2024 Annual Report
Closed Leichner Landfill
Vancouver, Washington
Consent Decree 96-2-03081-7
Facility ID No. 1017

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04225030.14 | February 26, 2025

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1.0 INTRODUCTION

This report presents and evaluates the results of groundwater and landfill gas (LFG) compliance monitoring performed during 2024 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 2024. SCS Engineers (SCS) performed the monitoring, maintenance, and repair activities and prepared this report on behalf of Clark County Public Health (CCPH) and the Leichner Landfill Oversight Committee (LLOC), whose members include the CCPH and City of Vancouver (City).

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 and maintenance 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 CCPH in July 2013 (SCS, 2013).

Although not directly related to environmental monitoring, it should be mentioned that Clark County formally notified the Washington State Department of Ecology (Ecology) and CCPH in November 2019 of the purchase-and-sale agreement (PSA) with the City for the former Koski property. The sale was finalized in December 2020. The City's property is part of the overall closed Leichner Landfill property (Figure 1-1). The City intends to develop this 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. On January 2, 2025, Ecology received written notice from the City accepting their status as a potentially liable person (PLP) for the site. Construction of the City's operation center is currently scheduled to begin sometime in late 2025.

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. Alluvium generally consists of sand, and gravelly to silty sand. The Troutdale Formation aquifer underlies the Alluvium deposits and 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 2024: 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 wells during the semiannual monitoring event performed in August 2024: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-17S, LB-26I, and LB-27I.

Monitoring well LB-6S is scheduled to be decommissioned in 2025. Monitoring well LB-17S was developed (surged and pumped) in July of 2024 in preparation for groundwater sampling during the August 2024 monitoring event. The purpose for sampling this well was to compare with LB-6S to determine if it can be substituted as a downgradient detection monitoring well and eliminate the need for reinstallation of LB-6S after City improvements are completed, south of Leichner Landfill.

It should be noted that two monitoring wells (LB-9SR2 and LB-22S; see Figure 2-1) were decommissioned in late August 2021 to accommodate construction of the NE 99th Street 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, 2021b) approved by Ecology in an email dated May 26, 2021. Road construction activities were completed by the fourth quarter 2023, and replacement monitoring wells (LB-9SR2 and LB-22SR; see Figure 2-1) were installed close to the original well locations during the first quarter 2024. These wells were incorporated in the semi-annual groundwater level measurements but are not included in the list of wells monitored for groundwater quality purposes.

Groundwater samples collected from the site monitoring wells in 2024 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

[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).

(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 (on CD). The 2024 field parameter monitoring results are provided in Appendix B (see Table B-1).

2.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

Static depth-to-groundwater levels were measured on February 12, 2024 and August 6, 2024, 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 2024 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 2024 groundwater flow directions were consistent with historical interpretations of groundwater flow at Leichner Landfill.

Groundwater elevation hydrographs are provided in Appendix D. The 2024 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 quality monitoring included the following field quality assurance/quality control (QA/QC) procedures: 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 on CD).

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 on CD) 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 2024 continue to indicate that there are little or no adverse effects on groundwater quality from the closed Leichner Landfill. Groundwater monitoring results supporting this conclusion are discussed in the sections below.

2.4.1 Volatile Organic Compounds

The 2024 analytical data are summarized in Appendix B (see Table B-2). VOCs for which compliance levels were established in the 1996 Consent Decree, and that are still part of the analytical testing program (i.e., 1,4-dichlorobenzene, tetrachloroethene, and trichloroethene)[2], were not detected above the laboratory method reporting limits (MRLs) in groundwater samples collected in February and August 2024.

It should be noted that during the March 2023 semiannual monitoring event, chloroform was detected in groundwater collected from monitoring well LB-3S at a concentration of 0.51 micrograms per liter (µg/L) (Table B-2), just above the detection limit of 0.5 µg/L. During the 2024 February monitoring event, chloroform levels at LB-3S returned to below the detection limit. The low-level detection of chloroform in the LB-3S groundwater sample collected in March 2023 was attributed to laboratory contamination.

2.4.2 Inorganic Parameters and Dissolved Metals

The 2024 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, 2024 groundwater analytical results for inorganic parameters and dissolved metals were generally consistent with historical data. Table 2-1 summarizes 2024 groundwater concentrations above compliance levels. Concentrations of Mn and/or Fe above the compliance levels were detected in four wells located downgradient and near the landfill areas (i.e., LB-17I, LB-17D, LB-20S, and LB-27I). 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).
- Fe has 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).

[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.

- Mn concentrations in groundwater samples collected from well LB-20S have shown an overall decreasing trend since 2013 and are typically below the compliance level (see time-concentration diagrams in Appendix F). Although the recent sampling events indicate a slight increasing trend, these concentrations are still within historical ranges and may be due to regional variations.
- 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).

LB-17S was sampled on August 6, 2024, the first time since installation in 1989. The purpose of sampling LB-17S is to compare the analytical results to groundwater results from LB-6S and determine if LB-17S is a suitable replacement as a downgradient compliance monitoring well after LB-6S is decommissioned in 2025. The initial results from LB-17S showed no detections of VOCs. Chloride, TDS, dissolved iron, and dissolved manganese were all below corresponding compliance levels. Only nitrate had a concentration (13, mg/L) above a compliance level of 10 mg/L. Additional groundwater samples will be collected from LB-17S in 2025 to provide additional groundwater analytical data to support using this well as a replacement for LB-6S. A separate report presenting the results of this groundwater assessment will be submitted to Ecology in 2025.

2.4.2.1 Statistical Analysis of Groundwater Analytical Data

Leichner Landfill groundwater analytical data for inorganic parameters (nitrate, Cl, and TDS) and dissolved metals (Mn and Fe collected from 2020 to 2024) were statistically evaluated using the MTCA Stat97 program.[3] The program identifies if the data shows 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-3D groundwater that exceeded the range of concentrations. In these cases, the highest reported value from the last 5 monitoring years (2020 to 2024) 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 respective 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 more than an order of magnitude (0.89 to 23.4 mg/L) between 2020 and 2024. 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 (Maximum value of 14.5 mg/L), LB-17D (maximum value of 0.32 mg/L) and LB-20S (Maximum value of 1.46 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-95of 2.56 mg/L), LB-17D (UCL-95 of 4.13 mg/L), and LB-20S (UCL-95 of 3.58 mg/L), and LB-27I (UCL-95 of 0.306 mg/L).

The above results are consistent with the historical results 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 LB-5D, LB-6S, 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. Concentrations are occasionally above 10 mg/L in LB-10SR groundwater, however, the concentrations are within the range detected historically in this well and former well LB-10S. Most recent trends show concentrations decreasing and below 10 mg/L.

It is also noteworthy that TDS, Fe, and Mn concentrations in groundwater collected from wells LB-17I, LB-17D, and LB-20S, located downgradient and near 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 may be in response to the implementation of Leichner Landfill's post-closure systems, including the landfill cover system and the stormwater control and collection system. Below is a review of the Fe and Mn trends observed in groundwater sampled from LB-17I, LB-17D, and LB-20S.

- Concentrations of Fe in LB-17D have gradually increased since 2001. In 2022, the concentration of Fe was detected at 0.330 mg/L, just above the compliance level (0.3 mg/L) and in 2024, the concentration was 0.320 mg/L, slightly above the compliance level.

- Concentrations of Fe detected in LB-17I have remained stable since 2001, but are averaging between 8-12 mg/L, consistently above the compliance level.
- Concentrations of Mn in LB-17I have gradually increased since 2001 with the highest concentration occurring in 2021 at 2.86 mg/L, above the compliance level (0.05 mg/L).
- Concentrations of Mn in LB-17D and LB-20S have remained relatively stable and/or exhibited decreasing trends since about 2001 yet have consistently been detected above the compliance level of 0.05 mg/L (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.

In 2023, the County coordinated with Clark County Public Works (CCPW) to construct a stormwater control system for the extension of NE 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), redesigning the stormwater control system, and repairing the landfill liner system along the southern edge of the North Detention Pond impacted by the road construction project. This work was completed in summer of 2023 including the installation of the stormwater vault and modification of the associated stormwater conveyance system to handle the South Pond and Module 2 discharge. Four new conveyance lines were installed to discharge stormwater into the new North Drain vault; two lines convey stormwater from Module 2 (to the west of the vault) and two lines convey stormwater from South Pond (to the south of the vault). Module 2 surface water is gravity fed and empties into the top of the vault through a grated lid.

Drainage issues attributed to the repair of the landfill liner are currently being addressed and CCPH will keep Ecology apprised of these developments if impacts to the landfill require modification to the landfill liner system. Temporary repairs of the stormwater system currently redirect the water away from liner seams, allowing the water to flow toward the vault without impacting the liner. A more permanent repair is still under development and is planned to be implemented in 2025.

4.0 LANDFILL GAS MONITORING

This section describes the GCCS that was originally installed at the Leichner Landfill in 1978 and presents compliance and performance monitoring results associated with the GCCS. The GCCS has been upgraded several times over the years, including most recently with the installation of the new micro-flare in October 2020 in response to decreasing methane production (discussed in Section 4.3.1). 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 LFG COMPLIANCE MONITORING NETWORK AND RESULTS

4.1.1 LFG Monitoring Network

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 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. Three replacement probes were installed along the northern border of the landfill in January 2024 (GP-40, GP-41 and GP-42) as replacements, using the existing interval between wells as seen in other parts of the landfill. All three were included in quarterly LFG monitoring network for 2024 (SCS, 2024b).

LFG probes GP-03, GP-04 and GP-05 were decommissioned in January 2024 under an Ecology approved work plan (SCS, 2024a; Ecology 2024a) and reinstalled on the Waste Connections of Washington, Inc. (WCI) Operations facility (9411 NE 94th Avenue), located adjacent to the west side of the Leichner Landfill under an approved installation work plan (SCS, 2024b; Ecology 2024b). WCI did major site improvements and the LFG probes were decommissioned to accommodate construction activities. Following completion of the construction, the gas probes were reinstalled in August 2024 (GP-03R, GP-04R, and GP-05R) and continue to be used as part of the Leichner Landfill LFG compliance monitoring network (SCS, 2024e).

4.1.2 LFG Compliance Monitoring Results

Compliance LFG monitoring was performed quarterly in February, May, September, and October 2024. Quarterly monitoring data collected in 2024 are summarized in Table 4-1. Monitoring results indicate that methane concentrations were below the compliance limit of 5% by volume (predominantly less than 0.1% by volume) in almost all of the LFG monitoring probes except in probes GP-38 and GP-39 (only in June likely when the flare was down) and in newly-installed LFG probes GP-40 and GP-41 located between the northern edge of the landfill and the extension of NE 99th Street (see Figure 4-1). Readjustment of the nearby LFG extraction wells quickly returned methane concentrations to below compliance levels in probes GP-38 and GP-39. However, the readjustment of the LFG collection system was unsuccessful at lowering methane concentrations in probes GP-40 and GP-41 because the closest extraction wells are too far from the probes to effectively capture LFG in the area around the probes. As such, CCPH has approved installing three additional LFG extraction wells in closer proximity to probes GP-40 and GP-41 and incorporate them into the existing GCCS. The three new LFG extraction wells are tentatively scheduled to be installed in Summer 2025.

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 2024 to maintain balanced and efficient LFG extraction rates.

4.3 LANDFILL GAS FLARE

4.3.1 Installation of New Micro-Flare

A new, smaller, more efficient LFG micro-flare was installed in 2020 and started operating on October 2, 2020. The old flare was turned off and disassembled on September 28, 2020.

A new Air Discharge Permit (ADP 20-3433) was issued by the Southwest Clean Air Agency (SWCAA) in October 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, 2021a).

4.3.2 Landfill Gas Flare Monitoring

The LFG flare system was monitored regularly (typically on a weekly or biweekly basis) in 2024 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 2023 Annual Flare Emissions Estimate report, dated March 14, 2024 (SCS, 2024c), was submitted to the SWCAA. The report presents and evaluates flare monitoring data and performance objectives.

On August 3, 2023, SWCAA issued a Notice of Violation (NOV) to CCPH for not operating the LFG flare at the Leichner Landfill within the temperature range at which compliance was demonstrated during the 2020 source test, and which is specified in Requirement 8 of the October 2020 ADP. The NOV resulted in issuance by SWCAA of a $1,275.00 civil penalty. CCPH conducted verbal communications with SWCAA in September and October (including a meeting on September 27), to discuss the issues related to the established flare operating temperature range and challenges with operating the flare due to lowering LFG generation rates and an antiquated LFG collection conveyance system. In a letter dated November 15, 2023, CCPH requested remission or mitigation of the civil penalty and provided the rationale as to why its request was justified. SWCAA responded to CCPH's request in a letter dated November 30, 2023 stating that although the criteria of "extraordinary circumstances and factors not considered in setting the original penalty" had not been met, it agreed to suspend the civil penalty as long as there are no additional violations related to operating the flare within the permit required temperature range within the next two years following the acceptance of these settlement terms. CCPH acknowledged SWCAA's decision in a letter dated December 14, 2023.

In April 2024, it was noted that the flare continued to operate outside the permitted temperature range, as required by the landfill ADP. Despite several equipment changes and software upgrades, the flare was continuously operating at a consistent but higher temperature range. To confirm that the flare was effective at operating at higher operating temperatures and to reestablish the optimum range of flare operating temperatures, another source test was performed in June 2024, one year earlier than scheduled, consistent with a work plan approved by SWCAA (Montrose, 2024a). The results of the source testing showed that the flare could operate within a range of temperatures of 1256 °F to 1509 °F and still be within the permitted emission limits (Montrose, 2024b). The reestablished range of operating temperatures was reported to SWCAA, which approved the new temperature ranges and will reference them in Leichner Landfill's ADP.

4.4 GREENHOUSE GAS MONITORING

SCS completed an evaluation in November 2013 to determine if 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 Leichner Landfill is exempt from GHG reporting and weekly monitoring. Consequently, weekly GHG monitoring was suspended beginning January 2014. The evaluation results were verified with SWCAA in 2024; SWCAA staff reiterated that Leichner was not required to report under the mandatory reporting rule (WAC 173-441).

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 2024 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 and access road maintenance.
- 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 2024 are described in this section unless already previously discussed in this report.

5.2.1 First Quarter 2024

- Drilled, installed, and developed replacement groundwater monitoring wells LB-22SR and LB-9SR2. Prepared associated installation reports and submitted to Ecology and CCPH.
- Drilled and installed three new LFG probes (GP-40, GP-41, and GP-42). Prepared associated installation reports and submitted to Ecology and CCPH.
- Revised locations of replacement monitoring wells and gas probes in figures to be included in a workplan to be used for the construction of the City of Vancouver Operations Center.

- Conducted on-site meeting with inspector from Clark County Public Works (CCPW) regarding landfill liner and placement of concrete blocks, following water infiltration under the new liner.

- Conducted on-site visit with CCPH and Ecology staff on March 22, 2024, to discuss the current challenges in the northeast portion of the landfill, a history of recent improvements to the local geomembrane and drainage features, and ideas going forward to remedy the situation.

- Prepared a technical memorandum evaluating options for replacing the South Pond pumps. This included obtaining and evaluating pump curves and pump performance and costing information.

5.2.2 Second Quarter 2024

- Performed extensive vegetation removal and weed abatement in numerous areas inaccessible by the County's vegetation control staff, including sloped areas and areas around the new storm water infiltration structures.
- Worked with Perennial (flare manufacturer) to (1) reprogram the flare to address premature shut down during low temperature periods and (2) revise louver set points to level out temperature operation.
- SCS conducted an internal review of the geomembrane placement during road construction in northeast corner of the landfill and possible areas to investigate.
- Arranged and conducted ground penetrating radar as the initial method to investigate the northeast corner of the landfill to locate liner depths and subsurface drainage piping to prepare adjustments to the stormwater drainage system. Conducted follow-up investigation utilizing hand excavation, additional GPR survey, and camera work on exposed drain lines. Held conversations with CCPH to review and determine next steps.
- Submitted final work plan to Ecology regarding decommissioning and reinstalling monitoring wells and LFG probes in the development area for the future City of Vancouver Operations Center. Ecology approved the workplan.
- Obtained a variance from Ecology (May 23, 2024) for decommissioning LB-05D, which will allow leaving the 12-inch and 8-inch steel casings in the ground, while removing the 2-inch PVC and backfilling with bentonite grout. This variance is valid for one year.
- Conducted teleconference with the Washington Department of Ecology on June 14, 2024, to discuss its request requiring installing a replacement monitoring well for LB-6S. As a result of the meeting, Ecology requested sampling of LB-17S and comparing analytical results with L-17I to determine if one or both are possible replacements for LB-6S.

5.2.3 Third Quarter 2024

- Constructed a modified support system for the three new South Pond stormwater pumps. Coordinated with EC Electric to perform the necessary electrical work for installing new pumps.
- Met with the County survey crew onsite to measure key features and elevations for liner repair design in the northeast corner of the landfill.
- Performed technical and field oversight of trenching and backfilling activities near the anchor trench as part of the investigation of issues with the liner in the northeast corner. Created construction drawings showing conditions discovered during this investigation for use in developing repair options.
- Installed a drain line in the northeast portion of the landfill and covered the line with drain rock as an interim measure to control stormwater and improve drainage.

5.2.4 Fourth Quarter 2024

- Reviewed polychlorinated biphenyl (PCB) data and reports obtained from Ecology's files and from the City related to the Fleisher property and prepared a technical memorandum summarizing the information and submitted it to CCPH.
- Evaluated options/requirements for upgrading the South Pond pump controller system including having technical discussions with Owens Pumps, SCS RMC technicians, and CCPH. Prepared cost estimates to upgrade the controller system.
- Continued problems with South Pond pumps required having two of three pumps pulled from the vault using confined space protocols to have them serviced.
- Modified the vault electrical system/controls allowing the junction box/control panel to be moved outside the vault thus eliminating the need to follow confined space protocols to perform future electrical work. This involved coring holes in the concrete vault to allow conduits to be routed outside the vault.
- Anchored the drain line previously installed in the northeast portion of the landfill and added larger drain rock to control stormwater discharge and improve drainage.

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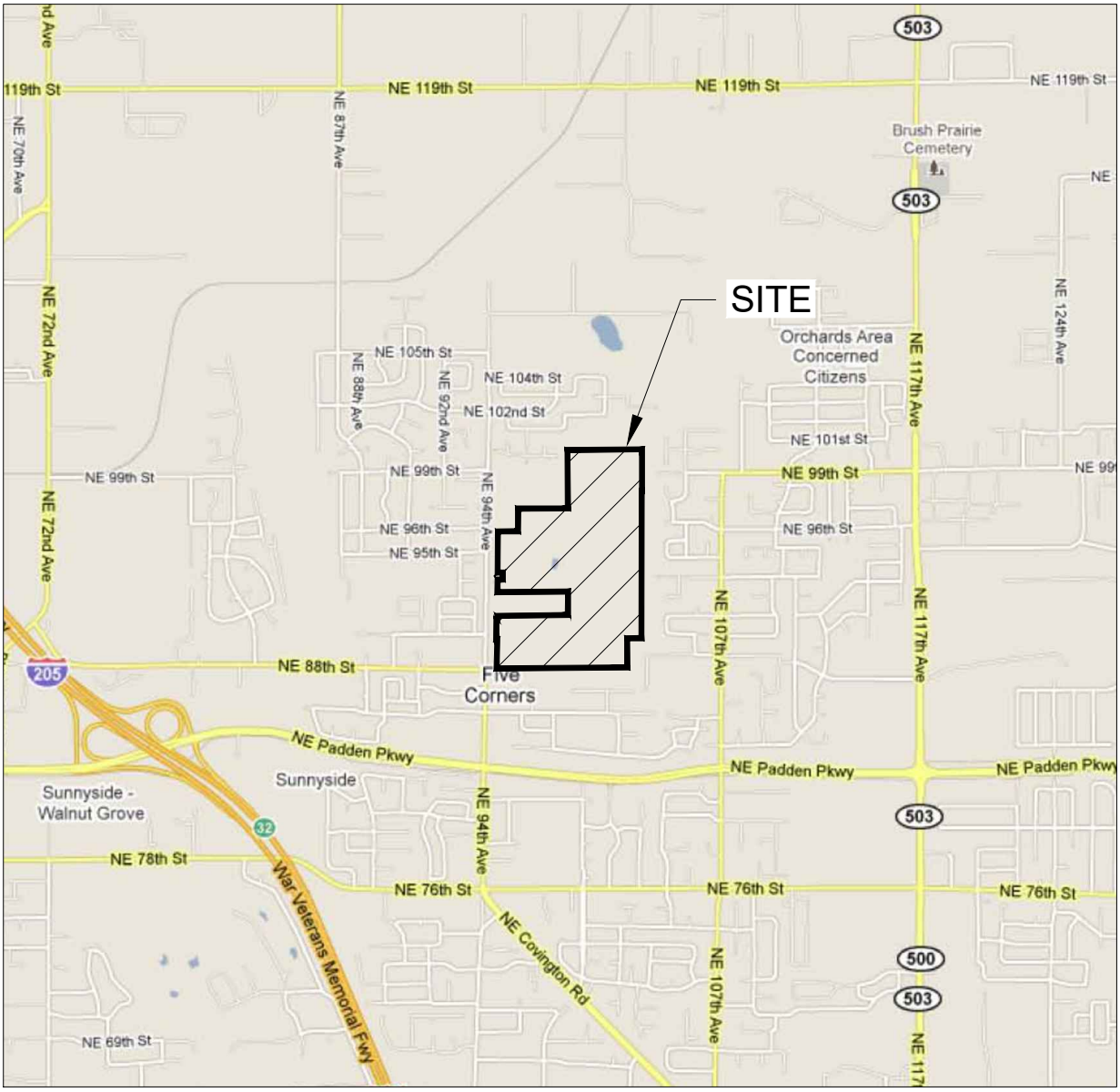
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FIGURES



NOT TO SCALE



WASHINGTON

SOURCE: GOOGLE MAPS

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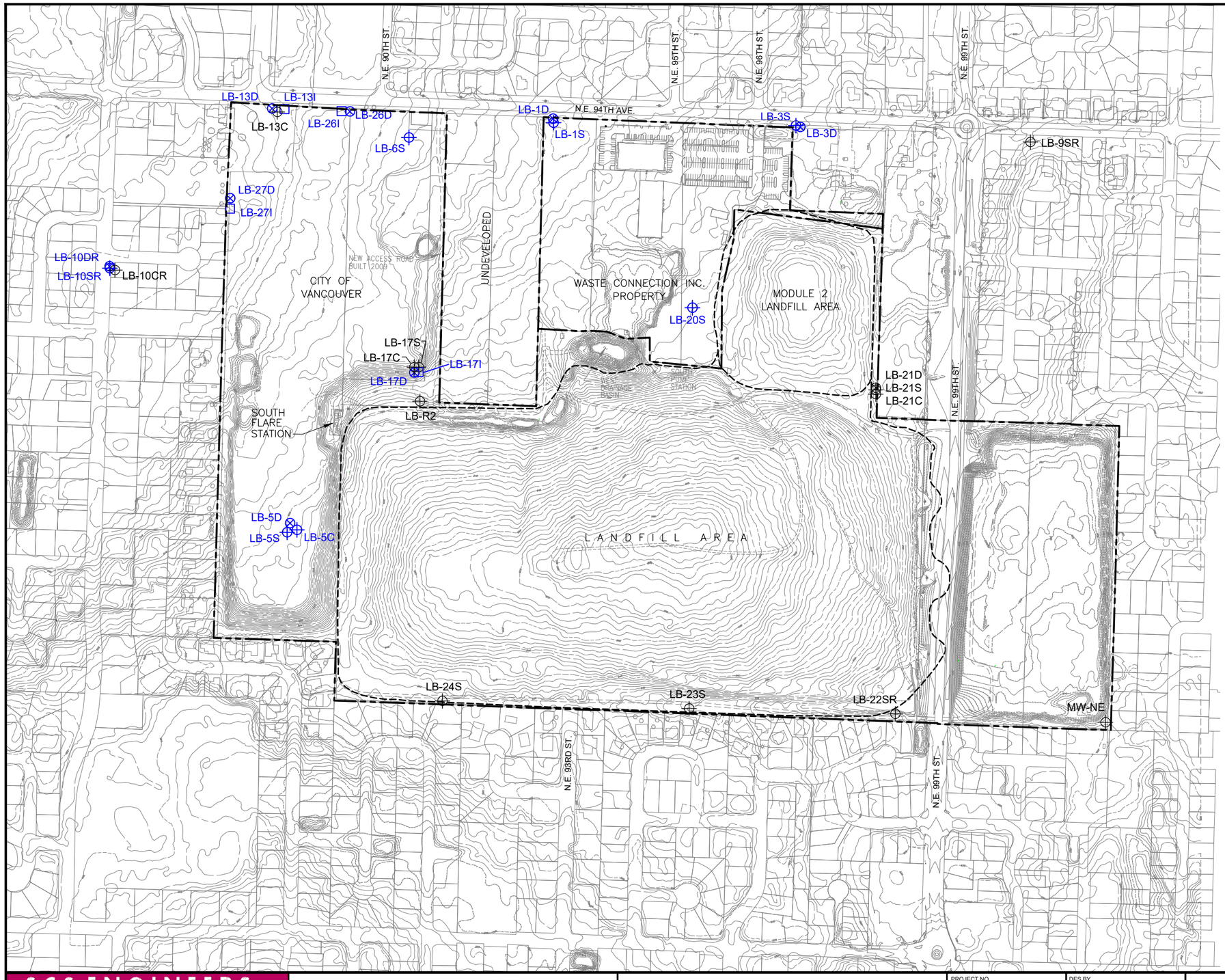
PROJECT NO. 04225030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 1-1	APP BY L.C.

