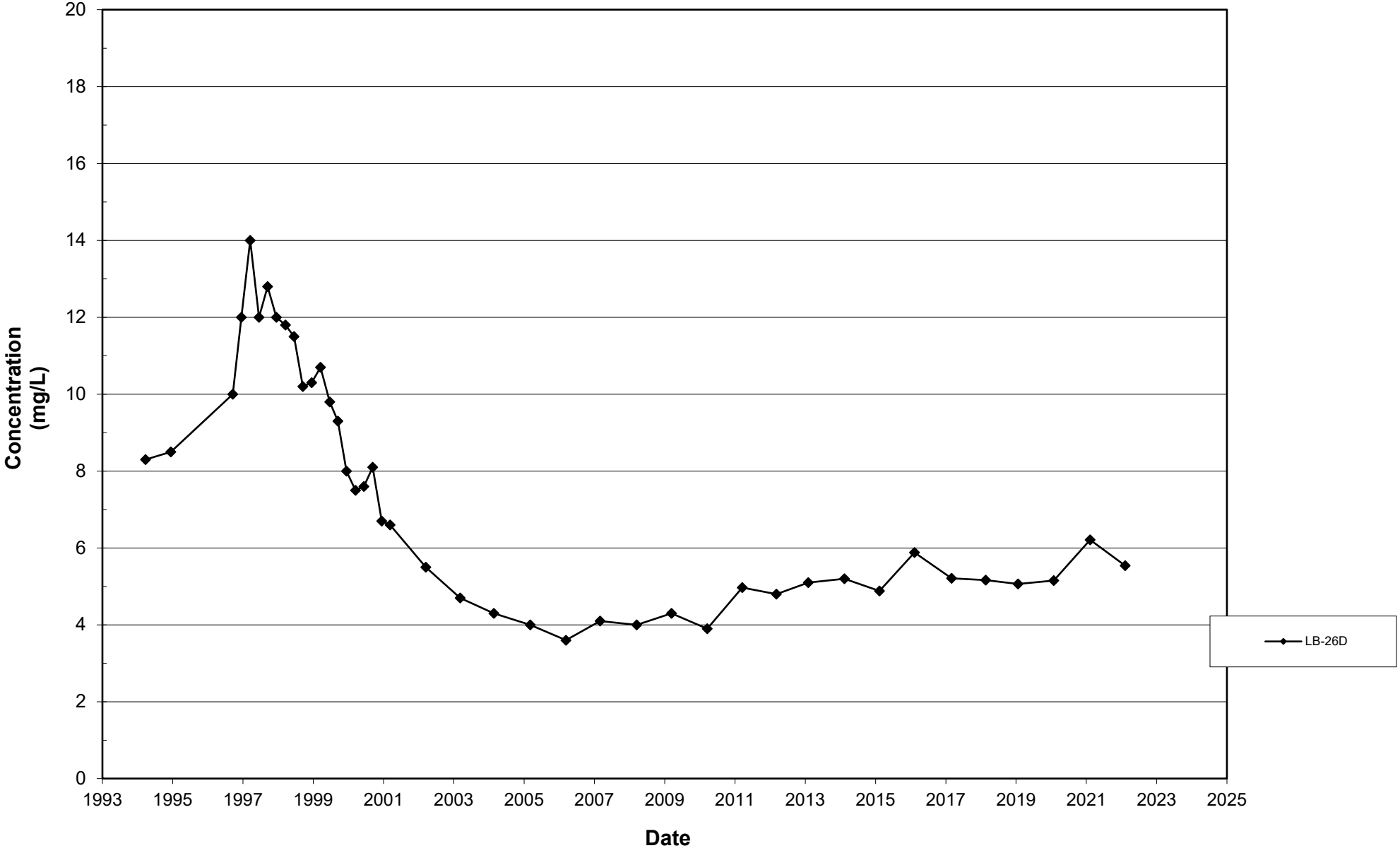
Leichner Landfill
Chloride, LB-20S
1987 - 2022



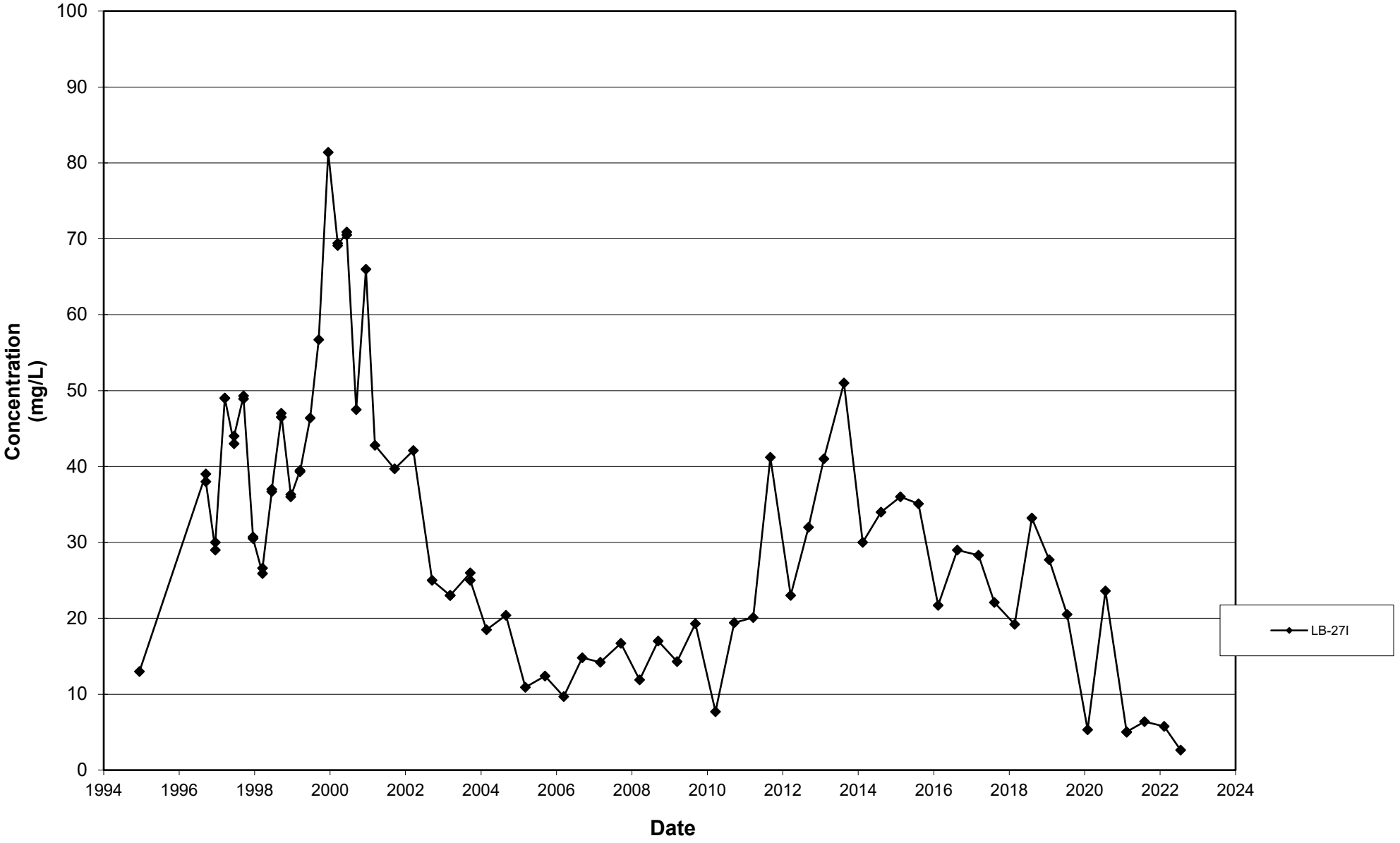
Leichner Landfill
Chloride, LB-26I
1987 - 2022



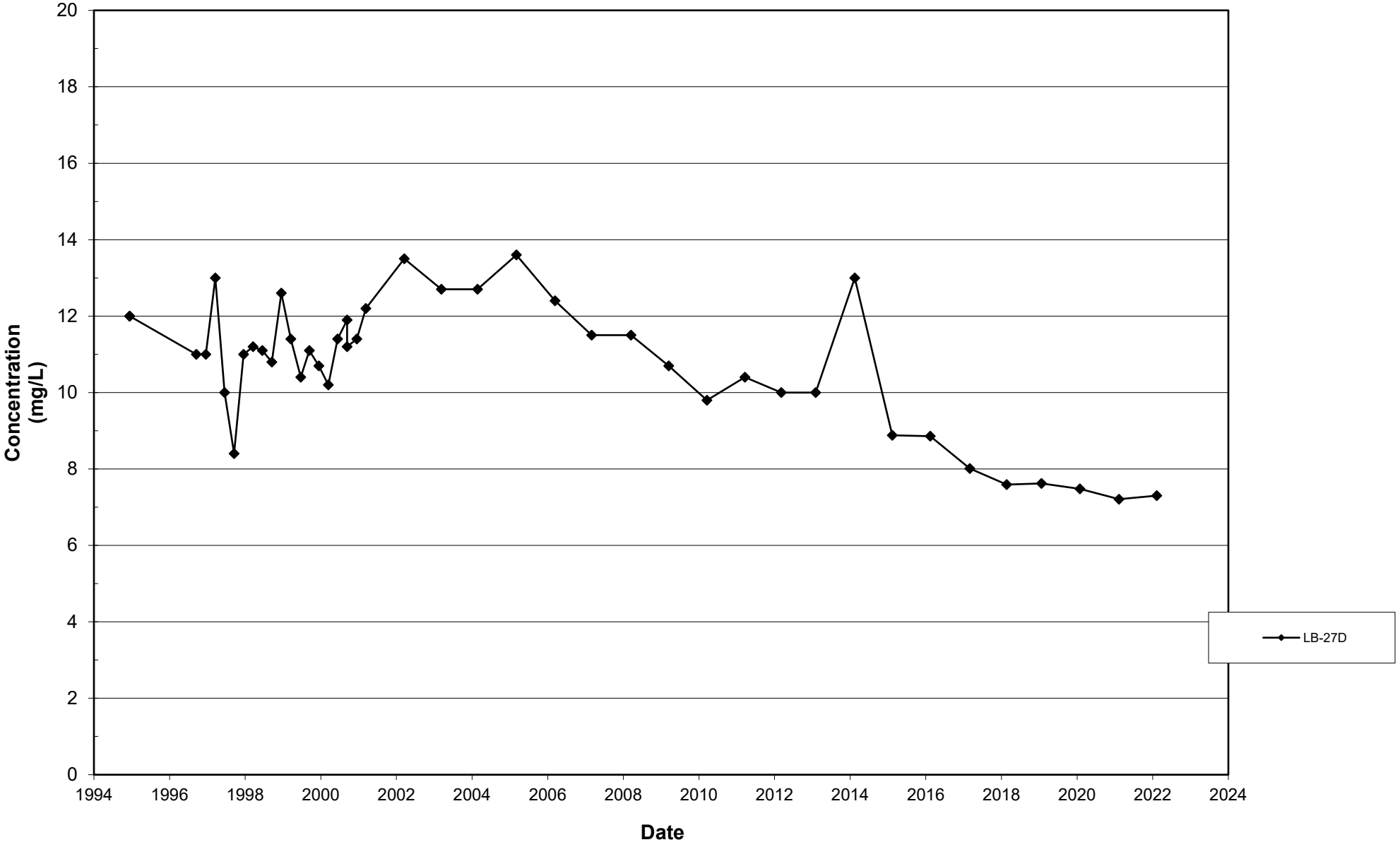
Leichner Landfill
Chloride, LB-26D
1987 - 2022



Leichner Landfill
Chloride, LB-27I
1987 - 2022

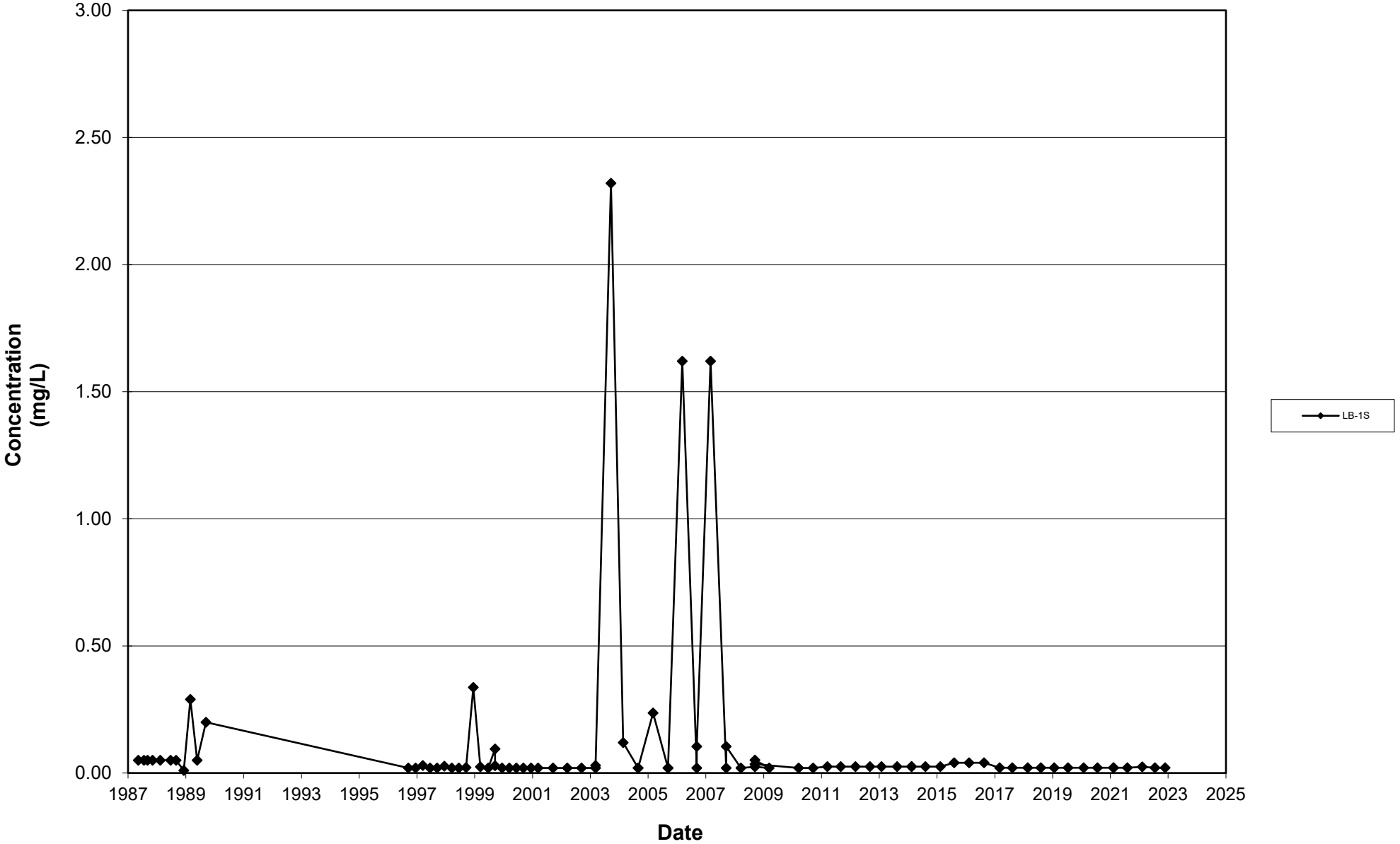


Leichner Landfill
Chloride, LB-27D
1987 - 2022

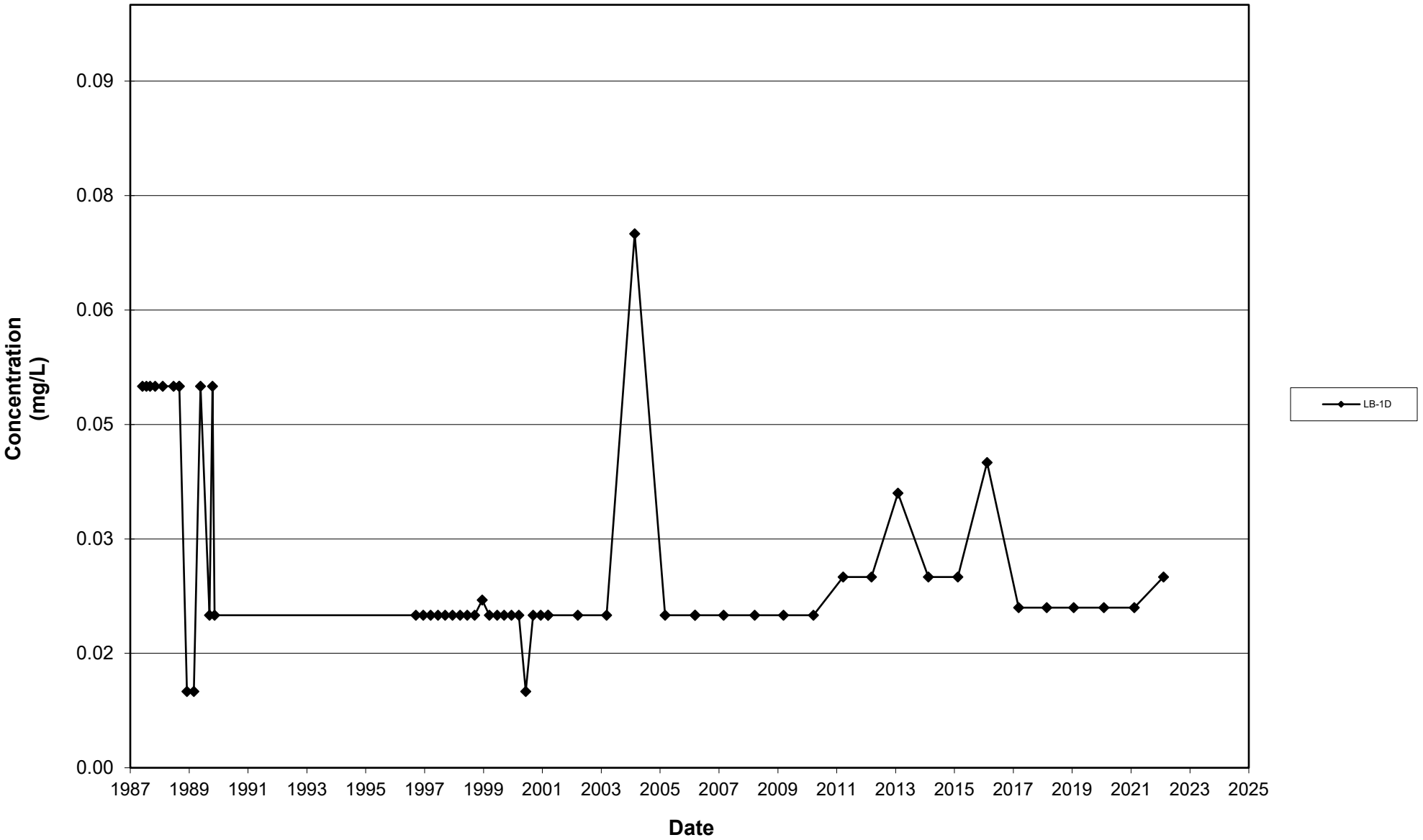


Dissolved Iron

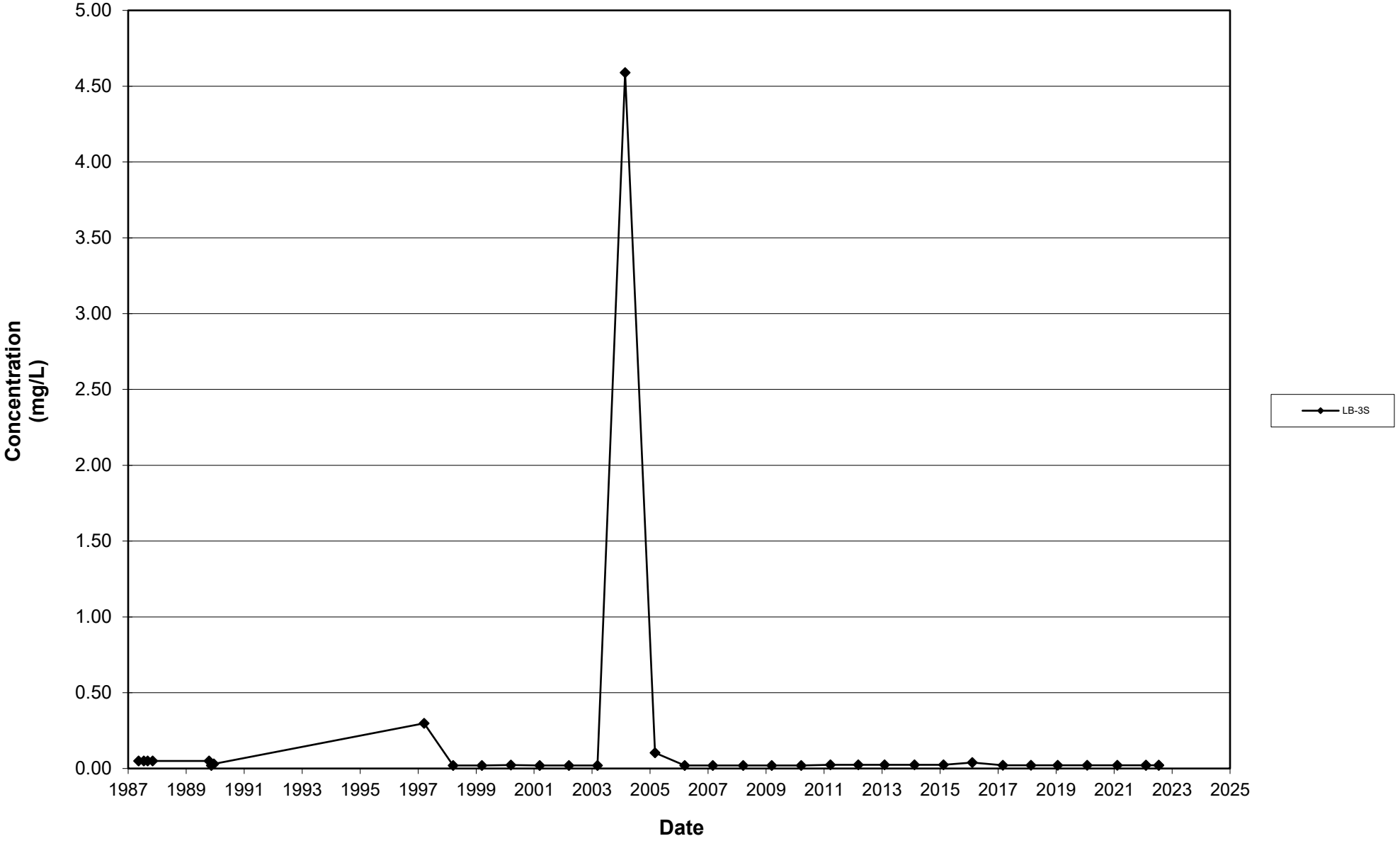
Leichner Landfill
Dissolved Iron, LB-01S
1987 - 2022



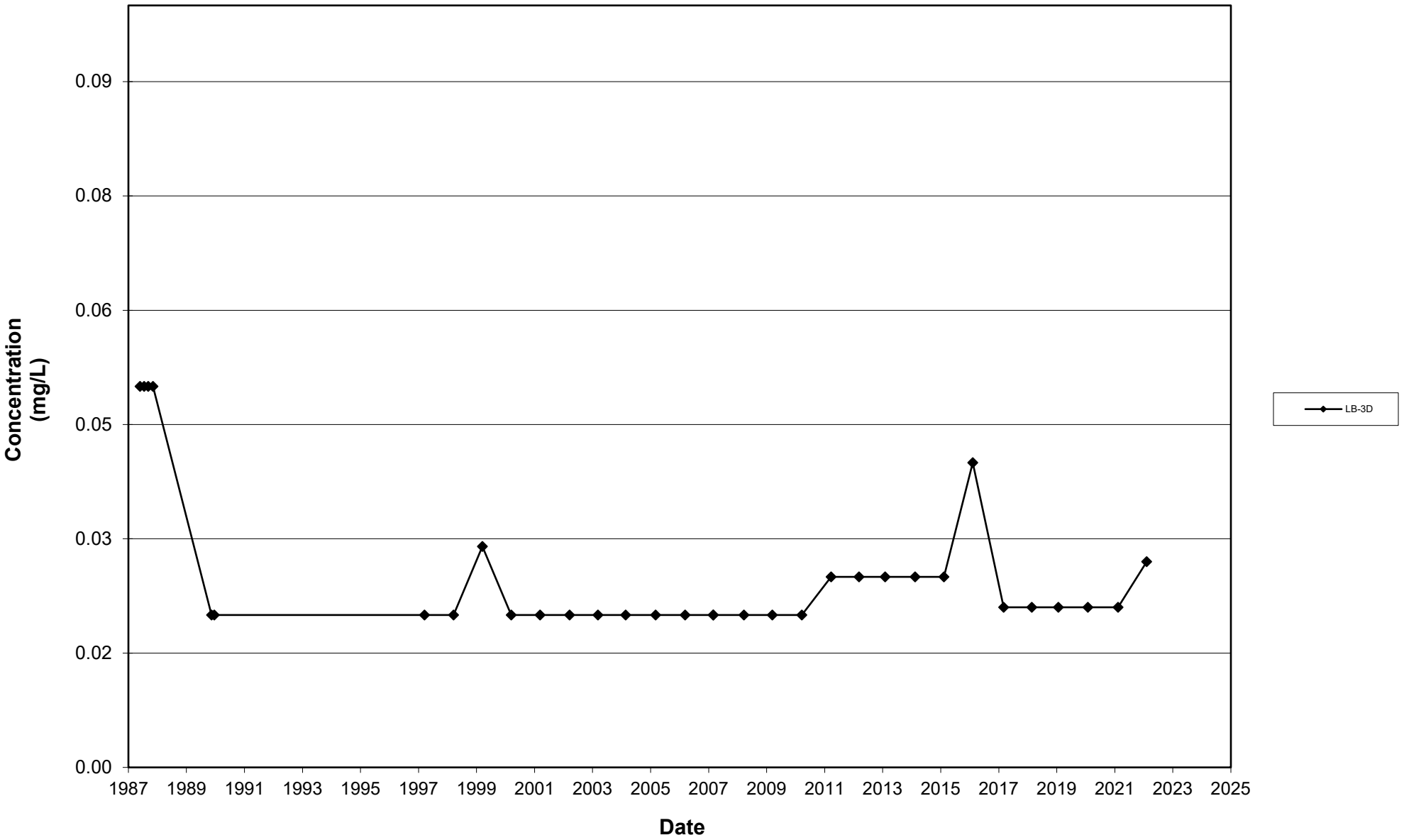
Leichner Landfill
Dissolved Iron, LB-01D
1987 - 2022



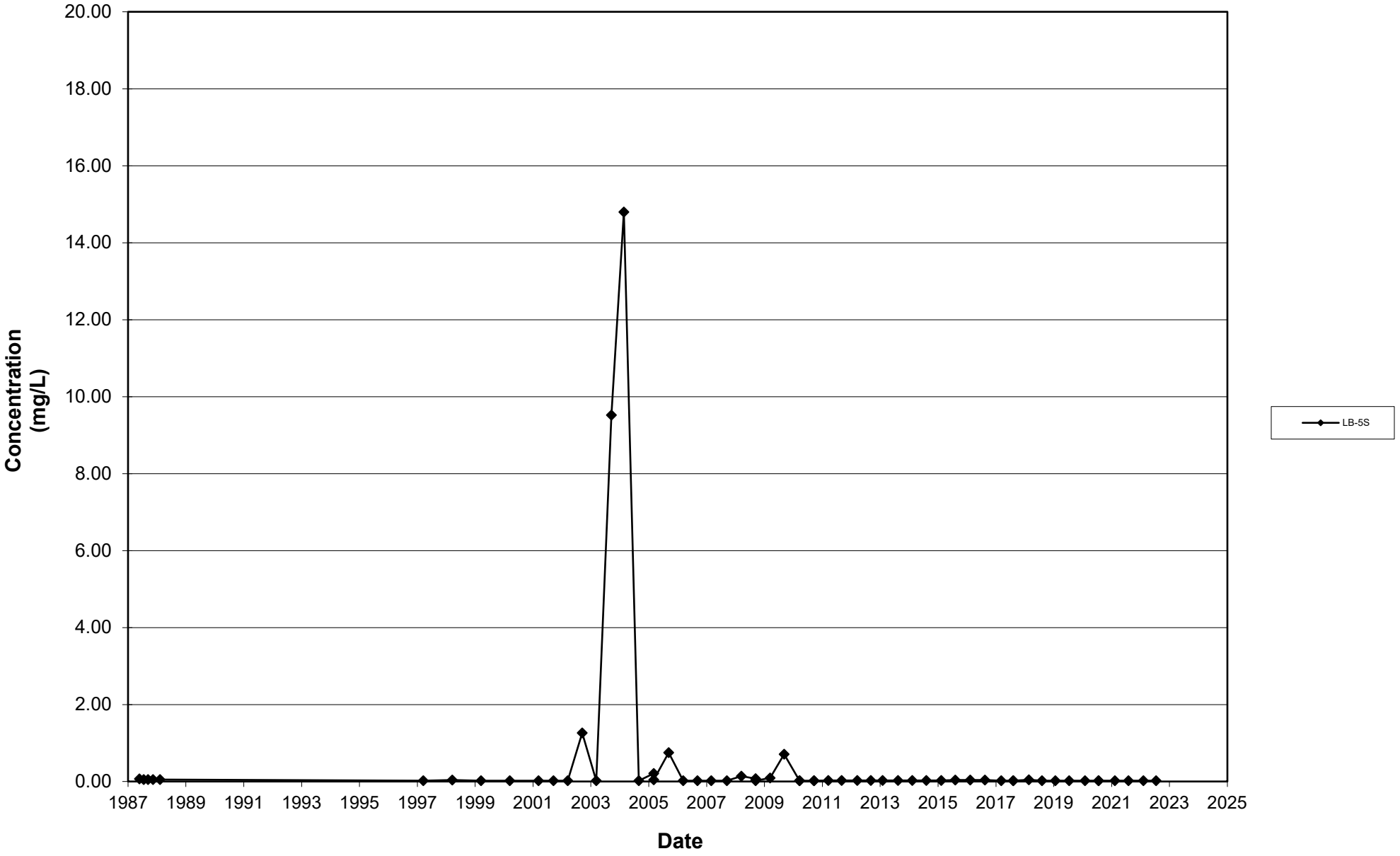
Leichner Landfill
Dissolved Iron, LB-03S
1987 - 2022



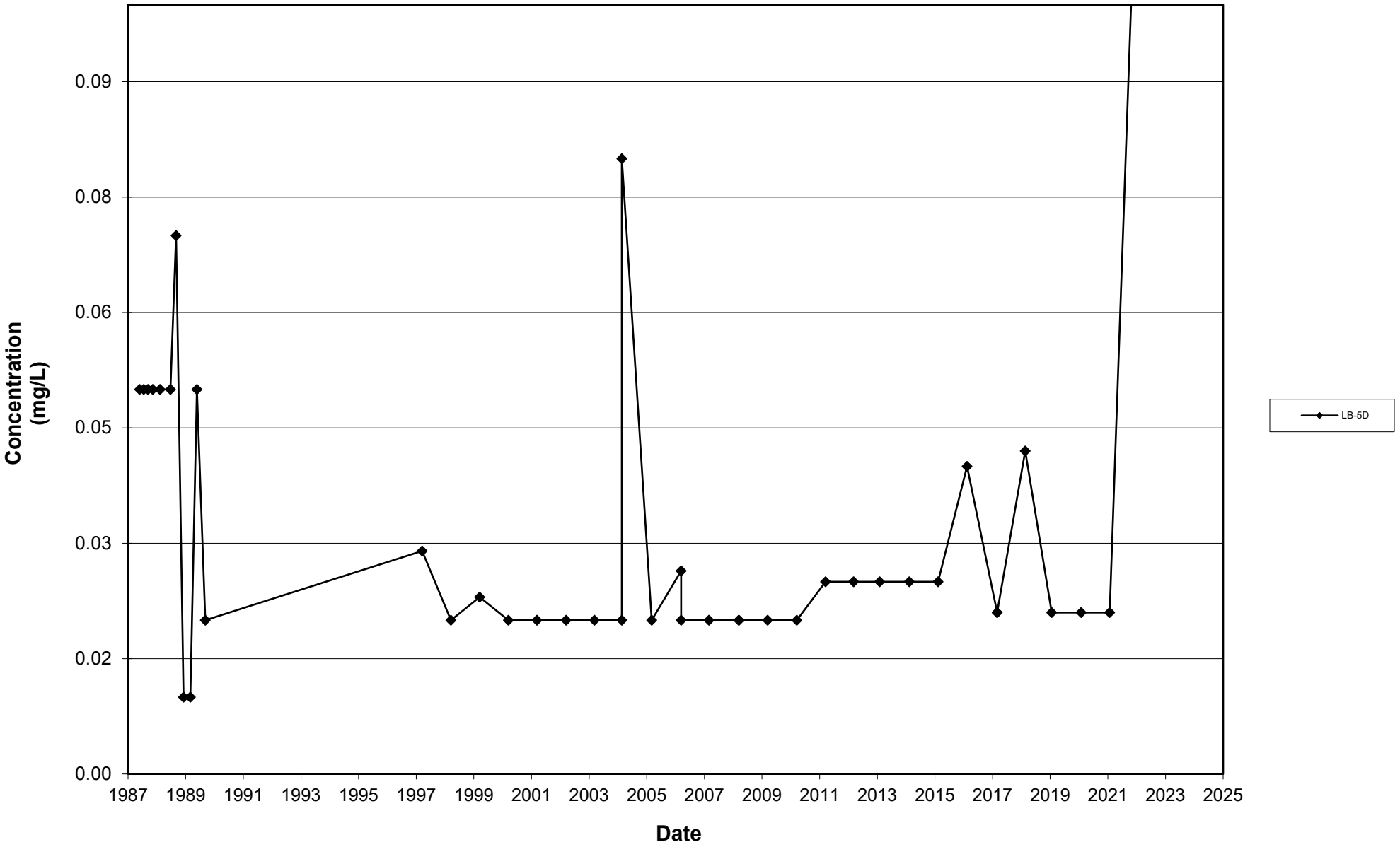
Leichner Landfill
Dissolved Iron, LB-03D
1987 - 2022



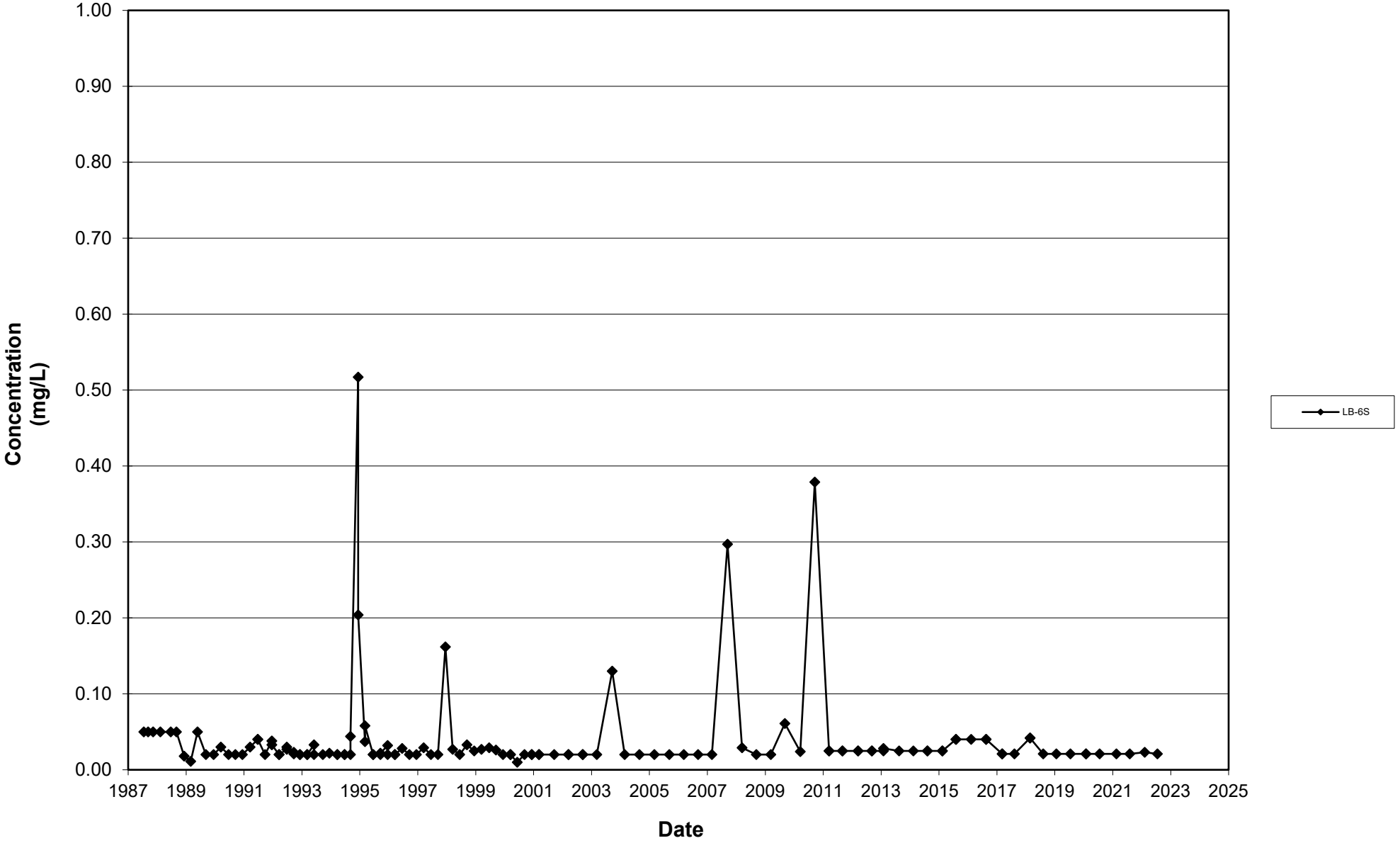
Leichner Landfill
Dissolved Iron, LB-05S
1987 - 2022