SITE LOCATION MAP

LEICHNER LANDFILL
CLARK COUNTY, WASHINGTON

DATE JANUARY 2025

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
———	Property Boundary
– – – – –	Limit of Landfill Cover and Approximate Edge of Waste

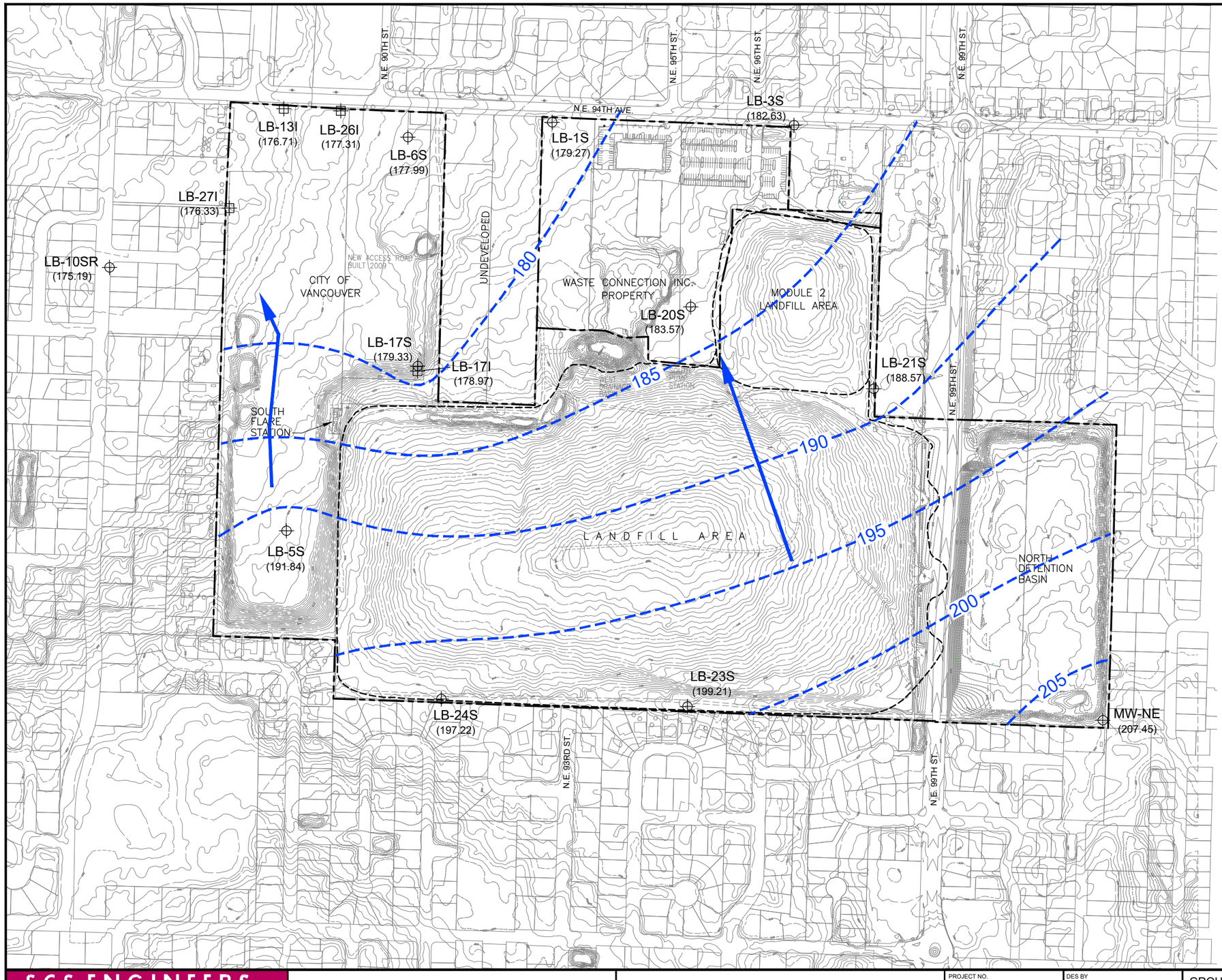
NOTES:

1. Monitoring wells designated by blue color are compliance monitoring wells.
2. Topography taken from Clark County GIS, December 2023.

SCALE
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PROJECT NO. 04225030.14	DES BY B.L.	GROUNDWATER MONITORING WELL LOCATIONS	DATE JANUARY 2025
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
(178.97)	Groundwater Elevation Measured on February 12, 2024
→	Inferred Groundwater Flow Direction

NOTES:

1. Topography taken from Clark County GIS, December 2023.

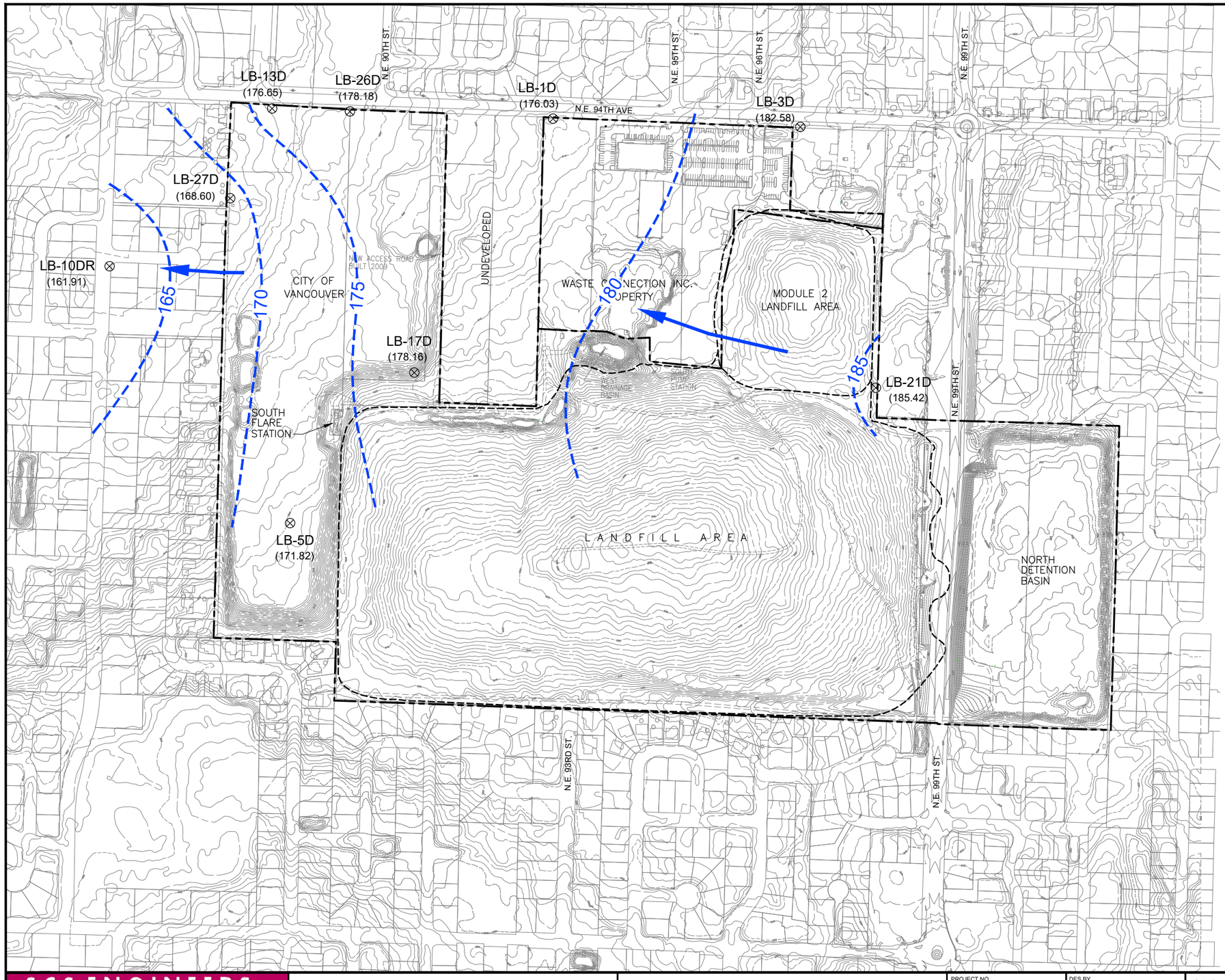
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PROJECT NO. 04225030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 2-2	APP BY L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
ALLUVIAL WATER BEARING ZONE
FEBRUARY 12, 2024
LEICHNER LANDFILL
VANCOUVER, WASHINGTON

DATE JANUARY 2025
FIGURE 2-2



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
(171.82)	Groundwater Elevation Measured on February 12, 2024
→	Inferred Groundwater Flow Direction

NOTES:

1. Topography taken from Clark County GIS, December 2023.

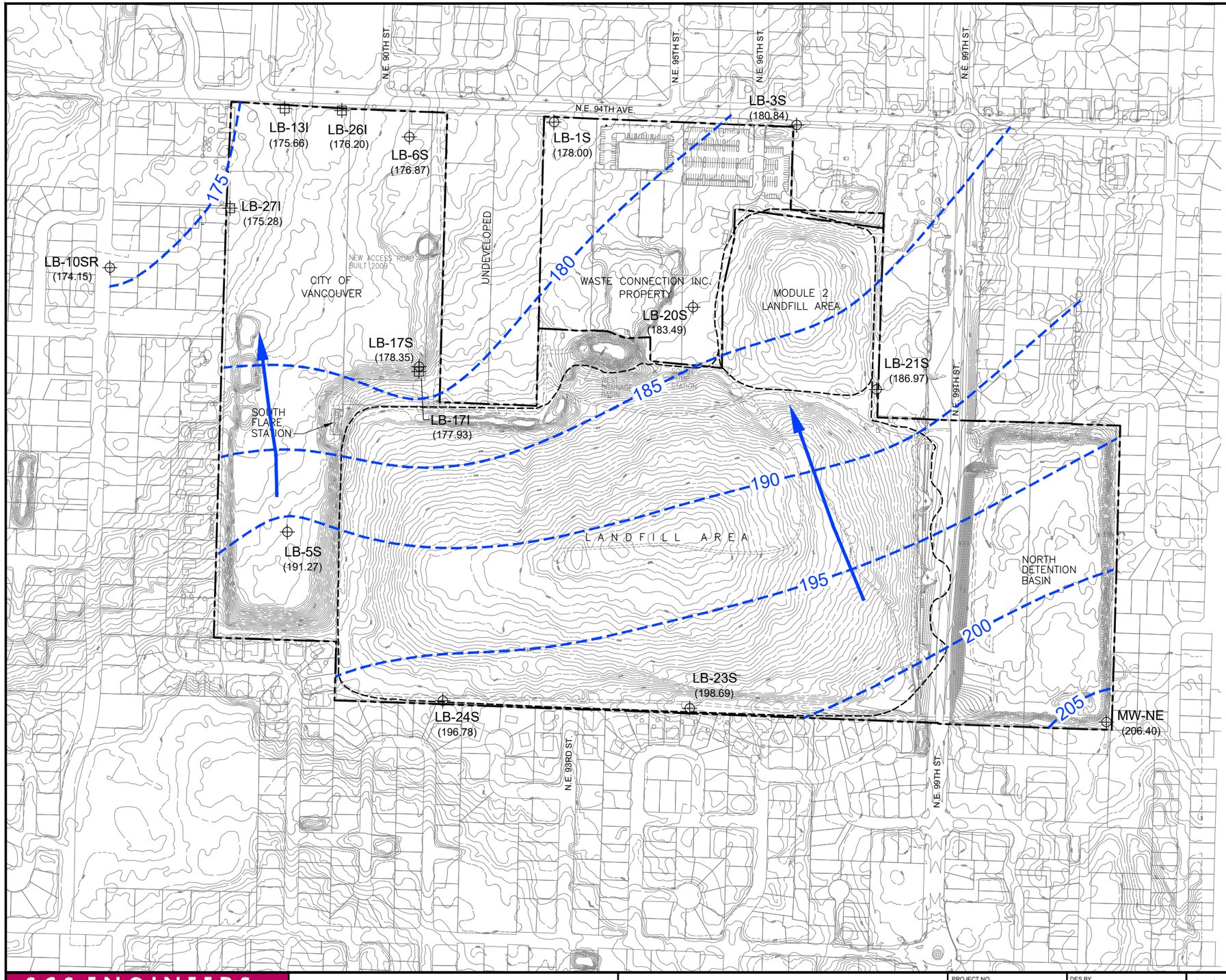
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SCALE
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PROJECT NO. 04225030.14	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 2-3	APP BY L.C.

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
TROUTDALE FORMATION AQUIFER
FEBRUARY 12, 2024
LEICHNER LANDFILL
VANCOUVER, WASHINGTON

DATE JANUARY 2025
FIGURE 2-3



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
(177.93)	Groundwater Elevation Measured on August 6, 2024
→	Inferred Groundwater Flow Direction

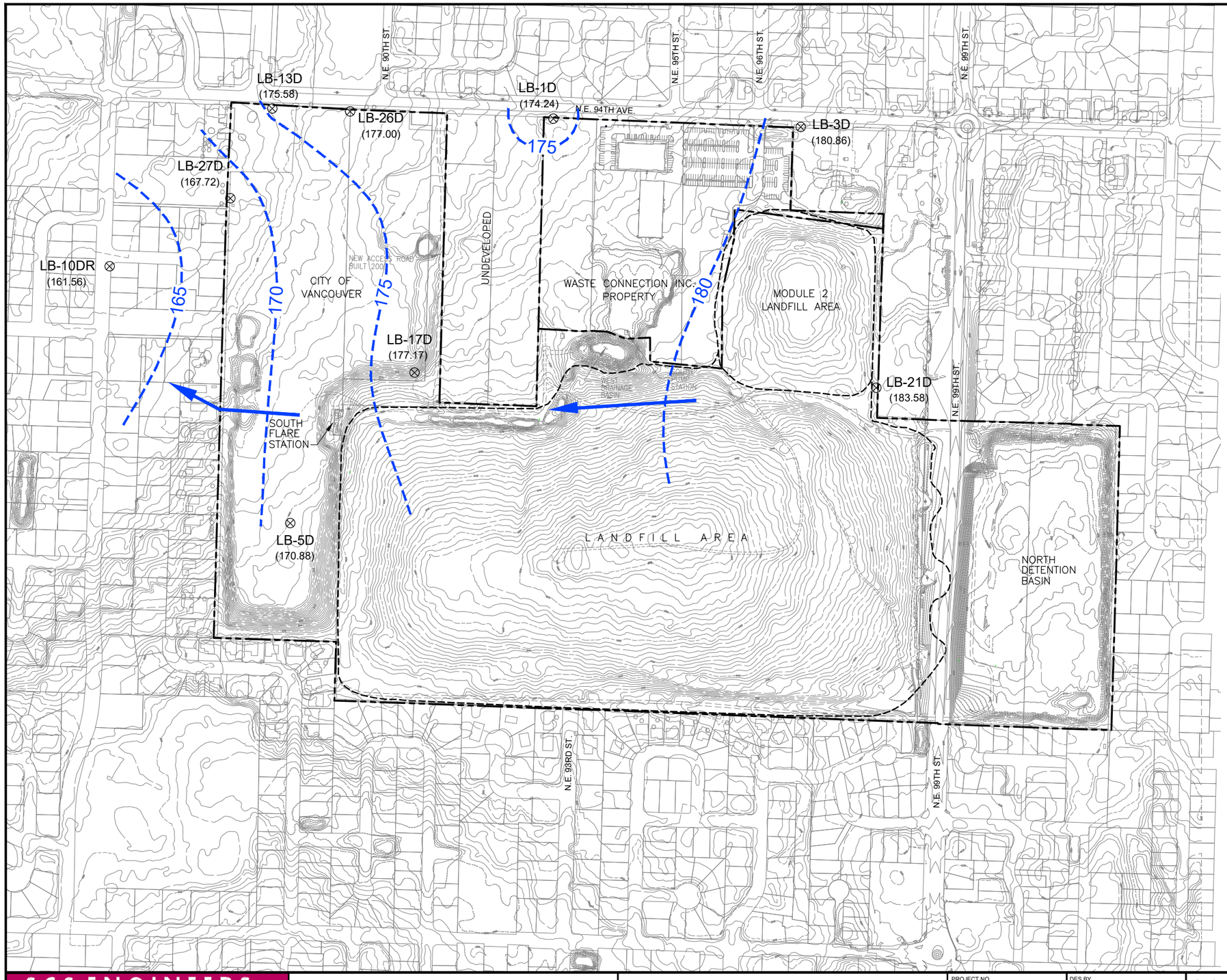
NOTES:

1. Topography taken from Clark County GIS, December 2023.

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0 400 800 FEET

PROJECT NO. 04225030.14	DES BY B.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE AUGUST 6, 2024 LEICHNER LANDFILL VANCOUVER, WASHINGTON	DATE JANUARY 2025
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
(170.88)	Groundwater Elevation Measured on August 6, 2024
→	Inferred Groundwater Flow Direction

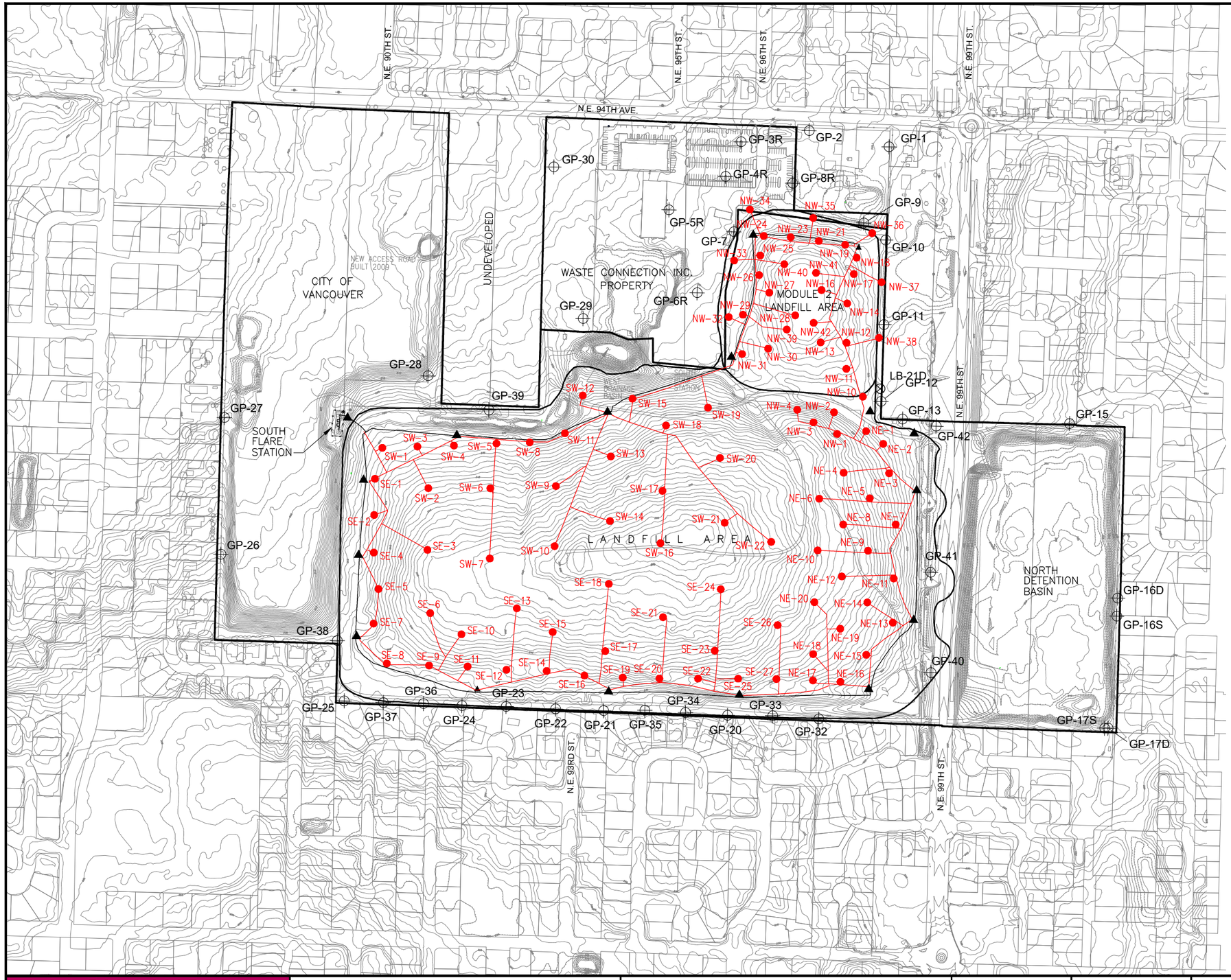
NOTES:

1. Topography taken from Clark County GIS, December 2023.

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PROJECT NO. 04225030.14	DES BY B.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER AUGUST 6, 2024 LEICHNER LANDFILL VANCOUVER, WASHINGTON	DATE JANUARY 2025
SCALE AS SHOWN	CHK BY B.L.		FIGURE 2-5
CAD FILE FIGURE 2-5	APP BY L.C.		



LEGEND:

- GP-30 — Compliance Landfill Gas Monitoring Probe Location
- SW-1 — Vertical Landfill Gas Extraction Well
- Condensate Sump
- Gas Collection Piping
- Property Boundary
- Limit of Landfill Cover and Approximate Edge of Waste

NOTES:

1. Topography taken from Clark County GIS, December 2023.

SCS ENGINEERS

SCALE
0 400 800 FEET

PROJECT NO. 04223030.11	DES BY B.L.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS	DATE JANUARY 2025
SCALE AS SHOWN	CHK BY B.L.	LEICHNER LANDFILL VANCOUVER, WASHINGTON	FIGURE 4-1
CAD FILE FIGURE 4-1	APP BY L.C.		