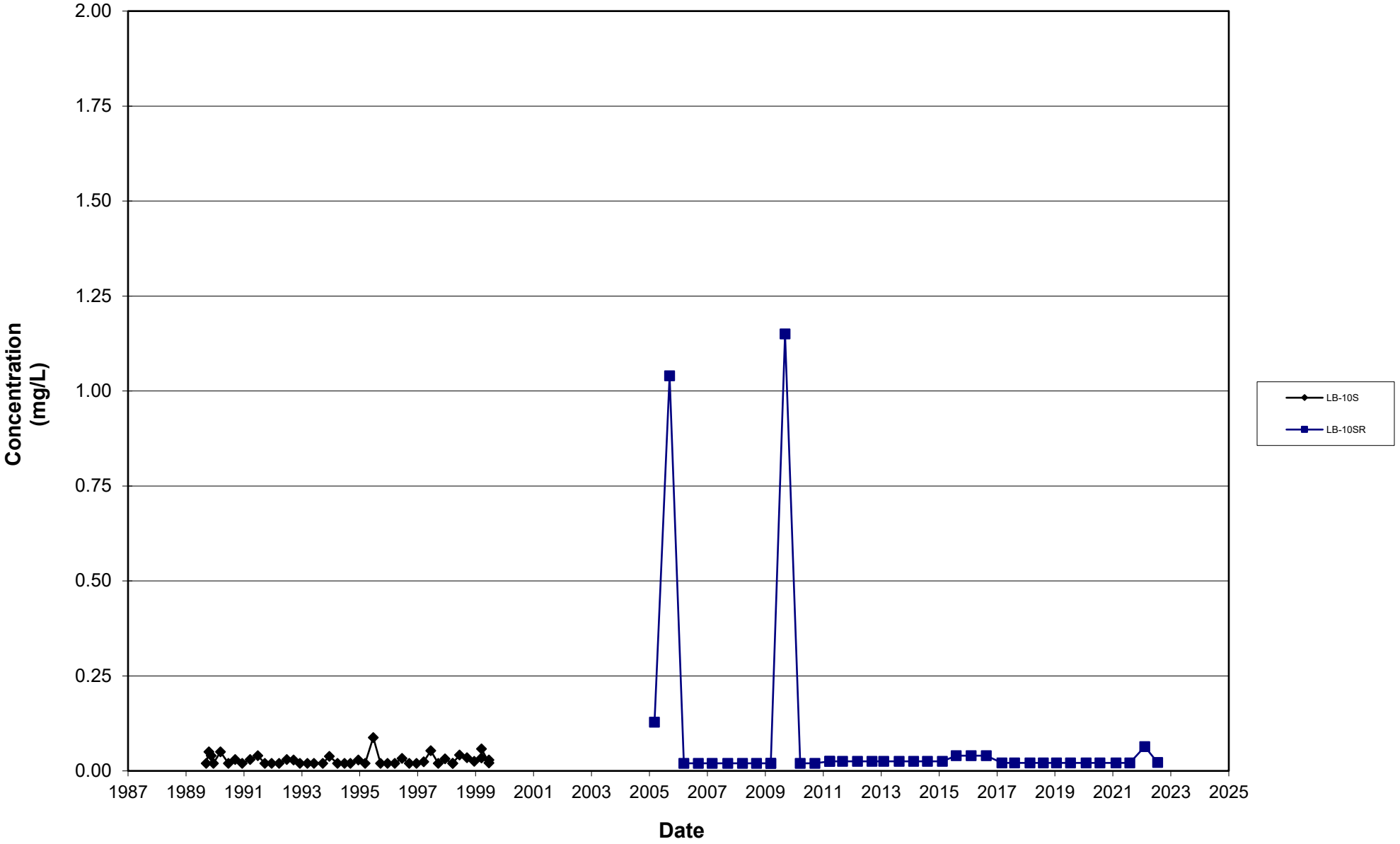
Leichner Landfill
Dissolved Iron, LB-05D
1987 - 2022



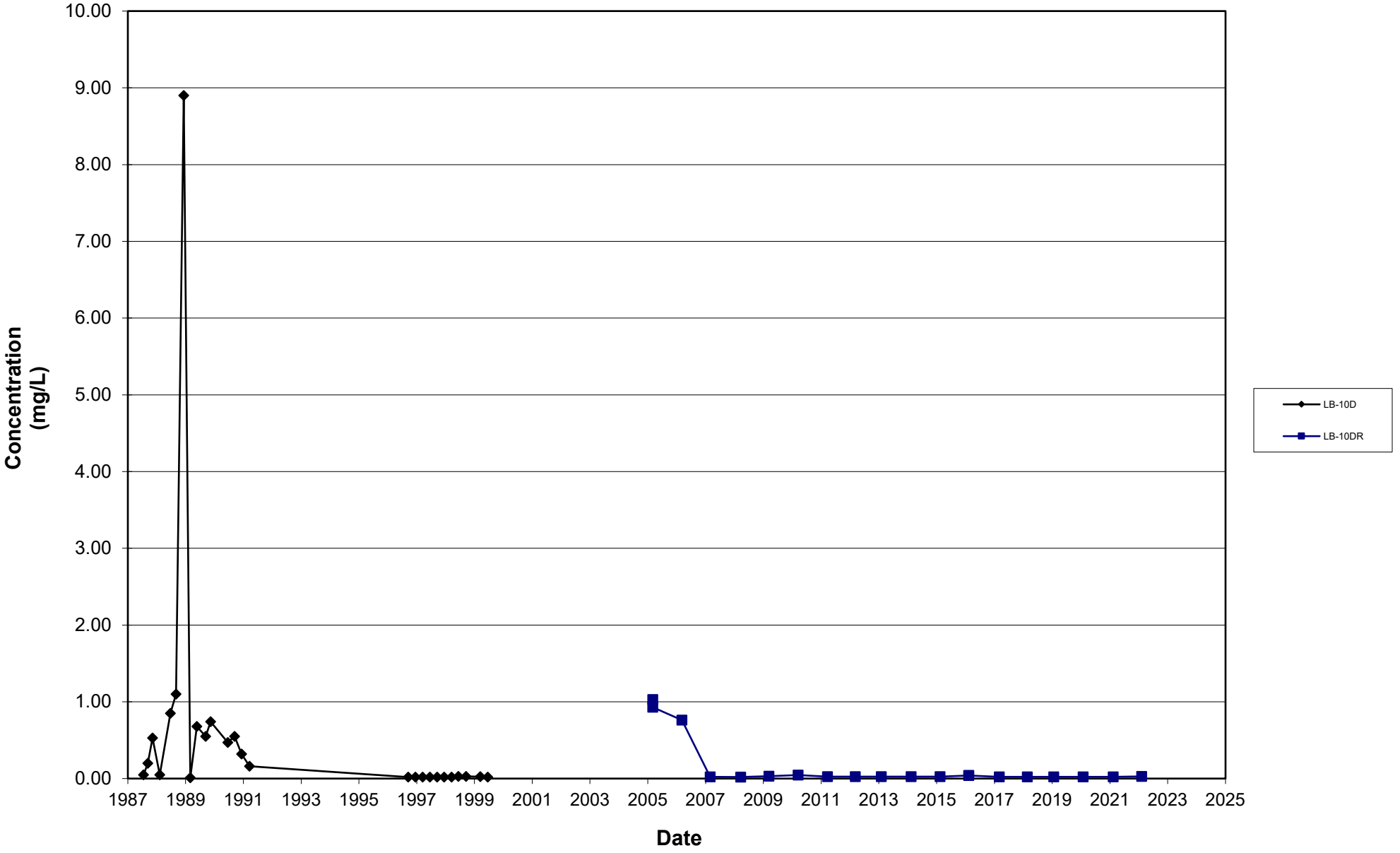
Leichner Landfill
Dissolved Iron, LB-06S
1987 - 2022



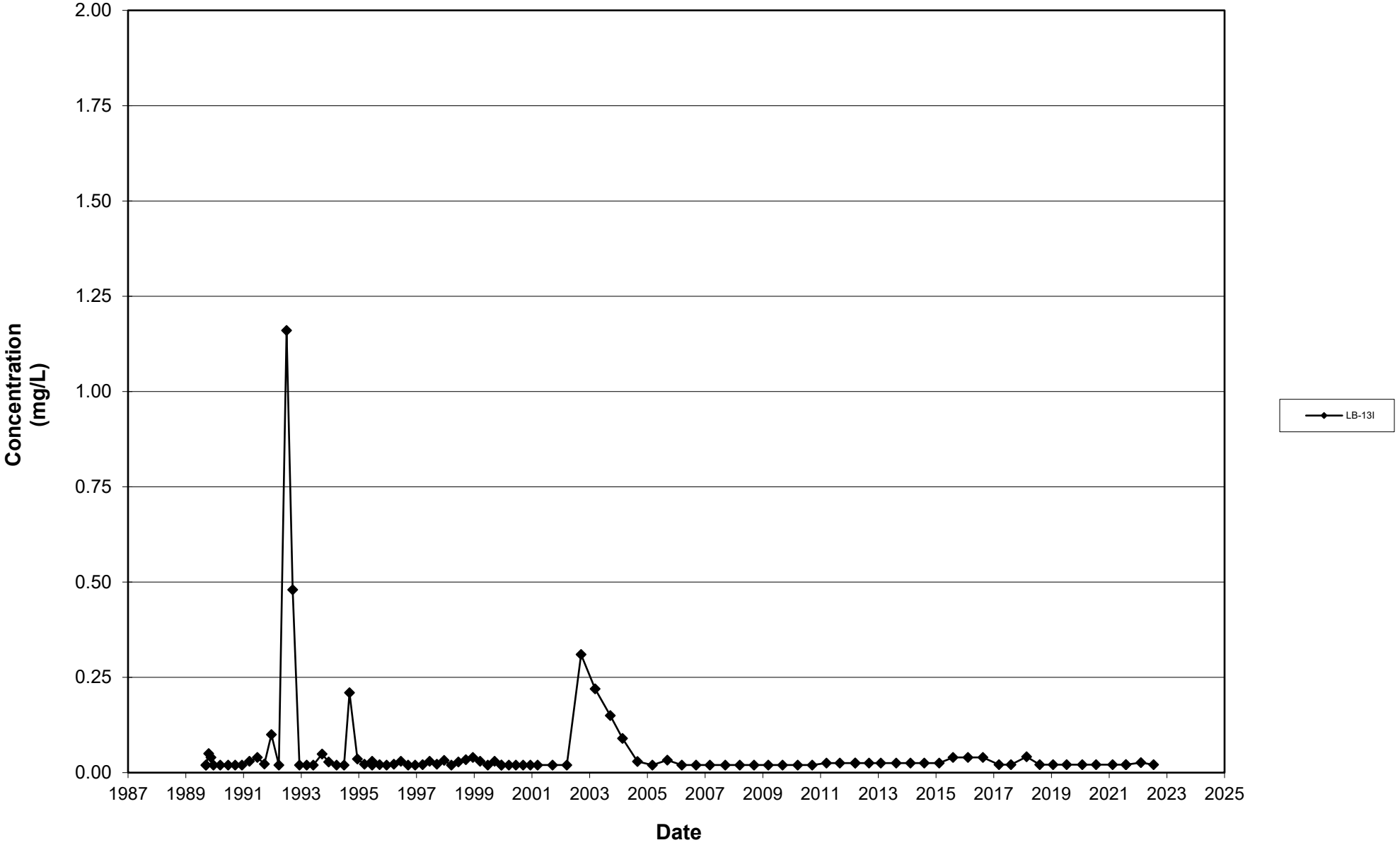
Leichner Landfill
Dissolved Iron, LB-10S and LB-10SR
1987 - 2022



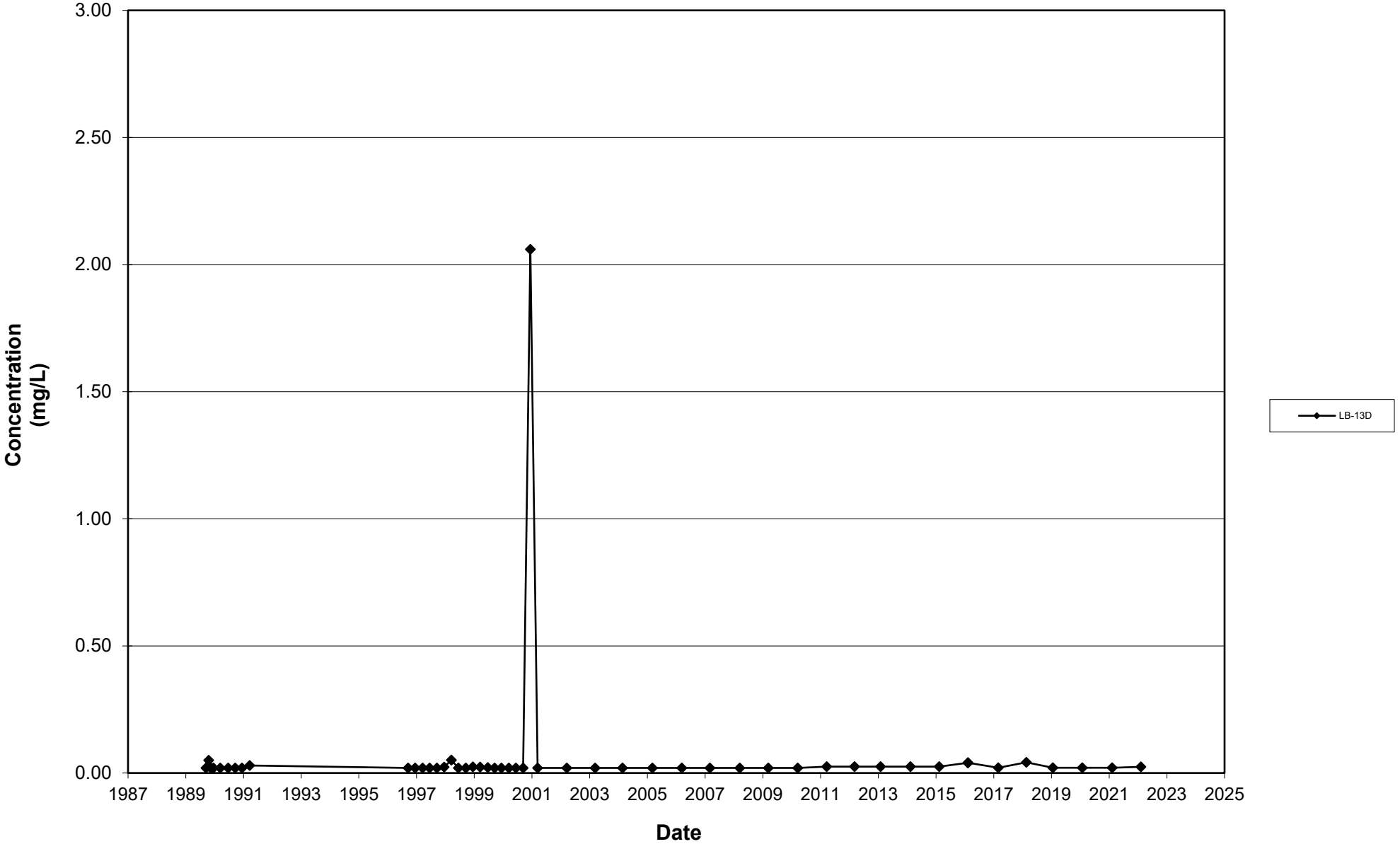
Leichner Landfill
Dissolved Iron, LB-10D and LB-10DR
1987 - 2022



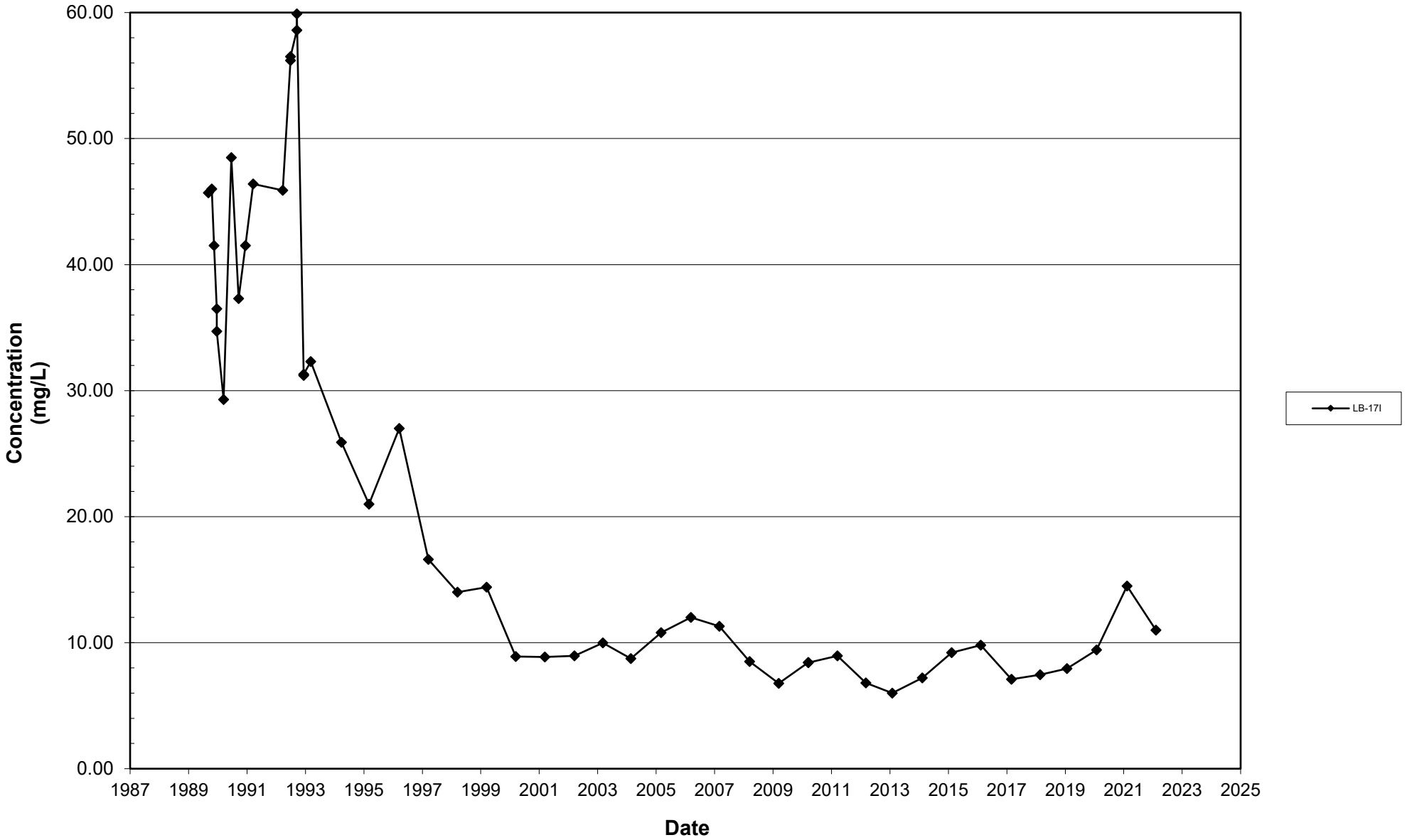
Leichner Landfill
Dissolved Iron, LB-13I
1987 - 2022



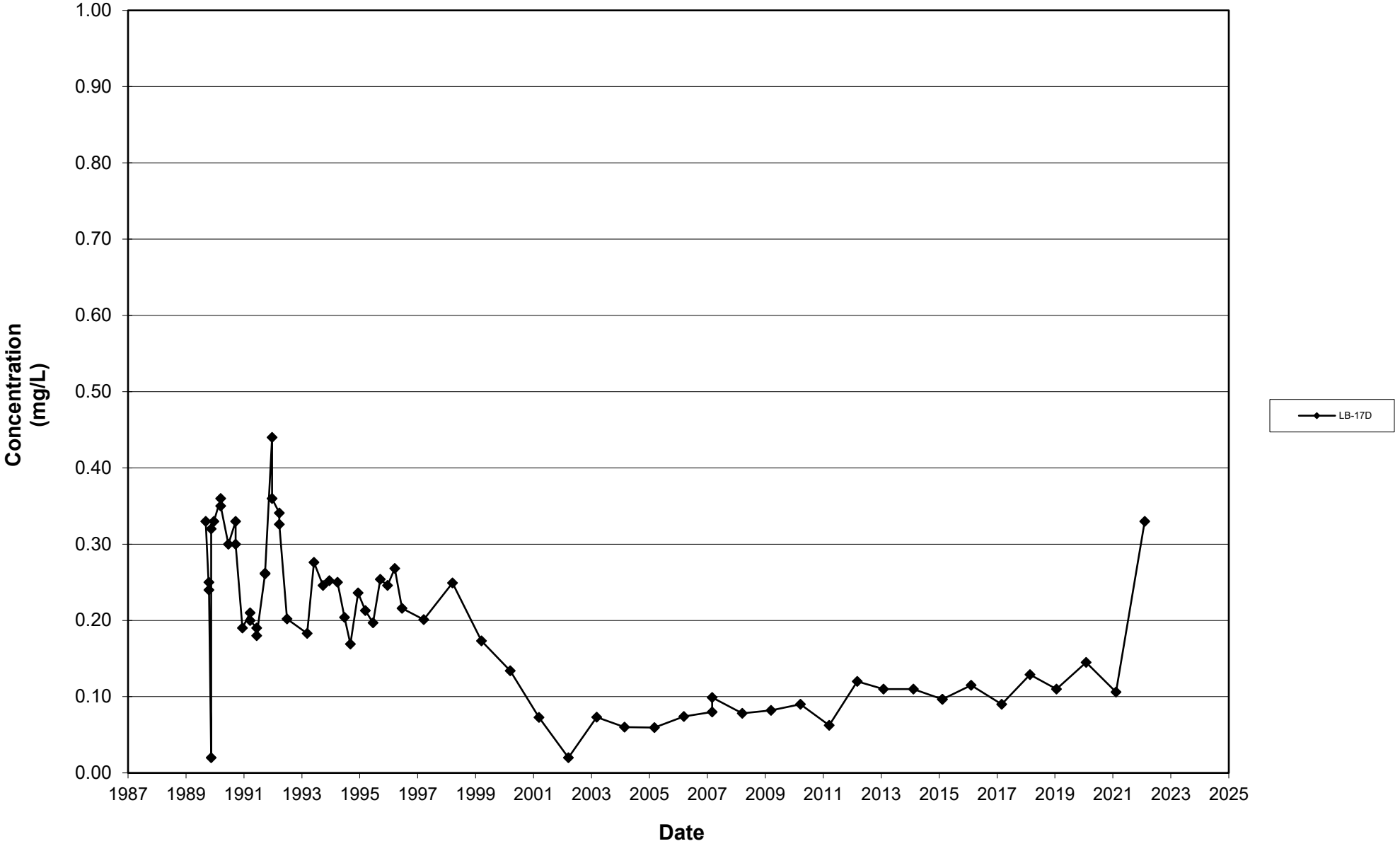
Leichner Landfill
Dissolved Iron, LB-13D
1987 - 2022



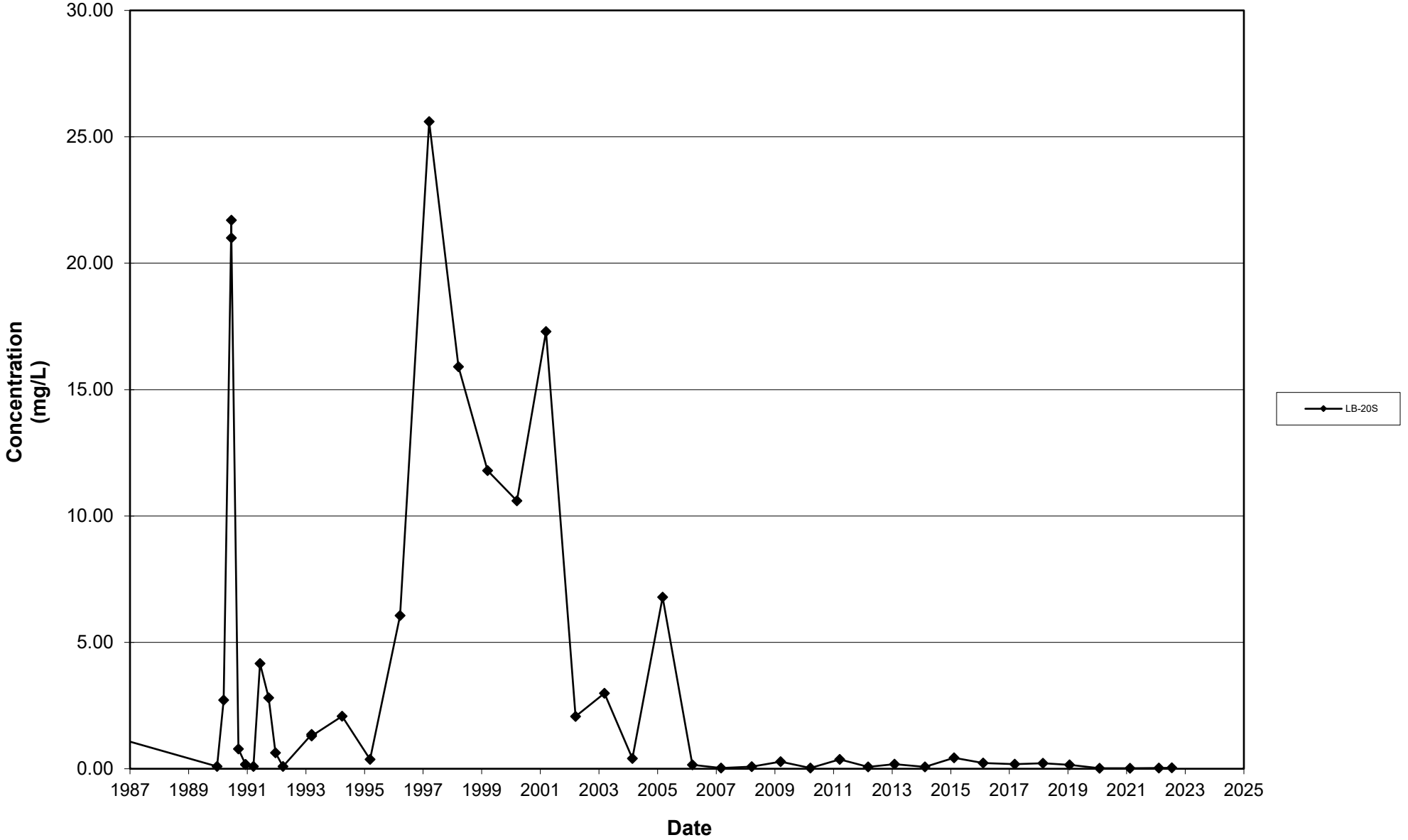
Leichner Landfill
Dissolved Iron, LB-17I
1987 - 2022



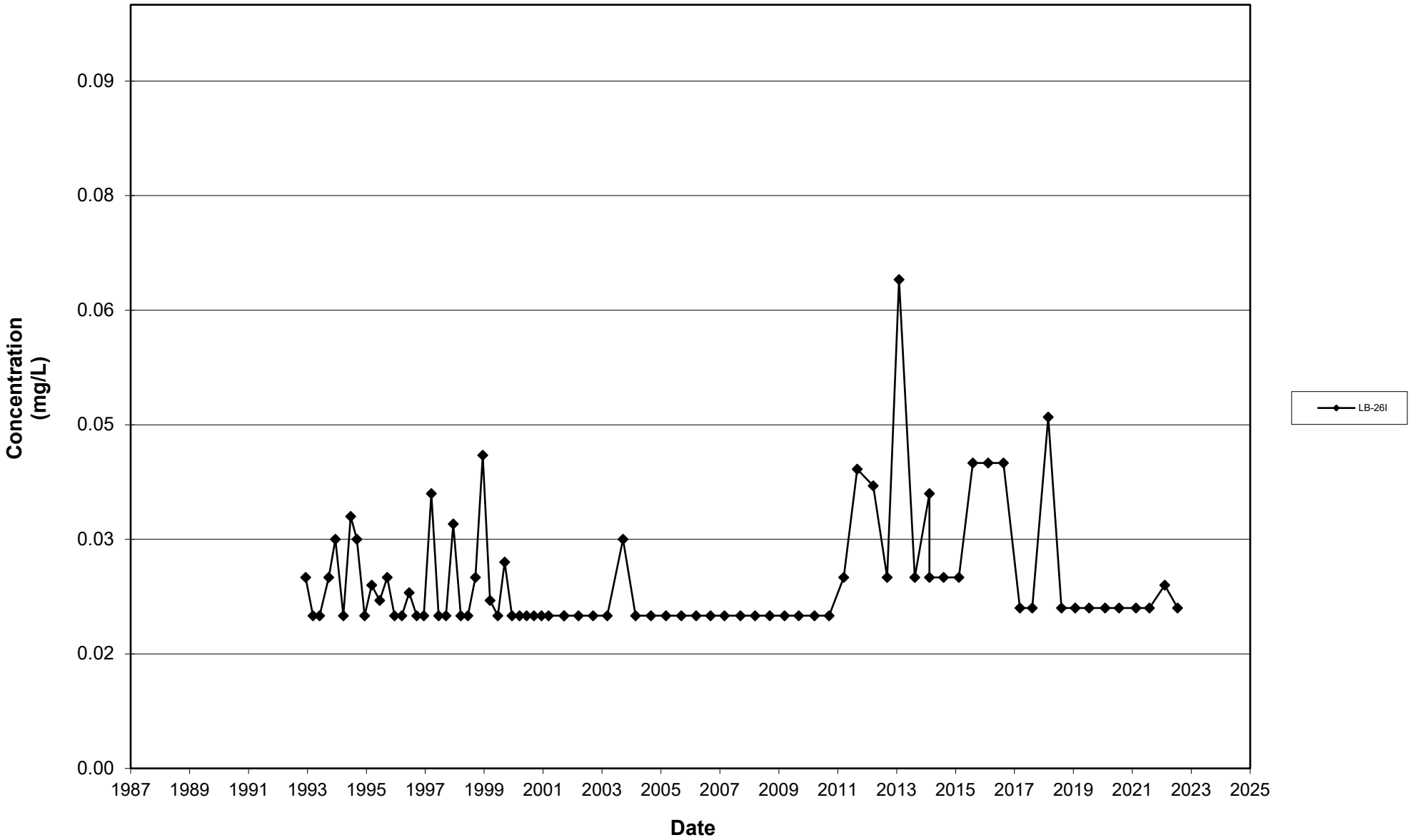
Leichner Landfill
Dissolved Iron, LB-17D
1987 - 2022



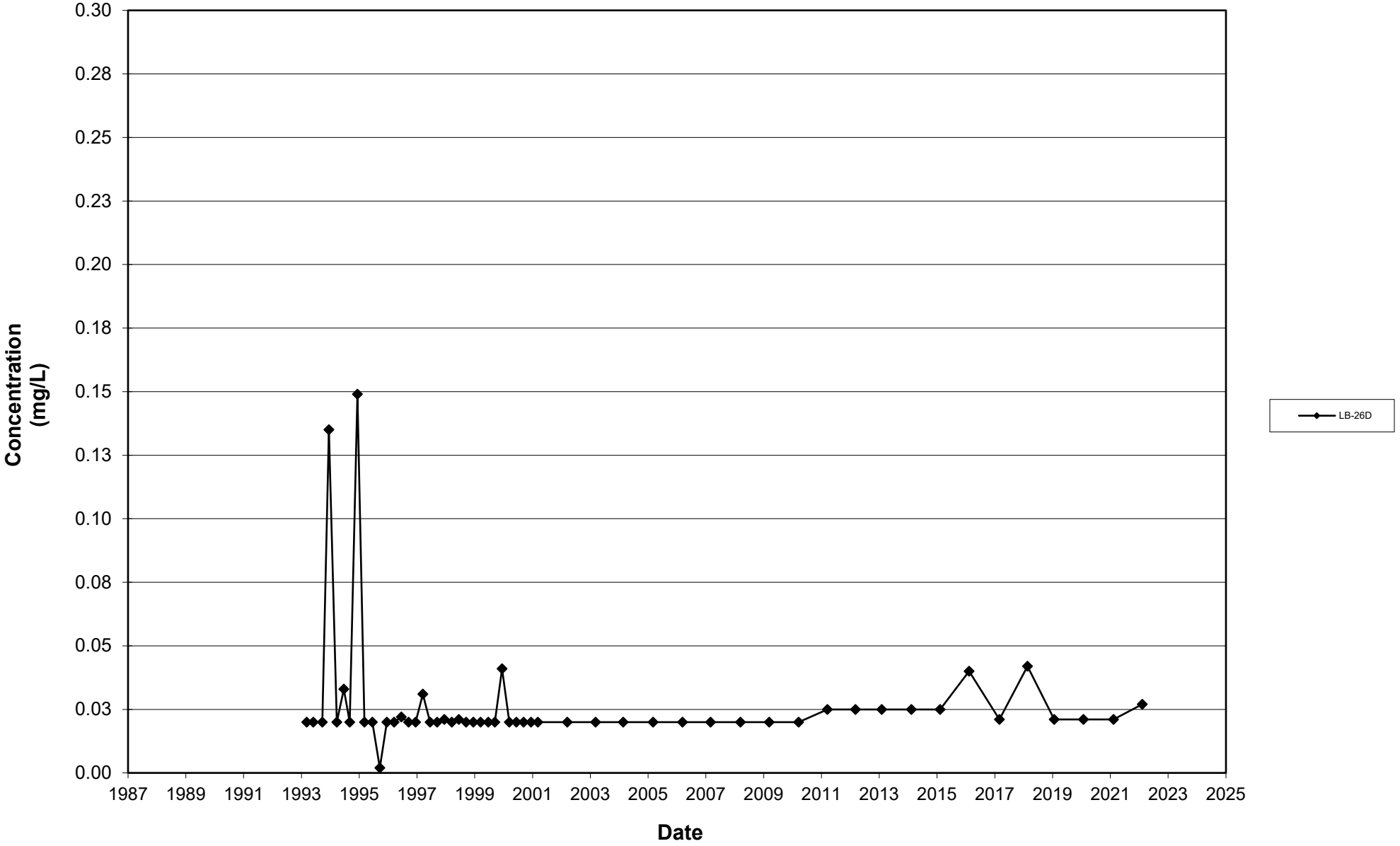
Leichner Landfill
Dissolved Iron, LB-20S
1987 - 2022