TABLES

Table 2-1
2024 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-17D	LB-032123-10-17D	3/21/23	---	---	3.82
LB-17D	LB-021324-02-17D	2/13/24	---	0.320	3.86
LB-17I	LB-032123-11-17I	3/21/23	---	9.07	2.04
LB-17I	LB-021324-03-17I	2/13/24	---	7.83	1.70
LB-17I	LB-021324-04-DUP1	2/13/24	---	7.85	1.70
LB-20S	LB-032123-01-20S	3/21/23	---	1.46	1.75
LB-20S	LB-021424-05-20S	2/14/24	---	---	0.625
LB-20S	LB-021424-06-DUP1	2/14/24	---	---	0.651
LB-27I	LB-032123-03-27I	3/21/23	---	---	---
LB-27I (DUP)	LB-032123-04-DUP2	3/21/23	---	---	---
LB-27I	LB-072523-02-27I	7/25/23	---	---	0.118
LB-27I	LB-021324-09-27I	2/13/24	---	---	0.128
LB-27I	LB-080624-02-27I	8/6/24	---	---	0.137

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 2020 to 2024
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	6.1	M(6.29)	5.63	M(10.1)	5.91	M(8.12)	6.43	8.29	10.49	M(12.9)	NC	M(18)	10.68	29.37	7.90	5.95	13.02	M(7.48)
Nitrate	10	mg/L	M(5.01)	M(5.82)	M(6.82)	M(9.14)	5.14	M(1.92)	3.71	**11.73**	3.66	M(5.15)	4.86	All ND	NC	NC	4.32	M(5.55)	6.63	4.39
Total Dissolved Solids	500	mg/L	193	M(174)	M(186)	M(180)	171	M(217)	M(187)	223	235	M(224)	177	267	195	296	194	M(197)	236	M(207)
Metals																				
Iron (dissolved)	0.3	mg/L	NC	NC	All ND	NC	NC	NC	NC	M(0.064)	NC	NC	NC	**M(14.5)**	**M(0.32)**	**M(1.46)**	NC	NC	M(0.044)	NC
Manganese (dissolved)	0.05	mg/L	NC	NC	All ND	NC	NC	0.0058	NC	NC	NC	0.0060	NC	**2.56**	**4.13**	**3.58**	0.0070	All ND	**0.306**	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 due to lack of data above the detection limit.
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
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-01A	02/29/24	0.0	2.5	18.7	78.8
GP-01A	05/03/24	0.0	2.5	17.8	79.7
GP-01A	09/13/24	0.0	3.2	16.7	80.1
GP-01A	09/17/24	0.0	1.8	19.5	78.7
GP-01A	10/11/24	0.1	1.0	20.2	78.7
GP-01B	02/29/24	0.0	2.7	18.8	78.5
GP-01B	05/03/24	0.0	2.7	17.3	80.0
GP-01B	09/13/24	0.0	1.0	19.6	79.4
GP-01B	09/17/24	0.0	1.6	19.6	78.8
GP-01B	10/11/24	0.1	1.0	20.1	78.8
GP-02	02/29/24	0.0	2.7	17.9	79.4
GP-02	05/03/24	0.0	2.9	17.5	79.6
GP-02	09/13/24	0.0	1.9	19.2	78.9
GP-02	10/11/24	0.1	0.3	20.7	78.9
GP-03R	09/13/24	0.0	3.2	16.7	80.1
GP-03R	10/11/24	0.1	4.1	15.7	80.1
GP-04R	09/13/24	0.0	1.0	19.6	79.4
GP-04R	10/11/24	0.1	1.2	19.3	79.4
GP-05R	09/13/24	0.0	1.0	19.4	79.6
GP-05R	10/11/24	0.1	1.2	18.6	80.1
GP-06	02/29/24	0.0	5.6	12.2	82.2
GP-06	05/03/24	0.0	5.5	11.1	83.4
GP-06	09/17/24	0.0	6.2	12.8	81.0
GP-06R	10/11/24	0.0	5.1	15.7	79.2
GP-07	02/29/24	0.8	3.9	0.2	95.1
GP-07	05/03/24	0.0	6.6	8.4	85.0
GP-07	09/17/24	0.0	3.9	16.2	79.9
GP-07	10/11/24	0.1	8.0	8.8	83.1
GP-07	10/11/24	0.1	8.6	8.1	83.2
GP-08R	02/29/24	0.1	0.5	20.7	78.7
GP-08R	05/03/24	0.0	1.4	18.3	80.3
GP-08R	09/13/24	0.0	1.2	19.5	79.3
GP-08R	10/11/24	0.1	1.9	19.2	78.8
GP-09A	02/29/24	0.1	4.9	12.5	82.5
GP-09A	05/03/24	0.0	7.4	10.2	82.4
GP-09A	09/13/24	0.0	4.8	13.7	81.5
GP-09A	10/11/24	0.1	5.9	12.8	81.2

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-09B	02/29/24	0.1	12.4	1.3	86.2
GP-09B	05/03/24	0.0	11.2	2.3	86.5
GP-09B	09/13/24	0.0	11.0	3.5	85.5
GP-09B	10/11/24	0.1	12.1	3.7	84.1
GP-10A	02/29/24	0.0	4.3	14.2	81.5
GP-10A	05/03/24	0.0	3.8	13.7	82.5
GP-10A	09/13/24	0.0	4.5	14.9	80.6
GP-10A	10/11/24	0.1	0.4	20.5	79.0
GP-10B	02/29/24	0.0	1.3	19.7	79.0
GP-10B	05/03/24	0.0	1.6	17.4	81.0
GP-10B	09/13/24	0.0	1.4	19.3	79.3
GP-10B	10/11/24	0.1	1.3	19.0	79.6
GP-11	02/29/24	0.0	0.8	20.0	79.2
GP-11	05/01/24	0.0	1.2	18.5	80.3
GP-11	09/13/24	0.0	1.2	19.4	79.4
GP-11	10/11/24	0.1	1.2	18.8	79.9
GP-12	02/29/24	0.0	0.7	19.8	79.5
GP-12	05/01/24	0.0	0.7	18.9	80.4
GP-12	09/13/24	0.0	0.7	20.5	78.8
GP-12	10/11/24	0.1	0.8	19.7	79.4
GP-13	02/29/24	0.0	1.8	18.5	79.7
GP-13	05/01/24	0.0	1.9	18.0	80.1
GP-13	09/13/24	0.0	2.7	18.6	78.7
GP-13	10/11/24	0.1	2.5	18.4	79.0
GP-15	02/29/24	0.0	2.9	18.9	78.2
GP-15	05/03/24	0.0	2.3	18.2	79.5
GP-15	09/13/24	0.0	2.2	18.7	79.1
GP-15	10/11/24	0.1	2.5	19.0	78.4
GP-16D	02/29/24	0.0	2.9	18.8	78.3
GP-16D	05/03/24	0.0	2.9	17.3	79.8
GP-16D	09/13/24	0.0	3.0	18.0	79.0
GP-16S	05/03/24	0.0	1.6	18.4	80.0
GP-16S	09/13/24	0.0	1.5	19.4	79.1
GP-16S	10/11/24	0.1	1.5	19.8	78.6

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-17D	02/29/24	0.0	3.7	18.7	77.6
GP-17D	05/03/24	0.0	1.6	18.9	79.5
GP-17D	09/13/24	0.0	3.1	17.5	79.4
GP-17D	10/11/24	0.1	3.6	18.0	78.3
GP-17S	02/29/24	0.0	4.5	17.3	78.2
GP-17S	05/03/24	0.0	4.3	16.7	79.0
GP-17S	09/13/24	0.0	2.5	18.4	79.1
GP-17S	10/11/24	0.1	2.6	18.8	78.5
GP-20	02/29/24	0.0	7.8	8.5	83.7
GP-20	05/01/24	0.0	7.5	8.1	84.4
GP-20	09/13/24	0.0	8.0	10.3	81.7
GP-20	09/13/24	0.0	8.0	10.3	81.7
GP-20	10/11/24	0.0	8.7	10.3	81.0
GP-21A	02/29/24	0.0	1.4	19.3	79.3
GP-21A	05/01/24	0.0	1.3	18.8	79.9
GP-21A	09/13/24	0.0	1.3	19.5	79.2
GP-21A	09/13/24	0.0	1.3	19.5	79.2
GP-22	09/13/24	0.0	1.0	20.2	78.8
GP-22	09/13/24	0.0	1.0	20.2	78.8
GP-22	10/11/24	0.1	1.2	20.0	78.7
GP-23	02/29/24	0.0	2.2	19.1	78.7
GP-23	05/01/24	0.0	1.8	18.8	79.4
GP-23	09/13/24	0.0	1.2	19.8	79.0
GP-23	09/13/24	0.0	1.2	19.8	79.0
GP-23	10/11/24	0.1	1.5	19.5	78.9
GP-24A	02/29/24	0.0	1.2	19.3	79.5
GP-24A	05/01/24	0.0	0.6	19.3	80.1
GP-24A	09/13/24	0.0	0.5	20.6	78.9
GP-24A	09/13/24	0.0	0.5	20.6	78.9
GP-24A	10/11/24	0.1	0.5	20.5	78.9
GP-24B	02/29/24	0.0	1.6	18.3	80.1
GP-24B	05/01/24	0.0	1.0	18.1	80.9
GP-24B	09/13/24	0.0	0.5	20.0	79.5
GP-24B	09/13/24	0.0	0.5	20.0	79.5
GP-24B	10/11/24	0.1	0.9	19.0	80.0

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-25A	02/29/24	0.0	3.0	18.2	78.8
GP-25A	05/01/24	0.0	2.7	17.8	79.5
GP-25A	09/13/24	0.0	1.1	19.7	79.2
GP-25A	09/13/24	0.0	1.1	19.7	79.2
GP-25A	10/11/24	0.1	1.3	19.9	78.7
GP-25B	02/29/24	0.0	3.1	18.0	78.9
GP-25B	05/01/24	0.0	2.7	17.5	79.8
GP-25B	09/13/24	0.0	3.0	17.2	79.8
GP-25B	09/13/24	0.0	3.0	17.2	79.8
GP-25B	10/11/24	0.1	2.5	18.2	79.2
GP-26	02/29/24	0.0	0.4	20.2	79.4
GP-26	05/01/24	0.0	0.5	19.3	80.2
GP-26	09/13/24	0.0	1.3	19.2	79.5
GP-26	10/11/24	0.1	0.2	20.5	79.2
GP27	02/29/24	0.0	0.6	19.9	79.5
GP-27	05/01/24	0.0	0.6	19.1	80.3
GP-27	09/13/24	0.0	0.7	19.7	79.6
GP-27	10/11/24	0.1	1.7	19.0	79.2
GP-28	02/29/24	0.2	5.0	11.7	83.1
GP-28	05/01/24	0.0	5.1	11.4	83.5
GP-28	09/13/24	0.0	7.4	7.0	85.6
GP-28	09/13/24	0.0	7.4	7.0	85.6
GP-28	10/11/24	0.2	6.5	12.9	80.4
GP-29	02/29/24	0.0	8.3	3.1	88.6
GP-29	05/03/24	0.0	7.2	4.2	88.6
GP-29	09/13/24	0.0	5.6	13.9	80.5
GP-29	09/13/24	0.0	5.6	13.9	80.5
GP-29	09/17/24	0.0	8.1	6.0	85.9
GP-29	10/11/24	0.1	7.7	7.2	85.0
GP-30A	02/29/24	0.0	4.0	16.0	80.0
GP-30A	05/03/24	0.0	4.3	14.9	80.8
GP-30A	09/13/24	0.0	4.9	16.3	78.8
GP-30A	09/13/24	0.0	4.9	16.3	78.8
GP-30B	02/29/24	0.0	3.8	16.6	79.6
GP-30B	05/03/24	0.0	3.5	15.7	80.8
GP-30B	09/13/24	0.0	4.4	16.7	78.9
GP-30B	09/13/24	0.0	4.4	16.7	78.9

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-32	02/29/24	0.0	2.3	18.2	79.5
GP-32	05/01/24	0.0	2.2	17.7	80.1
GP-32	09/13/24	0.0	1.8	19.0	79.2
GP-32	09/13/24	0.0	1.8	19.0	79.2
GP-32	10/11/24	0.0	2.3	18.6	79.1
GP-33	09/13/24	0.0	1.4	19.3	79.3
GP-33	09/13/24	0.0	1.4	19.3	79.3
GP-33	10/11/24	0.1	3.0	16.9	80.0
GP-34	02/29/24	0.0	4.8	11.8	83.4
GP-34	05/01/24	0.0	5.0	12.0	83.0
GP-34	09/13/24	0.0	4.7	13.6	81.7
GP-34	09/13/24	0.0	4.7	13.6	81.7
GP-34	10/11/24	0.1	5.5	13.7	80.7
GP-35	02/29/24	0.0	2.2	16.3	81.5
GP-35	05/01/24	0.0	2.2	15.8	82.0
GP-35	09/13/24	0.0	2.6	16.9	80.5
GP-35	09/13/24	0.0	2.6	16.9	80.5
GP-35	10/11/24	0.1	3.1	16.9	79.9
GP-36	02/29/24	0.0	1.8	17.7	80.5
GP-36	05/01/24	0.0	1.8	17.5	80.7
GP-36	09/13/24	0.0	2.6	17.3	80.1
GP-36	09/13/24	0.0	2.6	17.3	80.1
GP-36	10/11/24	0.1	2.3	18.2	79.4
GP-37	02/29/24	0.0	3.4	17.4	79.2
GP-37	05/01/24	0.0	2.7	17.3	80.0
GP-37	09/13/24	0.0	2.0	18.1	79.9
GP-37	09/13/24	0.0	2.0	18.1	79.9
GP-37	10/11/24	0.1	2.4	18.2	79.3
GP-38	02/29/24	0.0	1.1	18.9	80.0
GP-38	05/01/24	0.0	1.3	17.7	81.0
GP-38	06/20/24	22.2	15.0	0.1	62.7
GP-38	09/13/24	0.0	1.3	19.6	79.1
GP-38	09/13/24	0.0	1.3	19.6	79.1
GP-38	10/11/24	0.1	1.6	19.6	78.7

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-39	02/29/24	0.0	14.2	9.5	76.3
GP-39	05/01/24	0.0	16.6	7.8	75.6
GP-39	06/20/24	12.0	14.7	3.0	70.3
GP-39	09/13/24	1.6	19.9	1.7	76.8
GP-39	09/17/24	1.2	21.1	1.8	75.9
GP-39	10/11/24	0.1	16.5	4.8	78.6
GP-40	02/29/24	0.0	0.1	20.8	79.1
GP-40	05/03/24	8.1	13.4	1.4	77.1
GP-40	05/07/24	6.6	14.0	0.7	78.7
GP-40	05/13/24	12.8	14.7	0.3	72.2
GP-40	05/21/24	12.2	14.5	0.5	72.8
GP-40	05/24/24	13.2	14.6	0.6	71.6
GP-40	05/30/24	11.0	14.7	0.1	74.2
GP-40	05/31/24	11.5	14.5	0.0	74.0
GP-40	06/03/24	14.5	15.2	0.0	70.3
GP-40	06/10/24	17.3	15.2	0.0	67.5
GP-40	06/12/24	16.8	14.7	0.0	68.5
GP-40	06/17/24	18.4	15.7	0.0	65.9
GP-40	06/26/24	21.2	15.5	0.3	63.0
GP-40	09/13/24	32.3	19.6	0.1	48.0
GP-40	10/11/24	40.1	21.0	0.0	38.9
GP-41	02/29/24	0.0	0.3	20.9	78.8
GP-41	05/03/24	9.7	16.6	0.0	73.7
GP-41	05/07/24	8.6	16.8	0.0	74.6
GP-41	05/13/24	6.7	16.8	0.0	76.5
GP-41	05/21/24	5.5	16.6	0.0	77.9
GP-41	05/24/24	6.9	16.8	0.0	76.3
GP-41	05/30/24	5.8	16.7	0.0	77.5
GP-41	05/31/24	6.1	16.3	0.0	77.6
GP-41	06/03/24	9.0	16.8	0.0	74.2
GP-41	06/10/24	11.8	16.7	0.0	71.5
GP-41	06/12/24	12.5	16.2	0.0	71.3
GP-41	06/17/24	12.7	17.1	0.0	70.2
GP-41	06/26/24	9.6	11.0	7.4	72.0
GP-41	09/13/24	29.4	21.4	0.0	49.2
GP-41	10/11/24	29.7	21.7	0.6	48.0

Table 4-1
2024 Compliance Landfill Gas Monitoring Probe Data
Leichner Landfill

Probe	Date	Methane	Carbon Dioxide	Oxygen	Balance Gases
		Percent by Volume			
GP-42	02/29/24	0.0	2.6	16.4	81.0
GP-42	05/01/24	0.0	1.4	17.5	81.1
GP-42	09/13/24	0.0	2.8	17.4	79.8
GP-42	10/11/24	0.1	3.0	17.1	79.8

APPENDIX A

2024 Field Sampling Data Sheets (FSDSs)

First Quarter (February) 2024 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. Mack
Date 2/12/24
Reason for inspection
(1st) 2nd, 3rd, or 4th groundwater monitoring event
Other

Notes: Cloudy, 38°F

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
Pro Quatro			23C106864		J. Mack			
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	2/12/24	0815	18.4	9.43	4.0	7.0	143	220
Leichner	2/13/24	0715	7.9	11.88	4.0	7.0	141?	220

Notes: 762.0 mm Hg 2/12/24
760.1 mm Hg 2/13/24

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
Pro Plus			17J102717		J. Mack			
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 04224030.13	2/14/24	0820	11.2	10.84	4.0	7.0	1413	220
Notes: 752.0 mm Hg								

Leichner Landfill
Groundwater Elevation Survey

Project #: 04224030.13 Sampler: B. Rupiza / J. Meek

Quarter: (1) 2 3 4 Date: 2/12/24

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	1005	Dry @ 14.97
MW-1 S	216.13	44.50	34.98	1008	
MW-1 E	216.45	29.05	N/A	1006	Dry @ 29.02
MW-NE	219.83	50.34	12.61	1025	Taken on 02/13/24 due to
LB-R2	222.27	77.36	43.03	1158	county lock impeding access
LB-1S	210.12	45.00	30.85	0941	previous day
LB-1D	209.74	137.45	33.71	0848	
LB-3S	218.25	52.50	35.62	1432	
LB-3D	219.29	117.28	36.71	1420	
LB-5S	206.89	30.32	15.05	1138	
LB-5C	206.70	74.71	31.07	1142	
LB-5D	207.56	122.40	35.74	1140	
LB-6S	202.80	39.07	24.81	1247	
LB-9SR2		47.89	30.88	1001	
LB-10SR	204.04	42.35	28.85	1215	
LB-10CR	203.05	71.95	27.76	1119	
LB-10DR	203.36	121.10	41.45	1117	
LB-13I	202.36	55.03	25.65	1238	
LB-13C	202.68	66.00	26.07	1236	
LB-13D	202.96	88.88	26.31	1235	
LB-17S	208.18	34.38	28.85	1147	
LB-17I	213.14	51.95	33.99	1153	
LB-17C	206.55	72.35	27.66	1149	
LB-17D	213.17	100.91	35.01	1151	
LB-20S	221.22	61.50	37.65	0805	
LB-21S	223.35	54.24	34.78	1026	
LB-21C	223.32	79.10	35.27	1028	
LB-21D	223.63	110.73	38.21	1030	
LB-22SR		42.45	20.71	1035	
LB-23S	229.19	45.40	29.98	1038	
LB-24S	235.13	54.16	37.91	1042	
LB-26I	200.22	58.30	22.91	1241	
LB-26D	200.75	101.78	22.57	1244	
LB-27I	205.35	57.15	29.02	1228	
LB-27D	204.65	115.10	36.03	1230	

Notes: Probe decon'd between readings, Cloudy 51°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-1D

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021247 -01-1D

DUP ID: 021224 **NA**

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 45.	°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)
2/12/24	08:45	137.95	.	33.71	.	—	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	2/12/24	09:15	A	3	40 ml	HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	09:15	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	2/12/24	09:15	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 [√]
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: 08:48 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(0851)	0.00	6.90	195.8	417.4	10.6	33.71	9.08	clear/colorless
1	A(0854)	0.10	6.91	157.1	365.8	11.3	33.67	7.67	Clear, Colorless
2	A(0857)	0.20	6.89	134.7	348.3	11.4	33.67	7.63	Clear, Colorless
3	A(0900)	0.30	6.85	116.4	338.2	11.4	33.68	7.60	Clear, Colorless
4	A(0904)	0.40	6.85	102.2	336.5	11.5	33.68	7.58	Clear, Colorless
5	A(0907)	0.50	6.87	92.2	335.7	11.5	33.69	7.65	Clear, Colorless
6		.	.			.	.	.	

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

Low Flow Purge Method: Low Flow: (20/10(70psi) ~ 150 mL/min

SAMPLER: R. Lepore (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-021224-02-1S
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 46 .	°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)
2/12/24	09:37	45.00	.	30.85	.	.	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	2/12/24	18:20	A	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	16:20	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	2/12/24	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 [ ]
	AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
	YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
	RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 09:43 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(0944)	0.00	6.75	115.6	382.7	12.9	30.05	6.65	
1	A(0948)	0.15	6.75	109.9	354.0	13.0	30.75	4.82	
2	A(0952)	0.35	6.74	100.4	358.6	11.9	30.73	5.00	
3	A(1010)	0.75	6.14	107.5	355.3	12.8	30.82	4.45	
4	A(1013)	1.00	6.26	102.3	352.3	12.9	30.83	4.35	
5	A(1016)	1.15	6.31	89.6	352.0	12.9	30.83	4.31	
6		.	.			.	.	.	

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

1004

Switched out tubing

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

SAMPLER: Jimmy Mack (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-021224-03-10DR

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)
2/12/24	11:17	121.10	.	41.45	.	.	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	2/12/24	11:50	A	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	11:50	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/12/24	11:50	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 [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 11:18 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(1127)	0.00	6.93	87.4	393.7	13.4	41.45	4.54	clear, colorless
1	A(1130)	0.20	6.80	79.1	388.2	13.2	41.31	1.42	clear, colorless
2	A(1133)	0.40	6.84	65.1	403.8	13.2	41.51	3.23	clear, colorless
3	A(1136)	0.60	6.91	58.4	412.0	13.2	41.46	3.07	clear, colorless
4	A(1139)	0.80	6.92	55.3	415.1	13.2	41.47	3.09	clear colorless
5	A(1142)	1.10	6.96	50.7	420.6	13.2	41.47	3.04	clear colorless
6			.			.	.	.	

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

Low Flow Purge Method: (12/8/60 psi) ~ 300 mL/min

SAMPLER:

(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-021224-04-FR1

DUP ID: NA

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

[Circle appropriate units]

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

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

Gal/ft = (dia./2)^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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/24	12:15	G	3	(40 ml)	HCl	(YES)	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	12:15	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	2 / /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	2/12/24	12:15	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 [ ]
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	G(1215)	0.00	.	—	—	.	.	.	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected Near: LB-10DR

SAMPLER: _____ _____

(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 - 10 SR

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB - 021224 - 05 - 10 SR

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	(SW)	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 50.	°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)
2/12/24	12:30	42.35	.	28.85	.	.	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	2/12/24	13:00	A	3	(40 ml)	HCl	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	13:00	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	2/12/24	13:00	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: 12 : 33 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(1235)	0.00	7.05	73.9	342.2	13.1	28.53	8.91	Clear, Colorless
1	A(1238)	0.2	6.43	77.2	442.2	13.4	28.76	0.83	Clear, Colorless
2	A(1241)	0.4	6.42	70.9	443.7	13.3	28.75	0.51	Clear, Colorless
3	A(1244)	0.6	6.39	68.4	442.2	13.3	28.82	0.42	Clear, Colorless
4	A(1247)	0.8	6.41	76.8	442.0	13.5	28.82	0.44	Clear, Colorless
5	A(1250)	1.0	6.39	33.1	441.6	13.4	28.82	0.41	Clear, Colorless
6			.			.	.	.	

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

Low Flow Purge Method: (9/6/30 psi) ~250 mL/min

SAMPLER: _____ _____

(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-021224-06-DUP1

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)
/ /	:	.	.	.	.	.	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	2/12/24	13:00	A	3	40 ml HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	13:06	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	2/12/24	13:00	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 (1300)	0.00	.	.		.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected at: LB-105R

SAMPLER:

(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-30

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB 021224-07-31

DUP ID: NA

WIND FROM:	N	NE	E	SE	(S)	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 51.	°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)
2/12/24	13:42	117.28	.	36.71	.	.	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	2/12/24	14:05	A	3	40 ml	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	14:05	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	2/12/24	14:05	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 [ ]
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: 13 : 43 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(1345)	0.00	6.86	71.2	348.3	13.8	36.75	3.36	C/C
1	A(1349)	0.2	6.75	62.7	346.3	13.6	36.75	3.98	C/C
2	A(1351)	0.4	6.73	59.4	346.2	13.5	36.75	4.45	C/C
3	A(1354)	0.6	6.75	61.0	345.1	13.4	36.75	4.97	C/C
4	A(1357)	0.8	6.76	64.3	345.9	13.4	36.75	5.04	C/C
5	A(1400)	1.0	6.71	65.1	348.3	13.4	36.75	5.35	C/C
6			.			.	.	.	