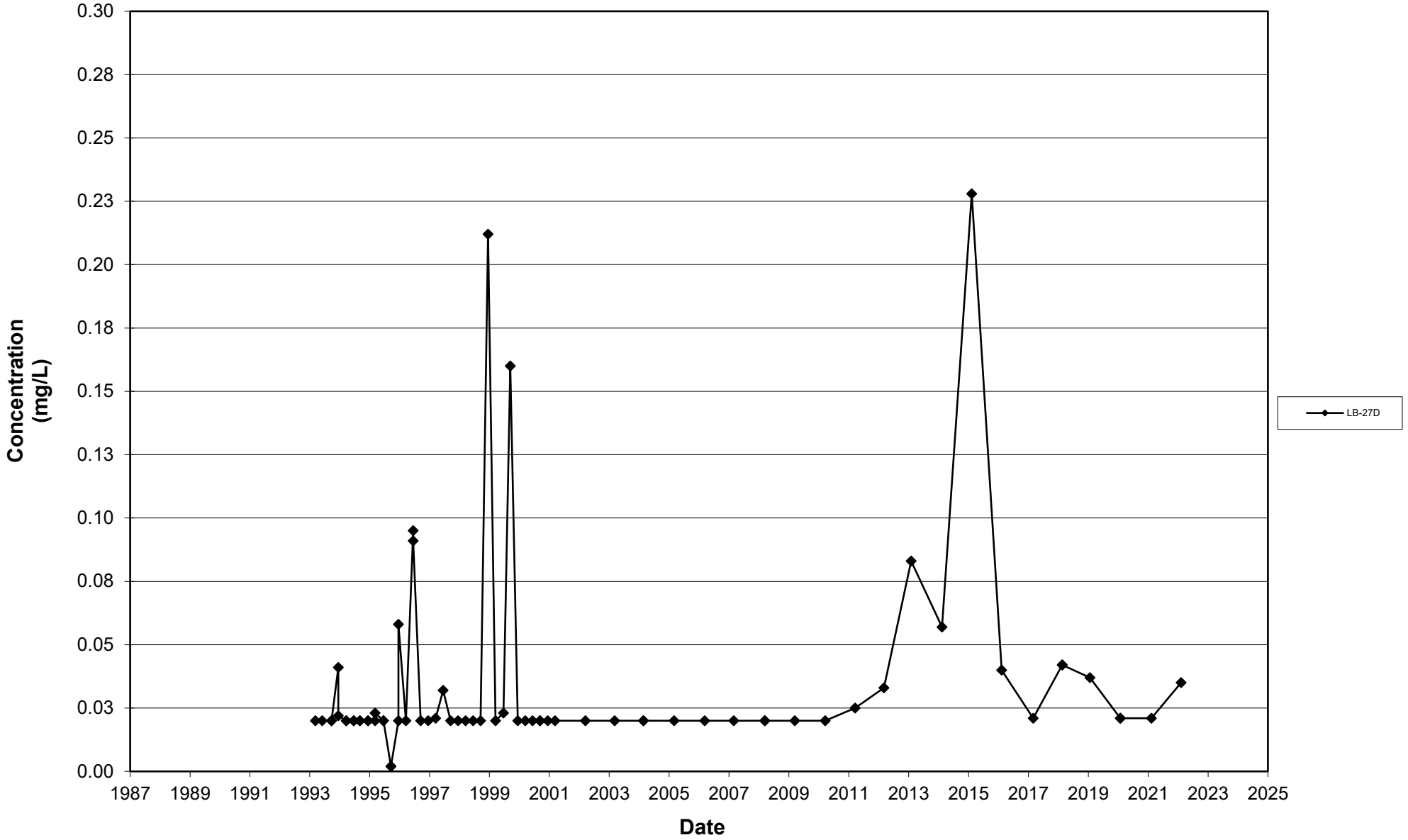
Leichner Landfill
Dissolved Iron, LB-26I
1987 - 2022



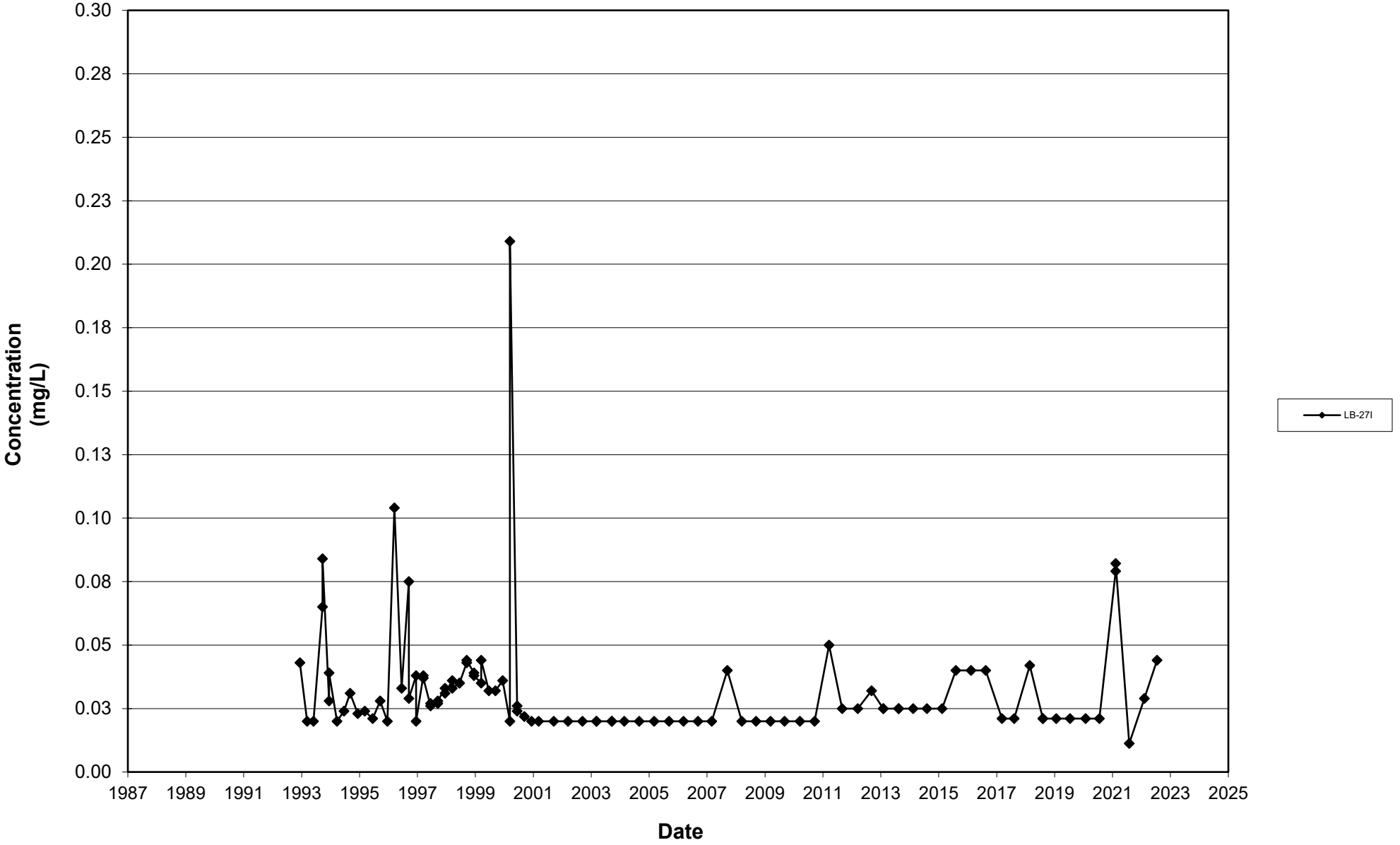
Leichner Landfill
Dissolved Iron, LB-26D
1987 - 2022



Leichner Landfill
Dissolved Iron, LB-27D
1987 - 2022

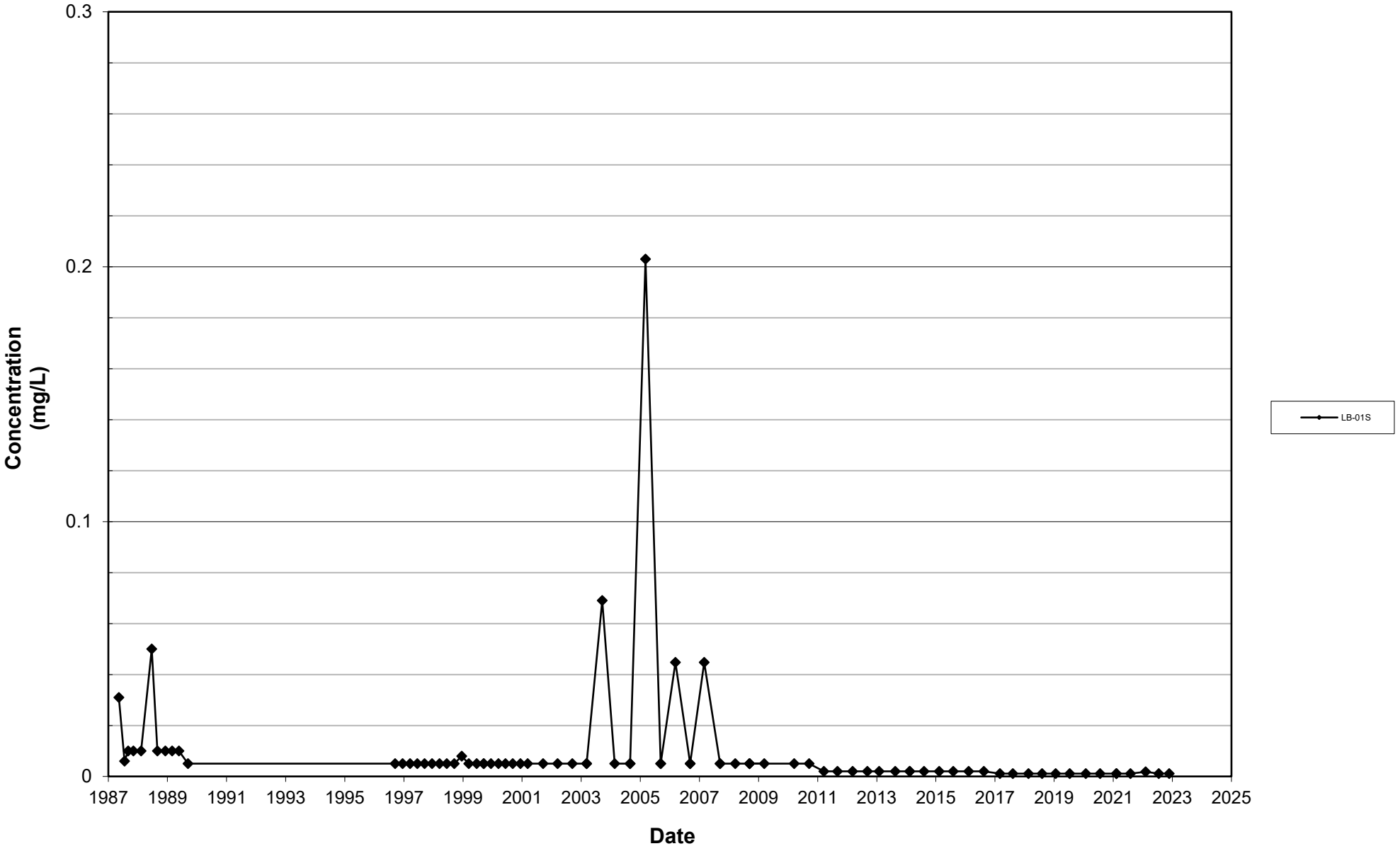


Leichner Landfill
Dissolved Iron, LB-27I
1987 - 2022

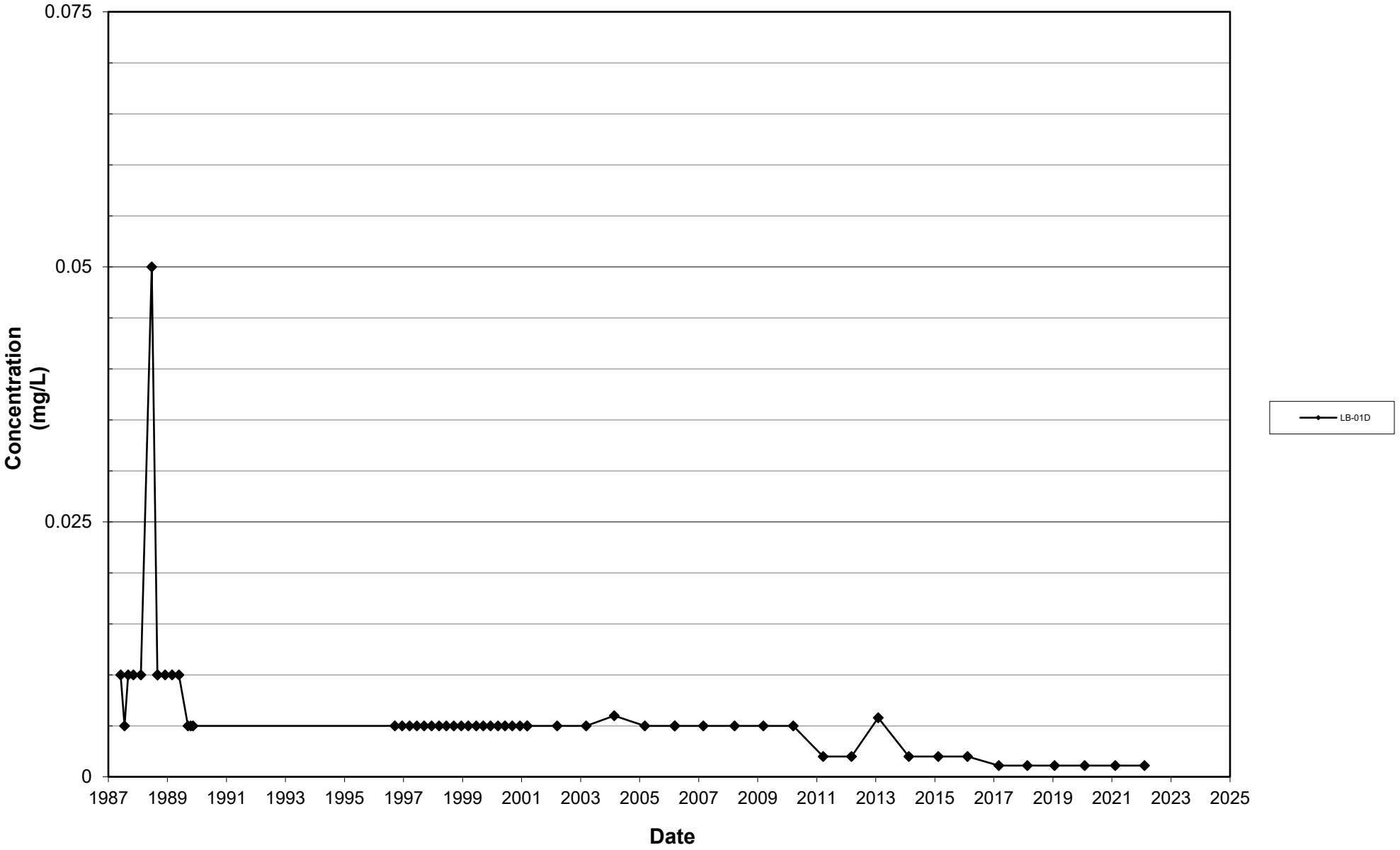


Dissolved Manganese

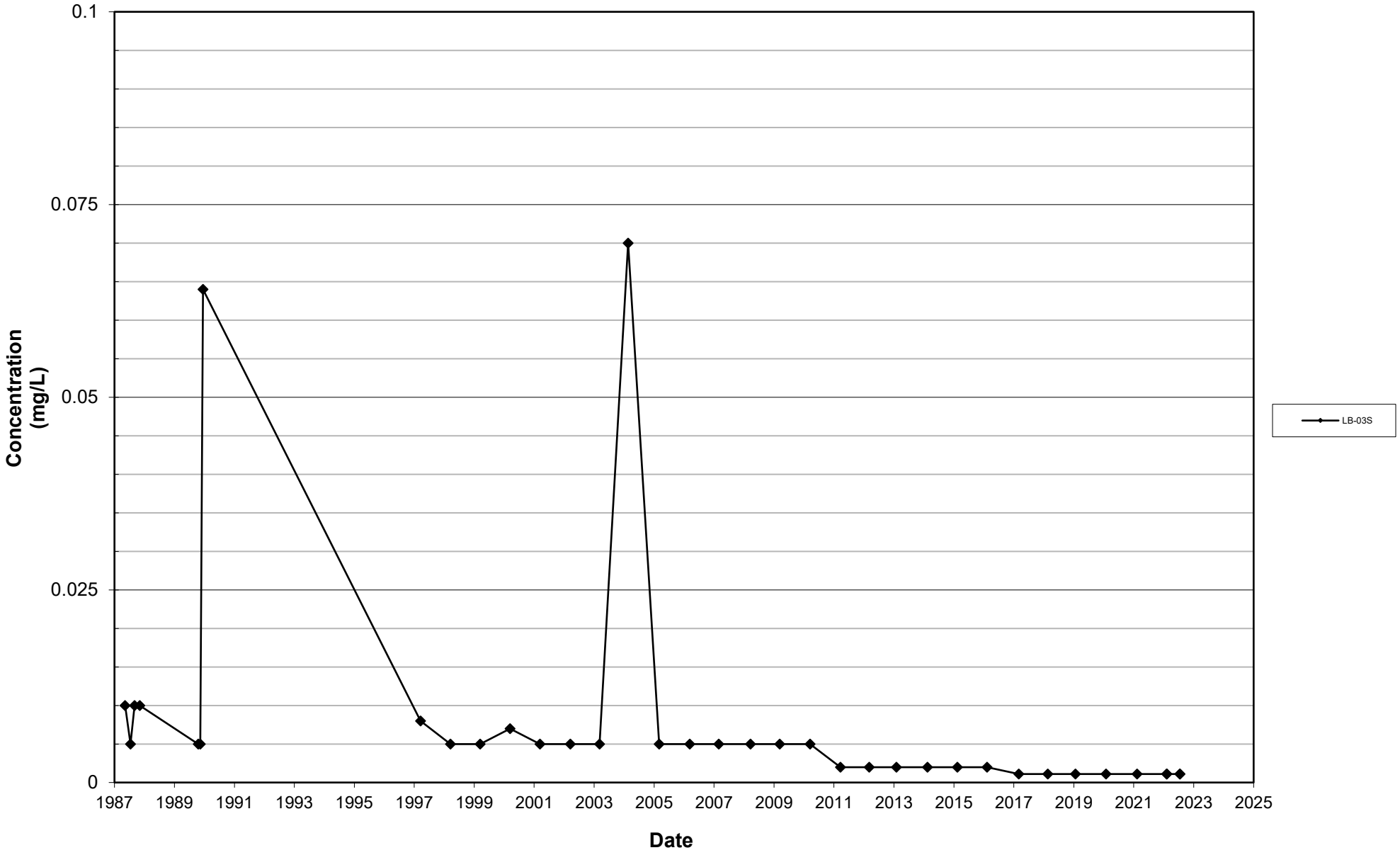
Leichner Landfill
Dissolved Manganese, LB-01S
1987 - 2022



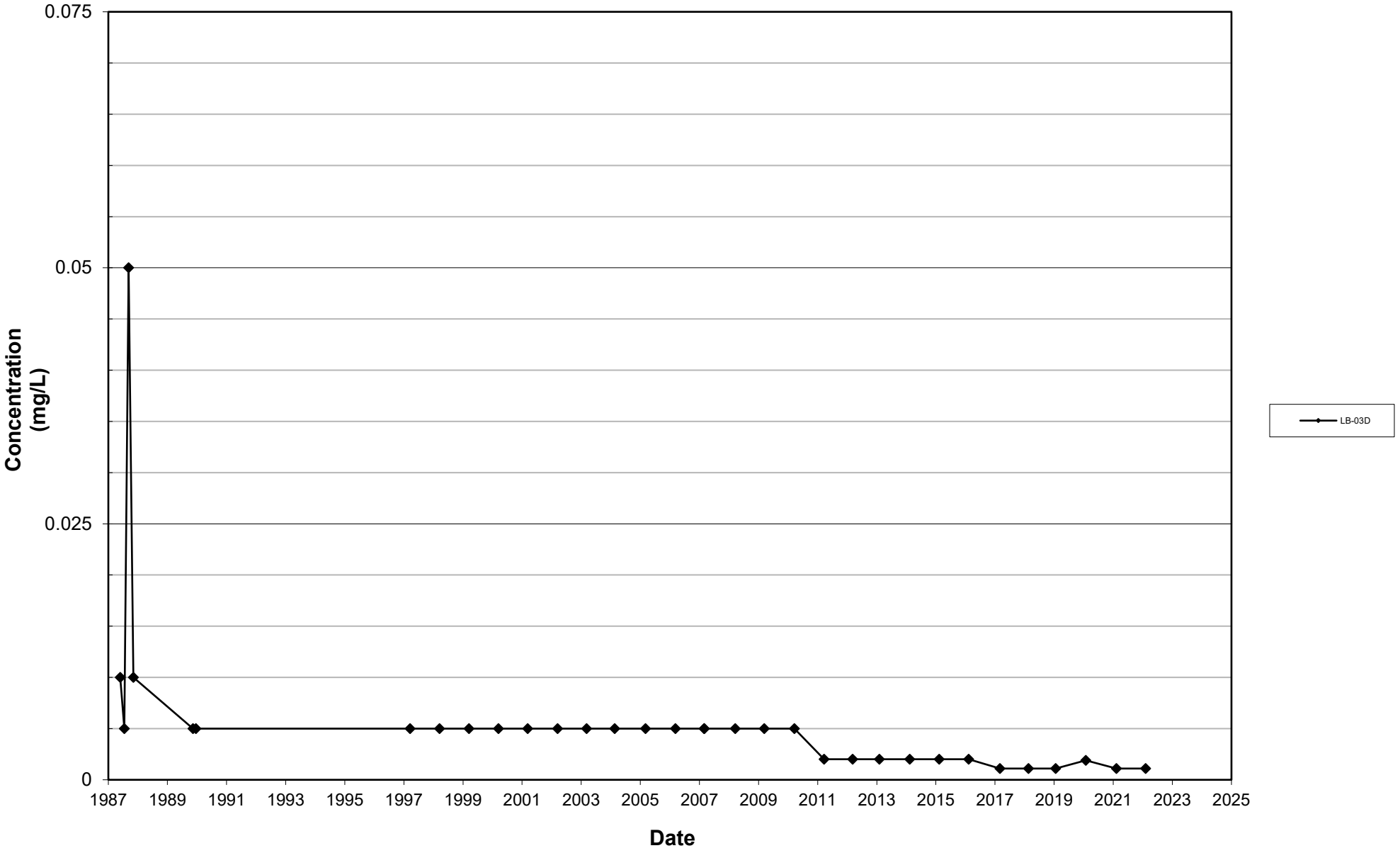
Leichner Landfill
Dissolved Manganese, LB-01D
1987 - 2022



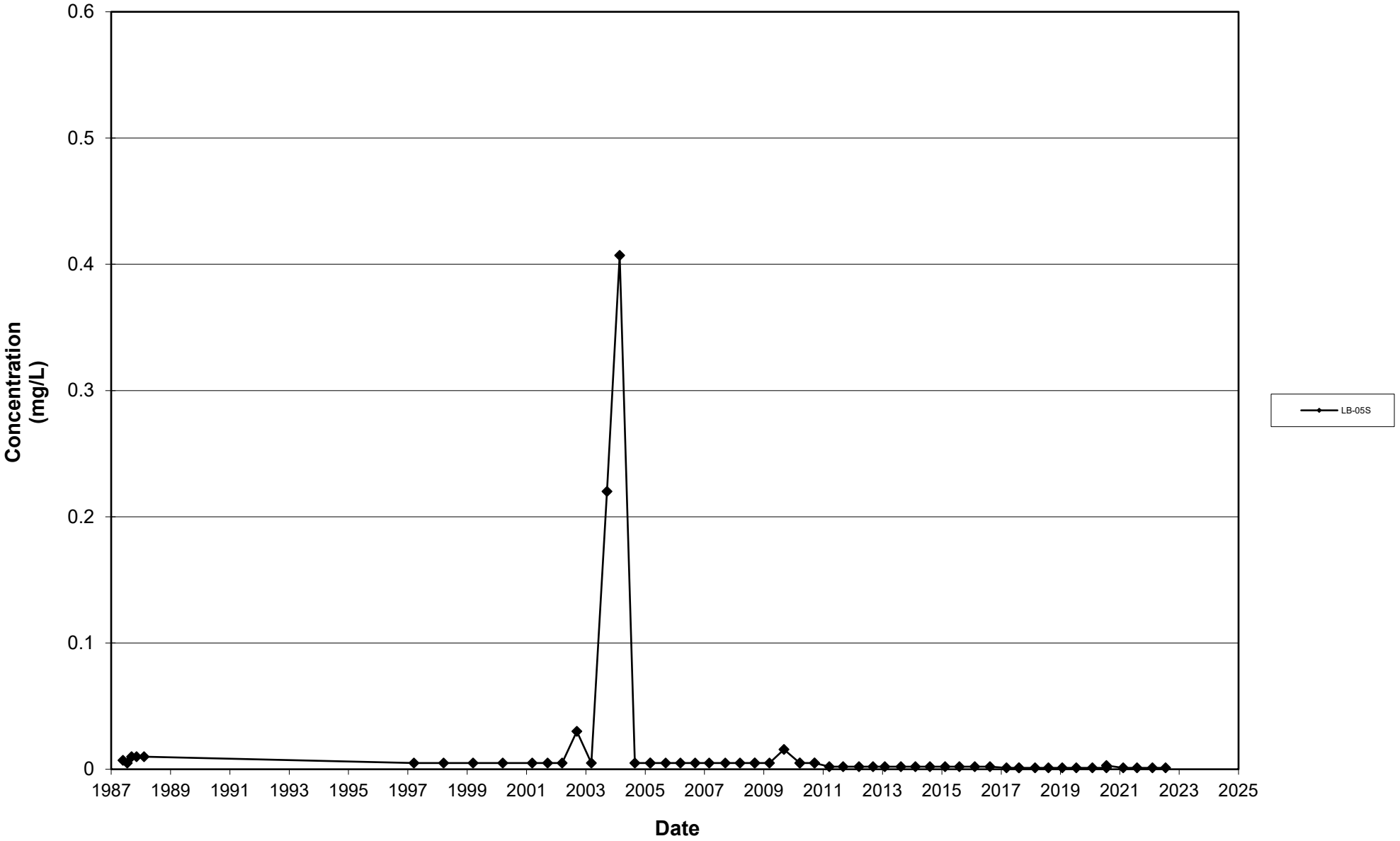
Leichner Landfill
Dissolved Manganese, LB-03S
1987 - 2022



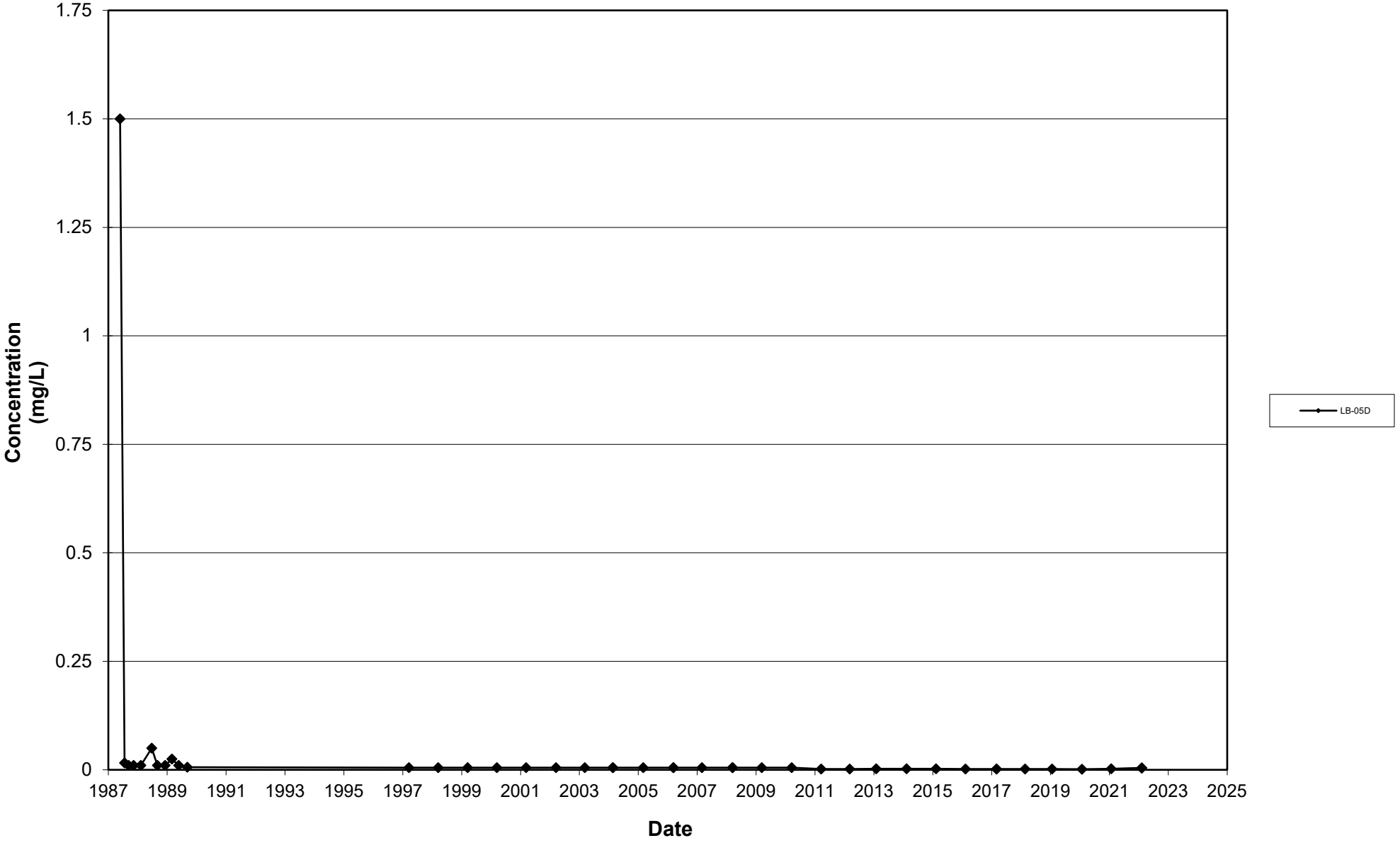
Leichner Landfill
Dissolved Manganese, LB-03D
1987 - 2022



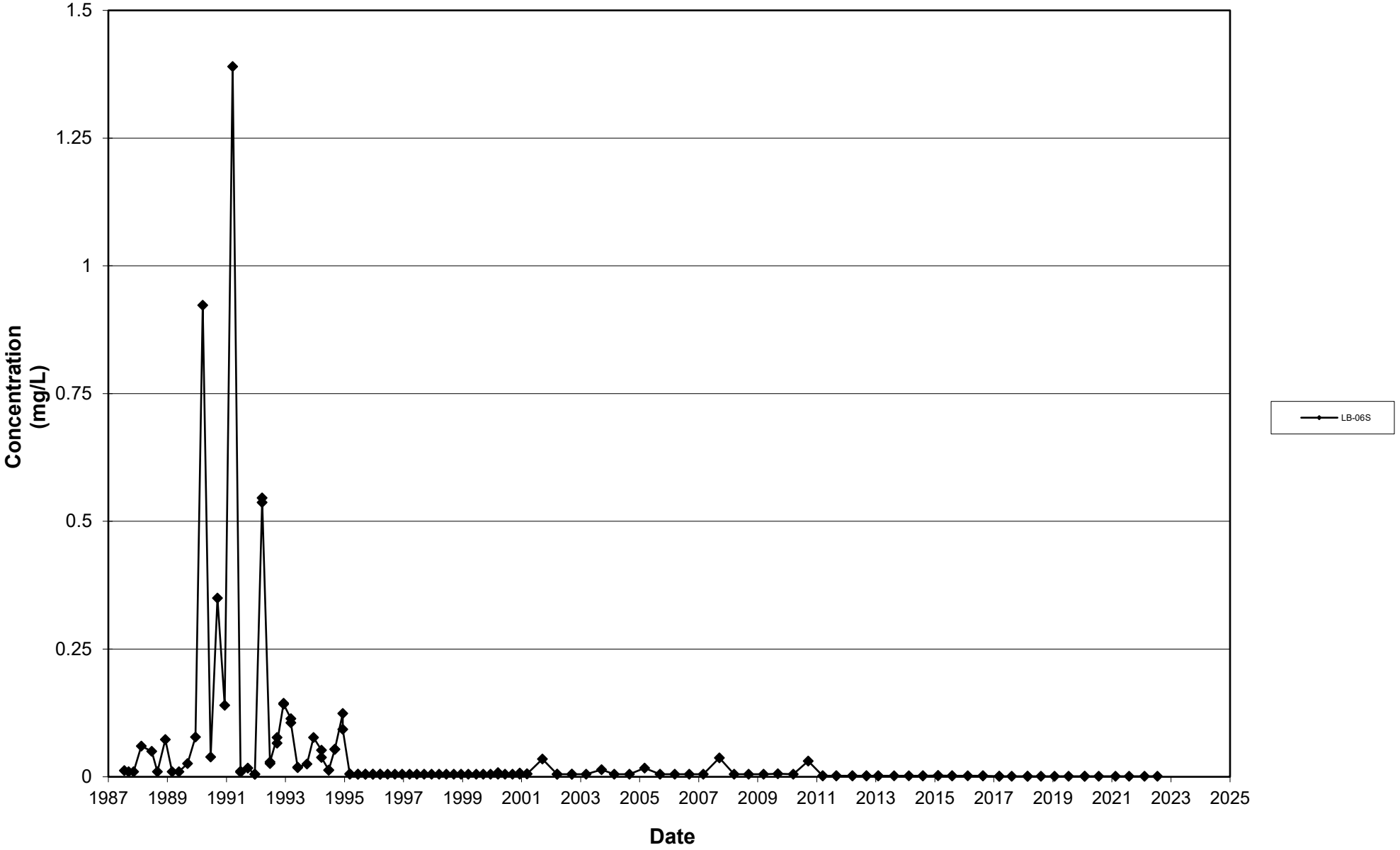
Leichner Landfill
Dissolved Manganese, LB-05S
1987 - 2022



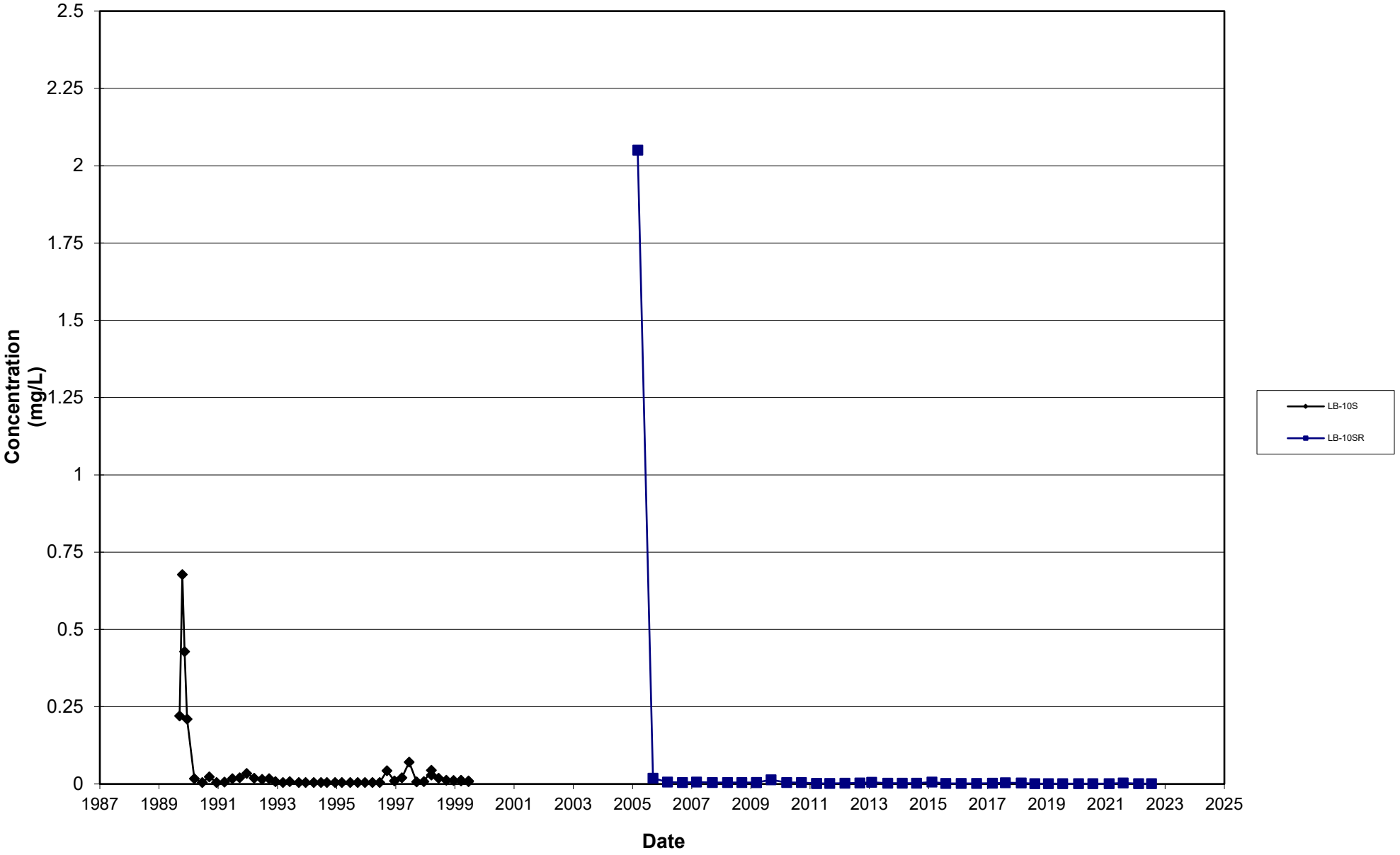
Leichner Landfill
Dissolved Manganese, LB-05D
1987 - 2022



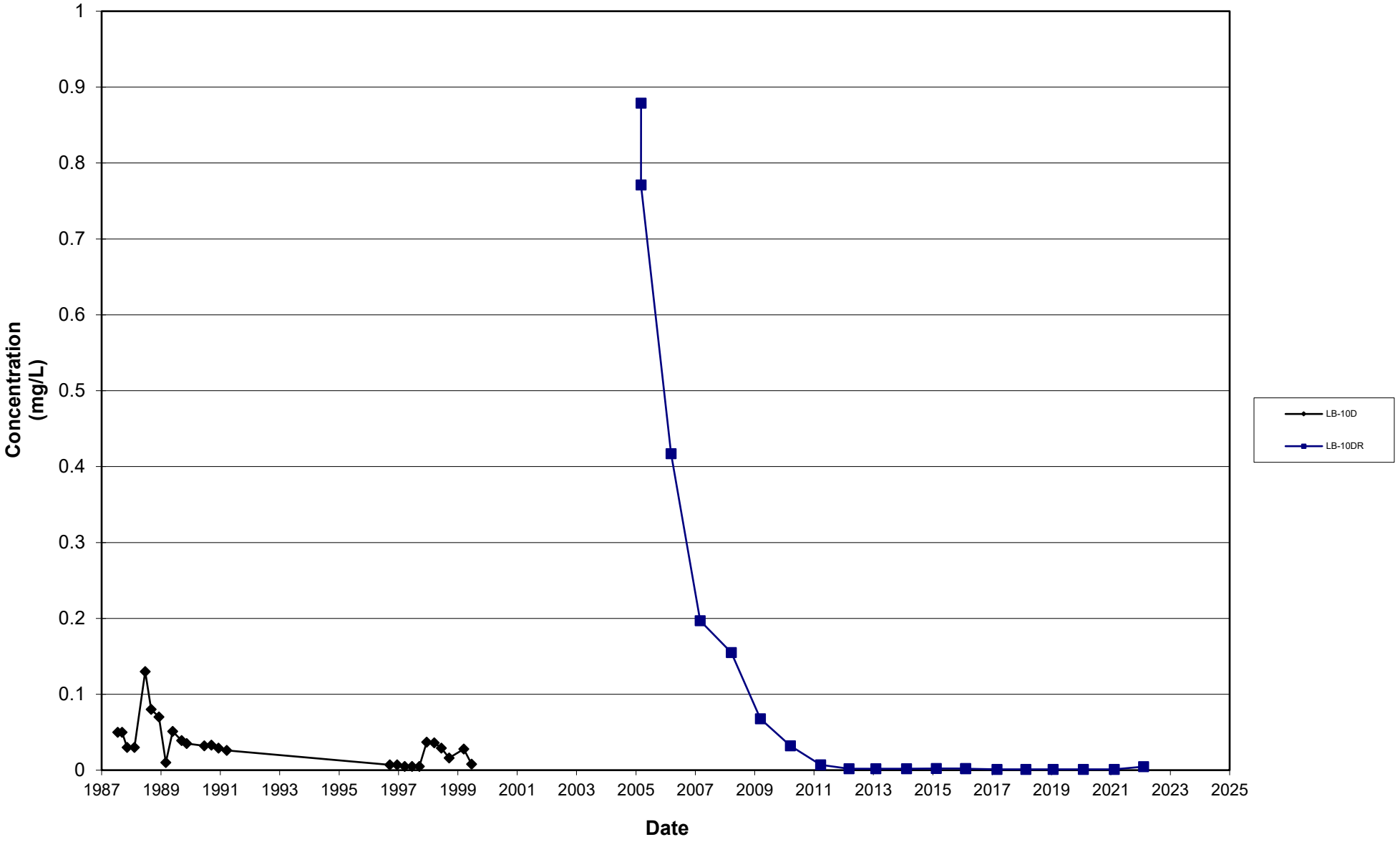
Leichner Landfill
Dissolved Manganese, LB-06S
1987 - 2022



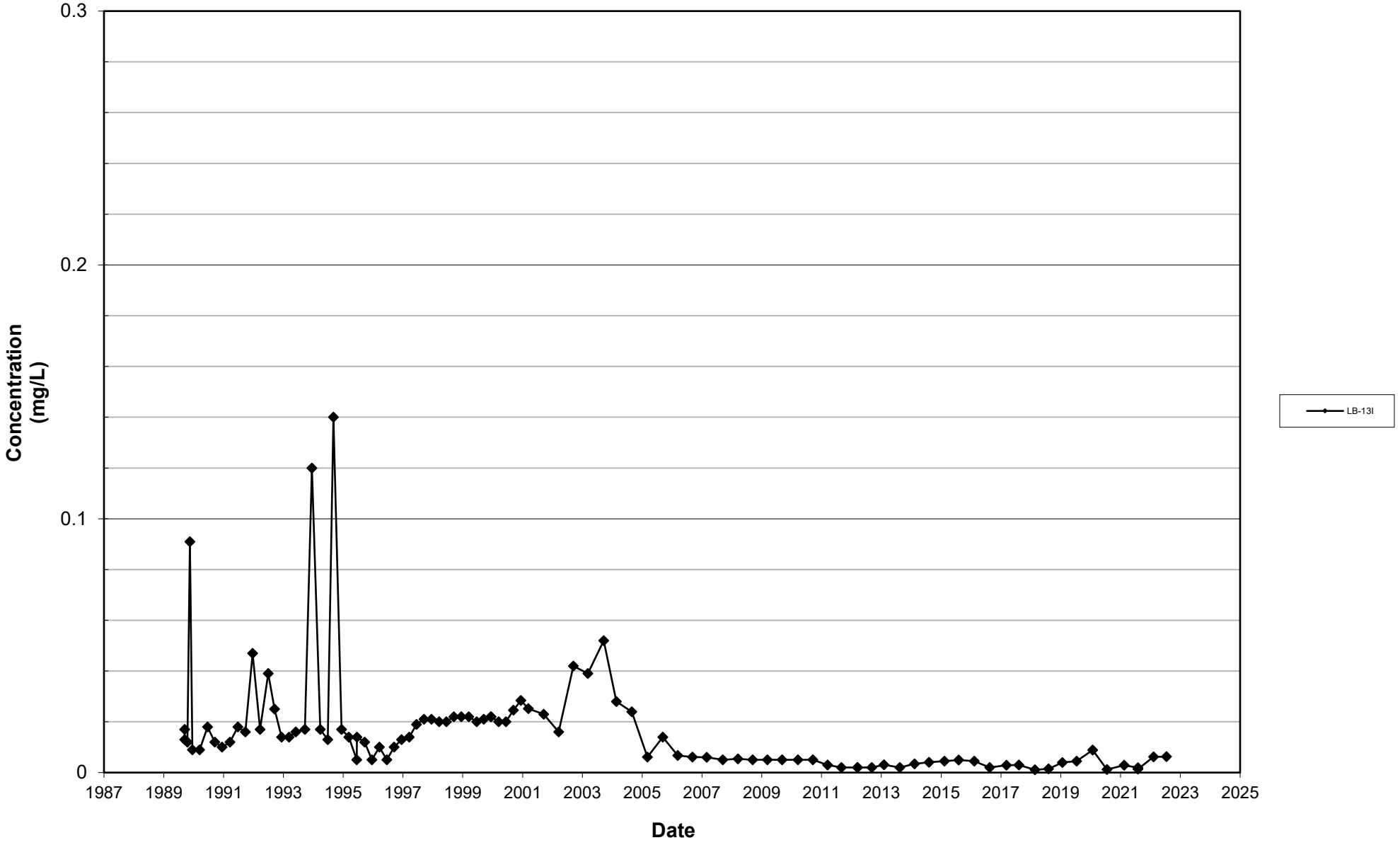
Leichner Landfill
Dissolved Manganese, LB-10S and LB-10SR
1987 - 2022



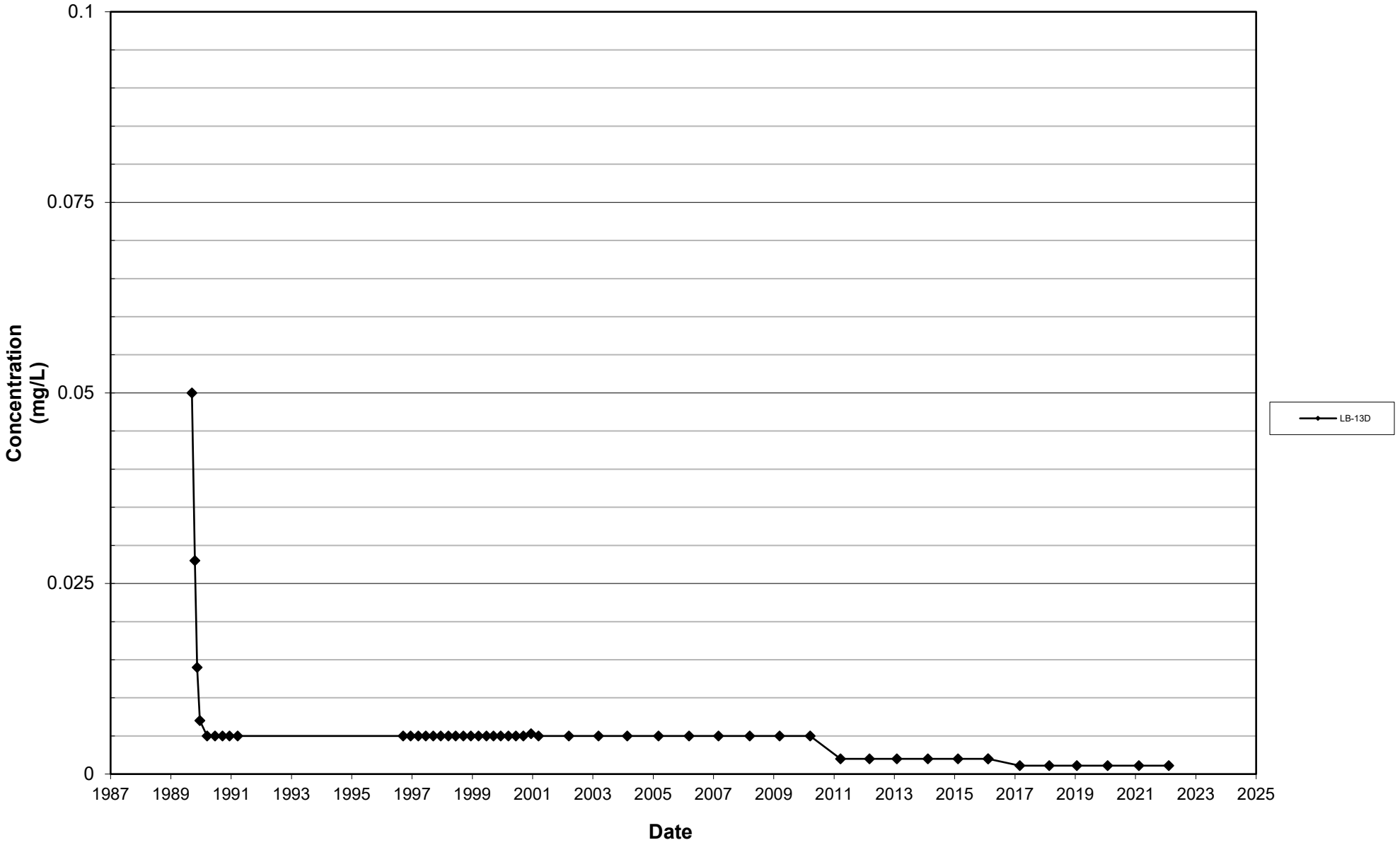
Leichner Landfill
Dissolved Manganese, LB-10D and LB-10DR
1987 - 2022



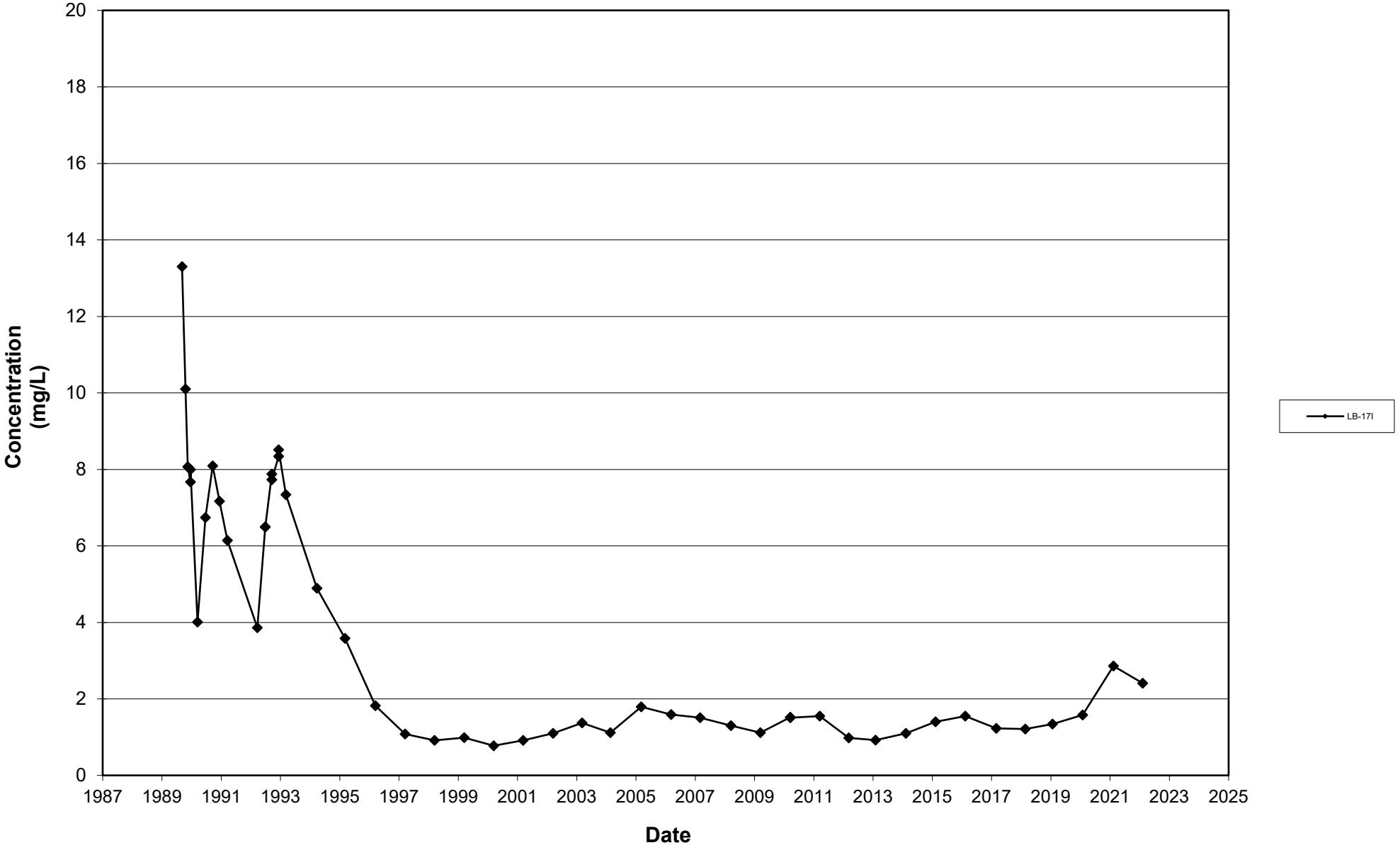
Leichner Landfill
Dissolved Manganese, LB-13I
1987 - 2022



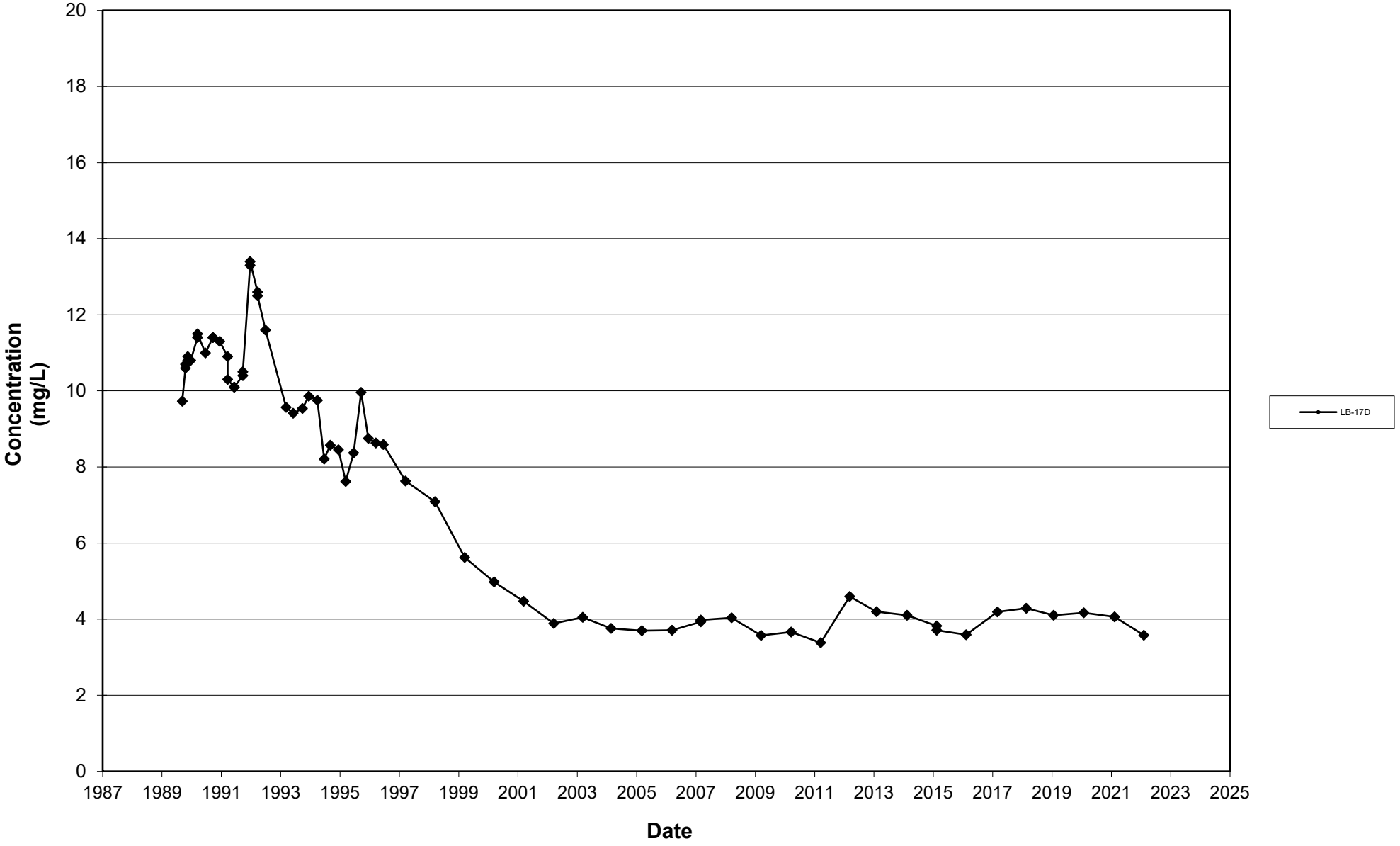
Leichner Landfill
Dissolved Manganese, LB-13D
1987 - 2022



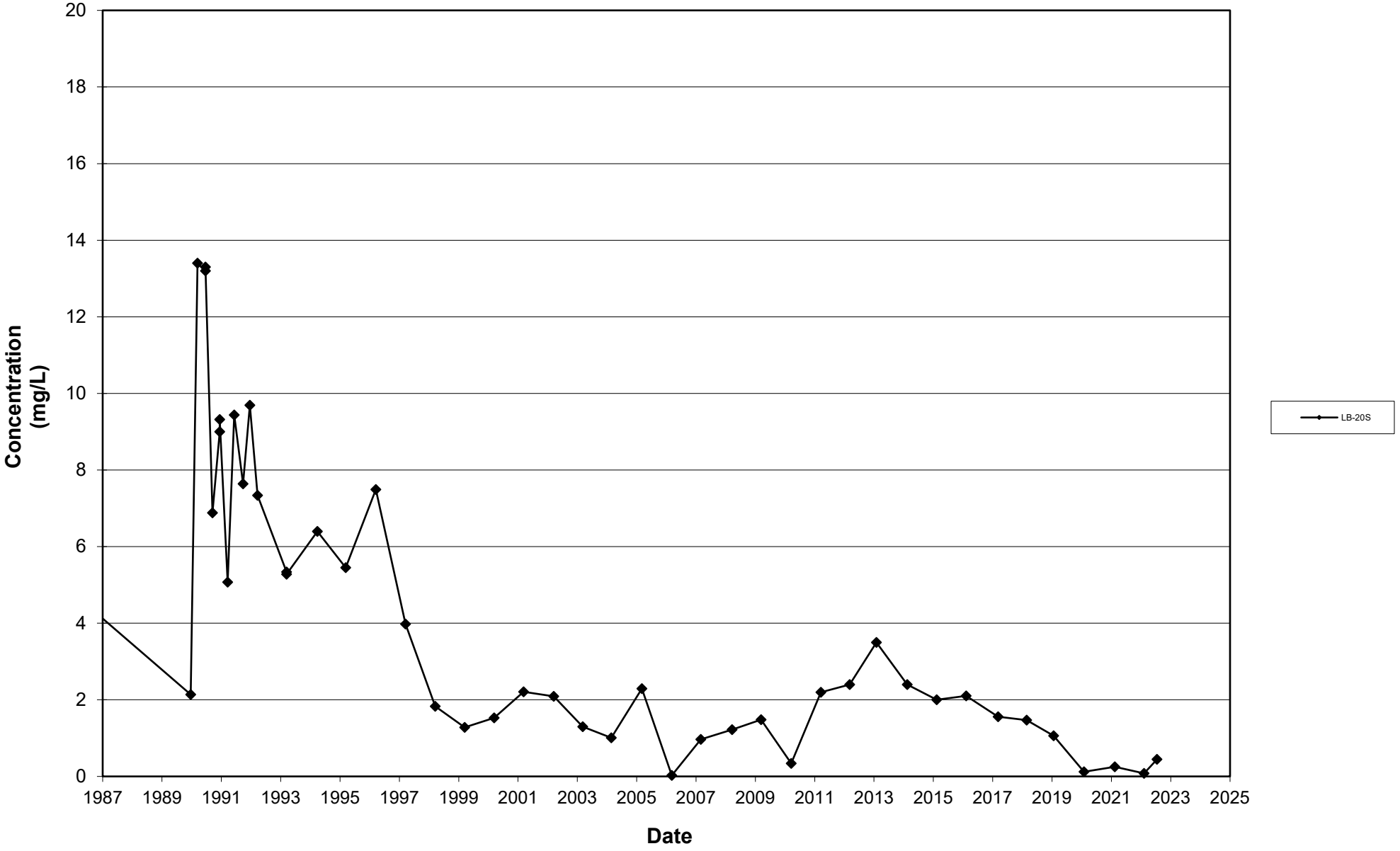
Leichner Landfill
Dissolved Manganese, LB-17I
1987 - 2022



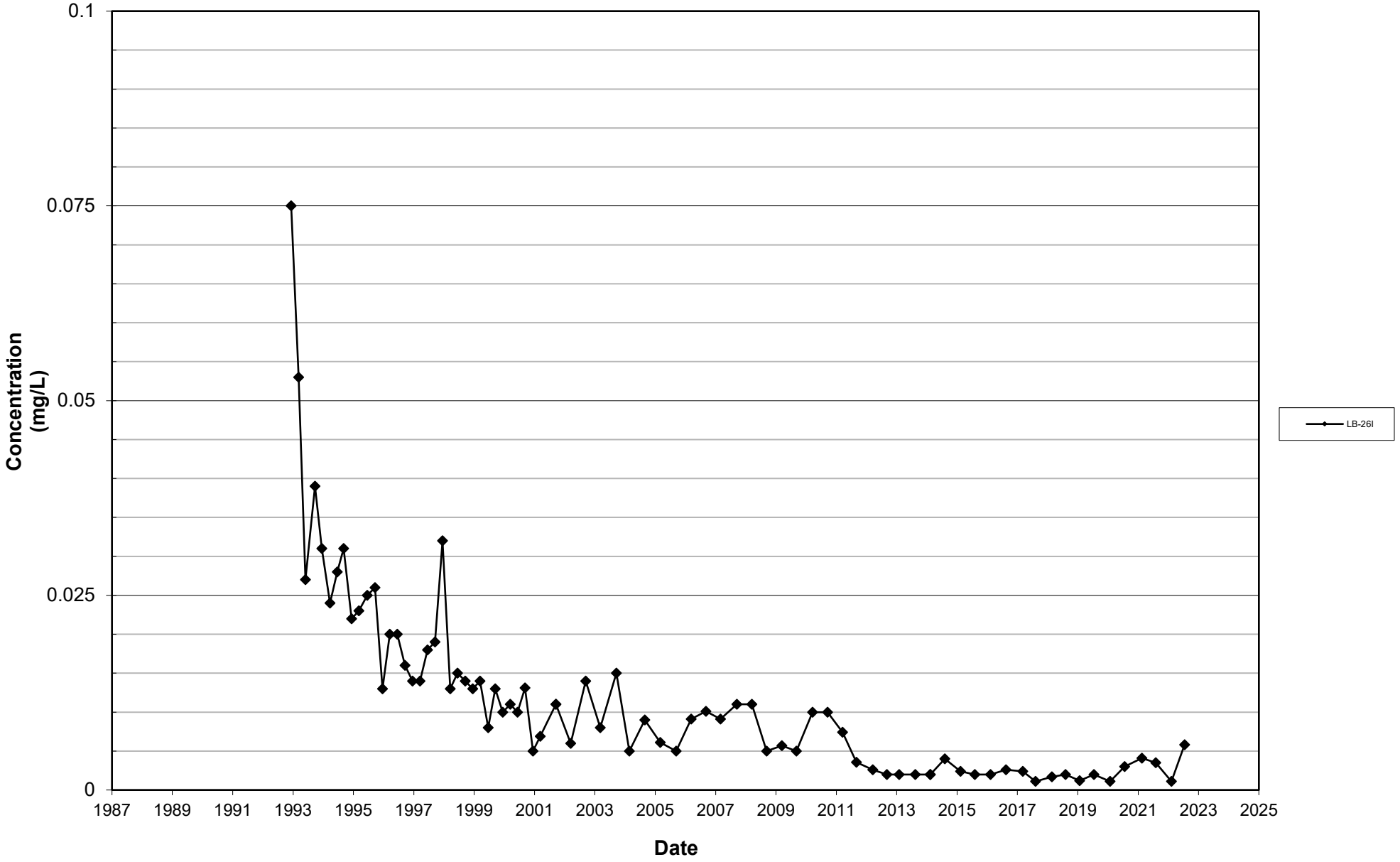
Leichner Landfill
Dissolved Manganese, LB-17D
1987 - 2022



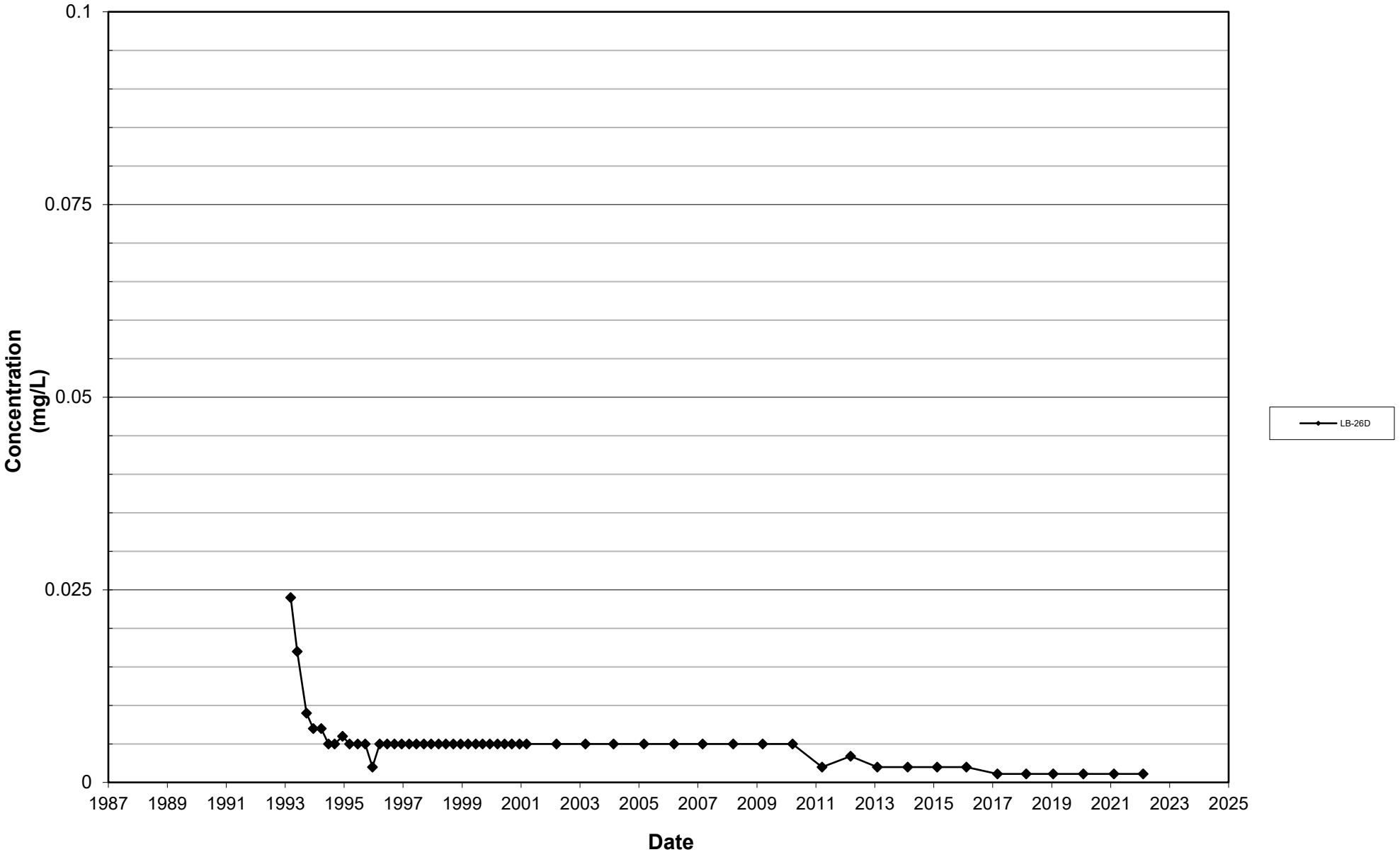
Leichner Landfill
Dissolved Manganese, LB-20S
1987 - 2022



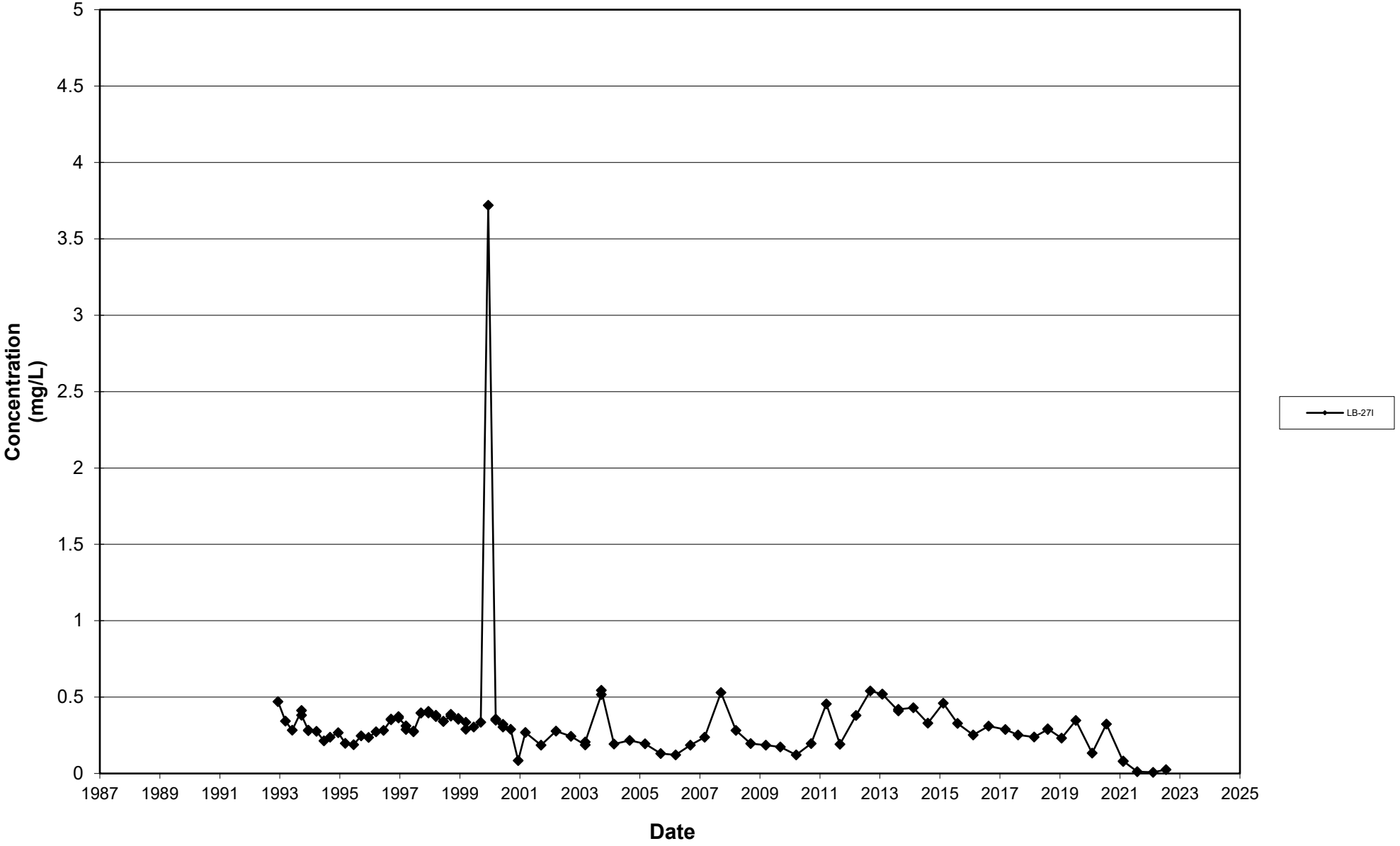
Leichner Landfill
Dissolved Manganese, LB-26I
1987 - 2022