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

C/C = Clear Colorless

Low Flow Purge Method: (8 17 / 70 psi) ~ 300 mL/Min

SAMPLER: Jimmy Mack
(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-35

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021224-DF-35

DUP ID: NA

WIND FROM:	N	NE	E	SE	(S)	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 51 .	°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)
2/12/24	14:32	52.55	.	35.62	.	.	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	2/12/24	15:00	A	3	(40 ml) (HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/12/24	15:00	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	2/12/24	15:00	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: 14:33 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(1437)	0.00	6.68	76.4	364.3	12.4	35.65	9.28	C/C
1	A(1440)	0.20	6.07	101.8	367.0	12.8	35.65	7.70	C/C
2	A(1443)	0.40	6.01	106.1	367.7	12.8	35.65	7.46	C/C
3	A(1446)	0.60	6.01	111.0	366.6	12.4	35.65	6.98	C/C
4	A(1449)	0.8	5.99	113.9	365.6	12.9	35.65	7.15	C/C
5	A(1452)	1.0	5.98	115.7	365.6	12.8	35.67	7.04	C/C
6			.			.	.	.	

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

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

SAMPLER: Jimmy Mack (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-021324-01-5D

DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(F) 34 .	°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)
2/13/24	07:45	122.40	.	35.63	.	.	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	2/13/24	08:40	A	3	(40 ml)	(HCl)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	08:40	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	2/13/24	08:40	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 [√]
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: 07 : 48 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(0745)	0.00	6.79	181.5	673	49.3	35.74	1.34	C/C
1	A(0815)	0.20	6.75	157.7	532	12.0	35.74	0.71	C/C
2	A(0818)	0.40	6.84	136.0	522	12.1	35.73	0.50	C/C
3	A(0821)	0.60	6.87	122.1	522	12.3	35.73	0.40	C/C
4	A(0824)	0.80	6.86	109.4	522	12.4	35.73	0.34	C/C
5	A(0827)	1.00	6.89	97.9	522	12.2	35.73	0.32	C/C
6	A(0830)	1.20	6.87	86.5	519	12.4	35.73	0.30	C/C
[Casing]	[Select A-G]	[Cumulative Totals]				[Circle units]			[Clarity, Color]
	A(0833)	1.40	6.88	77.4	511	12.5	35.73	0.30	C/C

0812

(11/97/65 psi) ~300 mL/min

C/C - Clear Colorless

Low Flow Purge Method:

SAMPLER: Jimmy Mack

(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-171S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021324-02-171S

DUP ID: NA

WIND FROM:	N	NE	E	(SE)	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN			?	**TEMPERATURE:**	(°F) 39 . °C	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water	DTP-DTW	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
2/13/24	09:11	100.91	.	34.94	.	.	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	2/13/24	07:45	A	3	(40 ml)	HCl	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	07:45	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	2/13/24	07:43	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: 09:13 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(0915)	0.00	7.34	5.7	377.9	9.6	33.15	2.11	C/C
1	A(0918)	0.20	6.88	-43.1	381.8	11.8	33.32	0.67	C/C
2	A(0921)	0.40	6.87	-46.1	381.6	11.9	33.67	0.57	C/C
3	A(0924)	0.60	6.88	-51.4	382.2	12.1	33.86	0.36	C/C
4	A(0927)	0.80	6.89	-56.3	382.2	12.2	33.80	0.31	C/C
5	A(0930)	1.0	6.91	-58.5	383.8	12.3	33.64	0.29	C/C
6	A(0933)	1.2	6.95	-56.7	388.7	12.3	33.68	0.24	C/C

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

C/C - Clear Colorless

Low Flow Purge Method: (91660 psi) ~325 mL/Min

SAMPLER: Jimmy Mack (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-021324-02-17D

DUP ID: NA

WIND FROM:	N	NE	E	(SE)	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(E) 5 .	°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)
2/13/24	07:11	100.91	.	34.90	.	.	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:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	2/13/24	09:45	A	3	40 ml	HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	09:45	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	2/13/24	09:45	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	continue	0.00	.			.	.	.	
1	A(0936)	1.40	6.96	-555	390.7	12.2	33.65	0.24	clr
2	A(0937)	1.60	6.97	-555	391.2	12.3	33.60	0.23	clr
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Page 2

Low Flow Purge Method: Purge 2

SAMPLER:

(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-02324-03-17I
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 42.	°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)
2/13/24	10:00	51.91	.	33.96	.	.	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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/13/24	10:35	A	3	(40 ml)	(HCl)	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	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	2/13/24	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 [√]
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 : 09 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(1012)	0.00	7.44	-40.4	419.4	9.7	33.98	4.94	C/C
1	A(1015)	0.1	6.91	-84	430.3	12.2	33.92	2.89	C/C
2	A(1018)	0.2	6.95	-95.5	439.2	12.3	33.93	2.69	C/C
3	A(1021)	0.3	6.98	-102.1	443.9	12.3	33.92	2.44	C/C
4	A(1024)	0.4	6.99	-106.4	445.2	12.4	33.92	2.40	C/C
5	A(1027)	0.5	7.00	-109.5	448.2	12.6	33.92	2.39	C/C
6			.			.	.	.	

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

Low Flow Purge Method: (8.5/6.5/30 PSI) 200 mL/min C/C clear Colorless

SAMPLER: Jimmy Mack
(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-021324-04-DUP1

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)
/ /	:	.	.	.	.	.	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	2/13/24	10 :40	A	3	40 ml HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	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	2/13/24	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 [ ]
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-17C

SAMPLER:

(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-021324-05-26D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 44.	°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)
2/13/24	11:09	101.20	.	22.56	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	2" =	3" =	4" =	6" =	10" =	12" =
	0.041	0.163	0.367	0.653	1.469	4.080	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	2/13/24	11:35	A	3	(40 ml)	(HCl)	YES NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	11:35	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	2/13/24	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 [✓]
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: 11:12 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1112)	0.00	7.48	-6.1	357.4	11.8	22.68	3.71	C/C
1	A(1115)	0.25	6.74	25	359.3	12.6	22.77	3.83	C/C
2	A(1118)	0.50	6.72	36.1	360.2	12.6	22.14	3.75	C/C
3	A(1121)	0.75	6.71	45.6	360.3	12.5	22.21	3.83	C/C
4	A(1124)	1.0	6.70	52.2	359.9	12.5	22.18	3.86	C/C
5	A(1127)	1.25	6.68	57.4	349.3	12.5	22.14	3.95	C/C
6			.			.	.	.	

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

C/C = clear colorless

Low Flow Purge Method: (81/60 psi) ~400 mL/min

SAMPLER: Jimmy Mack (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-021324-06-FB1

DUP ID: NA

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

[Circle appropriate units]

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

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

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

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = 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	2/13/24	11:30	G	3	40 ml	(HCl)	YES	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	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	2/13/24	11:30	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 [ ]
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	G(1130)	0.00	.	.	.	.	.	.	.
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected Near: LB-26D

SAMPLER: B. Ryan (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-021324-07-13D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 45.	°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)
2/13/24	11 : 57	48.84	.	26.27	.	.	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	2/13/24	12 : 30	A	3	40 ml	HCl	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	12 : 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	2/13/24	12 : 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 [√]
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 : 58 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(1213)	0.00	7.09	51.2	340.7	10.6	26.24	5.40	C/C
1	A(1215)	0.25	6.71	62.7	344.3	12.6	26.27	4.03	C/C
2	A(1218)	0.50	6.72	64.5	344.7	12.6	26.21	4.05	C/C
3	A(1221)	0.75	6.71	67.3	344.7	12.6	26.24	4.26	C/C
4	A(1224)	1.0	6.72	67.4	344.9	12.6	26.25	4.27	C/C
5	A(1227)	1.25	6.69	68.4	344.4	12.6	26.24	4.27	C/C
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/50 psi) ~400 mL/Min C/C = clear colorless

SAMPLER: Jimmy Mack (PRINTED NAME) (SIGNATURE)

!! NEED MORE TUBING !!

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-021324-DB-27D

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 47.	°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)
2/13/24	12:53	115.10	.	34.70	.	.	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	2/13/24	13:20	A	3	40 ml	(HCl)	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	13:27	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	2/13/24	13:20	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 [ ]
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: 12:55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1258)	0.00	7.16	55.8	407.5	11.1	36.05	3.16	C/C
1	A(1301)	0.15	7.05	50.4	408.9	11.6	36.68	2.63	C/C
2	A(1304)	0.30	7.06	46.1	410.4	11.4	36.98	2.58	C/C
3	A(1307)	0.45	7.06	43.8	410.7	11.4	37.28	2.50	C/C
4	A(1310)	0.60	7.05	41.3	409.8	11.5	37.90	2.48	C/C
5	A(1313)	0.75	7.05	39.2	408.7	11.6	38.05	2.44	C/C
6	A(1316)	1.0	7.05	38.4	408.4	11.7	38.25	2.46	C/C

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

C/C = Clear Colorless

Low Flow Purge Method: (20/10/60 psi) ~200 mL/min

SAMPLER: Jimmy Mack
(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-021324-09-27I
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE:	9.48	°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)
2/13/24	13:49	37.15	.	28.99	.	.	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	2/13/24	14:20	A	3	40 ml	(HCl)	YES	NO	
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO	
White Poly	2/13/24	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	2/13/24	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 [ ]
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: 13:55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1356)	0.00	7.43	51.0	420.7	11.1	28.99	4.30	C/C
1	A(1359)	0.25	6.81	60.1	445.3	12.5	28.99	1.15	C/C
2	A(1402)	0.50	6.74	60.3	450.1	12.5	28.99	0.70	C/C
3	A(1405)	0.75	6.75	60.3	471.1	12.6	28.99	0.37	C/C
4	A(1408)	1.0	6.74	60.2	474.5	12.6	28.99	0.32	C/C
5	A(1411)	1.25	6.75	54.2	482.4	12.6	28.99	0.22	C/C
6	A(1414)	1.50	6.80	56.2	487.7	12.6	28.99	0.21	C/C
[Casing] 7	[Select A-G] A(1417)	[Cumulative Totals] 1.75	6.82	52.5	491.3	[Circle units] 12.6	28.99	0.20	C/C [Clarity, Color]

Low Flow Purge Method: (8/7/35 psi) ~ 400 mL/min

SAMPLER: Jimmy Mack
(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-13I

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LR-021324-10-13I

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	49.	°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)
2/13/24	14:59	54.98	.	25.62	.	.	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	2/13/24	15:20	A	3	(40 ml)	(HCl)	YES NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/13/24	15:20	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	2/13/24	15:24	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) (NO3) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T.) (NO3)		
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)		
GREEN - Poly	(Cyanide)		
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)		
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)		

WATER QUALITY DATA Purge Start Time: 15:01 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1502)	0.00	7.26	30.7	397.0	12.8	25.62	4.90	C/C
1	A(1505)	0.25	6.82	42.6	406.7	12.9	25.62	2.40	C/C
2	A(1508)	0.50	6.80	44.4	407.1	13.0	25.62	2.14	C/C
3	A(1511)	0.75	6.79	44.4	407.2	13.0	25.62	2.13	C/C
4	A(1514)	1.00	6.79	45.1	407.5	12.9	25.62	2.08	C/C
5	A(1517)	1.25	6.79	45.8	407.7	12.9	25.62	2.09	C/C.
6		.				.	.	.	

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

C/C = Clear Colorless

Low Flow Purge Method: (8/7/30 psi) ~300 mL/Min

SAMPLER: Jimmy Mack (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-021424-01-5S

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:**	(F) 38.	°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)
2/14/24	08:45	30.32	.	15.07	.	.	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	2/14/24	09:10	A	3	40 ml (HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	09:10	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	2/14/24	09:10	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 [✓]
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: 08:50 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(0851)	0.00	6.26	60.4	215.5	10.3	15.06	9.14	C/C
1	A(0854)	0.25	5.76	46.3	173.0	11.3	15.06	8.87	C/C
2	A(0857)	0.50	5.77	39.3	174.2	11.6	15.06	8.64	C/C
3	A(0900)	0.75	5.84	33.6	175.0	11.7	15.06	8.29	C/C
4	A(0903)	1.0	5.87	31.0	175.4	11.7	15.06	7.90	C/C
5	A(0906)	1.25	5.90	28.5	175.4	11.7	15.06	7.91	C/C
6			.			.	.	.	

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

Low Flow Purge Method: (8/7/20 pS.) ~ 400 mL/min

C/C = Clear Colorless

SAMPLER: Simmy Malik
(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-021424-02-FB1

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)
/ /	:	.	.	.	.	.	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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/14/24	09:20	G	3	40 ml	(HCl)	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	09:20	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	2/14/24	09:20	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 [ ] 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	F(0920)	0.00	.	—	—	—	.	.	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected Near: LB-55

SAMPLER: Jimmy Mull (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-021424-03-26I
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:**	(F) 42.	°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)
2/14/24	10:19	58.30	.	22.86	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/14/24	10:40	A	3	40 ml	~~HCl~~	~~YES~~	~~NO~~		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	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	2/14/24	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 [✓]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) ~~(TDS)~~ (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO4) (Silica, T.) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 10 : 21 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1022)	0.00	6.50	10.1	210.7	9.7	22.87	7.27	C/C
1	A(1025)	0.20	6.35	11.3	220.4	11.2	22.87	6.70	C/C
2	A(1028)	0.40	6.33	13.4	219.0	11.3	22.86	5.75	C/C
3	A(1031)	0.60	6.34	13.3	222.2	11.3	22.87	5.78	C/C
4	A(1034)	0.80	6.34	12.0	222.9	11.3	22.87	5.84	C/C
5	A(1037)	1.0	6.35	12.8	224.1	11.3	22.87	5.78	C/C
6			.			.	.	.	

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

C/C = Clear Colorless

Low Flow Purge Method: (9.5/5.5/35 psi) ~ 300 mL/min

SAMPLER: J. Mack (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-65
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-021424-04-65
DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(42)	°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)
2/14/24	11:28	39.02	.	24.76	.	.	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	2/14/24	11:55	A	3	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	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	2/14/24	11:55	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 [ ]
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: 11:30 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(1131)	0.00	6.62	14.4	178.4	9.1	24.76	10.25	C/C
1	A(1134)	0.25	6.23	11.6	194.7	11.0	24.76	9.61	C/C
2	A(1137)	0.50	6.22	12.3	197.4	11.2	24.76	9.35	C/C
3	A(1140)	0.75	6.21	12.5	207.7	11.3	24.76	8.35	C/C
4	A(1143)	1.0	6.20	12.4	211.6	11.3	24.76	8.18	C/C
5	A(1146)	1.25	6.22	11.9	216.3	11.1	24.76	7.6	C/C
6	A(1149)	1.50	6.23	11.6	217.4	11.2	24.76	7.20	C/C
[Casing] 7	[Select A-G] A(1152)	[Cumulative Totals] 1.75	6.23	11.5	216.6	[Circle units] 11.2	24.76	7.24	C/C [Clarity, Color]

C/C = Clear Colorless

Low Flow Purge Method: (8/7/30 psi) ~ 400 mL/min

SAMPLER: Jimmy Mack
(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-021424-05-20S

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 42.	°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)
2/14/24	12:36	61.50	.	37.48	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/14/24	13:00	A	3	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	13:00	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	✓
Yellow Poly	2 / /	:			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	2/14/24	13:00	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.) (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 : 38 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(1239)	0.00	6.78	10.6	331.7	8.8	37.55	6.55	tan, murky
1	A(1242)	0.20	6.65	8.5	373.4	10.3	37.48	0.87	tan, murky
2	A(1245)	0.40	6.67	8.7	375.2	10.6	37.48	0.64	tan, murky
3	A(1248)	0.60	6.68	9.0	377.7	10.8	37.48	0.58	clearing, still light tan
4	A(1251)	0.80	6.68	8.9	375.0	10.8	37.48	0.63	light tan
5	A(1254)	1.00	6.69	8.9	365.7	10.9	37.48	0.65	light tan
6			.			.	.	.	

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

Low Flow Purge Method: (9/6/35 psi) ~300 mL/min ~~clear colorless~~

SAMPLER: Jimmy Mack (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-021424-06-DUP

DUP ID: NA

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:**	(°F) 42.	°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	2/14/24	13 : 10	G	3	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	2/14/24	13 : 10	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	2/14/24	13 : 10	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 [ ]
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(1310)	0.00	.	✓	—	—	.	.	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected Near: LB-20S

SAMPLER: _____ _____

(PRINTED NAME) (SIGNATURE)

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB1	2/12/24	0700	W		2	X	X	X	X BK	X		VOCs only + TB1	
2	LB-021224-01-1D	2/12/24	0915	W		5	X	X	X	X	X			
3	LB-021224-02-1S	2/12/24	1020	W		5	X	X	X	X	X			
4	LB-021224-03-10DR	2/12/24	1150	W		5	X	X	X	X	X			
5	LB-021224-04-FB1	2/12/24	1215	W		5	X	X	X	X	X		Metals are Field Filtered	
6	LB-021224-05-10SR	2/12/24	1300	W		5	X	X	X	X	X			
7	LB-021224-06-DUP1	2/12/24	1305	W		5	X	X	X	X	X			
8	LB-021224-07-3D	2/12/24	1405	W		5	X	X	X	X	X			
9	LB-021224-08-3S	2/12/24	1500	W		5	X	X	X	X	X			
10														

Sampler(s): Please Print & Sign: Brandon Raposo / Jimmy Mack

Shipment Method:

Required Turnaround Time: (Check Box) ☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2-13-24	0850		2-13-24	850	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Kelso, WA 98626
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(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 2

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB2	2/13/24	0700	W		2	X						Metals are Field Filtered	
2	LB-021324-01-5D	2/13/24	0840	W		5	X	X	X	X	X			
3	LB-021324-02-17D	2/13/24	0945	W		5	X	X	X	X	X			
4	LB-021324-03-17I	2/13/24	1035	W		5	X	X	X	X	X			
5	LB-021324-04-DUP1	2/13/24	1040	W		5	X	X	X	X	X			
6	LB-021324-05-26D	2/13/24	1135	W		5	X	X	X	X	X			
7	LB-021324-06-FB1	2/13/24	1130	W		5	X	X	X	X	X			
8	LB-021324-07-13D	2/13/24	1230	W		5	X	X	X	X	X			
9	LB-021324-08-27D	2/13/24	1320	W		5	X	X	X	X	X			
10	LB-021324-09-27I	2/13/24	1420	W		5	X	X	X	X	X			

Sampler(s): Please Print & Sign	Shipment Method:	Required Turnaround Time: (Check Box)	Results Due Date:
B Rupe	Courier	☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/14/24	0745		2-14-24	0745	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Chain of Custody Form

Page 2 of 2

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	LB-021324-10-13I	2/13/24	1520	W		5	X	X	X	X	X		Metals are Field Filtered	
2														
3														
4														
5														
6														
7														
8														
9														
10														

Sampler(s): Please Print & Sign	Shipment Method:	Required Turnaround Time: (Check Box)	Results Due Date:
B. Rypma	Courier	☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/14/24	0915		2/14/24	915	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Kelso, WA 98626
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(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB 3	2/14/24	0700	W		2	X						Metals are Field Filtered	
2	LB-021424-01-5S	2/14/24	0910	W		5	X	X	X	X	X			
3	LB-021424-02-FB1	2/14/24	0920	W		5	X	X	X	X	X			
4	LB-021424-03-26I	2/14/24	1040	W		5	X	X	X	X	X			
5	LB-021424-04-6S	2/14/24	1155	W		5	X	X	X	X	X			
6	LB-021424-05-20S	2/14/24	1300	W		5	X	X	X	X	X			
7	LB-021424-06-DUP1	2/14/24	1310	W		5	X	X	X	X	X			
8														
9														
10														

Sampler(s): Please Print & Sign: J. Mack

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/15/24	0850		2/15/24	0850	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in *writing once samples* and COC Form have been *submitted* to ALS.

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Third Quarter (August) 2024 FSDSs

Field Calibration Log
SCS Engineers

Equipment:			Serial Number:		Field Staff:			
YSI Pro Quatro			23C106864		S. Campbell			
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 04224030.13	8/6/24	1100	19.8	9.15	4.0	7.0	~~1390~~ 1413	~~219.4~~ 220.0
LBLF 04224030.13	8/7/24	~~0745~~ 0900	16.4	9.15	4.0	7.0	1413	220.0

Notes:

~~Barometric~~ - 8/6/24 - 761.7 mmHg

Barometric - 8/7/24 - 761.5 mmHg

Leichner Landfill
Groundwater Elevation Survey

Project #: 04224030.13

Sampler: S.Campbell

Quarter: 1 2 (3) 4

Date: 8/6/24

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
DNE MW-1 N	216.58	15.00	—	—	Dry @
DNE MW-1 S	216.13	44.50	—	—	
DNE MW-1 E	216.45	29.05	—	—	Dry @
MW-NE	219.83	50.34	13.66	1028	
LB-R2	222.27	77.36	43.99	0808	
LB-1S	210.12	45.00	32.12	0927	
LB-1D	209.74	137.45	35.50	0926	
LB-3S	218.25	52.50	37.41	0957	
LB-3D	219.29	117.28	38.43	0957	
LB-5S	206.89	30.32	15.62	0718	
LB-5C	206.70	74.71	31.89	0816	
LB-5D	207.56	122.40	~~36.5~~	~~0823~~	36.68 DTW
LB-6S	202.80	39.07	25.93	0801	
LB-9SR2		47.84	39.12	1007	water level with well casing
LB-10SR	204.04	42.35	29.87	1044	
LB-10CR	203.05	71.95	28.78	1047	
LB-10DR	203.36	121.10	41.80	1045	
LB-13I	202.36	55.03	26.70	0750	
LB-13C	202.68	66.00	27.12	0744	
LB-13D	202.96	88.88	27.38	0750	
LB-17S	208.18	34.38	29.83	1058	
LB-17I	213.14	51.95	35.03	1100	
LB-17C	206.55	72.35	27.68	1056	
LB-17D	213.17	100.91	36.00	1102	
LB-20S	221.22	61.50	37.73	0940	
LB-21S	223.35	54.24	36.38	0858	
LB-21C	223.32	79.10	36.81	0856	
LB-21D	223.63	110.73	40.05	0855	
LB-22SR		42.47	22.23	0847	
LB-23S	229.19	45.40	30.50	0842	✓
LB-24S	235.13	54.16	38.35	0833	
LB-26I	200.22	58.30	24.02	0758	
LB-26D	200.75	101.78	23.75	0757	well Plug found open.
LB-27I	205.35	57.15	30.07	0728	
LB-27D	204.65	115.10	36.91	0734	✓

Notes: water level probe decontaned between each well.

Partly cloudy 66°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:** ~~17-S~~ LB-17S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** ~~LB-~~ LB-080624-01-17S

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
8/6/24	11 : 38	~~51.95~~ 34.38	.	29.76	.	4.62	X 1	0.75
/ /	:		.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/6/24	12 : 20	A	3	(40 mL)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/6/24	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	8/6/24	12 : 20	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) (TOS) (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: 1 55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A (1158)	0.00	6.03	-57.0	456.2	19.6	29.77	4.50	clear/colorless
1	A (1204)	0.30	6.28	-103.7	457.1	17.4	29.78	3.43	clear/colorless
2	A (1207)	0.45	6.27	-109.0	459.7	17.6	29.78	3.43	clear/colorless
3	A (1210)	0.60	6.25	-109.4	456.6	17.0	29.78	3.34	clear/colorless
4	A (1213)	0.75	6.22	-106.8	456.4	17.2	29.78	3.29	clear/colorless
5	A (1215)	0.90	6.21	-106.5	457.9	17.2	29.78	3.24	clear/colorless
6	A (1218)	1.05	6.21	-107.4	~~456~~ 457.9	17.1	29.78	3.22	clear/colorless

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

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

SAMPLER: [signature] (PRINTED NAME) I. Hultquist (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-080624-01-FB
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	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/6/24	13:15	G	3	40 ml	(HCl)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/6/24	13:15	G	1	250, (500) 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/6/24	13:15	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 [✓]
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	(G)	0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected Near: LB-27I

SAMPLER: S. Campbell (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-080624-02-27I
DUP ID: NA

WIND FROM:	N	NE	E	(SE)	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN			?	**TEMPERATURE:** (72.0) °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]
8/6/24	13:32	57.15	.	30.04	.	~~27.46~~ 27.11 H	X 1	4.41
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Sample Depth: Ice	Filter	pH	(√ if used) √
VOA Glass	08/6/24	14:05	A	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/6/24	14:05	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/6/24	14:05	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 [ ]
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: 13:37 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(1337)	0.00	6.55	-15.5	373.5	14.7	30.04	2.45	clear/colorless
1	A(1340)	0.25	6.51	-51.9	385.2	14.0	30.04	0.99	clear/colorless
2	A(1343)	0.50	6.66	-88.9	396.2	13.7	30.04	0.65	clear/colorless
3	A(1346)	0.75	6.70	-107.6	402.4	13.6	30.04	0.59	clear/colorless
4	A(1349)	01.00	6.67	-128.6	406.1	13.6	30.04	0.52	clear/colorless
5	A(1352)	01.25	6.84	-142.0	406.6	13.6	30.04	0.39	clear/colorless
6	A(1355)	1.50	6.75	-149.2	406.5	13.7	30.04	0.43	clear/colorless
[Casing]	[Select A-G]	[Cumulative Totals]				[Circle units]			[Clarity, Color]
	A(1358)	1.75	6.76	-154.2	407.1	13.7	30.04	0.41 ~~0.40~~	clear/colorless

Low Flow Purge Method: (10/10/30 Psi) ~ 300 mL/min

SAMPLER: Saré Campbell (PRINTED NAME) Saré Campbell (SIGNATURE)

A(1401) 6.75 -158.5 408.0 13.6 300 0.40 clear/colorless

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-080624-03-13I

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 78.	°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)
/ /	:	55.03	.	26.72	.	28.31	X 1	4.61
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/6/24	16:00	A	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/6/24	16:00	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	8/6/24	16:00	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) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA

Purge Start Time: 15:28 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(1528)	0.00	6.74	-25.7	277.5	20.2	26.72	6.56	clear/colorless
1	A(1531)	0.25	6.49	-21.9	280.4	18.0	26.72	4.42	clear/colorless
2	A(1534)	0.50	6.53	-78.2	280.1	17.0	26.72	2.76	clear/colorless
3	A(1537)	0.75	6.60	-100	280.9	17.2	26.72	2.57	clear/colorless
4	A(1540)	1.0	6.62	-111.3	280.2	16.9	26.72	2.53	clear/colorless
5	A(1543)	1.25	6.62	-112.1	279.1	16.8	26.72	2.53	clear/colorless
6	A(1546)	+~~25~~ 1.35	6.62	-115.4	277.7	16.8	26.72	2.48	clear/colorless
[Casing]	[Select A-G] A(1549)	[Cumulative Totals]	6.62	-114.6	278.9	[Circle units] 17.2	26.72	2.47	[Clarity, Color] clear/colorless

Low Flow Purge Method: 10/10/30 psi 300 ml/min

SAMPLER: Sarè Campbell (PRINTED NAME) Sarè Campbell (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 13SC DUP
SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-080629-09-DUP
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)
/ /	:	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/6/29	16 :05	A	3	40 ml	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/6/29	16 :05	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/6/29	16 :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 [ ]
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-13I

SAMPLER: Sare Campbell (PRINTED NAME) Sare Campbell (SIGNATURE)

2.6' weir top

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-080724-01-26I

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 63 .	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
8/7/24	09:10	58.30	.	24.05	.	34.25	X 1	5.58
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/7/24	09:40	A	3	(40 mL)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	09:40	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	8/7/24	09:40	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 [ ]
AMBER - Glass	(8080) (8150) (TOX) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (Silica, T) (NO3)
YELLOW - Poly	(COD) (TOC) (NH_3) (NO_3/NO_2) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA

Purge Start Time: 09:13 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(0913)	0.00	6.09	138.4	227.7	14.6	24.05	4.17	clear/colorless
1	A(0916)	0.25	6.23	118.4	227.9	14.1	24.05	3.97	clear/colorless
2	A(0919)	0.50	6.32	104.5	228.5	13.9	24.05	4.27	clear/colorless
3	A(0921)	0.75	6.35	100.	228.9	14.0	24.05	4.32	clear/colorless
4	A(0924)	1.0	6.36	95.3	229.8	13.8	24.05	4.35	clear/colorless
5	A(0927)	1.25	6.38	90.6	230.1	13.8	24.05	4.43	clear/colorless
6	A(0930)	1.50	6.39	88.0	231.4	13.9	24.05	4.35	clear/colorless
[Casing]	[Select A-G]	[Cumulative Totals]	6.45	78.6	239.7	(Circle units) 15.8	24.05	4.16	[Cloudy, Color] Clear/Colorless

A(0933) 1.75

Low Flow Purge Method: 10, 10, 30 300 ml/min

SAMPLER: Sara Campbell (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

SCS ENGINEERS

15940 SW 72nd Avenue
Portland, OR 97224
Office: 503.639.9201 Fax: 503.684.6964

PROJECT NAME: Leichner Landfill **WELL ID:** FB

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-080724-02-FB

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(F) 65 . °C					

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

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

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

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

Sample Depth: (✓ if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	✓
VOA Glass	8/7/24	09 : 45	G	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	09 : 45	G	1	250, (500) 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/7/24	09 : 45	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_4) (NO_3/NO_2) (Tannin/Lignin)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (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-261

SAMPLER: Sare Campbell (PRINTED NAME) Sare Campbell (SIGNATURE)

1' SC ~~WT~~ ~~AB~~ AGS

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-080724-03-65

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)

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
8/7/24	10:45	39.07	.	26.00	.	13.07	X 1	2.13
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/7/24	11:05	A	3	40 ml	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	11:05	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss Poly	8/7/24	11:05	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 [✓]
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_2/NO_3) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA

Purge Start Time: 10:50 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(1050)	0.00	6.38	93.0	171.3	17.4	26.00	8.5	clear/colorless
1	A(1053)	0.25	6.45	73.2	197.2	15.2	26.00	6.81	clear/colorless
2	A(1056)	0.50	6.45	65.1	205.7	15.0	26.00	6.50	clear/colorless
3	A(1059)	0.75	6.47	55.7	209.7	15.0	26.00	6.41	clear/colorless
4	A(1102)	1.00	6.47	53.2	207.5	14.6	26.00	6.36	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low Flow Purge Method: 10/10/25 300 mL/min

SAMPLER: Sami Campbell (PRINTED NAME) Sami Campbell (SIGNATURE)

1.2' AGS
Yellow 1.6'

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-SS

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-080706-04-SS

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 74 .	°C

(Circle appropriate units)

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		[Water Column x Gal/ft] Volume (gal)
8/7/24	11 :35	30.32	.	15.66	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/7/24	11 :55	A	3	(40 ml)	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	11 :55	A	1	250, (500), 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	8/7/24	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_2/NO_3) (Tannin/Lignin)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hardness)
RED DISSOLVED - Poly	(Ca) (Fe) (Mg) (Mn) (K) (Na)

WATER QUALITY DATA Purge Start Time: 11 :41 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(1141)	0.00	6.11	60.7	179.2	17.9	~~16.66~~	7.93	15.66 DTW clear/colorless
1	A(1144)	0.25	5.97	62.9	178.6	15.5	15.66	7.47	clear/colorless
2	A(1147)	0.50	6.02	53.3	178.1	15.4	15.66	7.24	clear/colorless
3	A(1150)	0.75	6.05	48.7	177.2	15.2	15.66	7.17	clear/colorless
4	A(1153)	1.00	6.06	47.0	177.2	15.2	15.66	7.24	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low Flow Purge Method: 10/10/20 psi 300 ml/min

SAMPLER: Sara Campbell (PRINTED NAME) Sara Campbell (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-~~15~~ 1S

SITE ADDRESS: 9411 NE 94th Avenue, Vancouver, WA 98662 **BLIND ID:** LB-080724-05-15

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	(NW)	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY( )		( )CLOUDY		RAIN		?		**TEMPERATURE:**	(°F) 78.	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
8/7/24	12:58	45.00	.	32.13	.	12.87	X 1	12.70
/ /	:	.	.	.	.		X 3	.

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

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

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

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	8/7/24	13:15	A	3	40 ml	(HCl)	(YES)	(NO)		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	13:15	A	1	250, (500) 1L	(None)	(YES)	(NO)	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss Poly	8/7/24	13:15	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 [ ]
	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: 1300 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(1300)	0.00	6.52	85.7	259.2	16.2	32.13	5.23	clear/colorless
1	A(1303)	0.25	6.52	61.7	259.8	15.0	32.13	3.90	clear/colorless
2	A(1306)	0.50	6.52	51.2	260.7	14.7	32.13	3.77	clear/colorless
3	A(1309)	0.75	6.51	43.4	258.4	14.7	32.13	3.68	clear/colorless
4	A(1312)	1.0	6.51	38.0	258.4	14.6	32.13	3.64	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

(Casing) (Select A-G) (Cumulative Totals) (Circle units) (Clarity, Color)

Low Flow Purge Method (10/10/35 PSI) 300 ml/min

SAMPLER: Sara Campbell (PRINTED NAME) Sara Campbell (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-080724-06-10SR

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	(F) 84 .	°C

(Circle appropriate units)

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

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
8/7/24	~~12~~ 14:10	42.35	.	29.89	.	12.46	X 1	2.03
/ /	14:	.	.	.	.		X 3	.

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

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

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

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	8/7/24	14:35	A	3	40 ml	HCl	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	8/7/24	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	8/7/24	14:35	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 [8?]
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: 14:15 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(1415)	0.00	6.19	80.7	366.7	19.3	29.89	2.43	clear/colorless
1	A(1418)	0.25	6.27	56.9	386.1	16.8	29.89	0.46	clear/colorless
2	A(1421)	0.50	6.28	47.0	386.4	16.4	29.89	0.39	clear/colorless
3	A(1424)	0.75	6.27	40.2	384.9	16.4	29.89	0.34	clear/colorless
4	A(1427)	1.0	6.24	34.9	379.8	16.2	29.89	0.31	clear/colorless
5	A(1430)	1.25	6.23	8.7	374.2	16.2	29.89	0.34	clear/colorless
6			.			.	.	.	

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

Low Flow Purge Method: (10, 10, 25 Psi) 300 ml/min

SAMPLER: Sara Campbell (PRINTED NAME) Sara Campbell (SIGNATURE)

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information	
Purchase Order		Project Name	Leichner Landfill
Work Order		Project Number	04224030.13
Company Name	SCS Engineers	Bill To Company	SCS Engineers
Send Report To	Barb Lary	Invoice Attn.	Heather Williams
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224
Phone	(971) 284-1297	Phone	(503) 639-1103
Fax		Fax	
e-Mail Address	BLary@scsengineers.com		

	Parameter/Method Request for Analysis
A	Volatile Organics (Method 8260)
B	Chloride
C	TDS
D	Nitrate (Short Hold)
E	Dissolved Metals (Fe, Mn)
F	
G	
H	
I	
J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB2	8/7/24	0730	W	2,8	2	X						Metals are Field Filtered	
2	LB-080724-01-26I	8/7/24	0940	W	1,2,8	5	X	X	X	X	X			
3	LB-080724-02-FB	8/7/24	0945	W	1,2,8	5	X	X	X	X	X			
4	LB-080724-03-65	8/7/24	1045	W	1,2,8	5	X	X	X	X	X			
5	LB-080724-04-55	8/7/24	1135	W	1,2,8	5	X	X	X	X	X			
6	LB-080724-05-15	8/7/24	1315	W	1,2,8	5	X	X	X	X	X			
7	LB-080724-06-105R	8/7/24	1435	W	1,2,8	5	X	X	X	X	X			
8														
9														
10														

Sampler(s): Please Print & Sign: Sara Campbell Lene Campbell

Shipment Method: courier

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other STD

Results Due Date:

	Date:	Time:		Date:	Time:
Relinquished by: Lene Campbell	8/7/24	0825	Received by: Franklin LaBiche	8/8/24	0825
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

Notes:

ALS Cooler ID	Cooler Temp

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☐ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Project #:
Quarter: 1 2 3 4
Leichner Landfill
Groundwater Elevation Survey
Sampler:

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

Customer Information		Project Information		ALS Project Manager:		ALS Work Order #:	
Purchase Order		Project Name	Leichner Landfill				
Work Order		Project Number	04224030.13				
Company Name	SCS Engineers	Bill To Company	SCS Engineers				
Send Report To	Barb Lary	Invoice Attn.	Heather Williams				
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave				
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224				
Phone	(971) 284-1297	Phone	(503) 639-1103				
Fax		Fax					
e-Mail Address	BLary@scsengineers.com						

	Parameter/Method Request for Analysis
A	Volatile Organics (Method 8260)
B	Chloride
C	TDS
D	Nitrate (Short Hold)
E	Dissolved Metals (Fe, Mn)
F	
G	
H	
I	
J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	LB-080624-01-FB	8/6/24	1315	W	1,2,8	5	X	X	X	X	X		Metals are Field Filtered	
2	LB-080624-02-27I	8/6/24	1405	W	1,2,8	5	X	X	X	X	X			
3	LB-080624-03-13I	8/6/24	1600	W	1,2,8	5	X	X	X	X	X			
4	LB-080624-04-DUP	8/6/24	1605	W	1,2,8	5	X	X	X	X	X			
5	TBI	8/6/24	0700	W	1,8	2	X							
6														
7														
8														
9														
10														

Sampler(s): Please Print & Sign
Claire Campbell Claire Campbell

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Claire Campbell	8/7	0936	Franklin LeBish	08/07/24	0936	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☐ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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APPENDIX B

Summary Tables of 2024 Groundwater Field Parameter Measurements and Analytical Data

Field Parameters

Table B-1 Field Parameters
Closed Leichner Landfill
Vancouver, Washington

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (µmhos/cm)	Temperature (°C)	Dissolved Oxygen (mg/L)
LB-1D	LB-021224-01-1D	02/12/24	6.87	335.7	11.5	7.65
LB-1S	LB-021224-02-1S	02/12/24	6.31	352.0	12.9	4.31
LB-1S	LB-080724-05-1S	08/07/24	6.51	258.4	14.6	3.64
LB-3D	LB-021224-07-3D	02/12/24	6.61	348.3	13.4	5.35
LB-3S	LB-021224-08-3S	02/12/24	5.98	365.6	12.8	7.08
LB-5D	LB-021324-01-5D	02/13/24	6.88	511.0	12.5	0.3
LB-5S	LB-021424-01-5S	02/14/24	5.9	175.4	11.7	7.91
LB-5S	LB-080724-04-5S	08/07/24	6.06	172.2	15.2	7.24
LB-6S	LB-021424-04-6S	02/14/24	6.23	216.6	11.2	7.24
LB-6S	LB-080724-03-6S	08/07/24	6.47	207.5	14.6	6.36
LB-10DR	LB-021224-03-10DR	02/12/24	6.96	420.6	13.2	3.04
LB-10SR	LB-021224-05-10SR	02/12/24	6.39	441.8	13.4	0.41
LB-10SR	LB-080724-06-10SR	08/07/24	6.23	374.2	16.2	0.34
LB-13D	LB-021324-07-13D	02/13/24	6.69	344.4	12.6	4.27
LB-13I	LB-021324-10-13I	02/13/24	6.79	407.7	12.9	2.09
LB-13I	LB-080624-03-13I	08/06/24	6.62	278.9	17.2	2.47
LB-17D	LB-021324-02-17D	02/13/24	6.97	391.2	12.3	0.23
LB-17I	LB-021324-03-17I	02/13/24	7	448.2	12	2.39
LB-17S	LB-080624-01-17S	08/06/24	6.21	457.9	17.1	3.22
LB-20S	LB-021424-05-20S	02/14/24	6.69	365.7	10.9	0.65
LB-26D	LB-021324-05-26D	02/13/24	6.68	349.3	12.5	3.95
LB-26I	LB-021424-03-26I	02/14/24	6.35	224	11.3	5.78
LB-26I	LB-080724-01-26I	08/07/24	6.45	240	13.8	4.16
LB-27D	LB--21324-08-27D	02/13/24	7.05	408.4	11.7	2.46
LB-27I	LB-021324-09-27I	02/13/24	6.82	491	12.6	0.2
LB-27I	LB-080624-02-27I	08/06/24	6.75	408	13.6	0.4

Notes:
N/A = Not Applicable

Volatile Organic Compounds

Table B-2 Historical VOC Detections
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Bromo-dichloro-methane (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloroform (µg/L)	Chloro-methane (µg/L)	1,4-DCB (µg/L)	1,1-DCA (µg/L)	1,1,1-TCA (µg/L)	cis-1,2-DCE (µg/L)	PCE (µg/L)	TCE (µg/L)
LB-1D	LB-032023-01-1D	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-021224-01-1D	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-032023-02-1S	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-072623-02-1S	07/26/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-021224-02-1S	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-080724-05-1S	08/07/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032023-07-3D	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-021224-07-3D	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032023-08-3S	03/20/23	0.5 L	0.5 L	0.5 L	**0.51**	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-021224-08-3S	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-032123-09-5D	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-021324-01-5D	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-05S	05/29/87	2 L	2 L	5 L	2 L	2 L	NT	2 L	2 L	NT	2 L	2 L
LB-5S	LB-05S	07/19/87	1 L	1 L	4 L	1 L	1 L	NT	2 L	2 L	NT	1 L	1 L
LB-5S	LB-05S	09/10/87	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	NT	1 L	1 L
LB-5S	LB-05S	11/11/87	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	NT	1 L	1 L
LB-5S	LB-05S	02/10/88	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	NT	1 L	1 L
LB-5S	LB-032894-12	03/28/94	0.2 L	0.2 L	0.3 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.2 L	0.2 L	0.2 L
LB-5S	LB-031997-8	03/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031998-5	03/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	2.4	0.5 L
LB-5S	LB-031899-10	03/18/99	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.3 L	0.3 L	2.6	0.3 L
LB-5S	LB-031600-4	03/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	1.1	0.5 L
LB-5S	LB-031401-12	03/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.4 J	0.5 L
LB-5S	LB-031902-12	03/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091802-6	09/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031303-8	03/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-092203-1	09/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-022504-9	02/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-090104-5	09/01/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB030805-2	03/08/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB030805-3	03/08/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091405-4	09/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031606-16	03/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091206-1	09/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-030507-6	03/05/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091907-3	09/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031908-1	03/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091608-2	09/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-091608-8	09/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	03/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LBLF5S091109	09/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S032410	03/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-DUP2032410	03/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB5S092310	09/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB51S092310	09/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	03/23/11	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-5S	LB-090811-06	09/08/11	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-5S	LB-032212-17	03/22/12	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-5S	LB-091112-01	09/11/12	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-5S	LB-020513-04	02/05/13	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L	1 L
LB-5S	LB-082113-01	08/21/13	0.11 L	0.11 L	0.17 L	0.11 L	0.11 L	0.16 L	0.14 L	0.14 L	0.16 L	0.15 L	0.13 L

Table B-2 Historical VOC Detections
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Bromo-dichloro-methane (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloroform (µg/L)	Chloro-methane (µg/L)	1,4-DCB (µg/L)	1,1-DCA (µg/L)	1,1,1-TCA (µg/L)	cis-1,2-DCE (µg/L)	PCE (µg/L)	TCE (µg/L)
LB-5S	LB-021714-02	02/17/14	0.11 L	0.11 L	0.17 L	0.11 L	0.11 L	0.16 L	0.14 L	0.14 L	0.16 L	0.15 L	0.13 L
LB-5S	LB-081314-01	08/13/14	0.11 L	0.11 L	0.17 L	0.11 L	0.11 L	0.16 L	0.14 L	0.14 L	0.16 L	0.15 L	0.13 L
LB-5S	LB-021815-09	02/18/15	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-081215-08	08/12/15	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-021816-17	02/18/16	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-082316-01	08/23/16	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031517-14	03/15/17	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-081517-01-5S	08/15/17	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-081517-02-DUP1	08/15/17	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-030118-15-5S	03/01/18	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-081418-05-5S	08/14/18	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-012919-06-5S	01/29/19	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-072219-02-5S	07/22/19	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-020620-03-5S	02/06/20	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-072820-01-5S	07/28/20	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-072219-03-DUP	07/22/19	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-072820-05-DUP	07/28/20	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-101420-03-DUP	10/14/20	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-021921-02-5S	02/19/21	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-080921-01-5S	08/09/21	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-021422-03-5S	02/14/22	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-072522-02-5S	07/25/22	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-032223-01-5S	03/22/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-072523-01-5S	07/25/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-021424-01-5S	02/14/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-080724-04-5S	08/07/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-032023-09-6S	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-072623-01-6S	07/26/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-021424-04-6S	02/14/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-080724-03-6S	08/07/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10DR	LB-032023-03-10DR	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10DR	LB-021224-03-10DR	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-032023-05-10SR	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-032023-06-DUP1	03/20/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-072623-03-10SR	07/26/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-072623-03-DUP	07/26/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-021224-05-10SR	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-021224-06-DUP1	02/12/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-080724-06-10SR	08/07/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-032123-07-13D	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-021324-07-13D	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-032123-05-13I	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-072523-03-13I	07/25/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-021324-10-13I	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-080624-03-13I	08/06/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-080624-04-DUP	08/06/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-032123-10-17D	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-021324-02-17D	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-032123-11-17I	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-021324-03-17I	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-021324-04-DUP1	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2 Historical VOC Detections
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Bromo-dichloro-methane (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloroform (µg/L)	Chloro-methane (µg/L)	1,4-DCB (µg/L)	1,1-DCA (µg/L)	1,1,1-TCA (µg/L)	cis-1,2-DCE (µg/L)	PCE (µg/L)	TCE (µg/L)
LB-17S	LB-17S	08/06/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-32123-01-20S	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-021424-05-20S	02/14/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-021424-06-DUP1	02/14/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-032123-08-26D	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-021324-05-26D	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-032223-02-26I	03/22/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-032223-02-26I	07/25/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-021424-03-26I	02/14/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-080724-01-26I	08/07/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-032123-06-27D	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-021324-08-27D	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-032123-03-27I	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-032123-04-DUP1	03/21/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-072523-02-27I	07/25/23	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-021324-09-27I	02/13/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-080624-02-27I	08/06/24	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 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;
µg/L = micrograms per liter