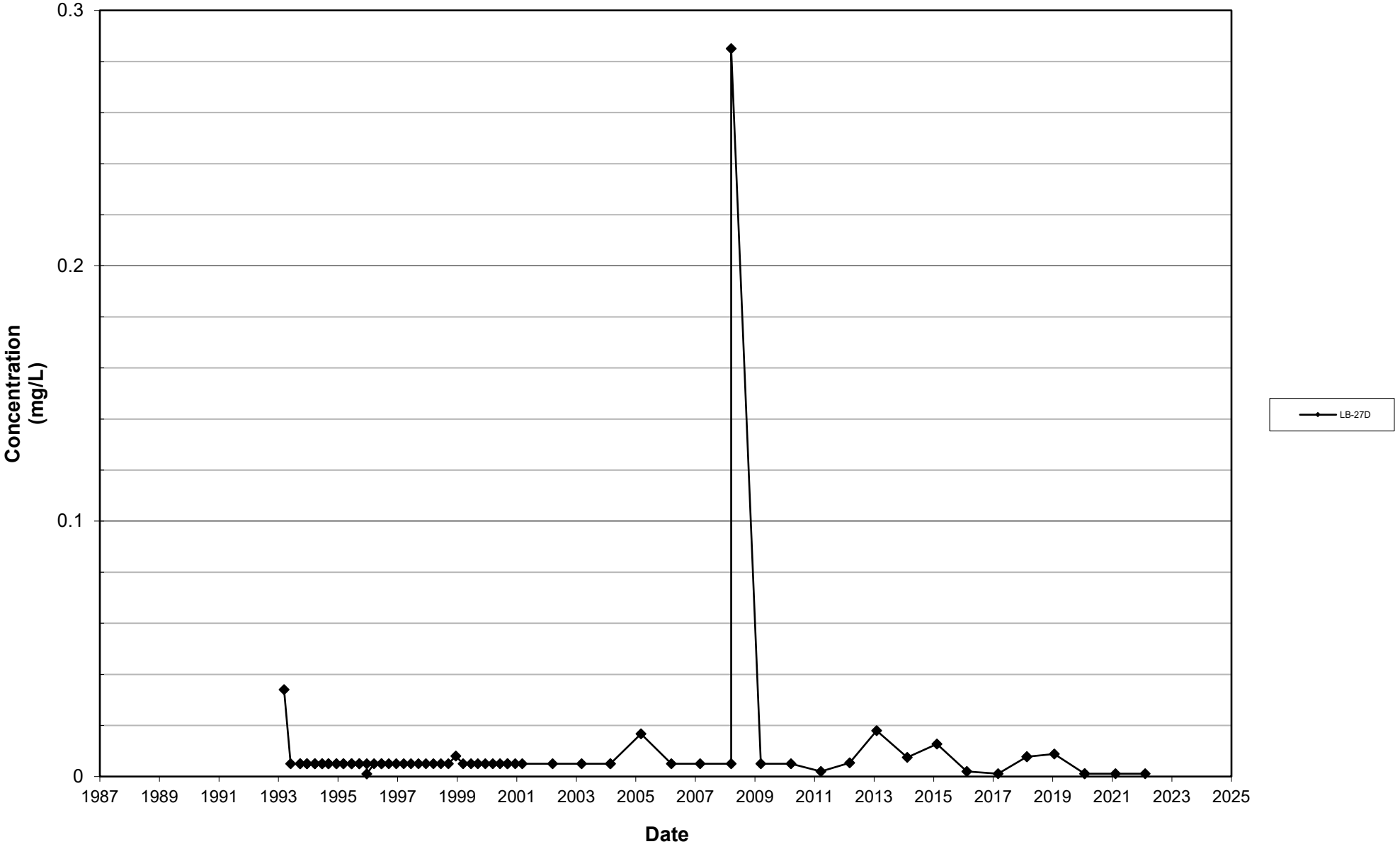
Leichner Landfill
Dissolved Manganese, LB-26D
1987 - 2022



Leichner Landfill
Dissolved Manganese, LB-27I
1987 - 2022

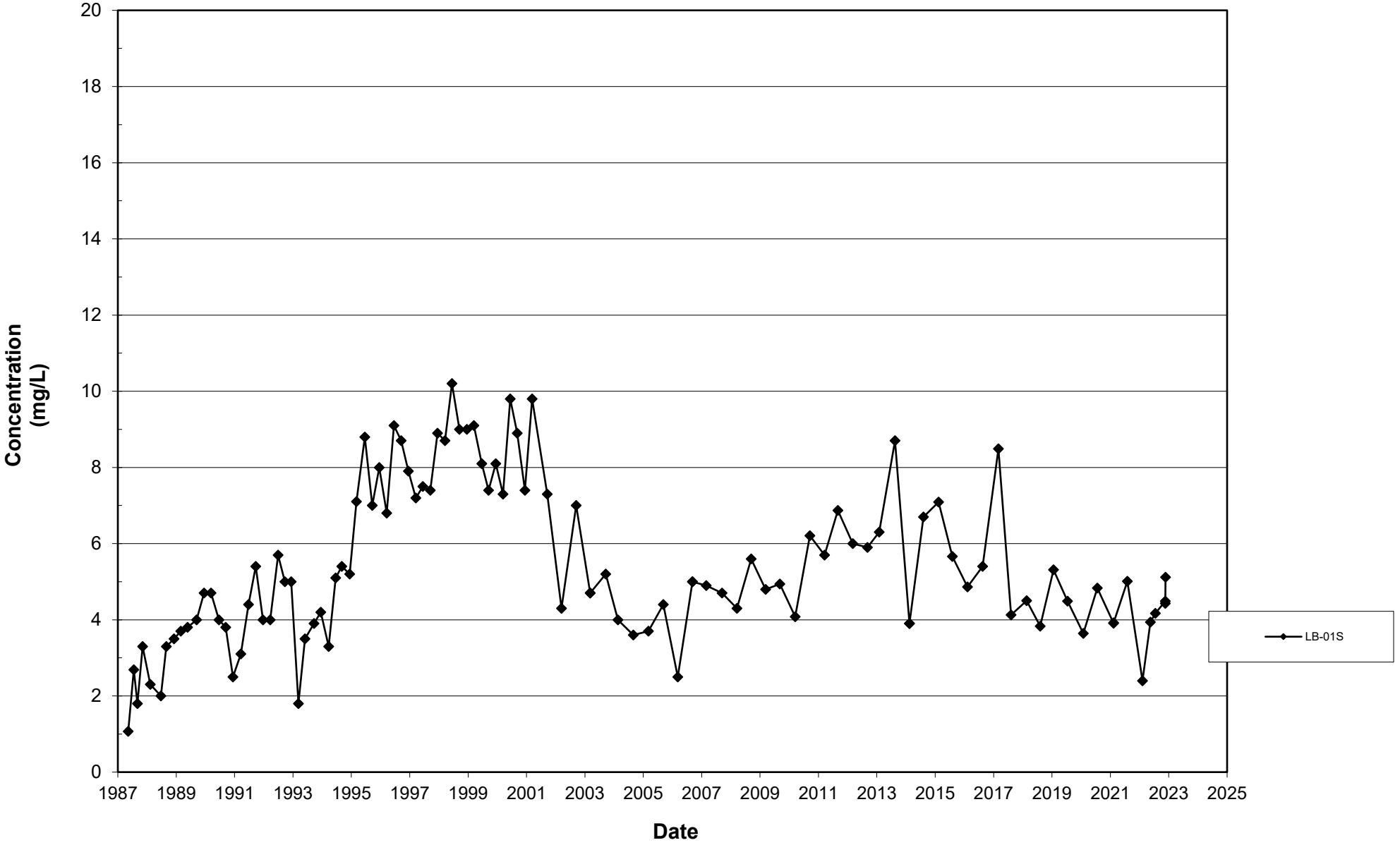


Leichner Landfill
Dissolved Manganese, LB-27D
1987 - 2022

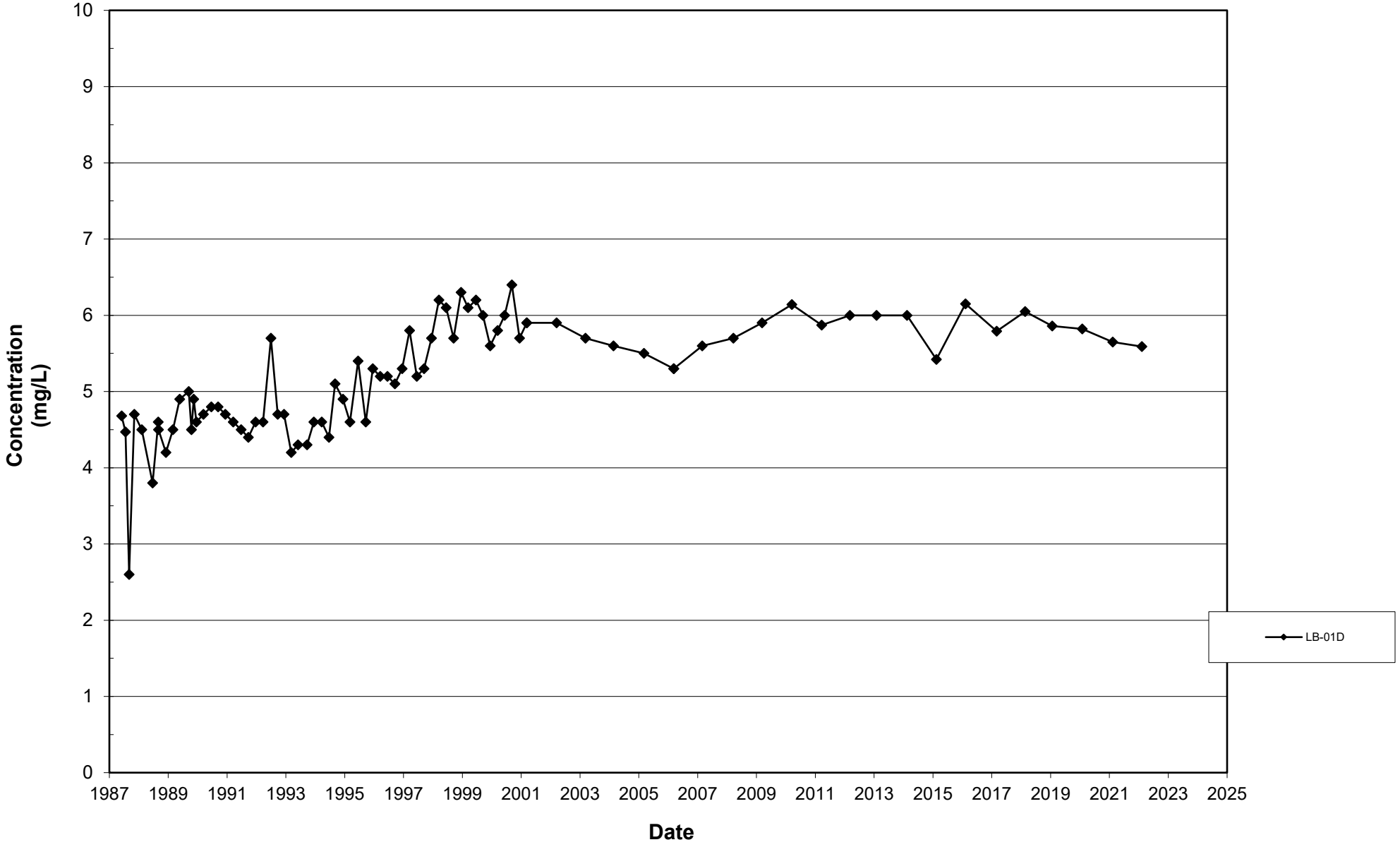


Nitrate

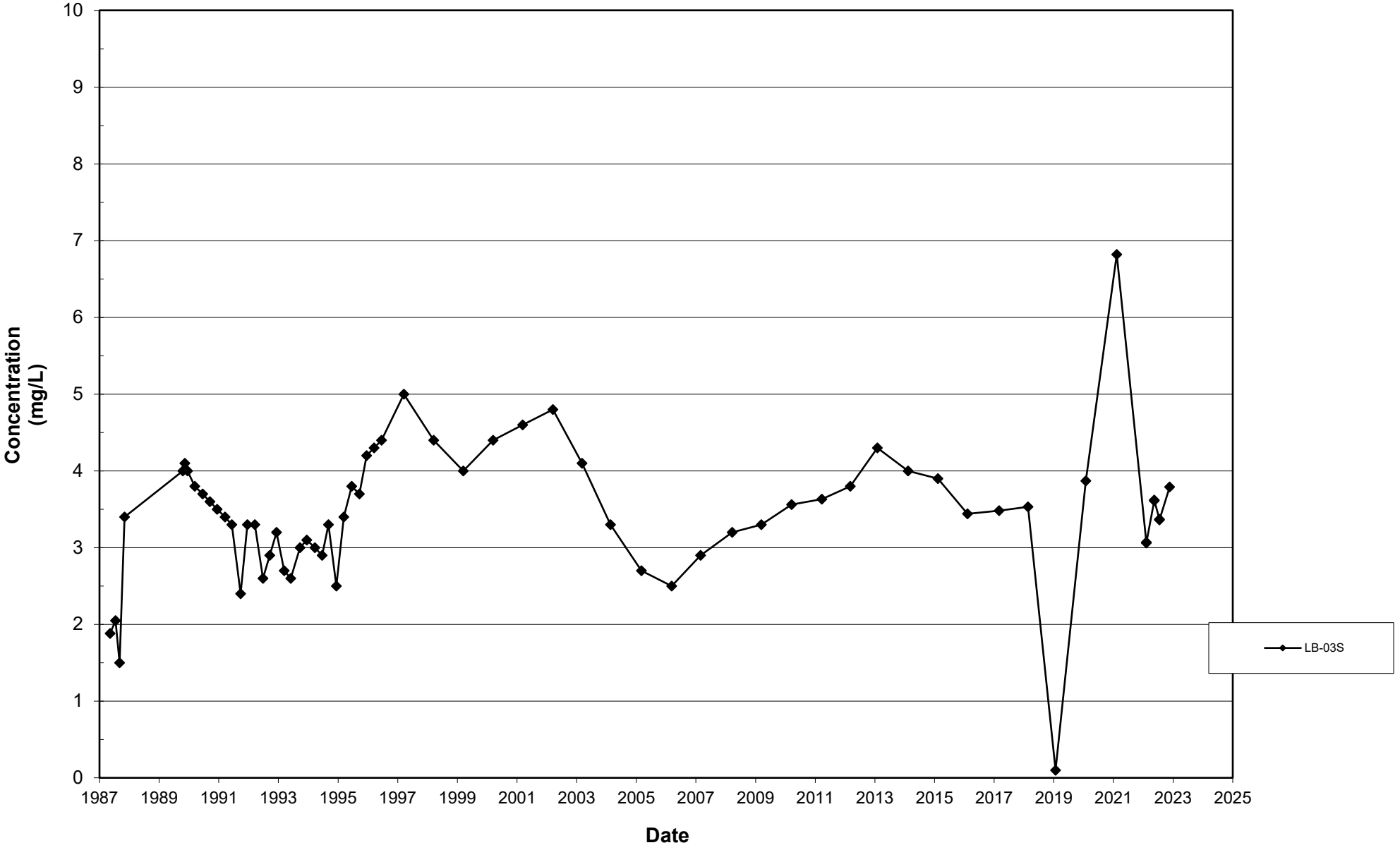
Leichner Landfill
Nitrate, LB-01S
1987 - 2022



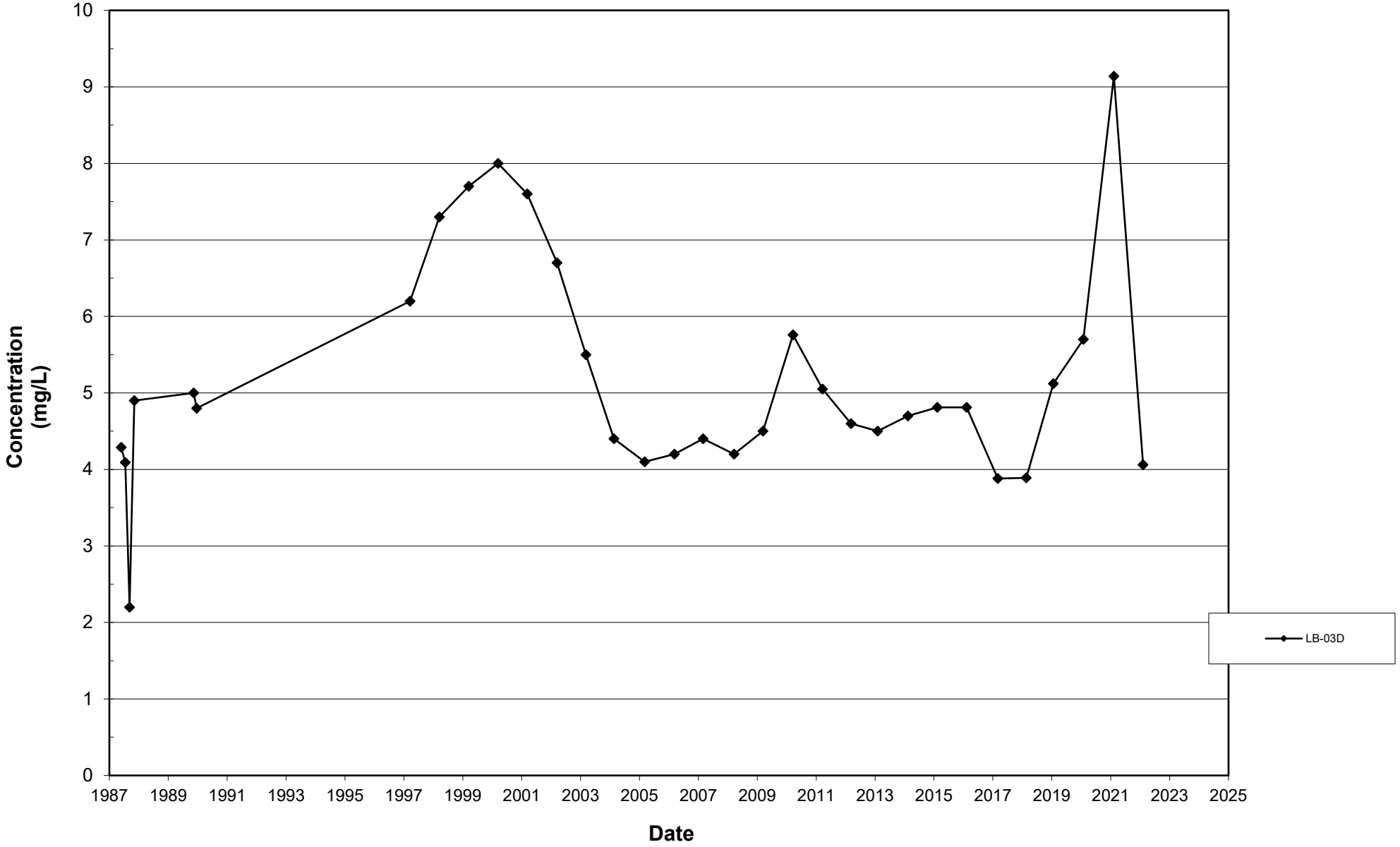
Leichner Landfill
Nitrate, LB-01D
1987 - 2022



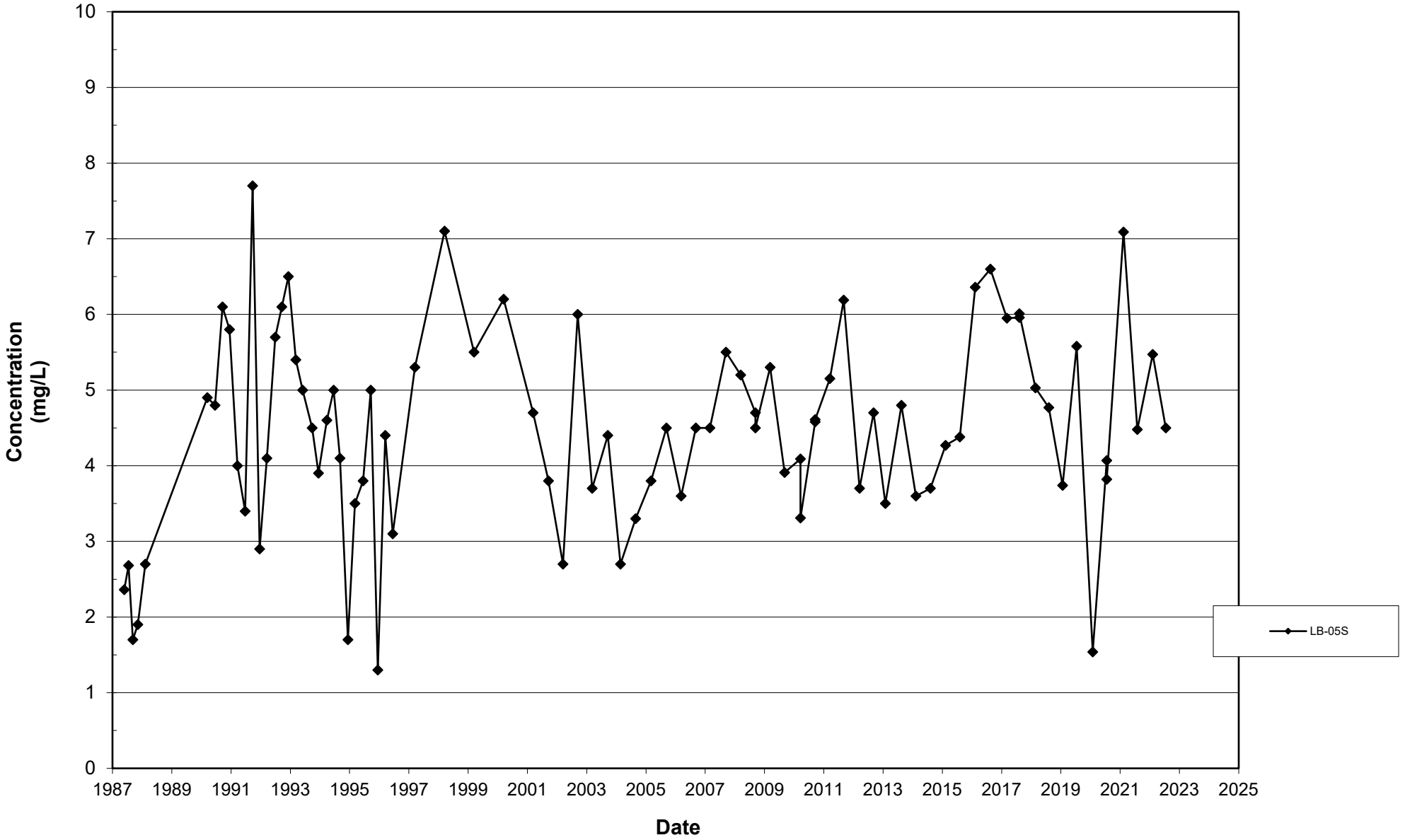
Leichner Landfill
Nitrate, LB-03S
1987 - 2022



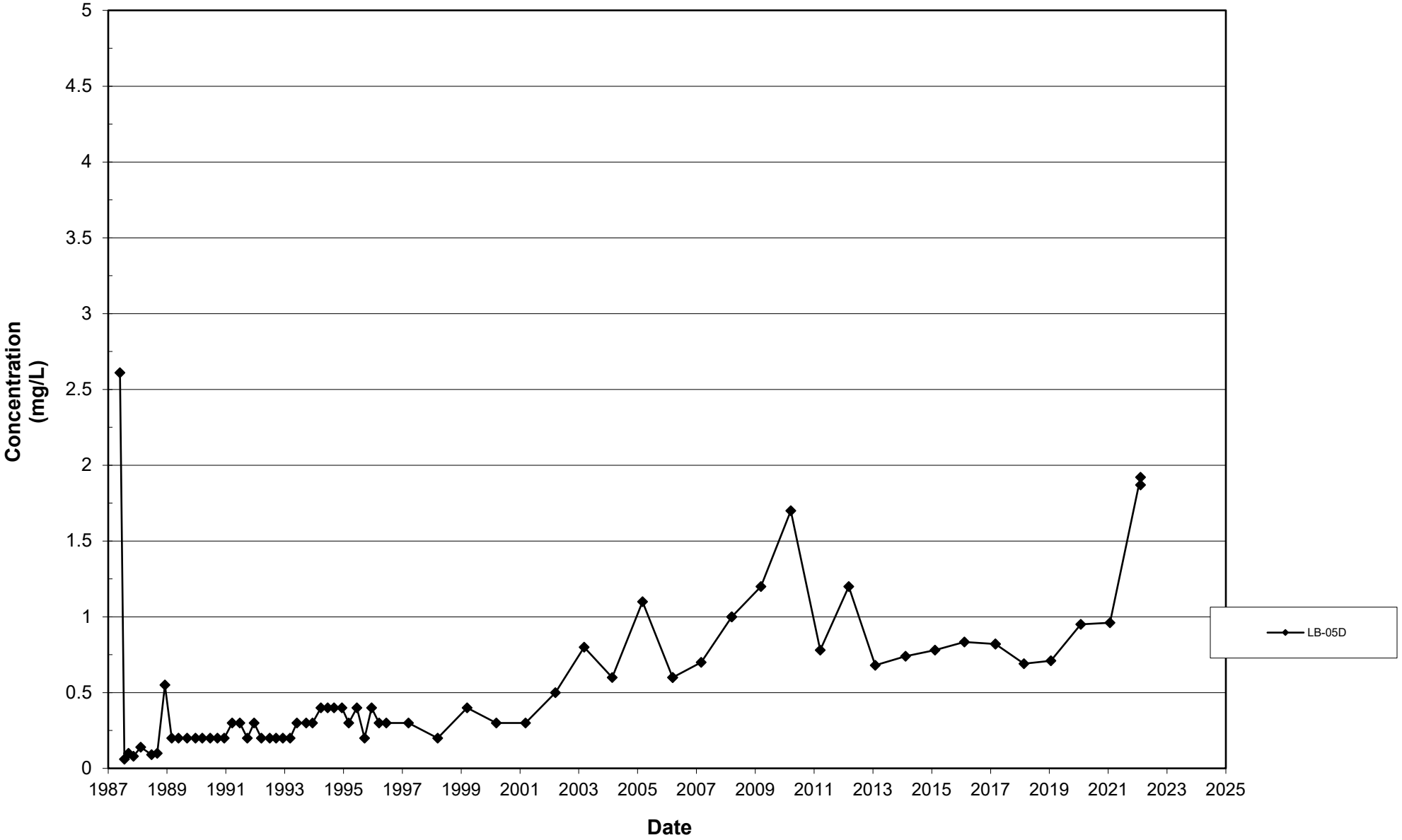
Leichner Landfill
Nitrate, LB-03D
1987 - 2022



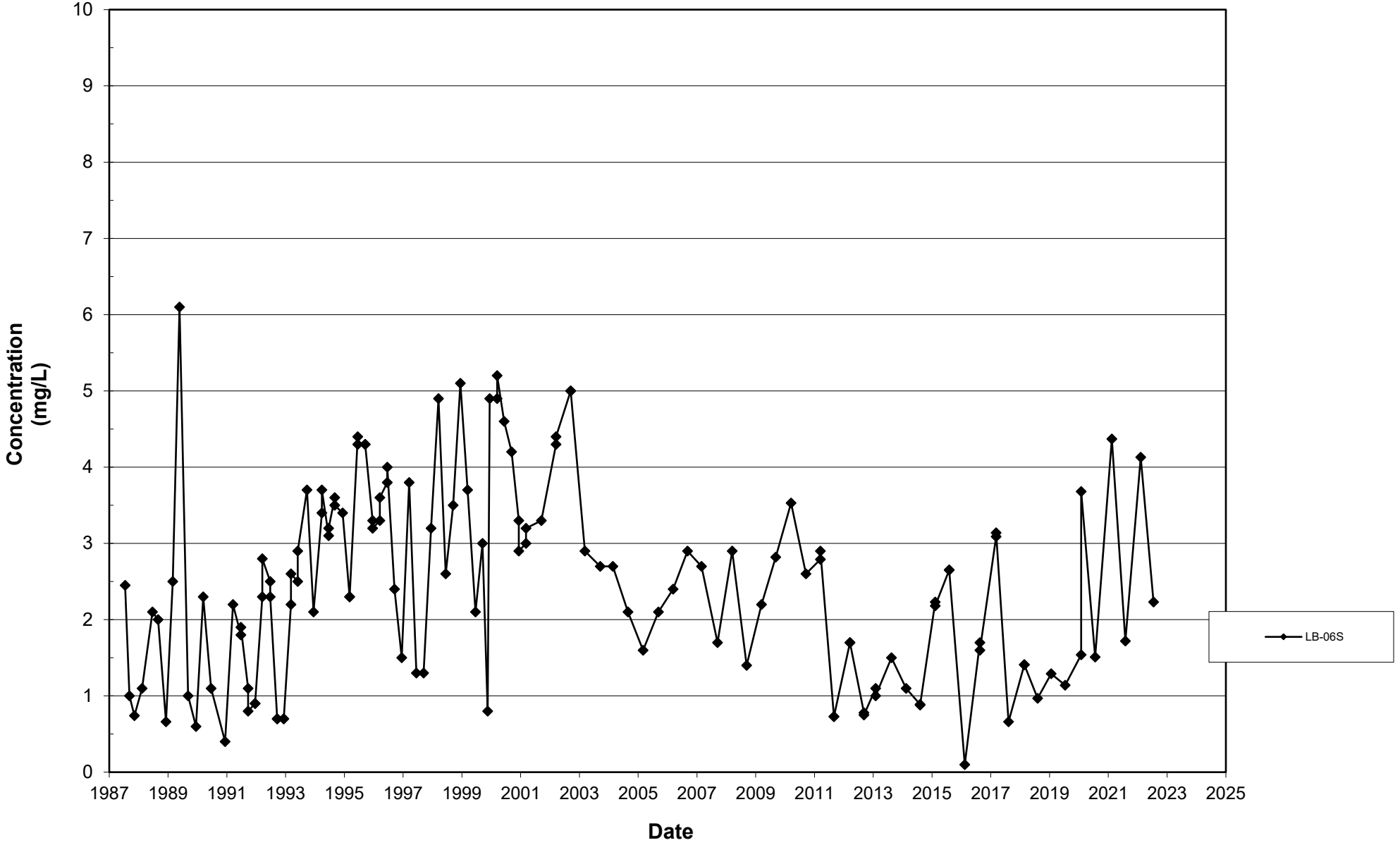
Leichner Landfill
Nitrate, LB-05S
1987 - 2022



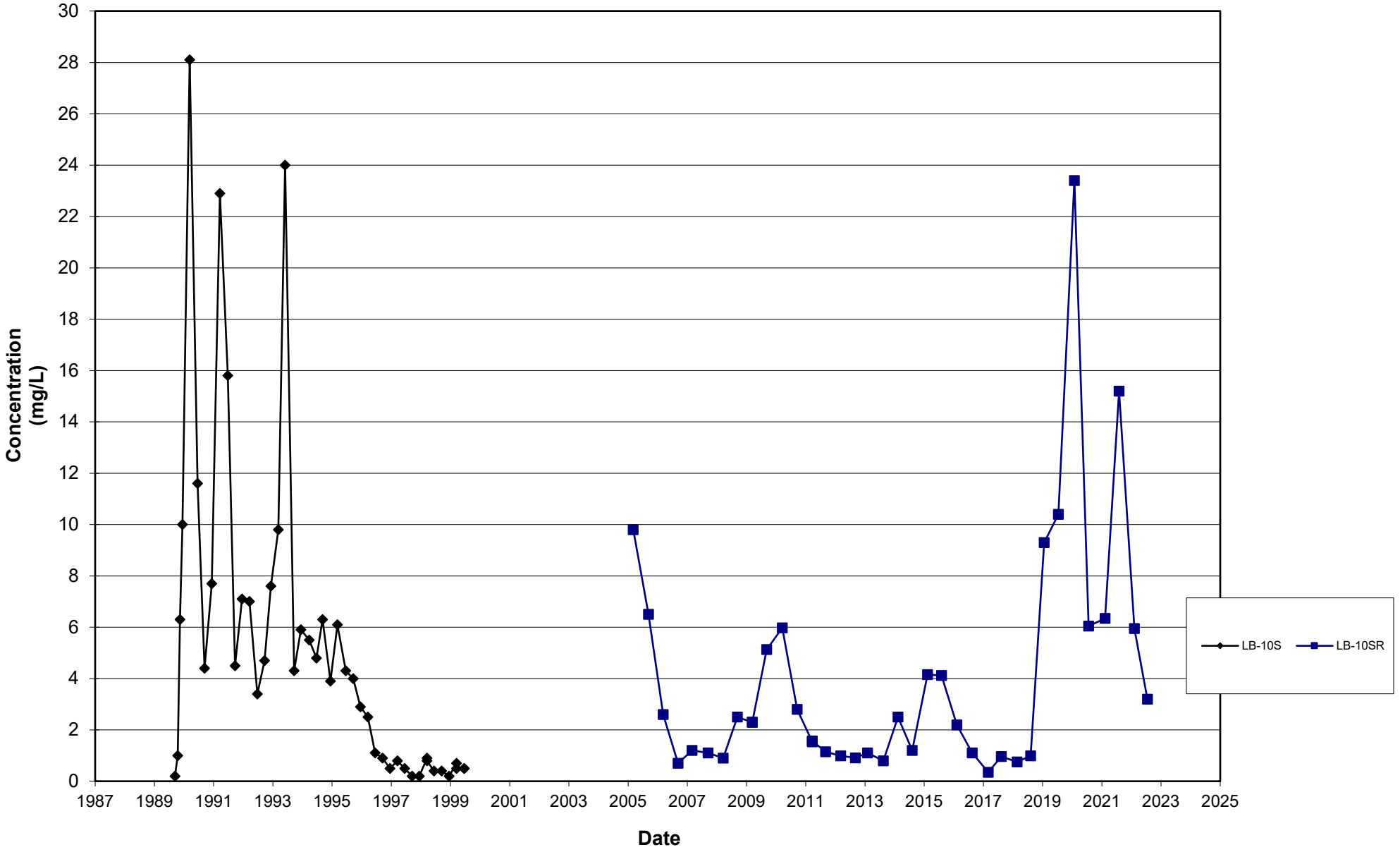
Leichner Landfill
Nitrate, LB-05D
1987 - 2022



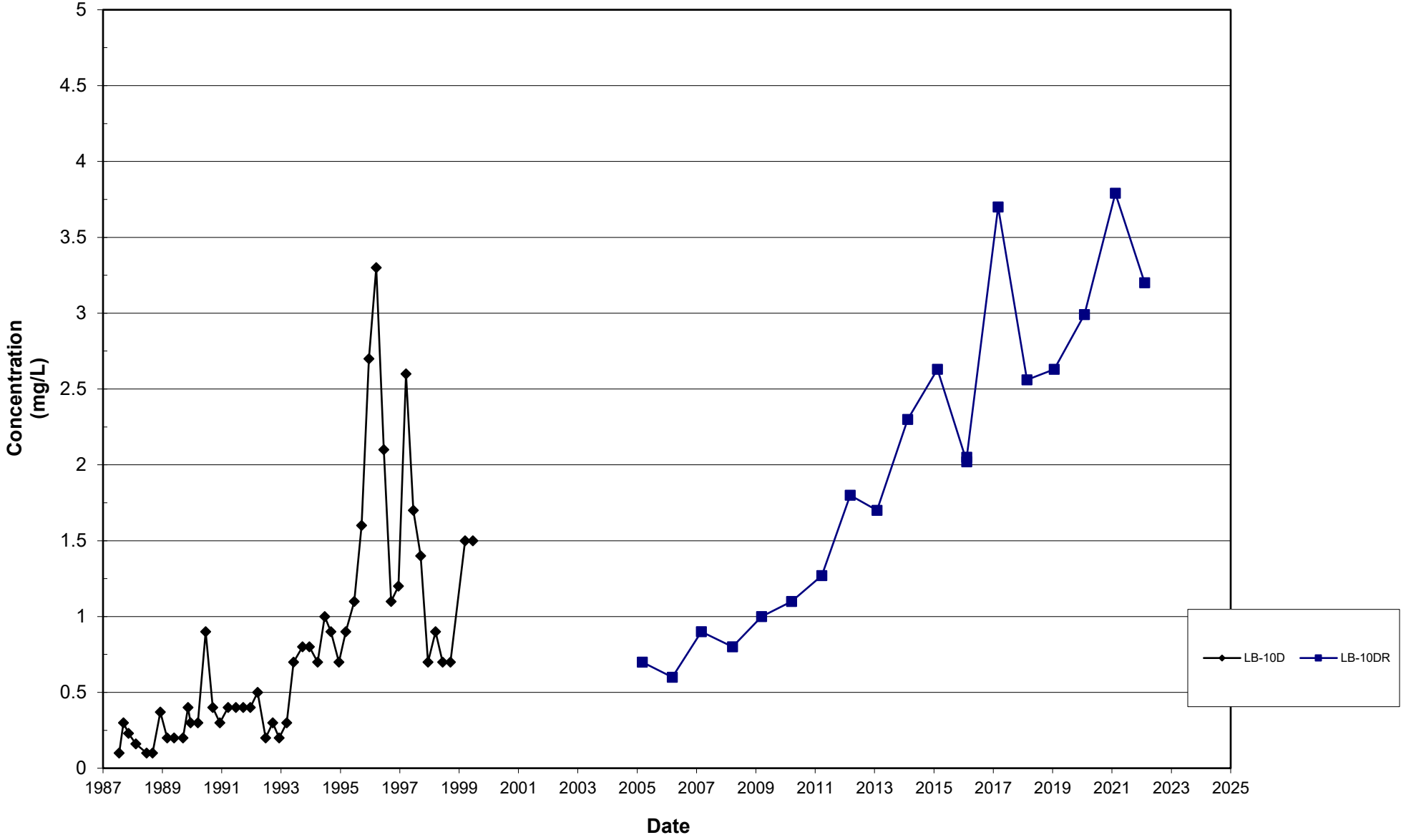
Leichner Landfill
Nitrate, LB-06S
1987 - 2022



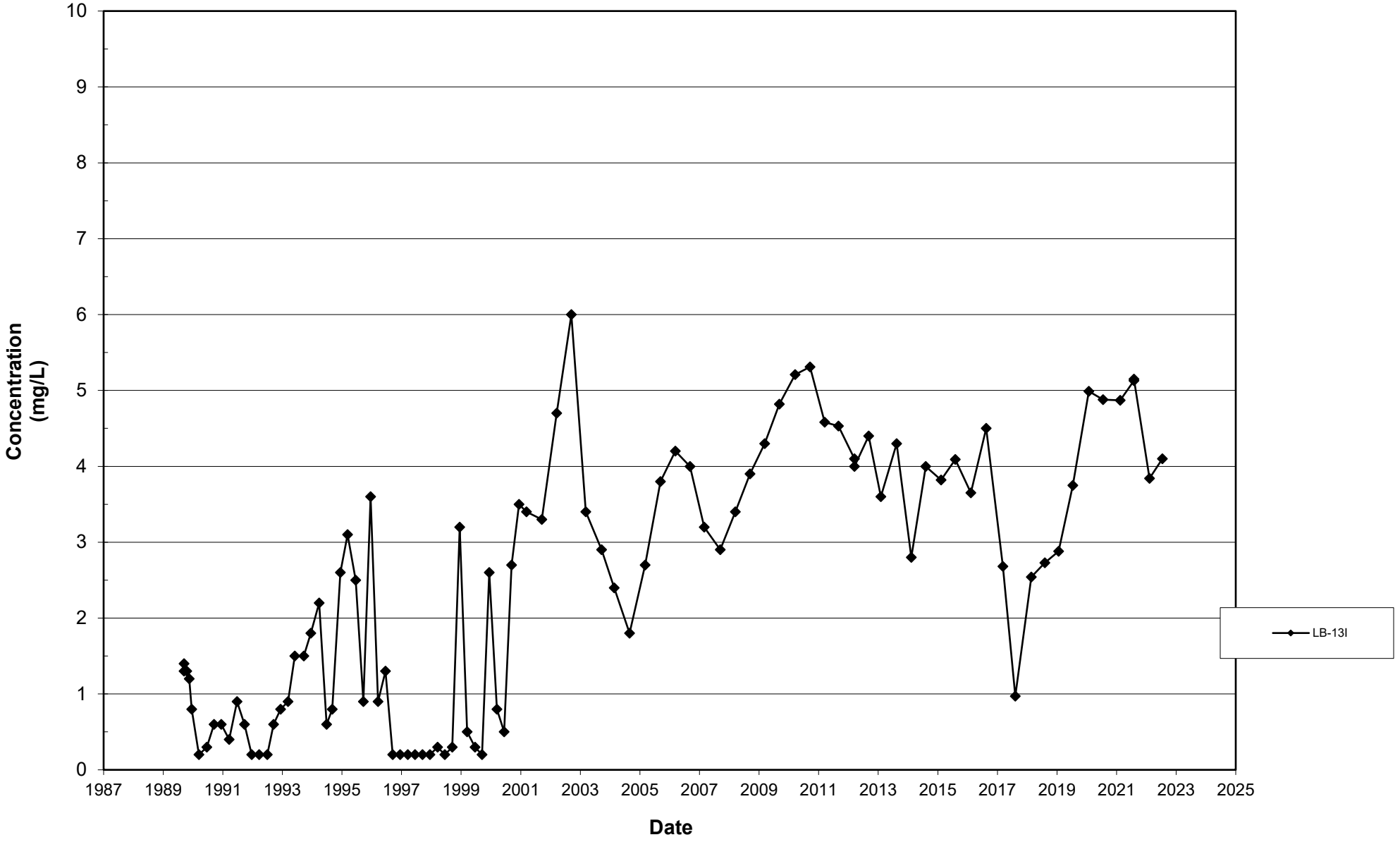
Leichner Landfill
Nitrate, LB-10S and LB-10SR
1987 - 2022



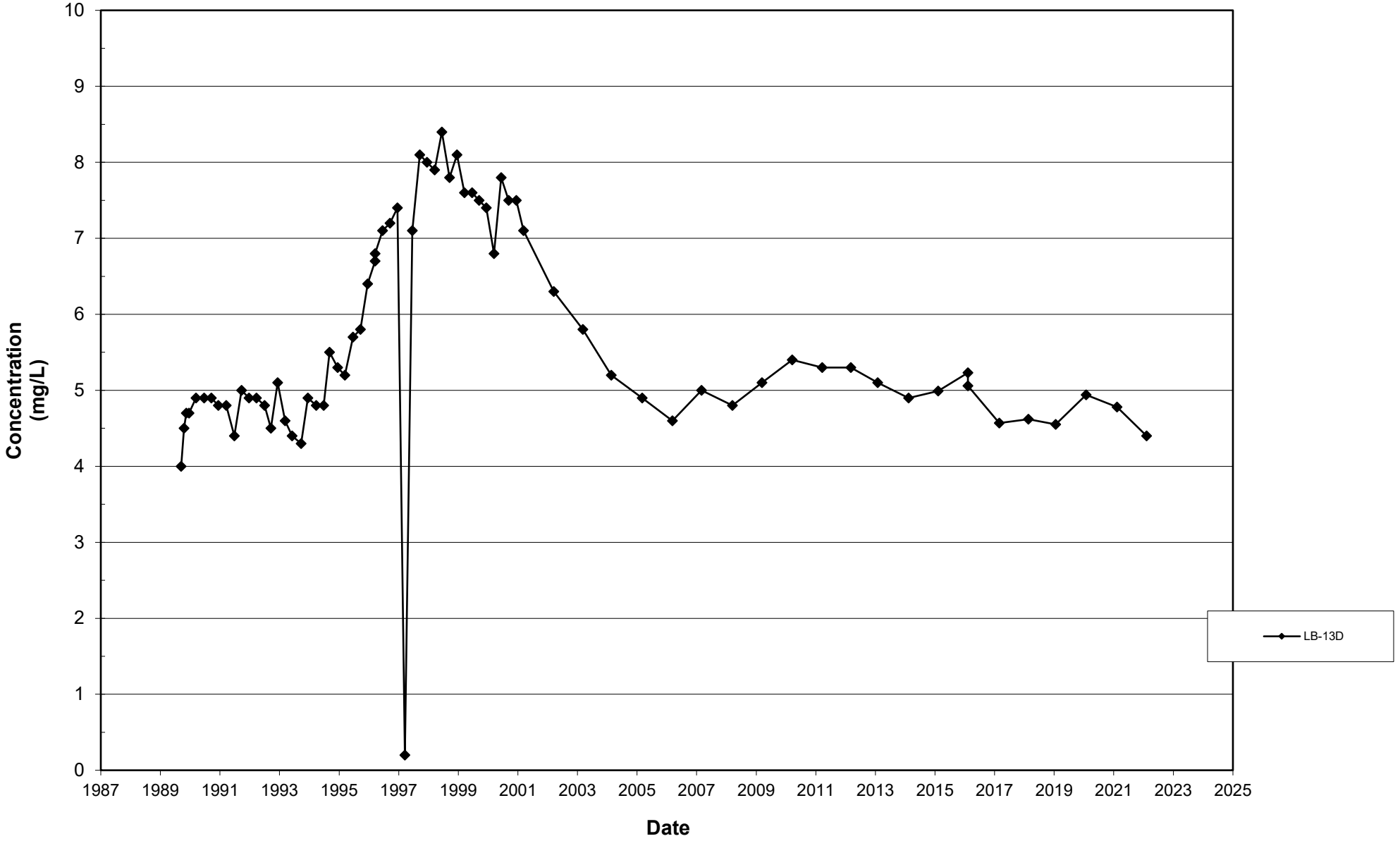
Leichner Landfill
Nitrate, LB-10D and LB-10DR
1987 - 2022



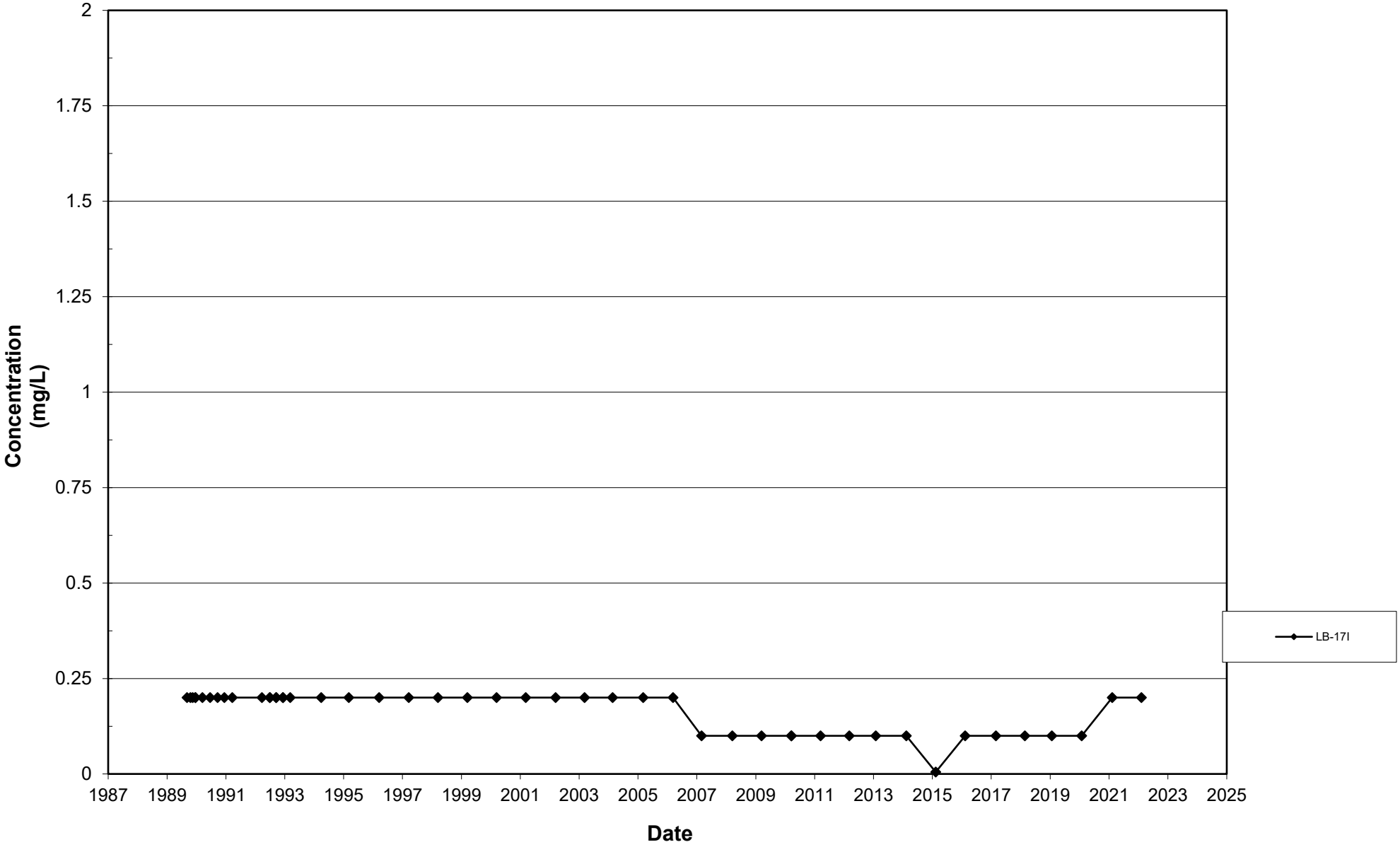
Leichner Landfill
Nitrate, LB-13I
1987 - 2022



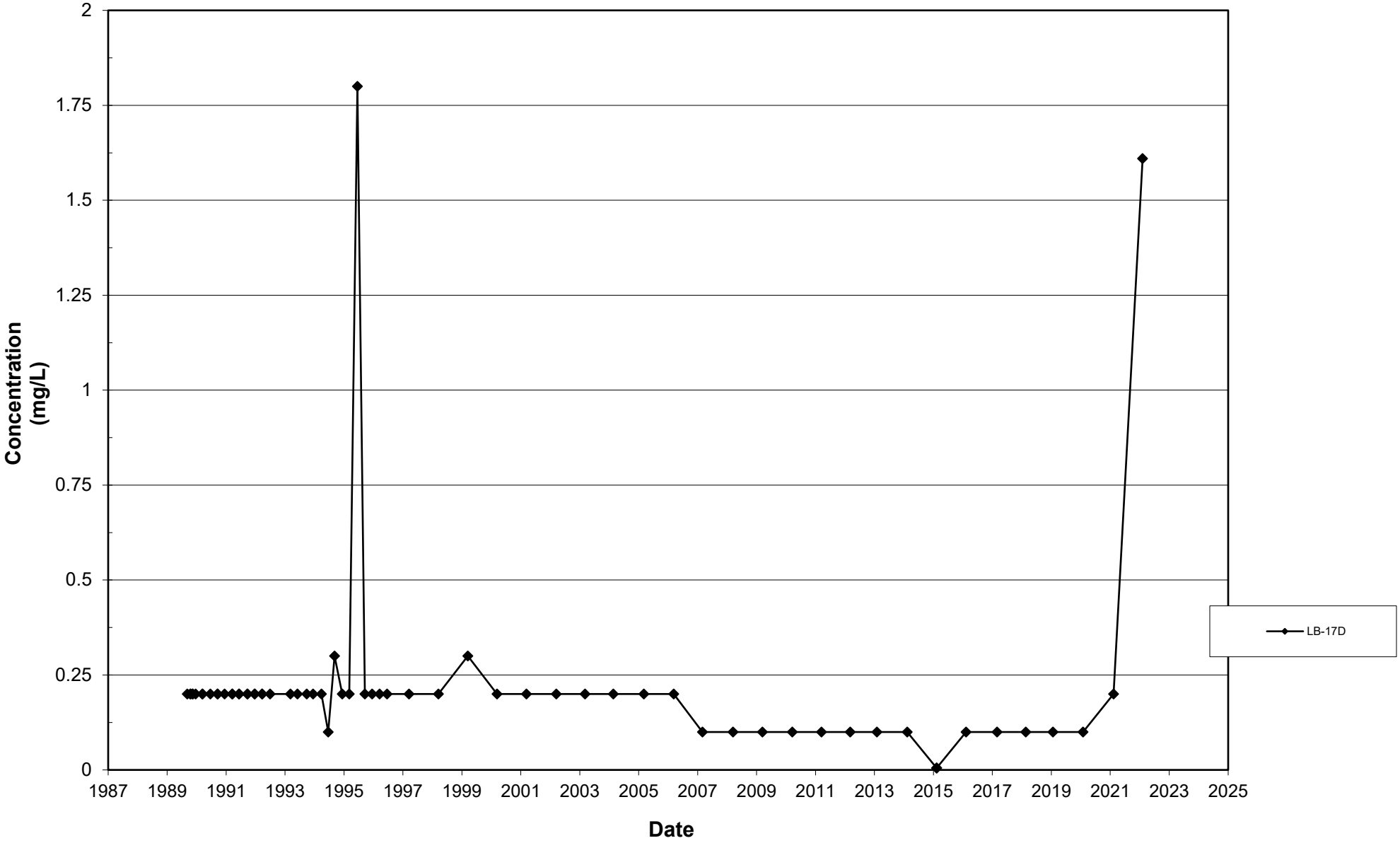
Leichner Landfill
Nitrate, LB-13D
1987 - 2022



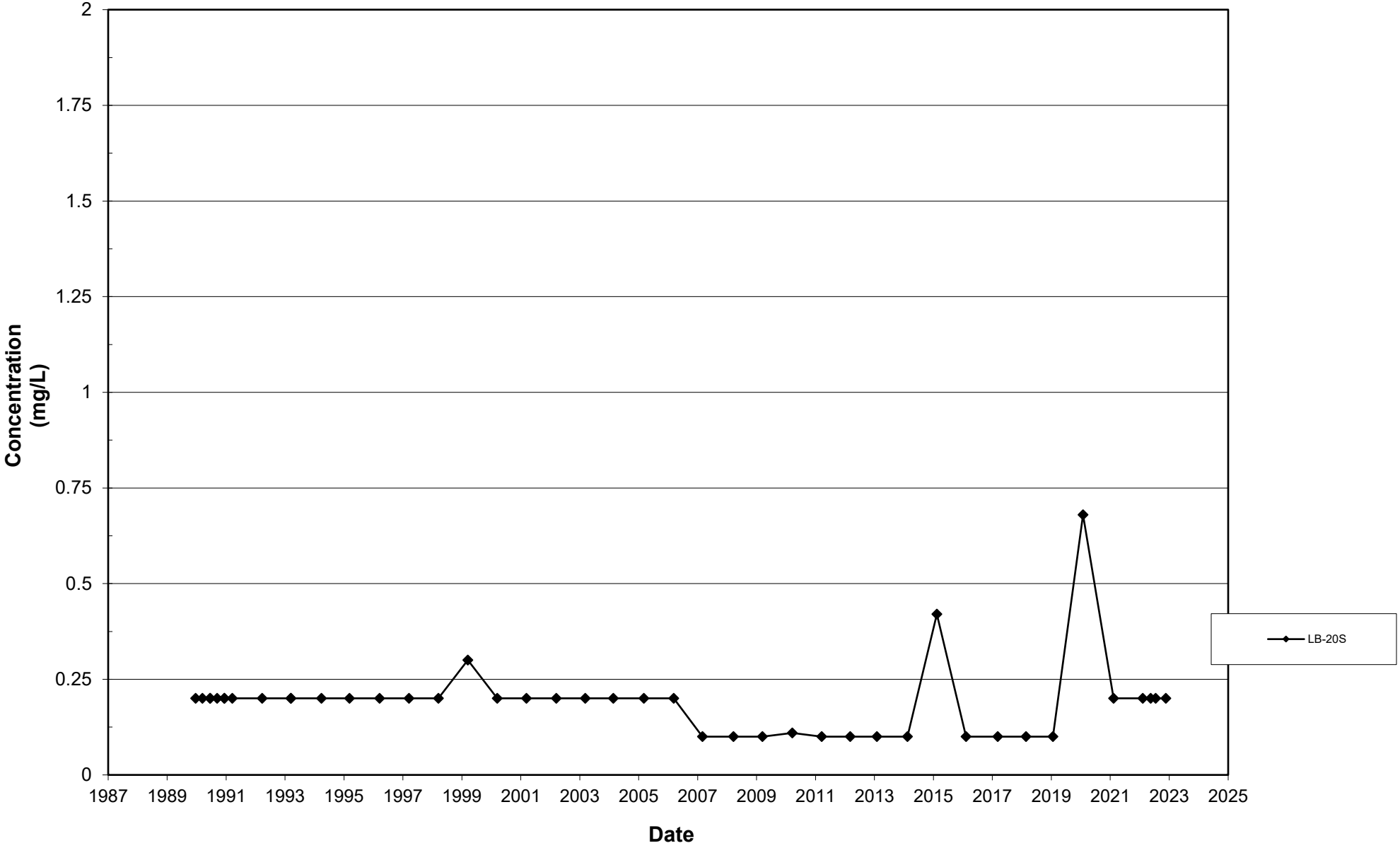
Leichner Landfill
Nitrate, LB-17I
1987 - 2022



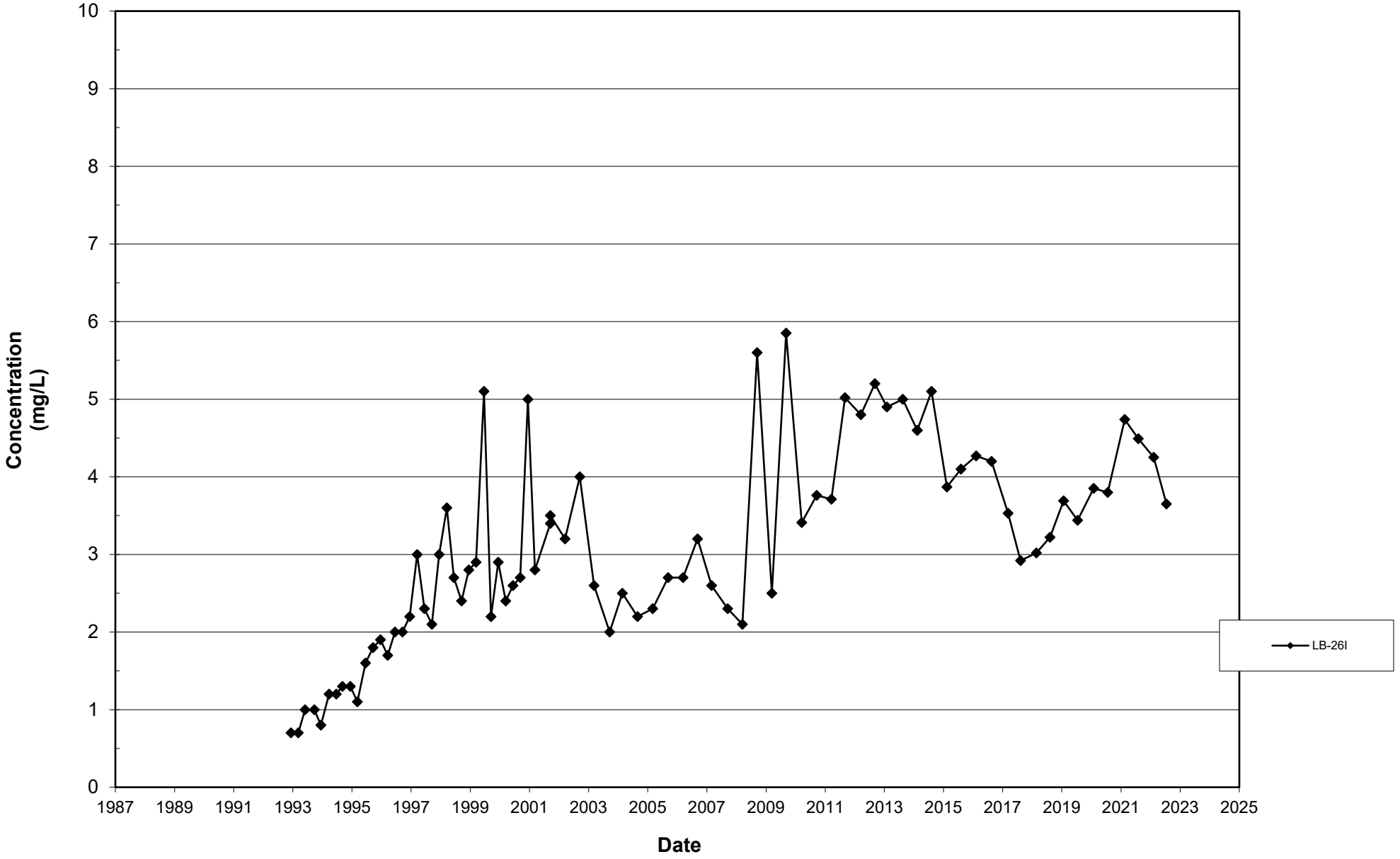
Leichner Landfill
Nitrate, LB-17D
1987 - 2022



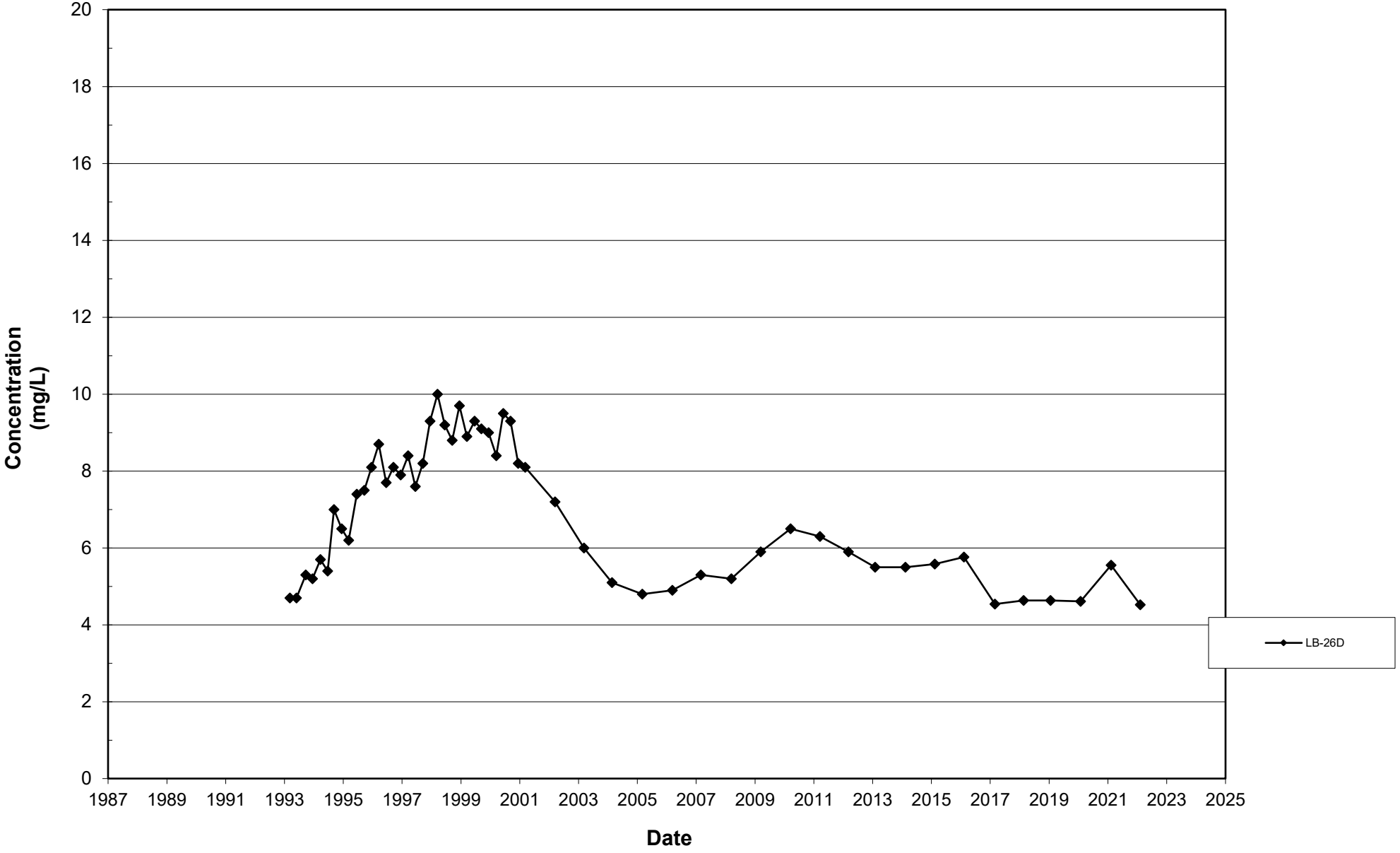
Leichner Landfill
Nitrate, LB-20S
1987 - 2022



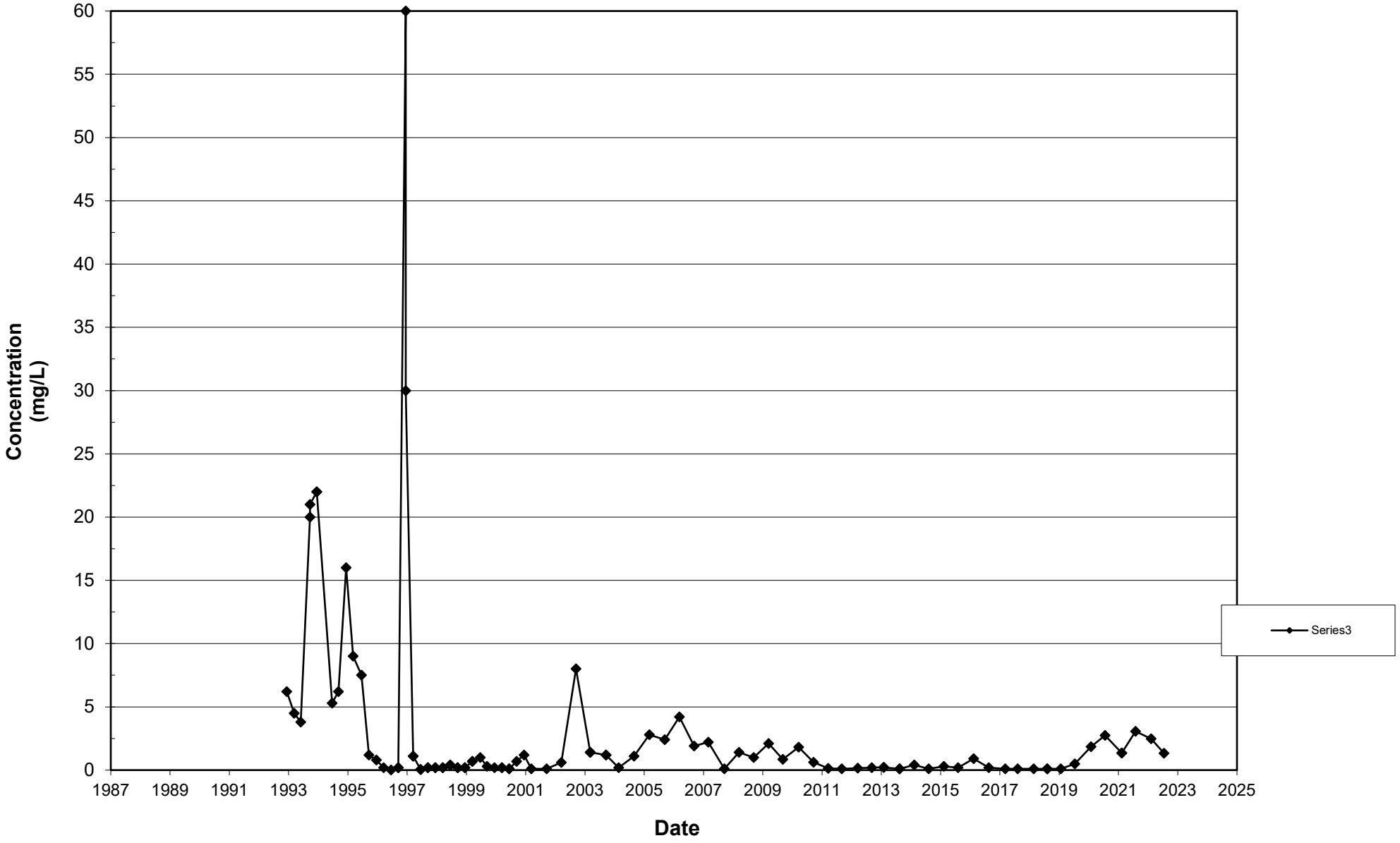
Leichner Landfill
Nitrate, LB-26I
1987 - 2022



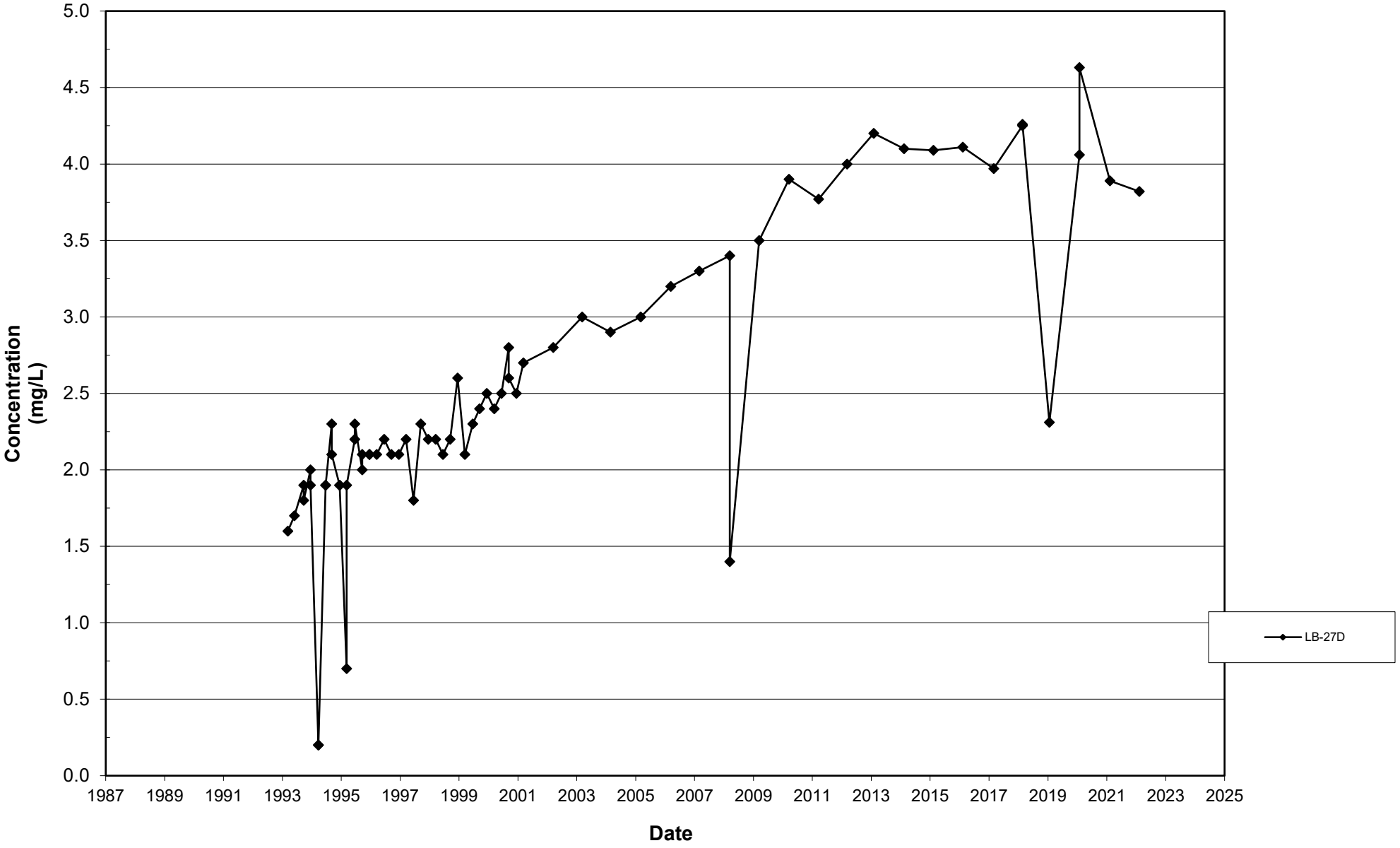
Leichner Landfill
Nitrate, LB-26D
1987 - 2022