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

Table B-3 Inorganic Parameters
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
Compliance Level (mg/L)			250	10	500	0.3	0.05
LB-1D	LB-020520-01-1D	02/05/20	6.29	5.82	167	0.021 L	0.0011 L
LB-1D	LB-021821-04-1D	02/18/21	6.1	5.65	170	0.021 L	0.0011 L
LB-1D	LB-021522-05-1D	02/15/22	6.11	5.59	166	0.025	0.0011 L
LB-1D	LB-032023-01-1D	03/20/23	5.97	5.58	167	0.021 L	0.0021
LB-1D	LB-021224-01-1D	02/12/24	5.60	5.63	174	0.042 L	0.0014
LB-1S	LB-020520-02-1S	02/05/20	6.19	3.64	176	0.021 L	0.0011 L
LB-1S	LB-072920-01-1S	07/29/20	6.21	4.83	200	0.021 L	0.0011 L
LB-1S	LB-021821-05-1S	02/18/21	5.67	3.91	190	0.021 L	0.0011 L
LB-1S (Dup)	LB-021821-06-DUP1	02/18/21	5.69	3.92	198	0.021 L	0.0011 L
LB-1S	LB-081021-03-1S	08/10/21	6.11	5.01	191	0.021 L	0.0011 L
LB-1S	LB-021522-06-1S	02/15/22	4.74	2.40	167	0.024	0.0018
LB-1S	LB-052522-01-1S	05/25/22	6.97	3.94	NT	NT	NT
LB-1S	LB-072622-02-1S	07/26/22	5.61	4.17	197	0.021 L	0.0011 L
LB-1S	LB-032023-02-1S	03/20/23	4.57	3.69	184	0.021 L	0.0011
LB-1S	LB-072623-02-1S	07/26/23	6.15	4.34	191	0.021 L	0.0011 L
LB-1S	LB-021224-02-1S	02/12/24	5.02	3.86	177	0.042 L	0.0011 L
LB-1S	LB-080724-05-1S	08/07/24	5.68	4.22	189	0.004	0.00024
LB-3D	LB-020420-06-3D	02/04/20	6.18	5.7	180	0.021 L	0.0019
LB-3D	LB-021821-07-3D	02/18/21	10.1	9.14	171	0.021 L	0.0011 L
LB-3D	LB-021522-01-3D	02/15/22	4.49	4.06	168	0.027	0.0011 L
LB-3D	LB-032023-07-3D	03/20/23	4.32	4.05	169	0.021 L	0.0011 L
LB-3D	LB-021224-07-3D	02/12/24	4.25	4.18	167	0.042 L	0.0011 L
LB-3S	LB-020620-06-3S	02/06/20	3.77	3.87	165	0.021 L	0.0011 L
LB-3S	LB-021821-08-3S	02/18/21	7	6.82	148	0.021 L	0.0011 L
LB-3S	LB-021522-02-3S	02/15/22	4.19	3.07	155	0.021 L	0.0011 L
LB-3S (Dup)	LB-021522-03-Dup2	02/15/22	4.18	3.06	152	0.021 L	0.0011 L
LB-3S	LB-052522-04-3S	05/25/22	5.81	3.61	NT	NT	NT
LB-3S (Dup)	LB-052522-05-Dup1	05/25/22	6.09	3.62	NT	NT	NT
LB-3S	LB-072622-03-3S	07/26/22	4.8	3.37	159	0.021 L	0.0011 L
LB-3S (Dup)	LB-072622-04-Dup	07/26/22	4.5	3.36	156	0.021 L	0.0011 L
LB-3S	LB-032023-08-3S	03/20/23	4.21	3.56	162	0.021 L	0.0011 L
LB-3S	LB-021224-08-3S	02/12/24	5.11	5.63	186	0.042 L	0.0011 L
LB-5D	LB-020420-05-5D	02/04/20	7.91	0.95	205	0.021 L	0.0014
LB-5D	LB-021721-04-5D	02/01/21	7.98	0.96	215	0.021 L	0.0025
LB-5D	LB-021422-01-5D	02/14/22	8.11	1.92	204	0.131	0.0043
LB-5D (DUP)	LB-021422-02-Dup1	02/14/22	8.12	1.87	205	0.130	0.0037
LB-5D	LB-032123-09-5D	03/21/23	8.11	1.20	215	0.021 L	0.0035
LB-5D	LB-021324-01-5D	02/13/24	7.54	1.66	217	0.042 L	0.0011

Table B-3 Inorganic Parameters
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
Compliance Level (mg/L)			250	10	500	0.3	0.05
LB-5S	LB-020620-03-5S	02/06/20	2.43	1.54	116	0.021 L	0.0011 L
LB-5S	LB-072820-01-5S	07/28/20	3.38	4.07	194	0.021 L	0.0011 L
LB-5S (Dup)	LB-072820-05-DUP	07/28/20	8.83	3.82	197	0.021 L	0.003
LB-5S	LB-021921-02-5S	02/19/21	6.75	7.09	140	0.021 L	0.0011 L
LB-5S	LB-080921-01-5S	08/09/21	4.25	4.48	161	0.021 L	0.0011 L
LB-5S	LB-021422-03-5S	02/14/22	5.4	5.47	151	0.022	0.0011 L
LB-5S	LB-072522-02-5S	07/25/22	3.59	4.5	153	0.021 L	0.0011 L
LB-5S	LB-032223-01-5S	03/22/23	3.98	4.19	145	0.021 L	0.0013
LB-5S	LB-072523-01-5S	07/25/23	4.74	5.03	153	0.021 L	0.0011 L
LB-5S	LB-021424-01-5S	02/14/24	4.62	5.03	153	0.042 L	0.0011 L
LB-5S	LB-080724-04-5S	08/07/24	2.6	2.47	164	0.0059	0.00029
LB-6S	LB-020620-05-6S	02/06/20	5.27	3.68	186	0.021 L	0.0011 L
LB-6S (Dup)	LB-020620-04-DUP2	02/06/20	2.44	1.54	111	0.021 L	0.0011 L
LB-6S	LB-072820-06-6S	07/28/20	7.5	1.51	163	0.021 L	0.0011 L
LB-6S	LB-022321-03-6S	02/23/21	7.78	4.37	169	0.021 L	0.0011 L
LB-6S	LB-081021-05-6S	08/10/21	4.62	1.72	163	0.021 L	0.0011 L
LB-6S	LB-021622-08-6S	02/16/22	7.59	4.13	187	0.023	0.0011 L
LB-6S	LB-072522-06-6S	07/25/22	5.49	2.23	154	0.021 L	0.0011 L
LB-6S	LB-032023-09-6S	03/20/23	5.77	3.44	179	0.021 L	0.0011 L
LB-6S	LB-072623-01-6S	07/26/23	5.76	3.10	182	0.021 L	0.0011
LB-6S	LB-021424-04-6S	02/14/24	4.61	3.27	168	0.042 L	0.0011
LB-6S	LB-080724-03-6S	08/07/24	4.01	2.32	156	0.0071	0.00034
LB-10DR	LB-020420-07-10DR	02/04/20	9.34	2.99	204	0.021 L	0.0011 L
LB-10DR	LB-021821-01-10DR	02/18/21	7.25	3.79	200	0.021 L	0.0011 L
LB-10DR	LB-021522-07-10DR	02/15/22	6.26	3.17	185	0.029	0.0045
LB-10DR	LB-032023-03-10DR	03/20/23	10.1	2.36	221	0.026	0.0013
LB-10DR	LB-021224-03-10DR	02/12/24	9.04	2.52	244	0.219	0.0074
LB-10SR	LB-020620-01-10SR	02/06/20	4.2	**23.4**	296	0.021 L	0.0011 L
LB-10SR	LB-072920-03-10SR	07/29/20	5.3	6.04	177	0.021 L	0.0011 L
LB-10SR	LB-021821-03-10SR	02/18/21	6.55	6.34	206	0.021 L	0.0011 L
LB-10SR	LB-081021-02-10SR	08/10/21	5.65	**15.2**	235	0.021 L	0.003
LB-10SR	LB-021522-08-10SR	02/15/22	6.04	5.95	165	0.064	0.0014
LB-10SR	LB-072622-05-10SR	07/26/22	3.75	3.20	131	0.022	0.0011 L
LB-10SR	LB-032023-05-10SR	03/20/23	3.47	2.45	130	0.023	0.0011 L
LB-10SR	LB-032023-06-DUP1	03/20/23	3.54	2.47	129	0.021 L	0.0011 L
LB-10SR	LB-072623-03-10SR	07/26/23	6.28	2.44	181	0.025	0.0011 L
LB-10SR	LB-072623-04-DUP	07/26/23	6.38	2.39	182	0.024	0.0011 L
LB-10SR	LB-021224-05-10SR	02/12/24	9.15	1.53	222	0.042 L	0.0011 L
LB-10SR	LB-021224-06-DUP1	02/12/24	9.09	1.53	221	0.042 L	0.0011 L
LB-10SR	LB-080724-06-10SR	08/07/24	14.8	0.89	236	0.0369	0.00103

Table B-3 Inorganic Parameters
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
Compliance Level (mg/L)			250	10	500	0.3	0.05
LB-13D	LB-020420-02-13D	02/04/20	4.92	4.94	163	0.021 L	0.0011 L
LB-13D	LB-021721-02-13D	02/17/21	5.05	4.78	179	0.021 L	0.0011 L
LB-13D	LB-021622-03-13D	02/16/22	5.03	4.40	173	0.024	0.0011 L
LB-13D	LB-032123-07-13D	03/21/23	5.04	4.58	174	0.021 L	0.0011 L
LB-13D	LB-021324-07-13D	02/13/24	4.63	4.4	167	0.042 L	0.0011 L
LB-13I	LB-020520-07-13I	02/05/20	9.14	4.99	200	0.021 L	0.0089
LB-13I	LB-072820-03-13I	07/28/20	11.6	4.88	224	0.021 L	0.0012
LB-13I	LB-022321-01-13I	02/23/21	12.9	4.87	199	0.021 L	0.0029
LB-13I	LB-080921-03-13I	08/09/21	6.85	5.13	199	0.021 L	0.0019
LB-13I (Dup)	LB-080921-04-Dup	08/09/21	6.82	5.15	191	0.021 L	0.0014
LB-13I	LB-021622-04-13I	02/16/22	6.20	3.84	194	0.026	0.0062
LB-13I	LB-072522-04-13I	07/25/22	6.21	4.10	192	0.021	0.0063
LB-13I	LB-032123-05-13I	03/21/23	5.6	3.58	189	0.021 L	0.0042
LB-13I	LB-072523-03-13I	07/25/23	5.9	3.50	190	0.021 L	0.0026
LB-13I	LB-021324-10-13I	02/13/24	6.25	3.61	188	0.042 L	0.0034
LB-13I	LB080624-03-13I	08/06/24	7.29	3.47	186	0.011	0.00104
LB-13I	LB080624-04-DUP	08/06/24	7.34	3.49	185	0.0122	0.00103
LB-17D	LB-020520-03-17D	02/05/20	6.81	0.1 L	188	0.145	**4.17**
LB-17D	LB-021821-09-17D	02/18/21	11.6	0.2 L	200	0.106	**4.06**
LB-17D	LB-021422-04-17D	02/14/22	6.25	1.61	171	0.3	**3.58**
LB-17D	LB-032123-10-17D	03/21/23	7.4	0.1 L	183	0.122	**3.82**
LB-17D	LB-021324-02-17D	02/13/24	8.33	0.1 L	179	**0.320**	**3.86**
LB-17I	LB-020520-05-17I	02/05/20	6.74	0.1 L	213	**9.42**	**1.58**
LB-17I	LB-021921-03-17I	02/19/21	18	0.2 L	299	**14.5**	**2.86**
LB-17I	LB-021622-09-17I	02/16/22	10.2	0.1 L	252	**11.0**	**2.41**
LB-17I	LB-032123-11-17I	03/21/23	11.2	0.1 L	218	**9.07**	**2.04**
LB-17I	LB-021324-03-17I	02/13/24	7.49	0.1 L	191	**7.83**	**1.70**
LB-17I	LB-021324-04_DUP1	02/13/24	7.48	0.1 L	191	**7.85**	**1.70**
LB-17S	LB-17S	08/06/24	10.8	**13.1**	304	0.0403	0.0011
LB-20S	LB-020620-02-20S	02/06/20	2.27	0.68	225	0.021 L	**0.119**
LB-20S	LB-021921-01-20S	02/19/21	4.61	0.2 L	275	0.021 L	**0.251**
LB-20S	LB-021522-04-20S	02/15/22	4.65	0.1 L	242	0.03	0.0779
LB-20S	LB-052522-02-20S	05/25/22	24.8	0.1 L	NT	NT	NT
LB-20S	LB-072622-01-20S	07/26/22	43.8	0.1 L	302	0.04	**0.445**
LB-20S	LB-032123-01-20S	03/21/23	18.4	0.1 L	321	**1.46**	**1.75**
LB-20S	LB-021424-05-20S	02/14/24	28.4	0.1 L	257	0.085	**0.652**
LB-20S	LB-021424-06-DUP1	02/14/24	28.9	0.1 L	257	0.096	**0.651**

Table B-3 Inorganic Parameters
Closed Leichner Landfill, Vancouver, Washington

Location	Sample Number	Date	Chloride (mg/L)	Nitrate as Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
Compliance Level (mg/L)			250	10	500	0.3	0.05
LB-26D	LB-020420-03-26D	02/04/20	5.15	4.61	168	0.021 L	0.0011 L
LB-26D	LB-021721-03-26D	02/17/21	6.21	5.55	197	0.021 L	0.0011 L
LB-26D	LB-021622-07-26D	02/16/22	5.54	4.52	175	0.027	0.0011 L
LB-26D	LB-032123-08-26D	03/21/23	5.01	4.45	180	0.021 L	0.0011 L
LB-26D	LB-021324-05-26D	02/13/24	4.68	4.21	165	0.042 L	0.0011 L
LB-26I	LB-020520-08-26I	02/05/20	10.1	3.85	196	0.021 L	0.0011 L
LB-26I	LB-072820-04-26I	07/28/20	8.79	3.8	206	0.021 L	0.003
LB-26I	LB-022321-02-26I	02/23/21	8.15	4.74	182	0.021 L	0.0041
LB-26I	LB-081021-04-26I	08/10/21	6.81	4.49	191	0.021 L	0.0035
LB-26I	LB-021622-06-26I	02/16/22	5.82	4.25	186	0.024	0.0011 L
LB-26I	LB-072522-05-26I	07/25/22	6.68	3.65	194	0.021 L	0.0058
LB-26I	LB-032223-02-26I	03/22/23	5.28	4.25	172	0.021 L	0.0011 L
LB-26I	LB-072523-04-26I	07/25/23	5.05	4.20	181	0.021 L	0.0011 L
LB-26I	LB-021424-03-26I	02/14/24	5.40	4.03	184	0.042 L	0.003
LB-26I	LB-080724-01-26I	08/07/24	5.52	3.88	188	0.0098	0.00206
LB-27D	LB-032123-06-27D	03/21/23	7.2	4.17	195	0.021 L	0.0011
LB-27D	LB-021324-08-27D	02/13/24	6.9	4.27	196	0.042 L	0.0011 L
LB-27I	LB-032123-03-27I	03/21/23	9.42	1.69	232	0.021 L	0.0431
LB-27I (Dup)	LB-032123-04-DUP2	03/21/23	9.41	1.66	231	0.021 L	0.0483
LB-27I	LB-072523-02-27I	07/25/23	12.1	1.12	273	0.033	**0.118**
LB-27I	LB-021324-09-27I	02/13/24	7.00	2.37	260	0.042 L	**0.128**
LB-27I	LB-080624-02-27I	08/06/24	13.60	0.1 L	258	0.0198	**0.137**

Notes:

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

mg/L = milligrams per liter; L = not detected at or above MRL; NT = not tested.

B = estimated concentration; detected above the method detection limit (MDL) but below the method reporting limit (MRL)

J = estimated concentration

H = due to laboratory error, sample was extracted and analyzed past the recommended 7-day hold time

= concentration is above the compliance level

APPENDIX C

2024 Laboratory Analytical Data Reports

First Quarter (February) 2024 Laboratory Reports

February 27, 2024 Service Request No:K2401562

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 13, 2024
For your reference, these analyses have been assigned our service request number **K2401562.**

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: K2401562
Date Received: 02/13/2024

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 02/13/2024. 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:

No significant anomalies were noted with this analysis.

Approved by _____ Date 02/27/2024

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-021224-01-1D	Lab ID: K2401562-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.60			0.20	mg/L	300.0
Manganese, Dissolved	1.4			1.1	ug/L	6010C
Nitrate as Nitrogen	5.63			0.10	mg/L	300.0
Solids, Total Dissolved	174			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-02-1S	Lab ID: K2401562-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.02			0.20	mg/L	300.0
Nitrate as Nitrogen	3.86			0.10	mg/L	300.0
Solids, Total Dissolved	177			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-03-10DR	Lab ID: K2401562-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	9.04			0.20	mg/L	300.0
Iron, Dissolved	219			42	ug/L	6010C
Manganese, Dissolved	7.4			1.1	ug/L	6010C
Nitrate as Nitrogen	2.52			0.10	mg/L	300.0
Solids, Total Dissolved	244			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-05-10SR	Lab ID: K2401562-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	9.15			0.20	mg/L	300.0
Nitrate as Nitrogen	1.53			0.10	mg/L	300.0
Solids, Total Dissolved	222			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-06-DUP1	Lab ID: K2401562-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	9.09			0.20	mg/L	300.0
Nitrate as Nitrogen	1.53			0.10	mg/L	300.0
Solids, Total Dissolved	221			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-07-3D	Lab ID: K2401562-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.25			0.20	mg/L	300.0
Nitrate as Nitrogen	4.18			0.10	mg/L	300.0
Solids, Total Dissolved	167			10	mg/L	SM 2540 C

CLIENT ID: LB-021224-08-3S	Lab ID: K2401562-009					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.11			0.20	mg/L	300.0
Nitrate as Nitrogen	5.63			0.10	mg/L	300.0
Solids, Total Dissolved	186			10	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:**K2401562
Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2401562-001	TB1	2/12/2024	0700
K2401562-002	LB-021224-01-1D	2/12/2024	0915
K2401562-003	LB-021224-02-1S	2/12/2024	1020
K2401562-004	LB-021224-03-10DR	2/12/2024	1150
K2401562-005	LB-021224-04-FB1	2/12/2024	1215
K2401562-006	LB-021224-05-10SR	2/12/2024	1300
K2401562-007	LB-021224-06-DUP1	2/12/2024	1305
K2401562-008	LB-021224-07-3D	2/12/2024	1405
K2401562-009	LB-021224-08-3S	2/12/2024	1500

VN2401562

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB1	2/12/24	0700	W		2	X	X	X	X BK	X		VOCs only TB1	
2	LB-021224-01-1D	2/12/24	0915	W		5	X	X	X	X	X		Metals are Field Filtered	
3	LB-021224-02-1S	2/12/24	1020	W		5	X	X	X	X	X			
4	LB-021224-03-10DR	2/12/24	1150	W		5	X	X	X	X	X			
5	LB-021224-04-FB1	2/12/24	1215	W		5	X	X	X	X	X			
6	LB-021224-05-10SR	2/12/24	1300	W		5	X	X	X	X	X			
7	LB-021224-06-DUP1	2/12/24	1305	W		5	X	X	X	X	X			
8	LB-021224-07-3D	2/12/24	1405	W		5	X	X	X	X	X			
9	LB-021224-08-3S	2/12/24	1500	W		5	X	X	X	X	X			
10														

Sampler(s): Please Print & Sign: Brandon Raposa / Jimmy Mack

Shipment Method:

Required Turnaround Time: (Check Box) ☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2-13-24	0850		2-13-24	850	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
	2.13.24	1045		2/13/24	1045	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)
		☐Level II: Standard QC ☐Level III: Raw Data
		☐TRRP LRC ☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like
		☐Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM HH

Cooler Receipt and Preservation Form

Client SCS Service Request K24 015602

Received: 2/13/24 Opened: 2/13/24 By: VM Unloaded: 2/13/24 By: VM

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
-0.1		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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:
		SHORT HOLD

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	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:**	K2401562
Project:	Leichner Landfill/04224030.13		

Sample Name:	TB1	**Date Collected:**	02/12/24
Lab Code:	K2401562-001	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name:	LB-021224-01-1D	**Date Collected:**	02/12/24
Lab Code:	K2401562-002	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021224-02-1S	**Date Collected:**	02/12/24
Lab Code:	K2401562-003	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021224-03-10DR	**Date Collected:**	02/12/24
Lab Code:	K2401562-004	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-021224-04-FB1	**Date Collected:**	02/12/24
Lab Code:	K2401562-005	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021224-05-10SR	**Date Collected:**	02/12/24
Lab Code:	K2401562-006	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021224-06-DUP1	**Date Collected:**	02/12/24
Lab Code:	K2401562-007	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021224-07-3D	**Date Collected:**	02/12/24
Lab Code:	K2401562-008	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-021224-07-3D	**Date Collected:**	02/12/24
Lab Code:	K2401562-008	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		AWILSON

Sample Name:	LB-021224-08-3S	**Date Collected:**	02/12/24
Lab Code:	K2401562-009	**Date Received:**	02/13/24
Sample Matrix:	Ground Water		

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

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:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2401562-001	**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	02/15/24 13:54	
Benzene	ND U	0.50	1	02/15/24 13:54	
Bromobenzene	ND U	2.0	1	02/15/24 13:54	
Bromochloromethane	ND U	0.50	1	02/15/24 13:54	
Bromodichloromethane	ND U	0.50	1	02/15/24 13:54	
Bromoform	ND U	0.50	1	02/15/24 13:54	
Bromomethane	ND U	0.50	1	02/15/24 13:54	
2-Butanone (MEK)	ND U	20	1	02/15/24 13:54	
n-Butylbenzene	ND U	4.0	1	02/15/24 13:54	
sec-Butylbenzene	ND U	2.0	1	02/15/24 13:54	
tert-Butylbenzene	ND U	2.0	1	02/15/24 13:54	
Carbon Disulfide	ND U	0.50	1	02/15/24 13:54	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 13:54	
Chlorobenzene	ND U	0.50	1	02/15/24 13:54	
Chloroethane	ND U	0.50	1	02/15/24 13:54	
Chloroform	ND U	0.50	1	02/15/24 13:54	
Chloromethane	ND U	0.50	1	02/15/24 13:54	
2-Chlorotoluene	ND U	2.0	1	02/15/24 13:54	
4-Chlorotoluene	ND U	2.0	1	02/15/24 13:54	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 13:54	
Dibromochloromethane	ND U	0.50	1	02/15/24 13:54	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 13:54	
Dibromomethane	ND U	0.50	1	02/15/24 13:54	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 13:54	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 13:54	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 13:54	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 13:54	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 13:54	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 13:54	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 13:54	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 13:54	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 13:54	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 13:54	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 13:54	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 13:54	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 13:54	
Ethylbenzene	ND U	0.50	1	02/15/24 13:54	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 13:54	
2-Hexanone	ND U	20	1	02/15/24 13:54	
Isopropylbenzene	ND U	2.0	1	02/15/24 13:54	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 13:54	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2401562-001	**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	02/15/24 13:54	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 13:54	
Methylene Chloride	ND U	2.0	1	02/15/24 13:54	
Naphthalene	ND U	2.0	1	02/15/24 13:54	
n-Propylbenzene	ND U	2.0	1	02/15/24 13:54	
Styrene	ND U	0.50	1	02/15/24 13:54	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 13:54	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 13:54	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 13:54	
Toluene	ND U	0.50	1	02/15/24 13:54	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 13:54	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 13:54	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 13:54	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 13:54	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 13:54	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 13:54	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 13:54	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 13:54	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 13:54	
Vinyl Chloride	ND U	0.50	1	02/15/24 13:54	
o-Xylene	ND U	0.50	1	02/15/24 13:54	
m,p-Xylenes	ND U	0.50	1	02/15/24 13:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 13:54	
Dibromofluoromethane	102	73 - 122	02/15/24 13:54	
Toluene-d8	99	65 - 144	02/15/24 13:54	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 09:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-01-1D	**Units:**	ug/L
Lab Code:	K2401562-002	**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	02/15/24 14:17	
Benzene	ND U	0.50	1	02/15/24 14:17	
Bromobenzene	ND U	2.0	1	02/15/24 14:17	
Bromochloromethane	ND U	0.50	1	02/15/24 14:17	
Bromodichloromethane	ND U	0.50	1	02/15/24 14:17	
Bromoform	ND U	0.50	1	02/15/24 14:17	
Bromomethane	ND U	0.50	1	02/15/24 14:17	
2-Butanone (MEK)	ND U	20	1	02/15/24 14:17	
n-Butylbenzene	ND U	4.0	1	02/15/24 14:17	
sec-Butylbenzene	ND U	2.0	1	02/15/24 14:17	
tert-Butylbenzene	ND U	2.0	1	02/15/24 14:17	
Carbon Disulfide	ND U	0.50	1	02/15/24 14:17	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 14:17	
Chlorobenzene	ND U	0.50	1	02/15/24 14:17	
Chloroethane	ND U	0.50	1	02/15/24 14:17	
Chloroform	ND U	0.50	1	02/15/24 14:17	
Chloromethane	ND U	0.50	1	02/15/24 14:17	
2-Chlorotoluene	ND U	2.0	1	02/15/24 14:17	
4-Chlorotoluene	ND U	2.0	1	02/15/24 14:17	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 14:17	
Dibromochloromethane	ND U	0.50	1	02/15/24 14:17	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 14:17	
Dibromomethane	ND U	0.50	1	02/15/24 14:17	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 14:17	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 14:17	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 14:17	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 14:17	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 14:17	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 14:17	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 14:17	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 14:17	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 14:17	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 14:17	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 14:17	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 14:17	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 14:17	
Ethylbenzene	ND U	0.50	1	02/15/24 14:17	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 14:17	
2-Hexanone	ND U	20	1	02/15/24 14:17	
Isopropylbenzene	ND U	2.0	1	02/15/24 14:17	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 14:17	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 09:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-01-1D	**Units:**	ug/L
Lab Code:	K2401562-002	**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	02/15/24 14:17	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 14:17	
Methylene Chloride	ND U	2.0	1	02/15/24 14:17	
Naphthalene	ND U	2.0	1	02/15/24 14:17	
n-Propylbenzene	ND U	2.0	1	02/15/24 14:17	
Styrene	ND U	0.50	1	02/15/24 14:17	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 14:17	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 14:17	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 14:17	
Toluene	ND U	0.50	1	02/15/24 14:17	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 14:17	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 14:17	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 14:17	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 14:17	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 14:17	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 14:17	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 14:17	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 14:17	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 14:17	
Vinyl Chloride	ND U	0.50	1	02/15/24 14:17	
o-Xylene	ND U	0.50	1	02/15/24 14:17	
m,p-Xylenes	ND U	0.50	1	02/15/24 14:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/15/24 14:17	
Dibromofluoromethane	103	73 - 122	02/15/24 14:17	
Toluene-d8	98	65 - 144	02/15/24 14:17	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-02-1S	**Units:**	ug/L
Lab Code:	K2401562-003	**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	02/15/24 14:39	
Benzene	ND U	0.50	1	02/15/24 14:39	
Bromobenzene	ND U	2.0	1	02/15/24 14:39	
Bromochloromethane	ND U	0.50	1	02/15/24 14:39	
Bromodichloromethane	ND U	0.50	1	02/15/24 14:39	
Bromoform	ND U	0.50	1	02/15/24 14:39	
Bromomethane	ND U	0.50	1	02/15/24 14:39	
2-Butanone (MEK)	ND U	20	1	02/15/24 14:39	
n-Butylbenzene	ND U	4.0	1	02/15/24 14:39	
sec-Butylbenzene	ND U	2.0	1	02/15/24 14:39	
tert-Butylbenzene	ND U	2.0	1	02/15/24 14:39	
Carbon Disulfide	ND U	0.50	1	02/15/24 14:39	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 14:39	
Chlorobenzene	ND U	0.50	1	02/15/24 14:39	
Chloroethane	ND U	0.50	1	02/15/24 14:39	
Chloroform	ND U	0.50	1	02/15/24 14:39	
Chloromethane	ND U	0.50	1	02/15/24 14:39	
2-Chlorotoluene	ND U	2.0	1	02/15/24 14:39	
4-Chlorotoluene	ND U	2.0	1	02/15/24 14:39	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 14:39	
Dibromochloromethane	ND U	0.50	1	02/15/24 14:39	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 14:39	
Dibromomethane	ND U	0.50	1	02/15/24 14:39	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 14:39	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 14:39	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 14:39	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 14:39	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 14:39	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 14:39	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 14:39	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 14:39	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 14:39	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 14:39	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 14:39	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 14:39	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 14:39	
Ethylbenzene	ND U	0.50	1	02/15/24 14:39	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 14:39	
2-Hexanone	ND U	20	1	02/15/24 14:39	
Isopropylbenzene	ND U	2.0	1	02/15/24 14:39	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 14:39	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-02-1S	**Units:**	ug/L
Lab Code:	K2401562-003	**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	02/15/24 14:39	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 14:39	
Methylene Chloride	ND U	2.0	1	02/15/24 14:39	
Naphthalene	ND U	2.0	1	02/15/24 14:39	
n-Propylbenzene	ND U	2.0	1	02/15/24 14:39	
Styrene	ND U	0.50	1	02/15/24 14:39	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 14:39	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 14:39	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 14:39	
Toluene	ND U	0.50	1	02/15/24 14:39	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 14:39	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 14:39	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 14:39	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 14:39	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 14:39	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 14:39	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 14:39	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 14:39	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 14:39	
Vinyl Chloride	ND U	0.50	1	02/15/24 14:39	
o-Xylene	ND U	0.50	1	02/15/24 14:39	
m,p-Xylenes	ND U	0.50	1	02/15/24 14:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	68 - 117	02/15/24 14:39	
Dibromofluoromethane	100	73 - 122	02/15/24 14:39	
Toluene-d8	99	65 - 144	02/15/24 14:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 11:50
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-03-10DR	**Units:**	ug/L
Lab Code:	K2401562-004	**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	02/15/24 15:02	
Benzene	ND U	0.50	1	02/15/24 15:02	
Bromobenzene	ND U	2.0	1	02/15/24 15:02	
Bromochloromethane	ND U	0.50	1	02/15/24 15:02	
Bromodichloromethane	ND U	0.50	1	02/15/24 15:02	
Bromoform	ND U	0.50	1	02/15/24 15:02	
Bromomethane	ND U	0.50	1	02/15/24 15:02	
2-Butanone (MEK)	ND U	20	1	02/15/24 15:02	
n-Butylbenzene	ND U	4.0	1	02/15/24 15:02	
sec-Butylbenzene	ND U	2.0	1	02/15/24 15:02	
tert-Butylbenzene	ND U	2.0	1	02/15/24 15:02	
Carbon Disulfide	ND U	0.50	1	02/15/24 15:02	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 15:02	
Chlorobenzene	ND U	0.50	1	02/15/24 15:02	
Chloroethane	ND U	0.50	1	02/15/24 15:02	
Chloroform	ND U	0.50	1	02/15/24 15:02	
Chloromethane	ND U	0.50	1	02/15/24 15:02	
2-Chlorotoluene	ND U	2.0	1	02/15/24 15:02	
4-Chlorotoluene	ND U	2.0	1	02/15/24 15:02	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 15:02	
Dibromochloromethane	ND U	0.50	1	02/15/24 15:02	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 15:02	
Dibromomethane	ND U	0.50	1	02/15/24 15:02	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 15:02	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 15:02	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 15:02	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 15:02	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 15:02	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:02	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:02	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 15:02	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 15:02	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 15:02	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 15:02	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:02	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:02	
Ethylbenzene	ND U	0.50	1	02/15/24 15:02	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 15:02	
2-Hexanone	ND U	20	1	02/15/24 15:02	
Isopropylbenzene	ND U	2.0	1	02/15/24 15:02	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 15:02	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 11:50
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-03-10DR	**Units:**	ug/L
Lab Code:	K2401562-004	**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	02/15/24 15:02	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 15:02	
Methylene Chloride	ND U	2.0	1	02/15/24 15:02	
Naphthalene	ND U	2.0	1	02/15/24 15:02	
n-Propylbenzene	ND U	2.0	1	02/15/24 15:02	
Styrene	ND U	0.50	1	02/15/24 15:02	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:02	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:02	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 15:02	
Toluene	ND U	0.50	1	02/15/24 15:02	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 15:02	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 15:02	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 15:02	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 15:02	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 15:02	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 15:02	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 15:02	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 15:02	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 15:02	
Vinyl Chloride	ND U	0.50	1	02/15/24 15:02	
o-Xylene	ND U	0.50	1	02/15/24 15:02	
m,p-Xylenes	ND U	0.50	1	02/15/24 15:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/15/24 15:02	
Dibromofluoromethane	100	73 - 122	02/15/24 15:02	
Toluene-d8	98	65 - 144	02/15/24 15:02	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 12:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-04-FB1	**Units:**	ug/L
Lab Code:	K2401562-005	**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	02/15/24 15:25	
Benzene	ND U	0.50	1	02/15/24 15:25	
Bromobenzene	ND U	2.0	1	02/15/24 15:25	
Bromochloromethane	ND U	0.50	1	02/15/24 15:25	
Bromodichloromethane	ND U	0.50	1	02/15/24 15:25	
Bromoform	ND U	0.50	1	02/15/24 15:25	
Bromomethane	ND U	0.50	1	02/15/24 15:25	
2-Butanone (MEK)	ND U	20	1	02/15/24 15:25	
n-Butylbenzene	ND U	4.0	1	02/15/24 15:25	
sec-Butylbenzene	ND U	2.0	1	02/15/24 15:25	
tert-Butylbenzene	ND U	2.0	1	02/15/24 15:25	
Carbon Disulfide	ND U	0.50	1	02/15/24 15:25	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 15:25	
Chlorobenzene	ND U	0.50	1	02/15/24 15:25	
Chloroethane	ND U	0.50	1	02/15/24 15:25	
Chloroform	ND U	0.50	1	02/15/24 15:25	
Chloromethane	ND U	0.50	1	02/15/24 15:25	
2-Chlorotoluene	ND U	2.0	1	02/15/24 15:25	
4-Chlorotoluene	ND U	2.0	1	02/15/24 15:25	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 15:25	
Dibromochloromethane	ND U	0.50	1	02/15/24 15:25	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 15:25	
Dibromomethane	ND U	0.50	1	02/15/24 15:25	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 15:25	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 15:25	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 15:25	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 15:25	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 15:25	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:25	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:25	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 15:25	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 15:25	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 15:25	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 15:25	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:25	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:25	
Ethylbenzene	ND U	0.50	1	02/15/24 15:25	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 15:25	
2-Hexanone	ND U	20	1	02/15/24 15:25	
Isopropylbenzene	ND U	2.0	1	02/15/24 15:25	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 15:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 12:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-04-FB1	**Units:**	ug/L
Lab Code:	K2401562-005	**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	02/15/24 15:25	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 15:25	
Methylene Chloride	ND U	2.0	1	02/15/24 15:25	
Naphthalene	ND U	2.0	1	02/15/24 15:25	
n-Propylbenzene	ND U	2.0	1	02/15/24 15:25	
Styrene	ND U	0.50	1	02/15/24 15:25	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:25	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:25	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 15:25	
Toluene	ND U	0.50	1	02/15/24 15:25	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 15:25	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 15:25	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 15:25	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 15:25	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 15:25	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 15:25	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 15:25	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 15:25	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 15:25	
Vinyl Chloride	ND U	0.50	1	02/15/24 15:25	
o-Xylene	ND U	0.50	1	02/15/24 15:25	
m,p-Xylenes	ND U	0.50	1	02/15/24 15:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/15/24 15:25	
Dibromofluoromethane	103	73 - 122	02/15/24 15:25	
Toluene-d8	100	65 - 144	02/15/24 15:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-05-10SR	**Units:**	ug/L
Lab Code:	K2401562-006	**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	02/15/24 15:47	
Benzene	ND U	0.50	1	02/15/24 15:47	
Bromobenzene	ND U	2.0	1	02/15/24 15:47	
Bromochloromethane	ND U	0.50	1	02/15/24 15:47	
Bromodichloromethane	ND U	0.50	1	02/15/24 15:47	
Bromoform	ND U	0.50	1	02/15/24 15:47	
Bromomethane	ND U	0.50	1	02/15/24 15:47	
2-Butanone (MEK)	ND U	20	1	02/15/24 15:47	
n-Butylbenzene	ND U	4.0	1	02/15/24 15:47	
sec-Butylbenzene	ND U	2.0	1	02/15/24 15:47	
tert-Butylbenzene	ND U	2.0	1	02/15/24 15:47	
Carbon Disulfide	ND U	0.50	1	02/15/24 15:47	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 15:47	
Chlorobenzene	ND U	0.50	1	02/15/24 15:47	
Chloroethane	ND U	0.50	1	02/15/24 15:47	
Chloroform	ND U	0.50	1	02/15/24 15:47	
Chloromethane	ND U	0.50	1	02/15/24 15:47	
2-Chlorotoluene	ND U	2.0	1	02/15/24 15:47	
4-Chlorotoluene	ND U	2.0	1	02/15/24 15:47	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 15:47	
Dibromochloromethane	ND U	0.50	1	02/15/24 15:47	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 15:47	
Dibromomethane	ND U	0.50	1	02/15/24 15:47	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 15:47	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 15:47	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 15:47	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 15:47	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 15:47	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:47	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 15:47	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 15:47	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 15:47	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 15:47	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 15:47	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:47	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 15:47	
Ethylbenzene	ND U	0.50	1	02/15/24 15:47	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 15:47	
2-Hexanone	ND U	20	1	02/15/24 15:47	
Isopropylbenzene	ND U	2.0	1	02/15/24 15:47	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 15:47	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-05-10SR	**Units:**	ug/L
Lab Code:	K2401562-006	**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	02/15/24 15:47	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 15:47	
Methylene Chloride	ND U	2.0	1	02/15/24 15:47	
Naphthalene	ND U	2.0	1	02/15/24 15:47	
n-Propylbenzene	ND U	2.0	1	02/15/24 15:47	
Styrene	ND U	0.50	1	02/15/24 15:47	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:47	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 15:47	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 15:47	
Toluene	ND U	0.50	1	02/15/24 15:47	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 15:47	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 15:47	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 15:47	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 15:47	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 15:47	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 15:47	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 15:47	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 15:47	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 15:47	
Vinyl Chloride	ND U	0.50	1	02/15/24 15:47	
o-Xylene	ND U	0.50	1	02/15/24 15:47	
m,p-Xylenes	ND U	0.50	1	02/15/24 15:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/15/24 15:47	
Dibromofluoromethane	101	73 - 122	02/15/24 15:47	
Toluene-d8	98	65 - 144	02/15/24 15:47	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-06-DUP1	**Units:**	ug/L
Lab Code:	K2401562-007	**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	02/15/24 16:10	
Benzene	ND U	0.50	1	02/15/24 16:10	
Bromobenzene	ND U	2.0	1	02/15/24 16:10	
Bromochloromethane	ND U	0.50	1	02/15/24 16:10	
Bromodichloromethane	ND U	0.50	1	02/15/24 16:10	
Bromoform	ND U	0.50	1	02/15/24 16:10	
Bromomethane	ND U	0.50	1	02/15/24 16:10	
2-Butanone (MEK)	ND U	20	1	02/15/24 16:10	
n-Butylbenzene	ND U	4.0	1	02/15/24 16:10	
sec-Butylbenzene	ND U	2.0	1	02/15/24 16:10	
tert-Butylbenzene	ND U	2.0	1	02/15/24 16:10	
Carbon Disulfide	ND U	0.50	1	02/15/24 16:10	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 16:10	
Chlorobenzene	ND U	0.50	1	02/15/24 16:10	
Chloroethane	ND U	0.50	1	02/15/24 16:10	
Chloroform	ND U	0.50	1	02/15/24 16:10	
Chloromethane	ND U	0.50	1	02/15/24 16:10	
2-Chlorotoluene	ND U	2.0	1	02/15/24 16:10	
4-Chlorotoluene	ND U	2.0	1	02/15/24 16:10	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 16:10	
Dibromochloromethane	ND U	0.50	1	02/15/24 16:10	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 16:10	
Dibromomethane	ND U	0.50	1	02/15/24 16:10	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 16:10	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 16:10	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 16:10	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 16:10	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 16:10	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:10	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:10	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 16:10	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 16:10	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 16:10	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 16:10	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:10	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:10	
Ethylbenzene	ND U	0.50	1	02/15/24 16:10	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 16:10	
2-Hexanone	ND U	20	1	02/15/24 16:10	
Isopropylbenzene	ND U	2.0	1	02/15/24 16:10	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 16:10	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-06-DUP1	**Units:**	ug/L
Lab Code:	K2401562-007	**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	02/15/24 16:10	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 16:10	
Methylene Chloride	ND U	2.0	1	02/15/24 16:10	
Naphthalene	ND U	2.0	1	02/15/24 16:10	
n-Propylbenzene	ND U	2.0	1	02/15/24 16:10	
Styrene	ND U	0.50	1	02/15/24 16:10	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:10	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:10	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 16:10	
Toluene	ND U	0.50	1	02/15/24 16:10	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 16:10	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 16:10	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 16:10	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 16:10	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 16:10	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 16:10	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 16:10	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 16:10	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 16:10	
Vinyl Chloride	ND U	0.50	1	02/15/24 16:10	
o-Xylene	ND U	0.50	1	02/15/24 16:10	
m,p-Xylenes	ND U	0.50	1	02/15/24 16:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	68 - 117	02/15/24 16:10	
Dibromofluoromethane	103	73 - 122	02/15/24 16:10	
Toluene-d8	101	65 - 144	02/15/24 16:10	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 14:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-07-3D	**Units:**	ug/L
Lab Code:	K2401562-008	**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	02/15/24 16:33	
Benzene	ND U	0.50	1	02/15/24 16:33	
Bromobenzene	ND U	2.0	1	02/15/24 16:33	
Bromochloromethane	ND U	0.50	1	02/15/24 16:33	
Bromodichloromethane	ND U	0.50	1	02/15/24 16:33	
Bromoform	ND U	0.50	1	02/15/24 16:33	
Bromomethane	ND U	0.50	1	02/15/24 16:33	
2-Butanone (MEK)	ND U	20	1	02/15/24 16:33	
n-Butylbenzene	ND U	4.0	1	02/15/24 16:33	
sec-Butylbenzene	ND U	2.0	1	02/15/24 16:33	
tert-Butylbenzene	ND U	2.0	1	02/15/24 16:33	
Carbon Disulfide	ND U	0.50	1	02/15/24 16:33	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 16:33	
Chlorobenzene	ND U	0.50	1	02/15/24 16:33	
Chloroethane	ND U	0.50	1	02/15/24 16:33	
Chloroform	ND U	0.50	1	02/15/24 16:33	
Chloromethane	ND U	0.50	1	02/15/24 16:33	
2-Chlorotoluene	ND U	2.0	1	02/15/24 16:33	
4-Chlorotoluene	ND U	2.0	1	02/15/24 16:33	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 16:33	
Dibromochloromethane	ND U	0.50	1	02/15/24 16:33	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 16:33	
Dibromomethane	ND U	0.50	1	02/15/24 16:33	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 16:33	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 16:33	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 16:33	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 16:33	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 16:33	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:33	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:33	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 16:33	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 16:33	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 16:33	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 16:33	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:33	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:33	
Ethylbenzene	ND U	0.50	1	02/15/24 16:33	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 16:33	
2-Hexanone	ND U	20	1	02/15/24 16:33	
Isopropylbenzene	ND U	2.0	1	02/15/24 16:33	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 16:33	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 14:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-07-3D	**Units:**	ug/L
Lab Code:	K2401562-008	**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	02/15/24 16:33	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 16:33	
Methylene Chloride	ND U	2.0	1	02/15/24 16:33	
Naphthalene	ND U	2.0	1	02/15/24 16:33	
n-Propylbenzene	ND U	2.0	1	02/15/24 16:33	
Styrene	ND U	0.50	1	02/15/24 16:33	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:33	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:33	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 16:33	
Toluene	ND U	0.50	1	02/15/24 16:33	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 16:33	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 16:33	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 16:33	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 16:33	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 16:33	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 16:33	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 16:33	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 16:33	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 16:33	
Vinyl Chloride	ND U	0.50	1	02/15/24 16:33	
o-Xylene	ND U	0.50	1	02/15/24 16:33	
m,p-Xylenes	ND U	0.50	1	02/15/24 16:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 16:33	
Dibromofluoromethane	104	73 - 122	02/15/24 16:33	
Toluene-d8	101	65 - 144	02/15/24 16:33	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 15:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-08-3S	**Units:**	ug/L
Lab Code:	K2401562-009	**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	02/15/24 16:56	
Benzene	ND U	0.50	1	02/15/24 16:56	
Bromobenzene	ND U	2.0	1	02/15/24 16:56	
Bromochloromethane	ND U	0.50	1	02/15/24 16:56	
Bromodichloromethane	ND U	0.50	1	02/15/24 16:56	
Bromoform	ND U	0.50	1	02/15/24 16:56	
Bromomethane	ND U	0.50	1	02/15/24 16:56	
2-Butanone (MEK)	ND U	20	1	02/15/24 16:56	
n-Butylbenzene	ND U	4.0	1	02/15/24 16:56	
sec-Butylbenzene	ND U	2.0	1	02/15/24 16:56	
tert-Butylbenzene	ND U	2.0	1	02/15/24 16:56	
Carbon Disulfide	ND U	0.50	1	02/15/24 16:56	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 16:56	
Chlorobenzene	ND U	0.50	1	02/15/24 16:56	
Chloroethane	ND U	0.50	1	02/15/24 16:56	
Chloroform	ND U	0.50	1	02/15/24 16:56	
Chloromethane	ND U	0.50	1	02/15/24 16:56	
2-Chlorotoluene	ND U	2.0	1	02/15/24 16:56	
4-Chlorotoluene	ND U	2.0	1	02/15/24 16:56	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 16:56	
Dibromochloromethane	ND U	0.50	1	02/15/24 16:56	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 16:56	
Dibromomethane	ND U	0.50	1	02/15/24 16:56	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 16:56	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 16:56	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 16:56	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 16:56	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 16:56	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:56	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 16:56	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 16:56	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 16:56	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 16:56	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 16:56	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:56	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 16:56	
Ethylbenzene	ND U	0.50	1	02/15/24 16:56	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 16:56	
2-Hexanone	ND U	20	1	02/15/24 16:56	
Isopropylbenzene	ND U	2.0	1	02/15/24 16:56	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 16:56	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 15:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-08-3S	**Units:**	ug/L
Lab Code:	K2401562-009	**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	02/15/24 16:56	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 16:56	
Methylene Chloride	ND U	2.0	1	02/15/24 16:56	
Naphthalene	ND U	2.0	1	02/15/24 16:56	
n-Propylbenzene	ND U	2.0	1	02/15/24 16:56	
Styrene	ND U	0.50	1	02/15/24 16:56	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:56	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 16:56	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 16:56	
Toluene	ND U	0.50	1	02/15/24 16:56	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 16:56	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 16:56	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 16:56	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 16:56	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 16:56	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 16:56	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 16:56	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 16:56	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 16:56	
Vinyl Chloride	ND U	0.50	1	02/15/24 16:56	
o-Xylene	ND U	0.50	1	02/15/24 16:56	
m,p-Xylenes	ND U	0.50	1	02/15/24 16:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	68 - 117	02/15/24 16:56	
Dibromofluoromethane	102	73 - 122	02/15/24 16:56	
Toluene-d8	99	65 - 144	02/15/24 16:56	

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:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 09:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-01-1D	**Basis:**	NA
Lab Code:	K2401562-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:11	02/15/24	
Manganese	6010C	**1.4**	ug/L	1.1	1	02/21/24 09:11	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-02-1S	**Basis:**	NA
Lab Code:	K2401562-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:30	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:30	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 11:50
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-03-10DR	**Basis:**	NA
Lab Code:	K2401562-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**219**	ug/L	42	1	02/21/24 09:33	02/15/24	
Manganese	6010C	**7.4**	ug/L	1.1	1	02/21/24 09:33	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 12:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-04-FB1	**Basis:**	NA
Lab Code:	K2401562-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:35	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:35	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-05-10SR	**Basis:**	NA
Lab Code:	K2401562-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:38	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:38	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-06-DUP1	**Basis:**	NA
Lab Code:	K2401562-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:41	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:41	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 14:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-07-3D	**Basis:**	NA
Lab Code:	K2401562-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:44	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:44	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 15:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-08-3S	**Basis:**	NA
Lab Code:	K2401562-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:46	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:46	02/15/24	