Leichner Landfill
Nitrate, LB-27I
1987 - 2022

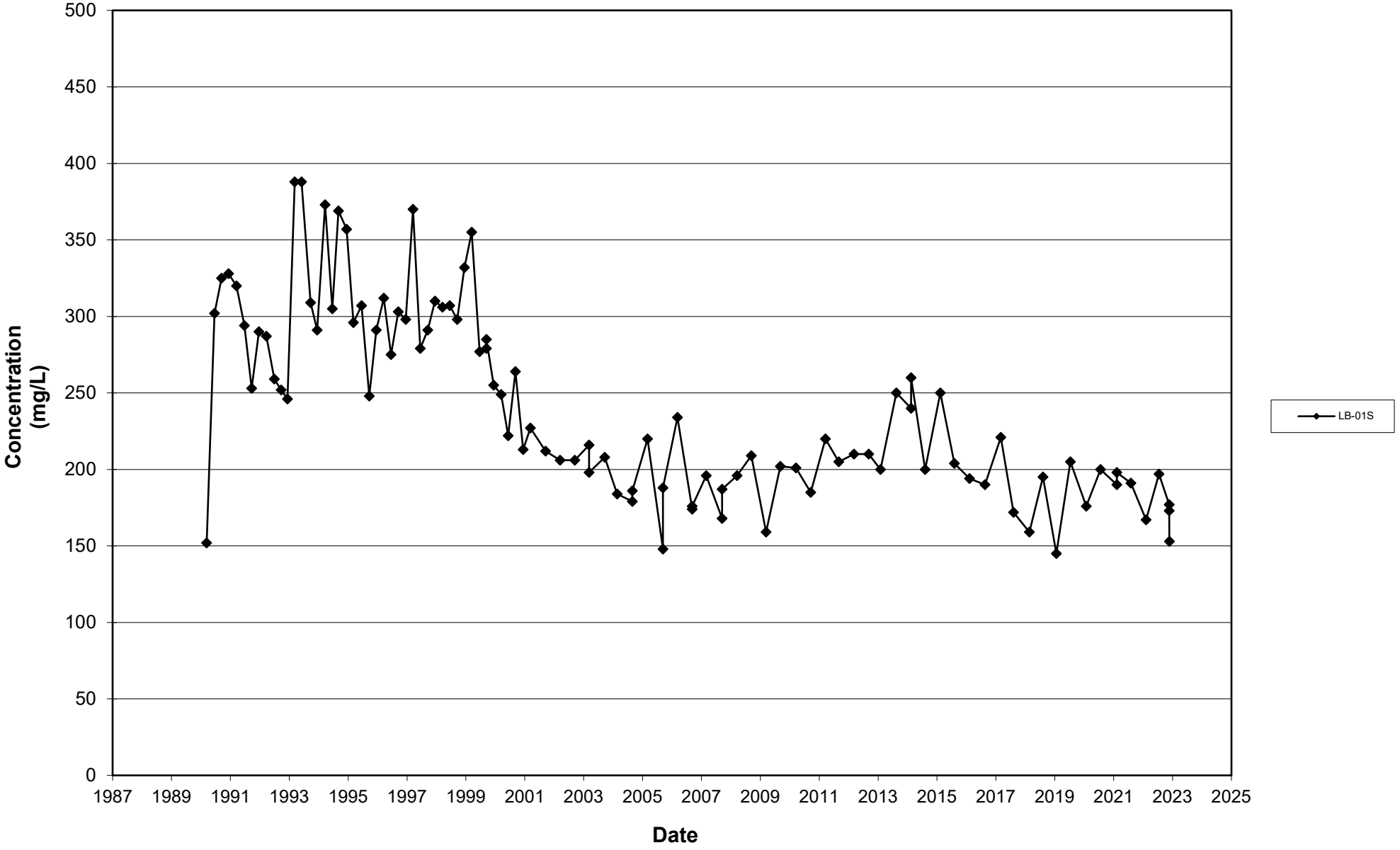


Leichner Landfill
Nitrate, LB-27D
1987 - 2022

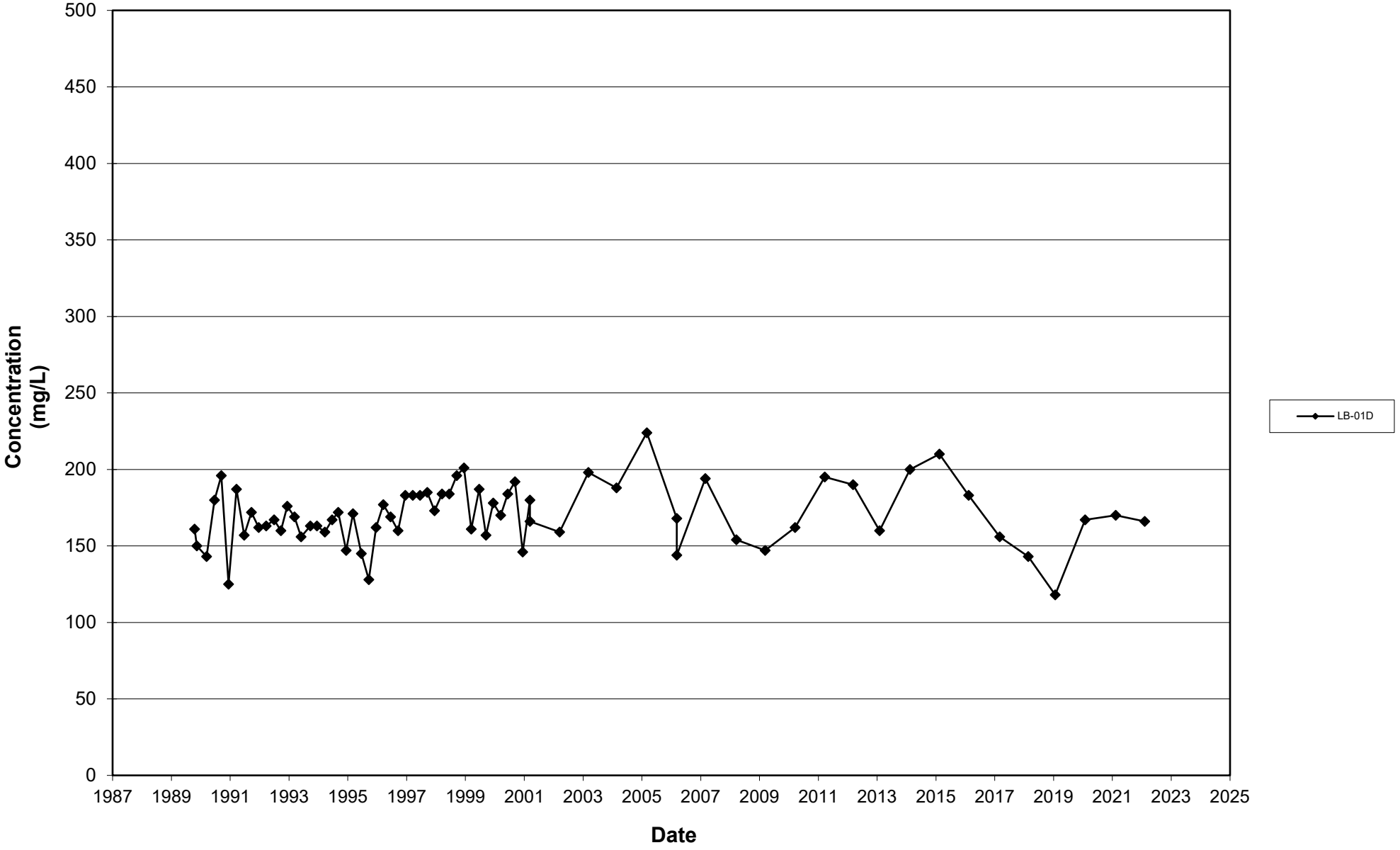


Total Dissolved Solids

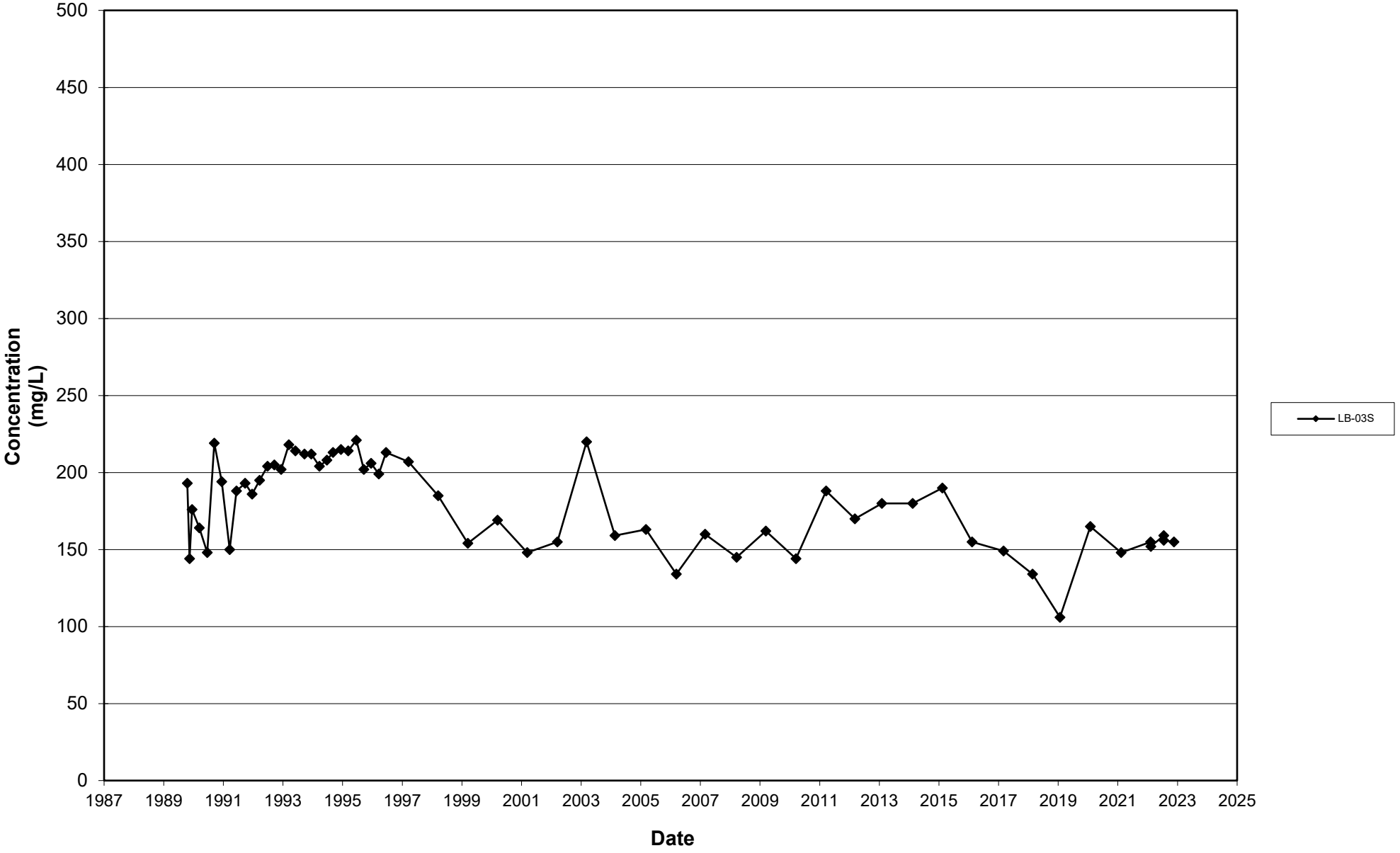
Leichner Landfill
Total Dissolved Solids, LB-01S
1987 - 2022



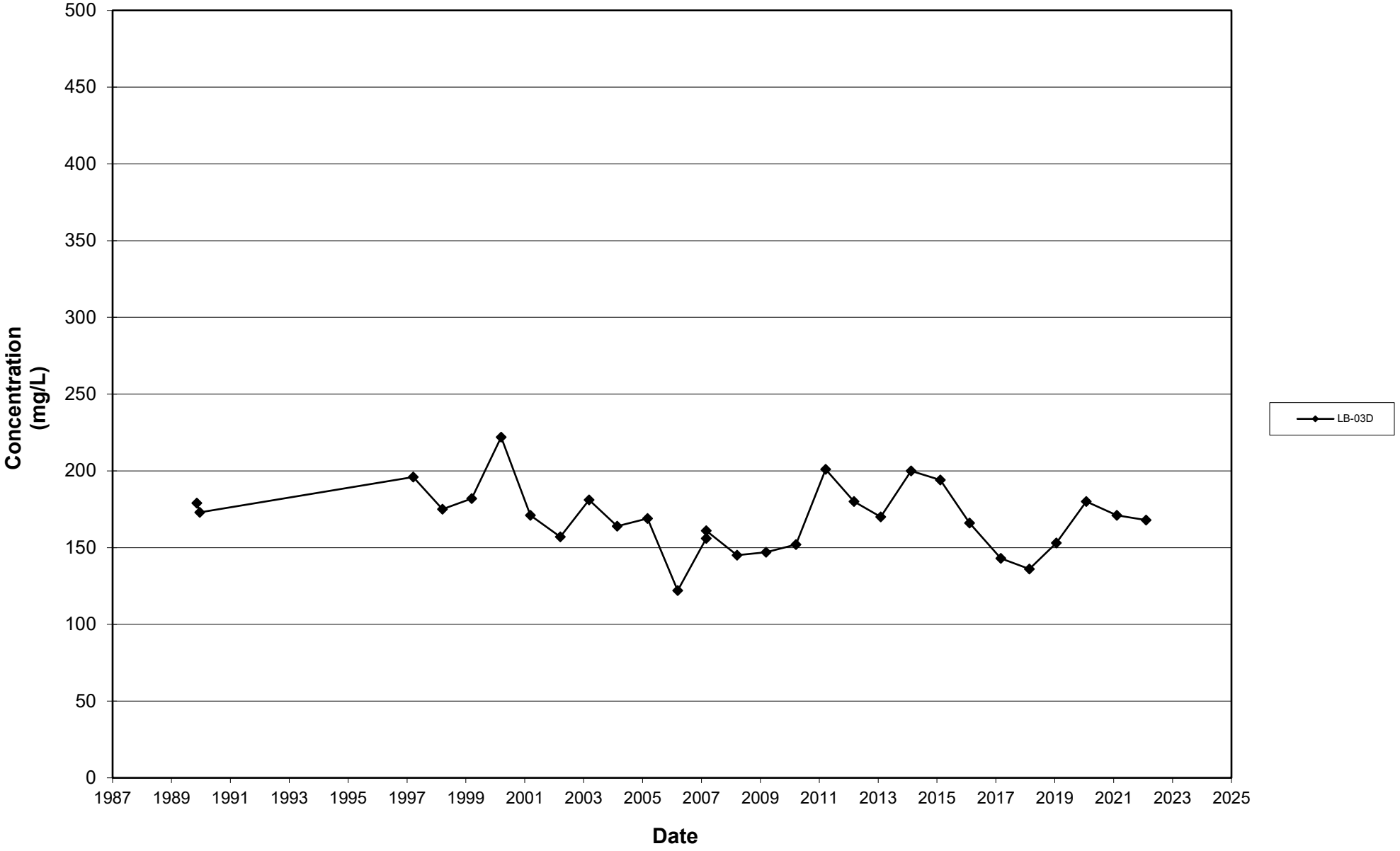
Leichner Landfill
Total Dissolved Solids, LB-01D
1987 - 2022



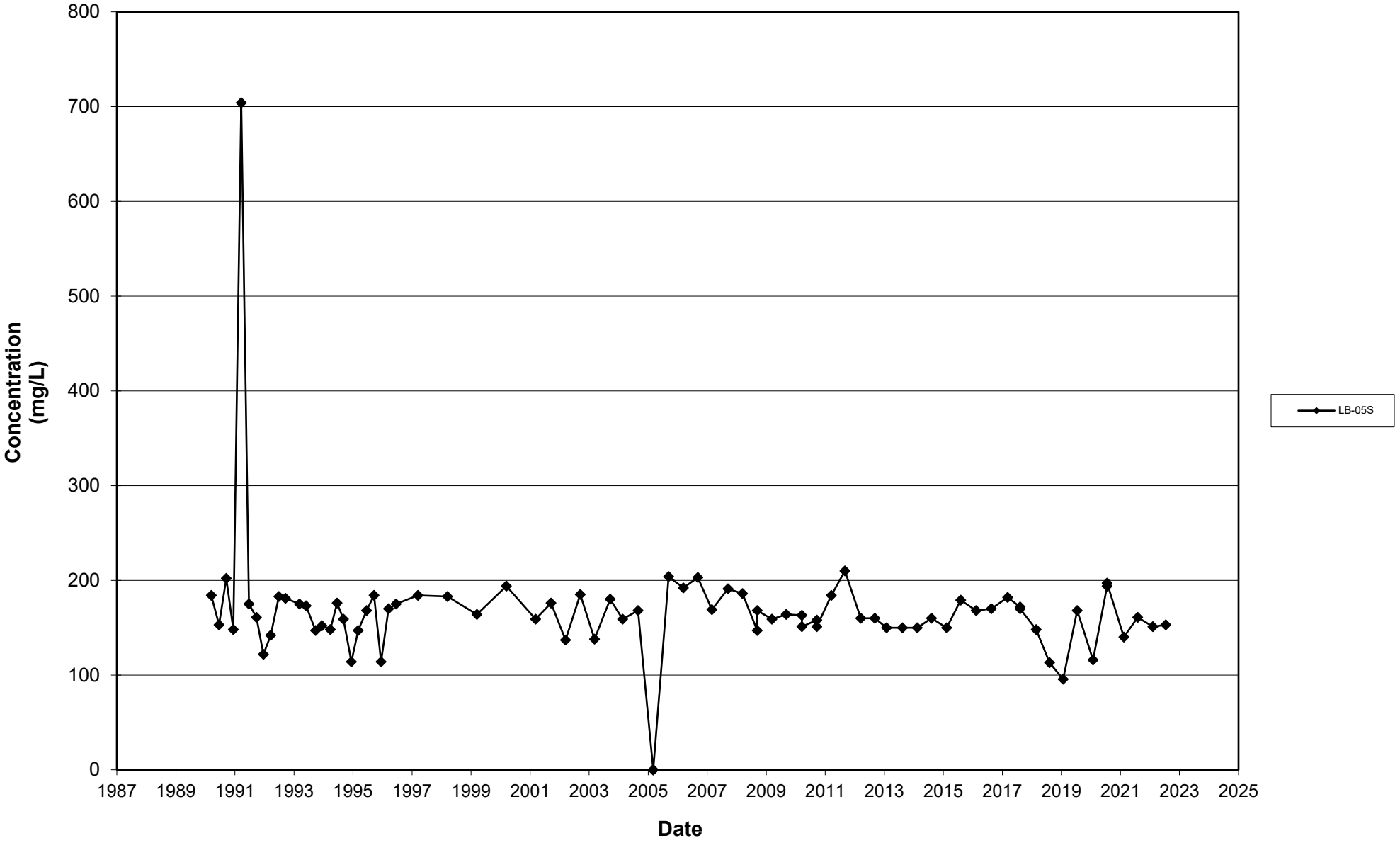
Leichner Landfill
Total Dissolved Solids, LB-03S
1987 - 2022



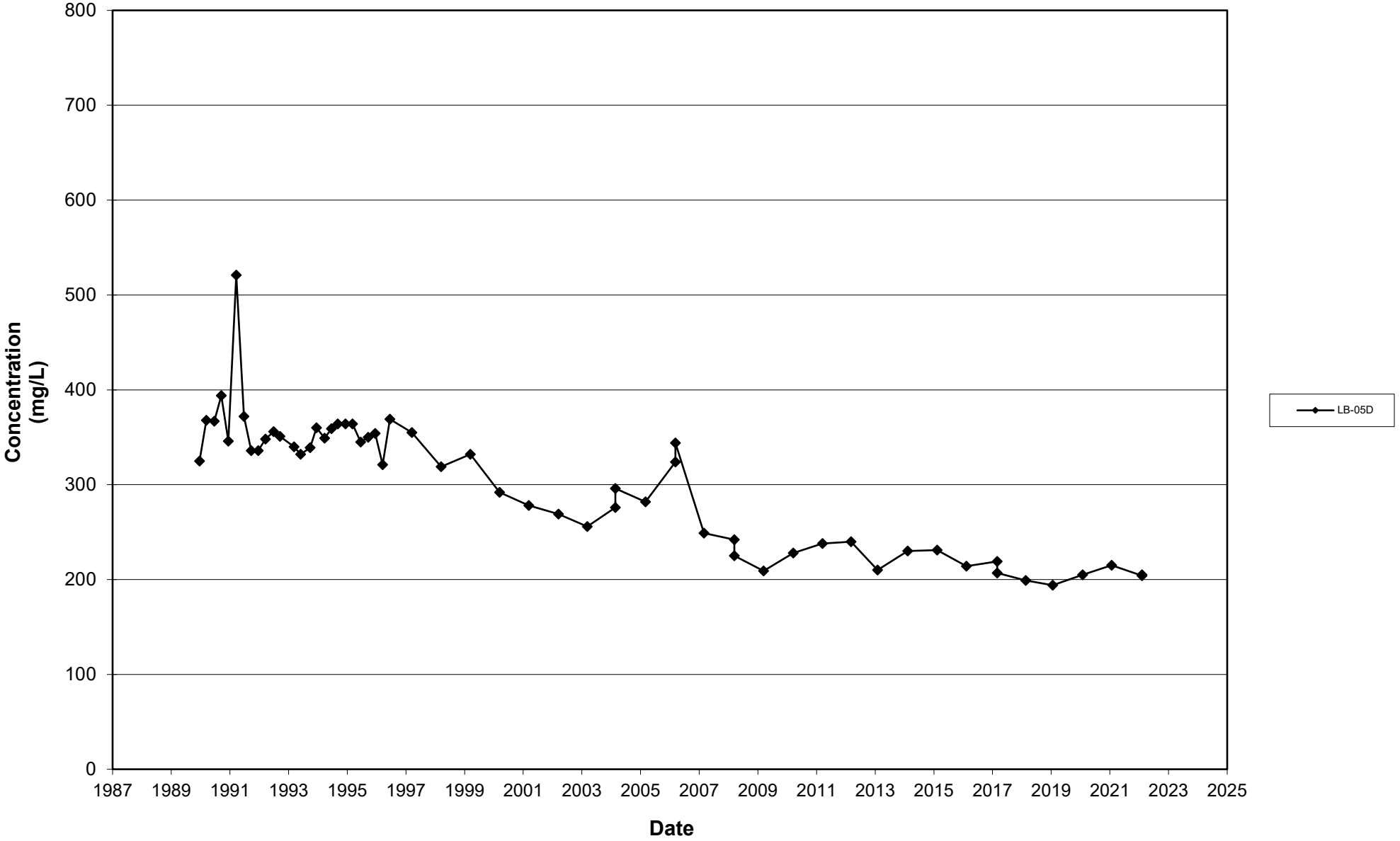
Leichner Landfill
Total Dissolved Solids, LB-03D
1987 - 2022



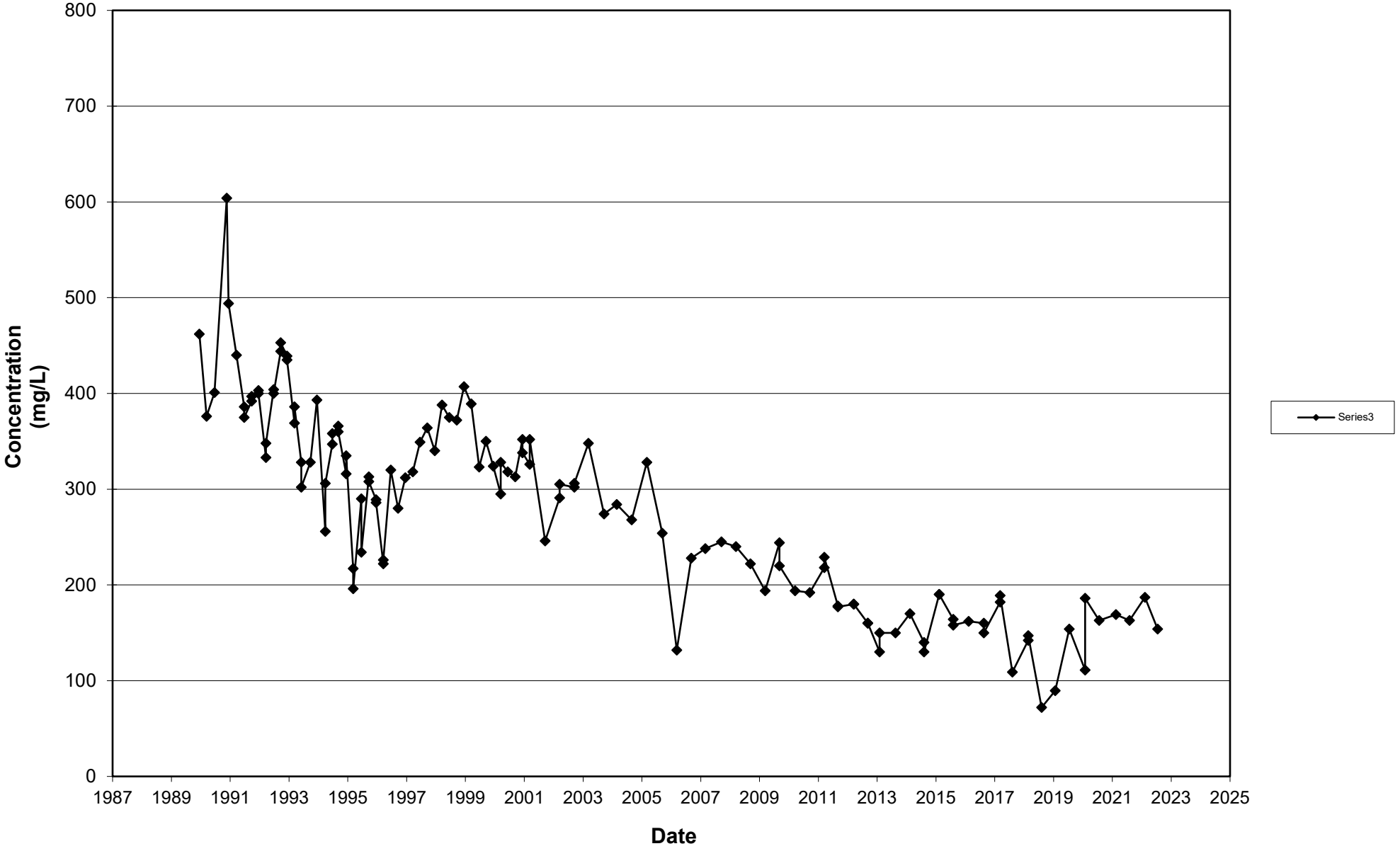
Leichner Landfill
Total Dissolved Solids, LB-05S
1987 - 2022



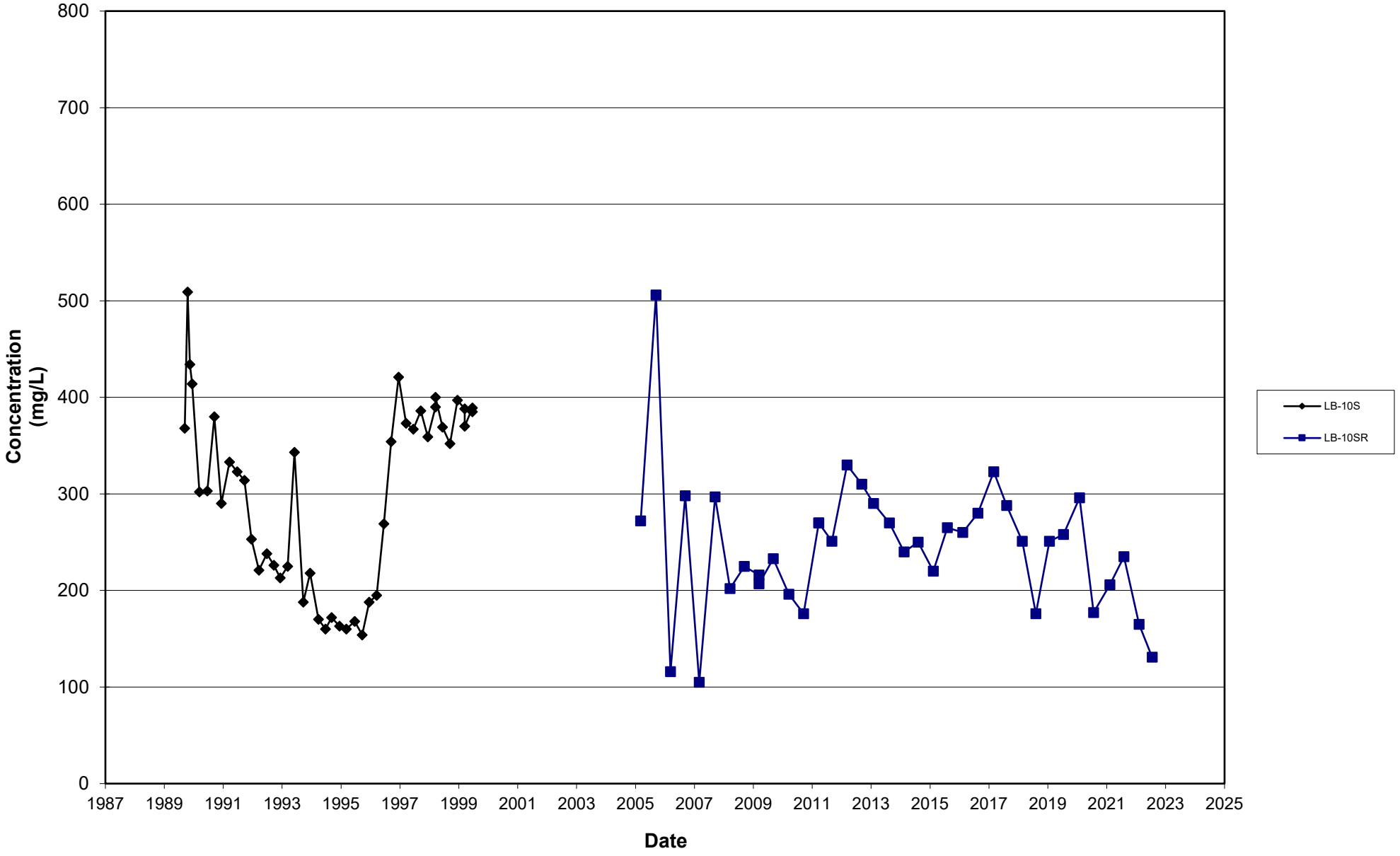
Leichner Landfill
Total Dissolved Solids, LB-05D
1987 - 2022



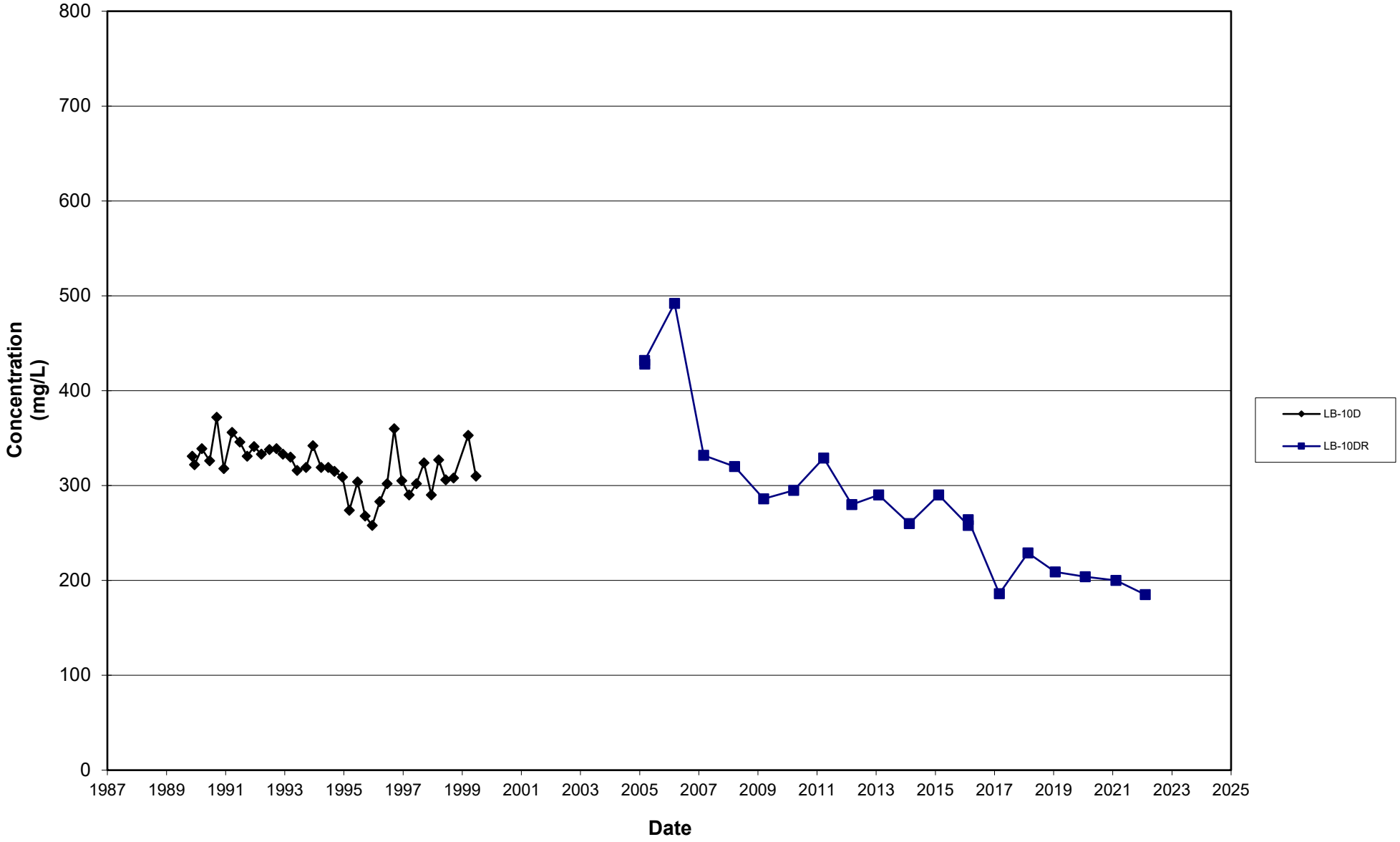
Leichner Landfill
Total Dissolved Solids, LB-06S
1987 - 2022



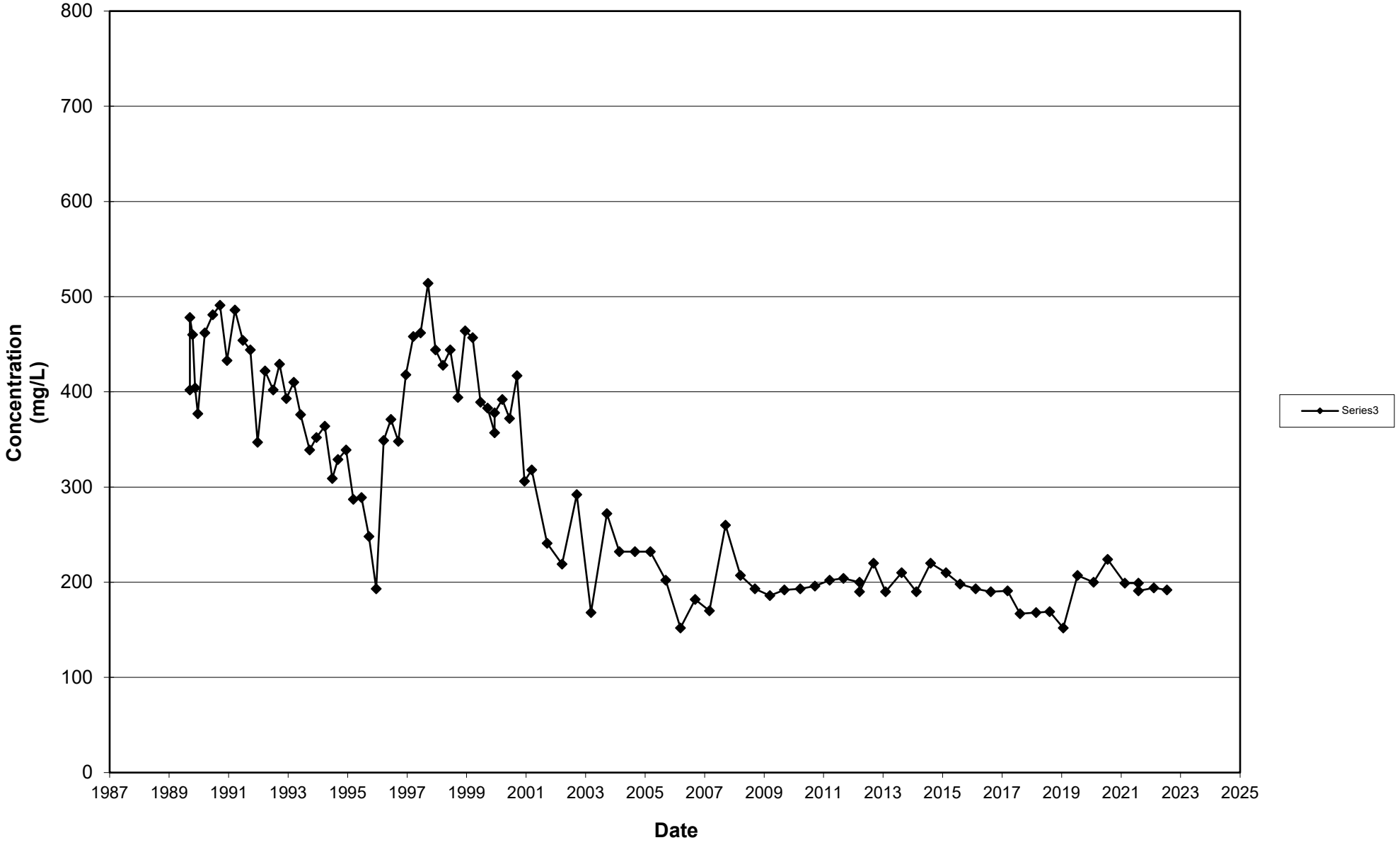
Leichner Landfill
Total Dissolved Solids, LB-10S and LB-10SR
1987 - 2022



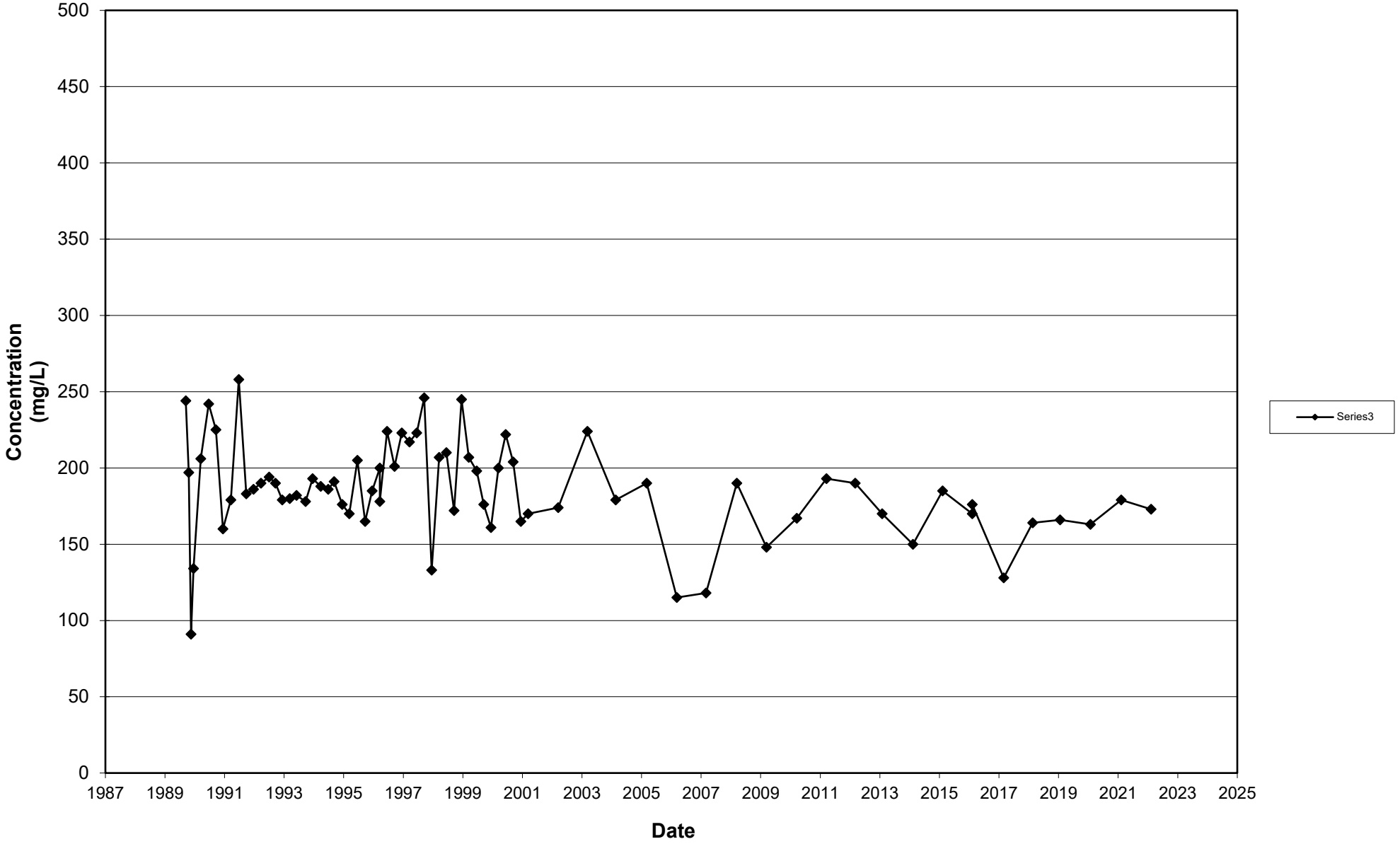
Leichner Landfill
Total Dissolved Solids, LB-10D and LB-10DR
1987 - 2022



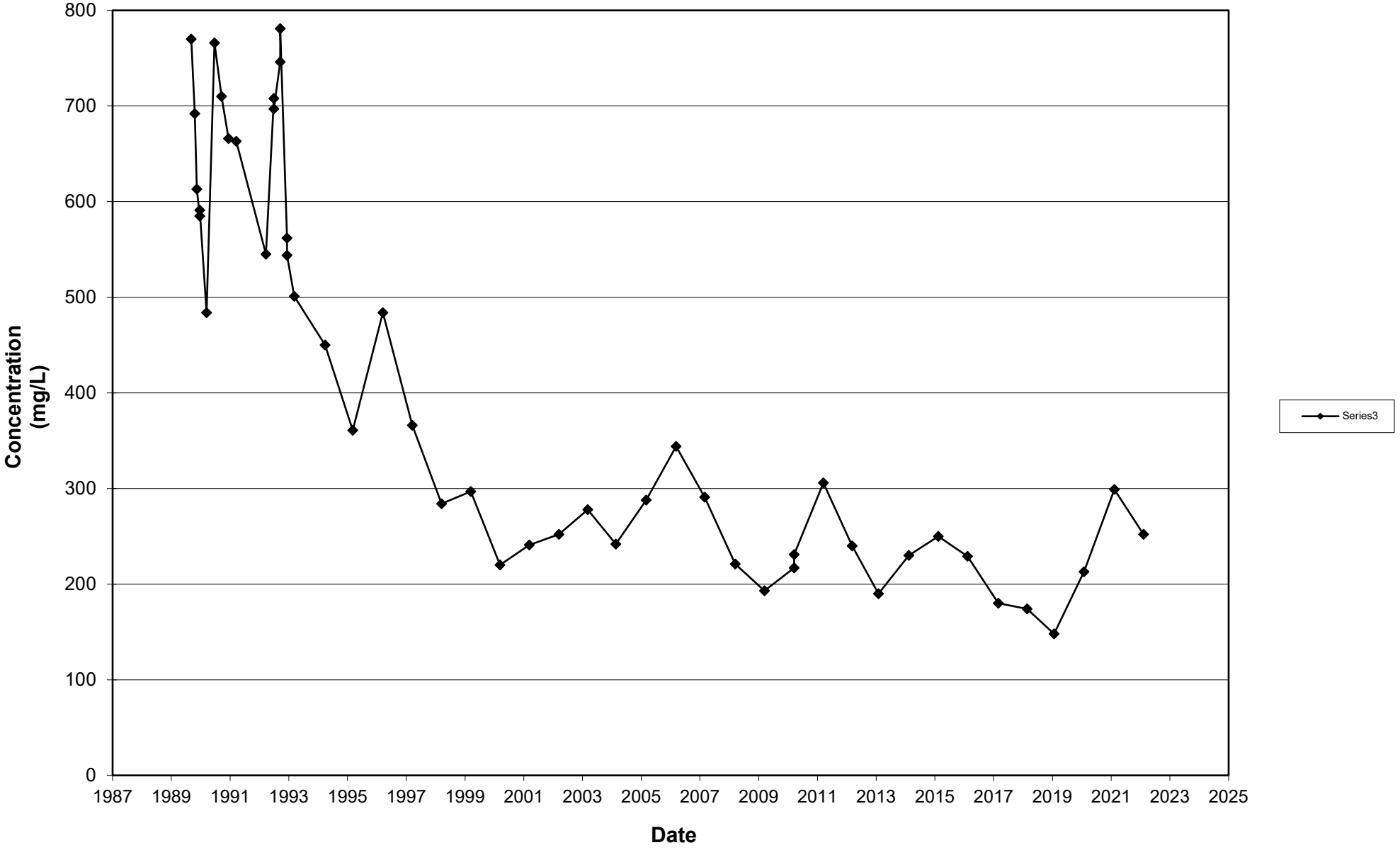
Leichner Landfill
Total Dissolved Solids, LB-13I
1987 - 2022



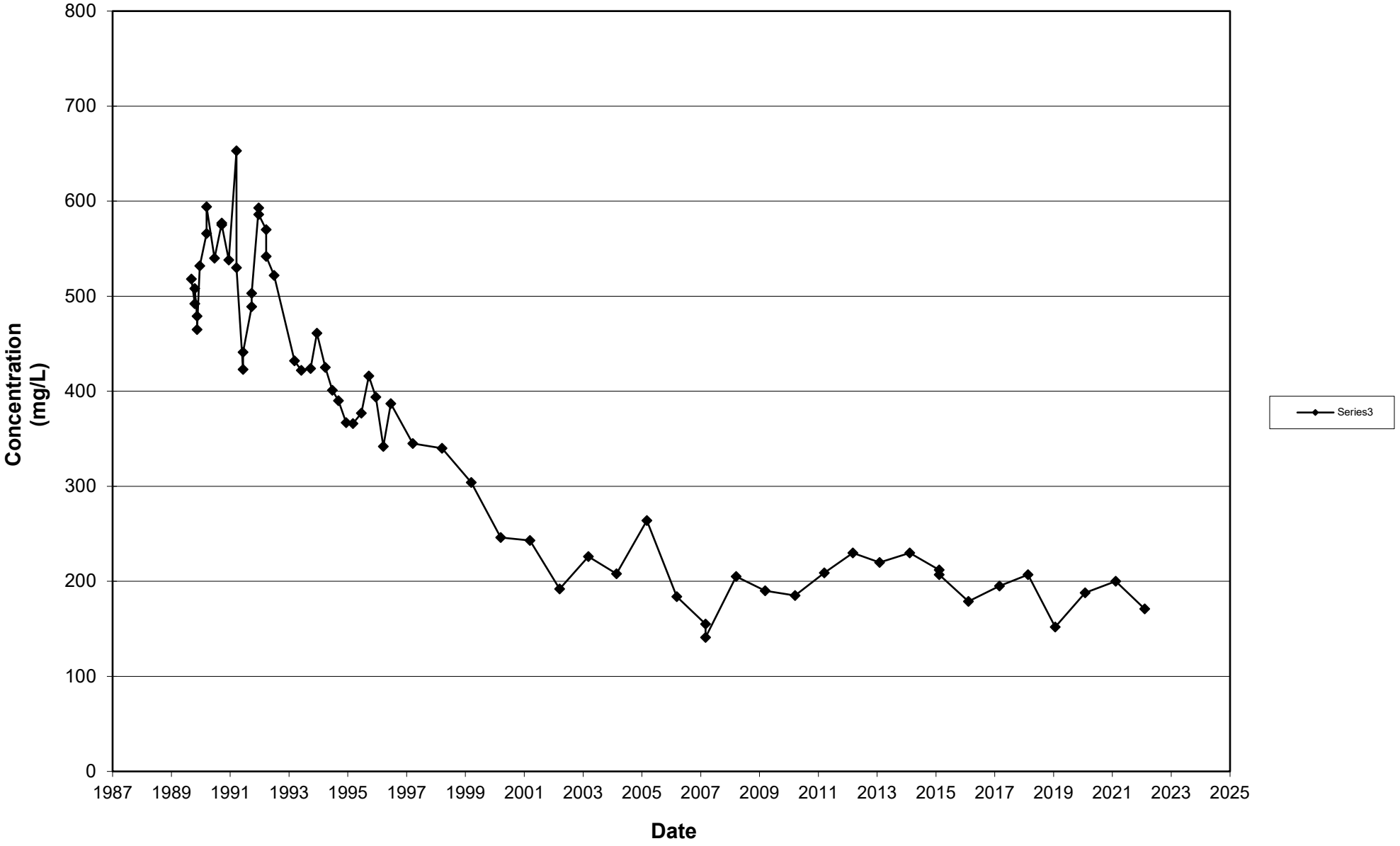
Leichner Landfill
Total Dissolved Solids, LB-13D
1987 - 2022



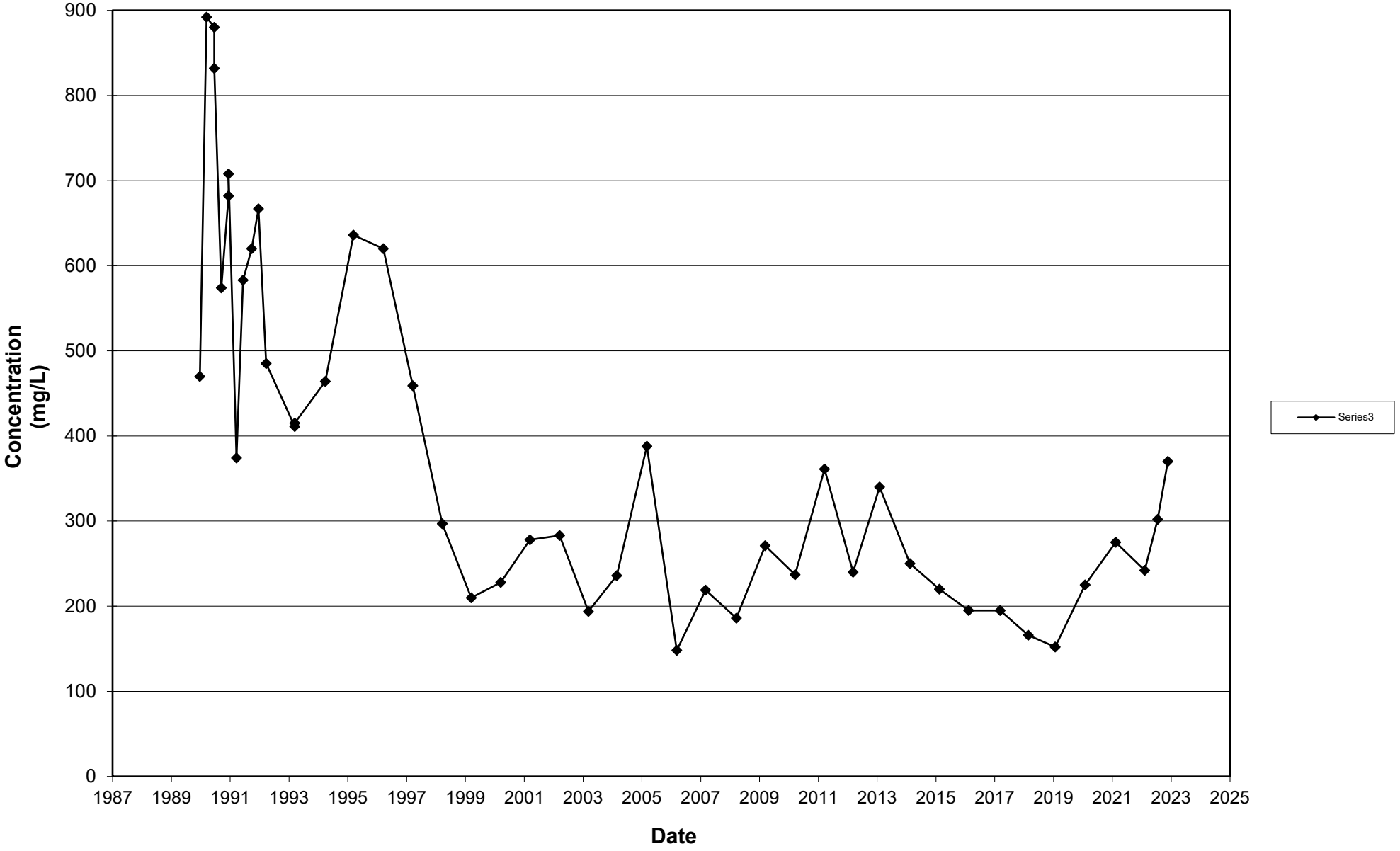
Leichner Landfill
Total Dissolved Solids, LB-17I
1987 - 2022



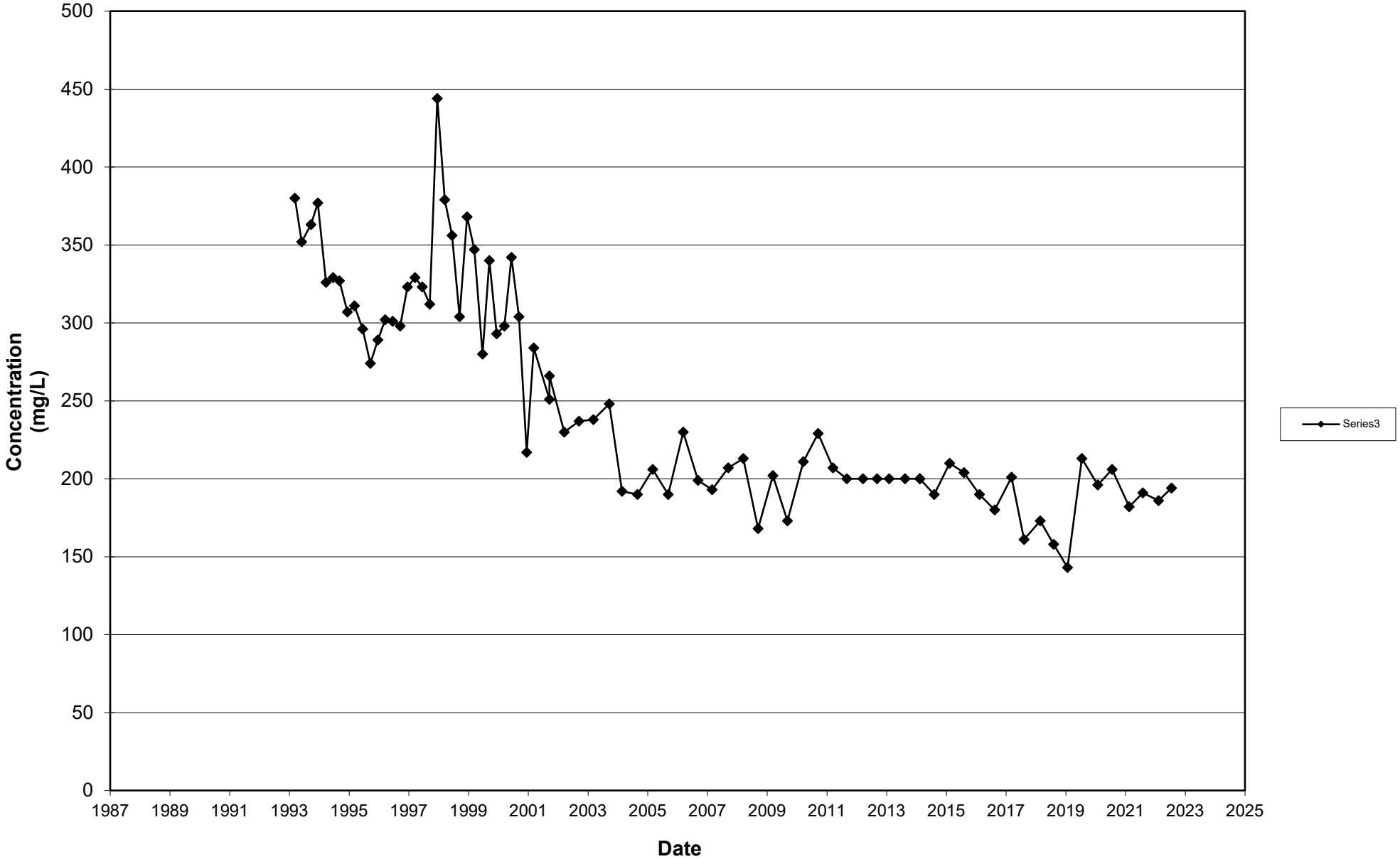
Leichner Landfill
Total Dissolved Solids, LB-17D
1987 - 2022



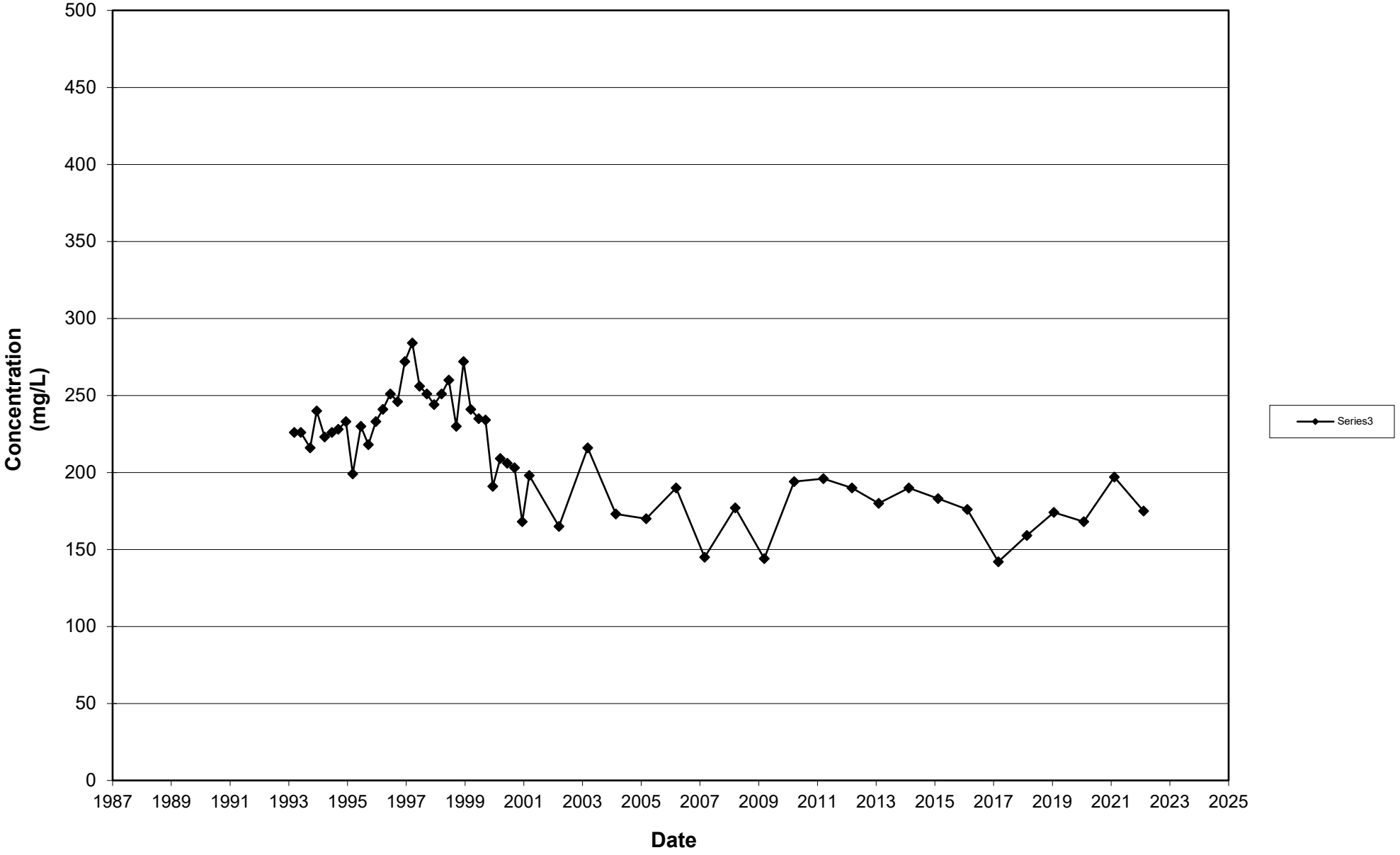
Leichner Landfill
Total Dissolved Solids, LB-20S
1987 - 2022



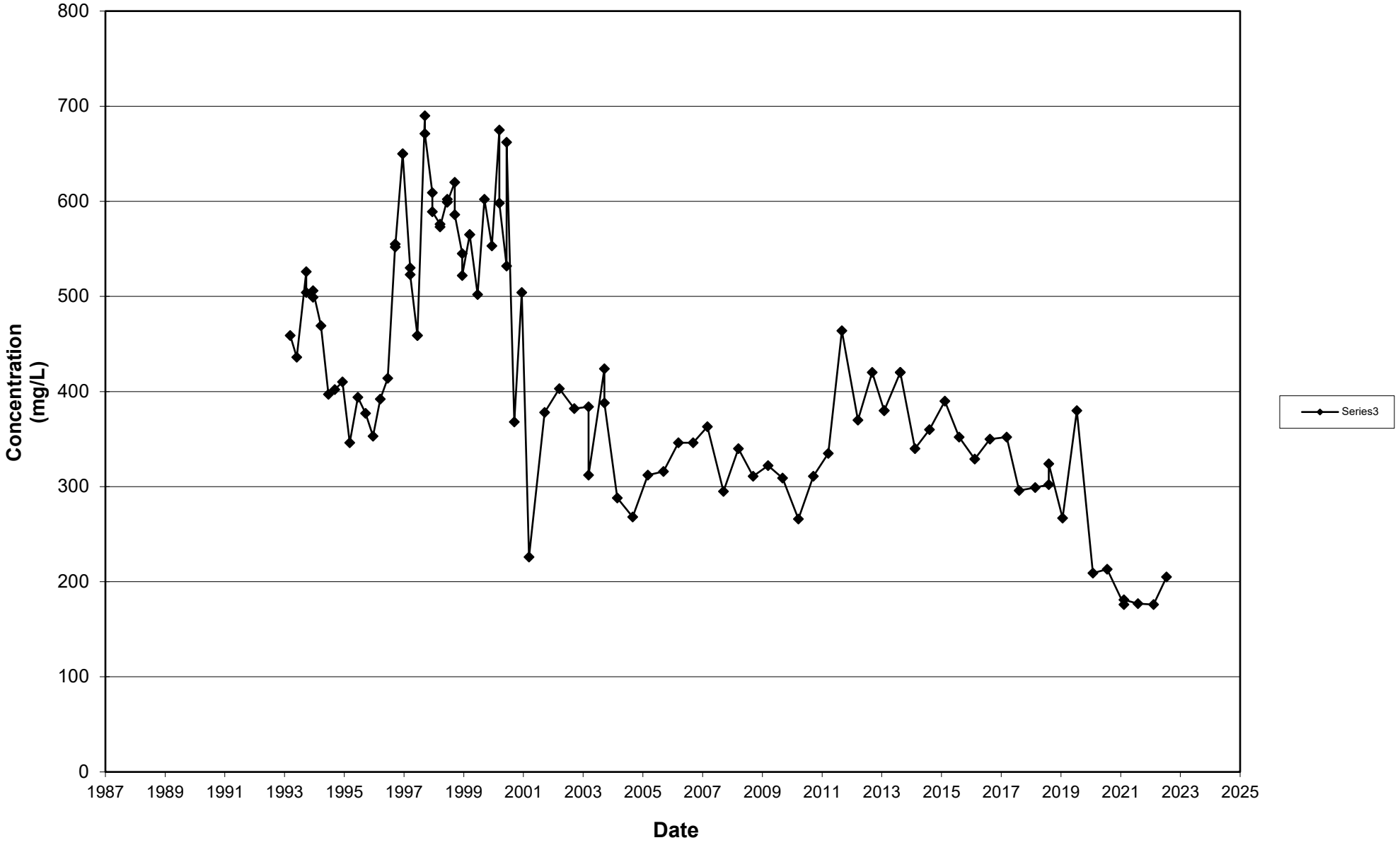
Leichner Landfill
Total Dissolved Solids, LB-26I
1987 - 2022



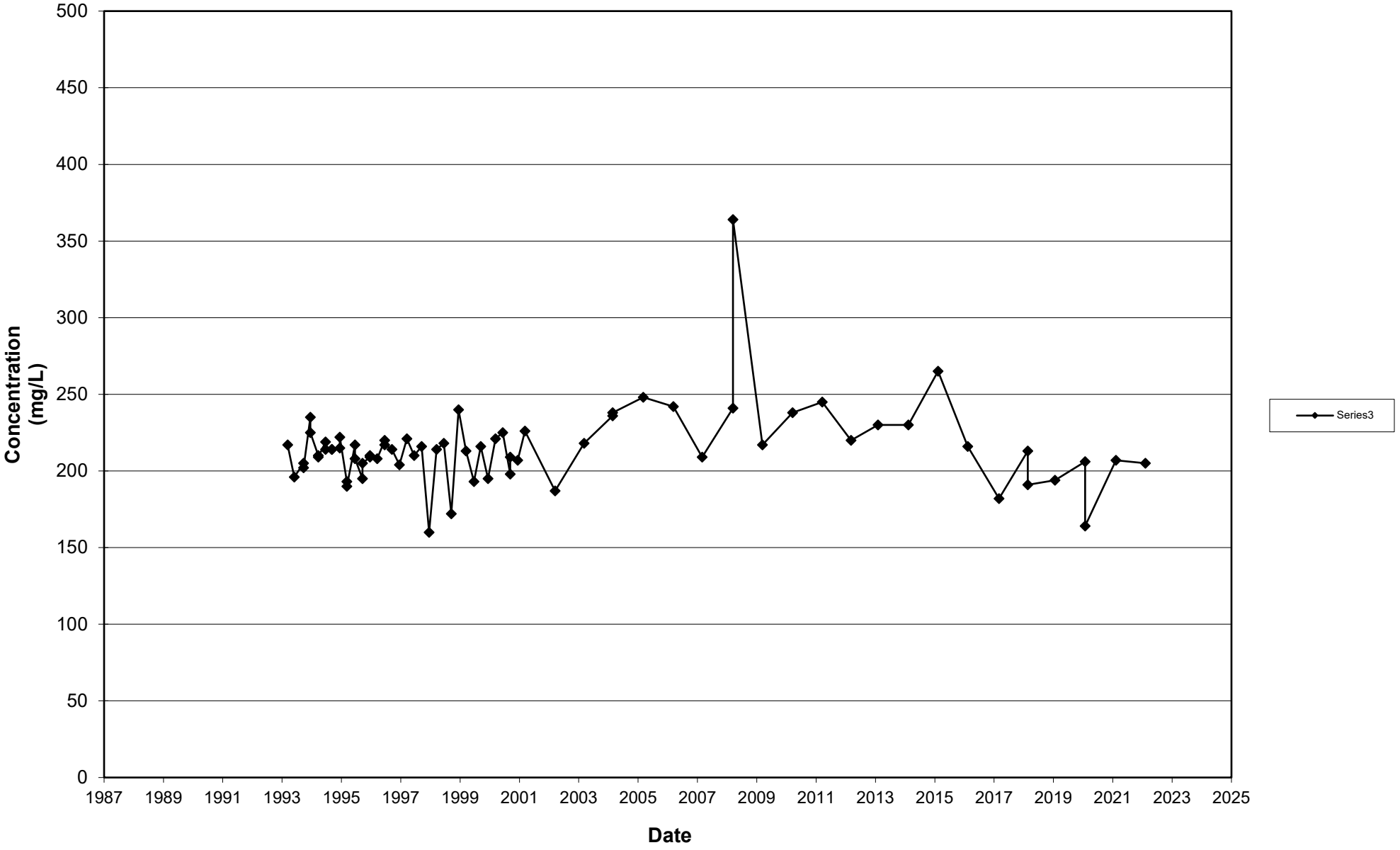
Leichner Landfill
Total Dissolved Solids, LB-26D
1987 - 2022



Leichner Landfill
Total Dissolved Solids, LB-27I
1987 - 2022



Leichner Landfill
Total Dissolved Solids, LB-27D
1987 - 2022



APPENDIX G

Summary of 2022 Groundwater Statistical Calculations

Table G-1
Groundwater Statistics - 2018 through 2022 Data
95 Percent Upper Confidence Limits on the Mean
Leichner Landfill

Parameter	LB-1S					LB-1D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	13	13	Non	6.91	M(12.2)	5	5	Lognormal	6.29	6.48
Nitrate (mg/L)	13	13	Normal	4.28	4.66	5	5	Lognormal	5.79	5.97
TDS (mg/L)	12	12	Lognormal	179.58	191.10	5	5	Lognormal	152.80	M(170)
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	0	NC	NC	All ND
VOCs (µg/L)										
1,4-Dichlorobenzene	14	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	14	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	14	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-3S					LB-3D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	8	8	Lognormal	4.62	5.62	5	5	Non	6.02	M(10.1)
Nitrate (mg/L)	8	7	Non	4.01	M(6.82)	5	5	Non	5.58	M(9.14)
TDS (mg/L)	7	7	Non	146.00	165.00	5	5	Lognormal	161.60	181.27
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	1	NC	NC	NC
VOCs (µg/L)										
1,4-Dichlorobenzene	6	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	6	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	6	0	NC	NC	All ND	5	0	NC	NC	All ND

Table G-1
Groundwater Statistics - 2018 through 2022 Data
95 Percent Upper Confidence Limits on the Mean
Leichner Landfill

Parameter	LB-5S					LB-5D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	4.18	5.03	5	5	Lognormal	7.88	8.08
Nitrate (mg/L)	10	10	Normal	4.63	5.45	5	5	Non	1.05	M(1.92)
TDS (mg/L)	10	10	Lognormal	143.95	164.97	5	5	Lognormal	203.40	211.10
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	2	NC	NC	NC
Manganese (dissolved	10	1	NC	NC	NC	5	4	Lognormal	0.002	0.0027
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. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	5.07	7.01	8	8	Lognormal	15.95	90.44
Nitrate (mg/L)	10	10	Lognormal	2.25	3.47	8	1	NC	NC	NC
TDS (mg/L)	10	10	Non	147.95	M(187)	7	7	Lognormal	247.42	329.90
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	6	2	NC	NC	NC
Manganese (dissolved	10	0	NC	NC	All ND	6	6	Lognormal	0.57	8.10
VOCs (µg/L)										
1,4-Dichlorobenzene	10	0	NC	NC	All ND	8	0	NC	NC	All ND
Tetrachloroethene	10	0	NC	NC	All ND	8	0	NC	NC	All ND
Trichloroethene	10	0	NC	NC	All ND	8	0	NC	NC	All ND

Table G-1
Groundwater Statistics - 2018 through 2022 Data
95 Percent Upper Confidence Limits on the Mean
Leichner Landfill

Parameter	LB-10SR					LB-10DR				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	6.36	9.88	5	5	Lognormal	8.95	12.11
Nitrate (mg/L)	10	10	Lognormal	8.15	M(23.4)	5	5	Lognormal	3.02	3.59
TDS (mg/L)	10	10	Lognormal	214.6	253.72	5	5	Lognormal	205.40	221.98
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved	10	4	NC	NC	NC	5	0	NC	NC	All ND
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

Parameter	LB-13I					LB-13D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	8.98	10.59	5	5	Non	6.07	M(10.8)
Nitrate (mg/L)	10	10	Lognormal	3.97	4.74	5	5	Lognormal	4.66	4.86
TDS (mg/L)	10	10	Lognormal	190.40	204.36	5	5	Non	169.00	M(179.00)
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved	10	7	Lognormal	0.004	0.0070	5	0	NC	NC	All ND
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

Table G-1
Groundwater Statistics - 2018 through 2022 Data
95 Percent Upper Confidence Limits on the Mean
Leichner Landfill

Parameter	LB-17I					LB-17D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	5	5	Non	11.19	M(10.20)	5	5	Lognormal	10.01	16.77
Nitrate (mg/L)	5	0	NC	NC	All ND	5	1	NC	NC	NC
TDS (mg/L)	5	5	Lognormal	217.20	305.26	5	5	Lognormal	183.60	209.46
Metals (mg/L)										
Iron (dissolved)	5	5	Lognormal	10.06	13.84	5	5	Non	0.163	M(0.33)
Manganese (dissolved	5	5	Lognormal	1.88	3.09	5	5	Non	4.04	M(4.29)
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

Parameter	LB-26I					LB-26D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	8.06	8.98	5	5	Non	5.42	M(6.21)
Nitrate (mg/L)	10	10	Lognormal	3.81	4.16	5	5	Non	4.78	M(5.55)
TDS (mg/L)	10	10	Lognormal	184.20	198.47	5	5	Lognormal	174.60	189.0
Metals (mg/L)										
Iron (dissolved)	10	1	NC	NC	NC	5	0	NC	NC	All ND
Manganese (dissolved	10	7	Lognormal	0.003	0.0040	5	0	NC	NC	All ND
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

Table G-1
Groundwater Statistics - 2018 through 2022 Data
95 Percent Upper Confidence Limits on the Mean
Leichner Landfill

Parameter	LB-27I					LB-27D				
	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detectec	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	14.93	38.50	5	5	Lognormal	7.44	7.61
Nitrate (mg/L)	10	7	Normal	1.90	1.97	5	5	Non	3.67	M(4.25)
TDS (mg/L)	10	10	Lognormal	240.40	287.17	5	5	Non	205.00	M(213)
Metals (mg/L)										
Iron (dissolved)	10	0	NC	NC	All ND	5	1	NC	NC	NC
Manganese (dissolved	10	8	Normal	0.203	0.235	5	2	NC	NC	NC
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 MTCAStat,
and (c) UCL calculated using MTCAStat was higher than the maximum value of the data set.

[a] Distribution was determined using MTCAStat 97 program and Statistical Guidance for Ecology Site Managers.

[b] UCL 95 was calculated using MTCAStat 97 program and Statistical Guidance for Ecology Site Managers.