General Chemistry

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:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 09:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-01-1D	**Basis:**	NA
Lab Code:	K2401562-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.60**	mg/L	0.20	2	02/13/24 16:04	
Nitrate as Nitrogen	300.0	**5.63**	mg/L	0.10	2	02/13/24 16:04	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 09:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-01-1D	**Basis:**	NA
Lab Code:	K2401562-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**174**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-02-1S	**Basis:**	NA
Lab Code:	K2401562-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.02**	mg/L	0.20	2	02/13/24 16:38	
Nitrate as Nitrogen	300.0	**3.86**	mg/L	0.10	2	02/13/24 16:38	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 10:20
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-02-1S	**Basis:**	NA
Lab Code:	K2401562-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**177**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 11:50
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-03-10DR	**Basis:**	NA
Lab Code:	K2401562-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**9.04**	mg/L	0.20	2	02/13/24 16:47	
Nitrate as Nitrogen	300.0	**2.52**	mg/L	0.10	2	02/13/24 16:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 11:50
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-03-10DR	**Basis:**	NA
Lab Code:	K2401562-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**244**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 12:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-04-FB1	**Basis:**	NA
Lab Code:	K2401562-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/13/24 16:55	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/13/24 16:55	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 12:15
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-04-FB1	**Basis:**	NA
Lab Code:	K2401562-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-05-10SR	**Basis:**	NA
Lab Code:	K2401562-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**9.15**	mg/L	0.20	2	02/13/24 17:04	
Nitrate as Nitrogen	300.0	**1.53**	mg/L	0.10	2	02/13/24 17:04	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-05-10SR	**Basis:**	NA
Lab Code:	K2401562-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**222**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-06-DUP1	**Basis:**	NA
Lab Code:	K2401562-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**9.09**	mg/L	0.20	2	02/13/24 17:13	
Nitrate as Nitrogen	300.0	**1.53**	mg/L	0.10	2	02/13/24 17:13	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 13:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-06-DUP1	**Basis:**	NA
Lab Code:	K2401562-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**221**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 14:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-07-3D	**Basis:**	NA
Lab Code:	K2401562-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.25**	mg/L	0.20	2	02/13/24 17:47	
Nitrate as Nitrogen	300.0	**4.18**	mg/L	0.10	2	02/13/24 17:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 14:05
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-07-3D	**Basis:**	NA
Lab Code:	K2401562-008		

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	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 15:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-08-3S	**Basis:**	NA
Lab Code:	K2401562-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.11**	mg/L	0.20	2	02/13/24 17:56	
Nitrate as Nitrogen	300.0	**5.63**	mg/L	0.10	2	02/13/24 17:56	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24 15:00
Sample Matrix:	Ground Water	**Date Received:**	02/13/24 10:45
Sample Name:	LB-021224-08-3S	**Basis:**	NA
Lab Code:	K2401562-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**186**	mg/L	10	1	02/16/24 12:11	

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:** K2401562
Project: Leichner Landfill/04224030.13
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	K2401562-001	96	102	99
LB-021224-01-1D	K2401562-002	97	103	98
LB-021224-02-1S	K2401562-003	95	100	99
LB-021224-03-10DR	K2401562-004	97	100	98
LB-021224-04-FB1	K2401562-005	97	103	100
LB-021224-05-10SR	K2401562-006	97	101	98
LB-021224-06-DUP1	K2401562-007	98	103	101
LB-021224-07-3D	K2401562-008	96	104	101
LB-021224-08-3S	K2401562-009	99	102	99
Lab Control Sample	KQ2402449-03	103	101	103
Duplicate Lab Control Sample	KQ2402449-04	105	98	102
Method Blank	KQ2402449-05	96	104	100

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402449-05	**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	02/15/24 12:46	
Benzene	ND U	0.50	1	02/15/24 12:46	
Bromobenzene	ND U	2.0	1	02/15/24 12:46	
Bromochloromethane	ND U	0.50	1	02/15/24 12:46	
Bromodichloromethane	ND U	0.50	1	02/15/24 12:46	
Bromoform	ND U	0.50	1	02/15/24 12:46	
Bromomethane	ND U	0.50	1	02/15/24 12:46	
2-Butanone (MEK)	ND U	20	1	02/15/24 12:46	
n-Butylbenzene	ND U	4.0	1	02/15/24 12:46	
sec-Butylbenzene	ND U	2.0	1	02/15/24 12:46	
tert-Butylbenzene	ND U	2.0	1	02/15/24 12:46	
Carbon Disulfide	ND U	0.50	1	02/15/24 12:46	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 12:46	
Chlorobenzene	ND U	0.50	1	02/15/24 12:46	
Chloroethane	ND U	0.50	1	02/15/24 12:46	
Chloroform	ND U	0.50	1	02/15/24 12:46	
Chloromethane	ND U	0.50	1	02/15/24 12:46	
2-Chlorotoluene	ND U	2.0	1	02/15/24 12:46	
4-Chlorotoluene	ND U	2.0	1	02/15/24 12:46	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 12:46	
Dibromochloromethane	ND U	0.50	1	02/15/24 12:46	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 12:46	
Dibromomethane	ND U	0.50	1	02/15/24 12:46	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 12:46	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 12:46	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 12:46	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 12:46	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
Ethylbenzene	ND U	0.50	1	02/15/24 12:46	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 12:46	
2-Hexanone	ND U	20	1	02/15/24 12:46	
Isopropylbenzene	ND U	2.0	1	02/15/24 12:46	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 12:46	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402449-05	**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	02/15/24 12:46	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 12:46	
Methylene Chloride	ND U	2.0	1	02/15/24 12:46	
Naphthalene	ND U	2.0	1	02/15/24 12:46	
n-Propylbenzene	ND U	2.0	1	02/15/24 12:46	
Styrene	ND U	0.50	1	02/15/24 12:46	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 12:46	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 12:46	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 12:46	
Toluene	ND U	0.50	1	02/15/24 12:46	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 12:46	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 12:46	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 12:46	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 12:46	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 12:46	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 12:46	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 12:46	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 12:46	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 12:46	
Vinyl Chloride	ND U	0.50	1	02/15/24 12:46	
o-Xylene	ND U	0.50	1	02/15/24 12:46	
m,p-Xylenes	ND U	0.50	1	02/15/24 12:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 12:46	
Dibromofluoromethane	104	73 - 122	02/15/24 12:46	
Toluene-d8	100	65 - 144	02/15/24 12:46	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/15/24
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:	832512

	Lab Control Sample KQ2402449-03			Duplicate Lab Control Sample KQ2402449-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.91	10.0	89	9.16	10.0	92	66-124	3	30
1,1,1-Trichloroethane (TCA)	9.96	10.0	100	10.1	10.0	101	59-136	1	30
1,1,2,2-Tetrachloroethane	8.80	10.0	88	9.23	10.0	92	70-127	5	30
1,1,2-Trichloroethane	8.87	10.0	89	9.25	10.0	93	74-118	4	30
1,1-Dichloroethane	9.53	10.0	95	9.54	10.0	95	68-132	<1	30
1,1-Dichloropropene	10.0	10.0	100	10.3	10.0	103	59-134	3	30
1,2,3-Trichlorobenzene	9.32	10.0	93	10.2	10.0	102	68-120	9	30
1,2,3-Trichloropropane	8.18	10.0	82	8.68	10.0	87	69-123	6	30
1,2,4-Trichlorobenzene	9.12	10.0	91	9.74	10.0	97	58-126	7	30
1,2,4-Trimethylbenzene	10.1	10.0	101	10.4	10.0	104	63-122	3	30
1,2-Dibromo-3-chloropropane	8.33	10.0	83	9.19	10.0	92	55-132	10	30
1,2-Dibromoethane (EDB)	8.75	10.0	88	9.12	10.0	91	74-118	4	30
1,2-Dichlorobenzene	9.04	10.0	90	9.46	10.0	95	72-115	5	30
1,2-Dichloropropane	9.20	10.0	92	9.24	10.0	92	67-126	<1	30
1,3,5-Trimethylbenzene	9.80	10.0	98	10.2	10.0	102	62-126	4	30
1,3-Dichlorobenzene	9.01	10.0	90	9.39	10.0	94	70-116	4	30
1,3-Dichloropropane	8.82	10.0	88	9.04	10.0	90	75-116	2	30
1,4-Dichlorobenzene	9.06	10.0	91	9.45	10.0	95	73-115	4	30
2,2-Dichloropropane	9.87	10.0	99	9.95	10.0	100	37-145	<1	30
2-Butanone (MEK)	53.5	50.0	107	54.9	50.0	110	71-149	3	30
2-Chlorotoluene	9.78	10.0	98	9.99	10.0	100	55-131	2	30
2-Hexanone	54.6	50.0	109	56.2	50.0	112	59-131	3	30
4-Chlorotoluene	9.47	10.0	95	9.80	10.0	98	66-121	3	30
4-Isopropyltoluene	10.6	10.0	106	11.0	10.0	110	61-128	4	30
4-Methyl-2-pentanone (MIBK)	52.7	50.0	105	55.1	50.0	110	64-134	4	30
Acetone	56.2	50.0	112	54.7	50.0	109	68-135	3	30
Benzene	9.45	10.0	95	9.35	10.0	94	69-124	1	30
Bromobenzene	8.96	10.0	90	9.19	10.0	92	72-116	3	30
Bromochloromethane	9.81	10.0	98	9.57	10.0	96	75-131	2	30
Bromodichloromethane	9.15	10.0	92	9.22	10.0	92	63-129	<1	30
Bromoform	8.49	10.0	85	8.79	10.0	88	52-144	3	30
Bromomethane	10.7	10.0	107	10.9	10.0	109	35-113	2	30
Carbon Disulfide	18.2	20.0	91	18.3	20.0	91	46-144	<1	30
Carbon Tetrachloride	9.87	10.0	99	9.95	10.0	100	55-140	<1	30
Chlorobenzene	9.33	10.0	93	9.45	10.0	95	72-116	1	30
Chloroethane	9.78	10.0	98	9.66	10.0	97	58-134	1	30
Chloroform	9.08	10.0	91	9.16	10.0	92	70-129	<1	30
Chloromethane	8.81	10.0	88	8.90	10.0	89	34-130	1	30
cis-1,2-Dichloroethene	9.18	10.0	92	9.37	10.0	94	71-118	2	30
cis-1,3-Dichloropropene	9.49	10.0	95	9.65	10.0	97	62-132	2	30
Dibromochloromethane	8.29	10.0	83	8.62	10.0	86	67-126	4	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/15/24
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:	832512

	Lab Control Sample KQ2402449-03			Duplicate Lab Control Sample KQ2402449-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.21	10.0	92	9.28	10.0	93	69-128	<1	30
Dichlorodifluoromethane	8.49	10.0	85	8.51	10.0	85	32-124	<1	30
Ethylbenzene	9.79	10.0	98	9.97	10.0	100	67-121	2	30
Hexachlorobutadiene	9.20	10.0	92	9.65	10.0	97	57-119	5	30
Isopropylbenzene	9.45	10.0	95	9.68	10.0	97	67-129	2	30
m,p-Xylenes	20.0	20.0	100	20.4	20.0	102	69-121	2	30
Methyl tert-Butyl Ether	9.36	10.0	94	9.81	10.0	98	54-126	5	30
Methylene Chloride	9.19	10.0	92	9.25	10.0	93	71-122	<1	30
Naphthalene	9.31	10.0	93	9.98	10.0	100	64-126	7	30
n-Butylbenzene	9.93	10.0	99	10.5	10.0	105	55-130	5	30
n-Propylbenzene	10.0	10.0	100	10.3	10.0	103	61-124	3	30
o-Xylene	9.65	10.0	97	10.0	10.0	100	71-119	4	30
sec-Butylbenzene	10.3	10.0	103	10.7	10.0	107	59-128	4	30
Styrene	9.49	10.0	95	9.83	10.0	98	74-121	4	30
tert-Butylbenzene	10.0	10.0	100	10.3	10.0	103	61-127	3	30
Tetrachloroethene (PCE)	9.62	10.0	96	9.75	10.0	98	62-126	1	30
Toluene	9.60	10.0	96	9.80	10.0	98	69-124	2	30
trans-1,2-Dichloroethene	9.45	10.0	95	9.60	10.0	96	67-125	2	30
trans-1,3-Dichloropropene	9.55	10.0	96	9.61	10.0	96	59-125	<1	30
Trichloroethene (TCE)	9.58	10.0	96	9.58	10.0	96	67-128	<1	30
Trichlorofluoromethane (CFC 11)	10.2	10.0	102	10.3	10.0	103	52-141	1	30
Vinyl Chloride	10.1	10.0	101	10.2	10.0	102	55-123	<1	30

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:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2402284-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:06	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:06	02/15/24	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24
Sample Matrix:	Ground Water	**Date Received:**	02/13/24
		Date Analyzed:	02/21/24
		Date Extracted:	02/15/24

Matrix Spike Summary
Dissolved Metals

Sample Name:	LB-021224-01-1D	**Units:**	ug/L
Lab Code:	K2401562-002	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2402284-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	ND U	1000	1000	100	75-125
Manganese	1.4	503	500	100	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:**	K2401562
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24
Sample Matrix:	Ground Water	**Date Received:**	02/13/24
		Date Analyzed:	02/21/24

Replicate Sample Summary
Dissolved Metals

Sample Name:	LB-021224-01-1D	**Units:**	ug/L
Lab Code:	K2401562-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample KQ2402284-03 Result	Average	RPD	RPD Limit
Iron	6010C	42	ND U	ND U	ND	-	20
Manganese	6010C	1.1	1.4	ND U	NC	NC	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
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401562
Date Analyzed: 02/21/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2402284-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2490	2500	99	80-120
Manganese	6010C	1240	1250	99	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401562-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	02/13/24 15:46	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/13/24 15:46	

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401562-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	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401562-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	02/13/24 18:57	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/13/24 18:57	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401562-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	10	1	02/16/24 12:11	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request:K2401562
Date Collected:02/12/24
Date Received:02/13/24
Date Analyzed:2/13/24

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: LB-021224-01-1D
Lab Code: K2401562-002

Units:mg/L
Basis:NA

			Matrix Spike K2401562-002MS			Duplicate Matrix Spike K2401562-002DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	5.60	20.2	16.0	91	20.2	16.0	91	90-110	<1	20
Nitrate as Nitrogen	300.0	5.63	13.4	8.00	98	13.4	8.00	98	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:**	K2401562
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24
Sample Matrix:	Ground Water	**Date Received:**	02/13/24
		Date Analyzed:	02/13/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021224-01-1D	**Units:**	mg/L
Lab Code:	K2401562-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401562-002DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	5.60	5.57	5.59	<1	20
Nitrate as Nitrogen	300.0	0.10	5.63	5.60	5.61	<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:**	K2401562
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/12/24
Sample Matrix:	Ground Water	**Date Received:**	02/13/24
		Date Analyzed:	02/16/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021224-03-10DR	**Units:**	mg/L
Lab Code:	K2401562-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401562-004DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	10	244	232	238	5	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 Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401562
Date Analyzed: 02/13/24 - 02/16/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401562-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.61	5.00	92	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	100	90-110
Solids, Total Dissolved	SM 2540 C	1420	1430	99	85-115

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401562
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/13/24
Sample Matrix:	Ground Water		

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401562-LCS2

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	2.52	2.50	101	90-110

February 27, 2024 Service Request No:K2401622

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 14, 2024
For your reference, these analyses have been assigned our service request number **K2401622.**

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: K2401622
Date Received: 02/14/2024

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:

Eleven ground water samples were received for analysis at ALS Environmental on 02/14/2024. 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:

Bromomethane was flagged as outside the control criterion for Continuing Calibration Verification (CCV) KQ2402772-02. In accordance with the EPA Method, 80% or more of the CCV analytes must have passed within 20% of the true value. The remaining analytes are allowed a 40% difference as per the ALS SOP. The CCV met these criteria. No further corrective action was required.

Approved by  Date 02/27/2024

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-021324-01-5D	Lab ID: K2401622-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.54			0.20	mg/L	300.0
Manganese, Dissolved	1.1			1.1	ug/L	6010C
Nitrate as Nitrogen	1.66			0.10	mg/L	300.0
Solids, Total Dissolved	217			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-02-17D	Lab ID: K2401622-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	8.33			0.20	mg/L	300.0
Iron, Dissolved	320			42	ug/L	6010C
Manganese, Dissolved	3860			1.1	ug/L	6010C
Solids, Total Dissolved	179			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-03-17I	Lab ID: K2401622-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.49			0.20	mg/L	300.0
Iron, Dissolved	7830			42	ug/L	6010C
Manganese, Dissolved	1700			1.1	ug/L	6010C
Solids, Total Dissolved	191			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-04-DUP1	Lab ID: K2401622-005					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.48			0.20	mg/L	300.0
Iron, Dissolved	7850			42	ug/L	6010C
Manganese, Dissolved	1700			1.1	ug/L	6010C
Solids, Total Dissolved	191			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-05-26D	Lab ID: K2401622-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.68			0.20	mg/L	300.0
Nitrate as Nitrogen	4.21			0.10	mg/L	300.0
Solids, Total Dissolved	165			10	mg/L	SM 2540 C

CLIENT ID: LB-031324-07-13D	Lab ID: K2401622-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.63			0.20	mg/L	300.0
Nitrate as Nitrogen	4.40			0.10	mg/L	300.0
Solids, Total Dissolved	167			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-08-27D	Lab ID: K2401622-009					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	6.90			0.20	mg/L	300.0
Nitrate as Nitrogen	4.27			0.10	mg/L	300.0
Solids, Total Dissolved	196			10	mg/L	SM 2540 C

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-021324-09-27I			Lab ID: K2401622-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.00			0.20	mg/L	300.0
Manganese, Dissolved	128			1.1	ug/L	6010C
Nitrate as Nitrogen	2.37			0.10	mg/L	300.0
Solids, Total Dissolved	260			10	mg/L	SM 2540 C

CLIENT ID: LB-021324-10-13I			Lab ID: K2401622-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	6.25			0.20	mg/L	300.0
Manganese, Dissolved	3.4			1.1	ug/L	6010C
Nitrate as Nitrogen	3.61			0.10	mg/L	300.0
Solids, Total Dissolved	188			10	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:**K2401622

Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2401622-001	TB2	2/13/2024	0700
K2401622-002	LB-021324-01-5D	2/13/2024	0840
K2401622-003	LB-021324-02-17D	2/13/2024	0945
K2401622-004	LB-021324-03-17I	2/13/2024	1035
K2401622-005	LB-021324-04-DUP1	2/13/2024	1040
K2401622-006	LB-021324-05-26D	2/13/2024	1135
K2401622-007	LB-031324-06-FB1	2/13/2024	1130
K2401622-008	LB-031324-07-13D	2/13/2024	1230
K2401622-009	LB-021324-08-27D	2/13/2024	1320
K2401622-010	LB-021324-09-27I	2/13/2024	1420
K2401622-011	LB-021324-10-13I	2/13/2024	1520

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Chain of Custody Form

Page 1 of 2

2/14/24

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB2	2/13/24	0700	W		2	X						Metals are Field Filtered	
2	LB-021324-01-5D	2/13/24	0840	W		5	X	X	X	X	X			
3	LB-021324-02-17D	2/13/24	0945	W		5	X	X	X	X	X			
4	LB-021324-03-17I	2/13/24	1035	W		5	X	X	X	X	X			
5	LB-021324-04-DUP1	2/13/24	1040	W		5	X	X	X	X	X			
6	LB-021324-05-26D	2/13/24	1135	W		5	X	X	X	X	X			
7	LB-021324-06-FB1	2/13/24	1130	W		5	X	X	X	X	X			
8	LB-021324-07-13D	2/13/24	1230	W		5	X	X	X	X	X			
9	LB-021324-08-27D	2/13/24	1320	W		5	X	X	X	X	X			
10	LB-021324-09-27I	2/13/24	1420	W		5	X	X	X	X	X			

Sampler(s): Please Print & Sign	Shipment Method:	Required Turnaround Time: (Check Box)	Results Due Date:
B Rupp	Courier	☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/14/24	0945		2.14.24	0945	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
	2/14/24	1155	ALS	2/14/24	1155	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 2 of 2

K2401622

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	LB-021324-10-13I	2/13/24	1520	W		5	X	X	X	X	X		Metals are Field Filtered	
2														
3														
4														
5														
6														
7														
8														
9														
10														

Sampler(s): Please Print & Sign: R. Rocco

Shipment Method: Courier

Required Turnaround Time: (Check Box): ☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/14/24	0915	Darin Bonney	2/14/24	915	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Darin Bonney	2/14/24	1155	ALS	2/14/24	1155	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM HH

Cooler Receipt and Preservation Form

Client SCS Service Request K24 2401622

Received: 2/14/24 Opened: 2/14/24 By: VM Unloaded: 2/14/24 By: VM

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
	1.9	ID06					

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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	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:**	K2401622
Project:	Leichner Landfill/04224030.13		

Sample Name:	TB2	**Date Collected:**	02/13/24
Lab Code:	K2401622-001	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name:	LB-021324-01-5D	**Date Collected:**	02/13/24
Lab Code:	K2401622-002	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021324-02-17D	**Date Collected:**	02/13/24
Lab Code:	K2401622-003	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021324-03-17I	**Date Collected:**	02/13/24
Lab Code:	K2401622-004	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-021324-04-DUP1	**Date Collected:**	02/13/24
Lab Code:	K2401622-005	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-021324-05-26D	**Date Collected:**	02/13/24
Lab Code:	K2401622-006	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-031324-06-FB1	**Date Collected:**	02/13/24
Lab Code:	K2401622-007	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

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

Sample Name:	LB-031324-07-13D	**Date Collected:**	02/13/24
Lab Code:	K2401622-008	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

Client: SCS Engineers **Service Request:** K2401622
Project: Leichner Landfill/04224030.13

Sample Name: LB-031324-07-13D **Date Collected:** 02/13/24
Lab Code: K2401622-008 **Date Received:** 02/14/24
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	ABOYER	AMCKORNEY
8260C		GROETTGER
SM 2540 C		AWILSON

Sample Name: LB-021324-08-27D **Date Collected:** 02/13/24
Lab Code: K2401622-009 **Date Received:** 02/14/24
Sample Matrix: Ground Water

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

Sample Name: LB-021324-09-27I **Date Collected:** 02/13/24
Lab Code: K2401622-010 **Date Received:** 02/14/24
Sample Matrix: Ground Water

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

Sample Name: LB-021324-10-13I **Date Collected:** 02/13/24
Lab Code: K2401622-011 **Date Received:** 02/14/24
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6010C	ABOYER	AMCKORNEY

Analyst Summary report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-021324-10-13I	**Date Collected:**	02/13/24
Lab Code:	K2401622-011	**Date Received:**	02/14/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER
SM 2540 C		AWILSON

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
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2401622-001	**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	02/15/24 17:19	
Benzene	ND U	0.50	1	02/15/24 17:19	
Bromobenzene	ND U	2.0	1	02/15/24 17:19	
Bromochloromethane	ND U	0.50	1	02/15/24 17:19	
Bromodichloromethane	ND U	0.50	1	02/15/24 17:19	
Bromoform	ND U	0.50	1	02/15/24 17:19	
Bromomethane	ND U	0.50	1	02/15/24 17:19	
2-Butanone (MEK)	ND U	20	1	02/15/24 17:19	
n-Butylbenzene	ND U	4.0	1	02/15/24 17:19	
sec-Butylbenzene	ND U	2.0	1	02/15/24 17:19	
tert-Butylbenzene	ND U	2.0	1	02/15/24 17:19	
Carbon Disulfide	ND U	0.50	1	02/15/24 17:19	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 17:19	
Chlorobenzene	ND U	0.50	1	02/15/24 17:19	
Chloroethane	ND U	0.50	1	02/15/24 17:19	
Chloroform	ND U	0.50	1	02/15/24 17:19	
Chloromethane	ND U	0.50	1	02/15/24 17:19	
2-Chlorotoluene	ND U	2.0	1	02/15/24 17:19	
4-Chlorotoluene	ND U	2.0	1	02/15/24 17:19	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 17:19	
Dibromochloromethane	ND U	0.50	1	02/15/24 17:19	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 17:19	
Dibromomethane	ND U	0.50	1	02/15/24 17:19	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 17:19	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 17:19	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 17:19	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 17:19	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 17:19	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 17:19	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 17:19	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 17:19	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 17:19	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 17:19	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 17:19	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 17:19	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 17:19	
Ethylbenzene	ND U	0.50	1	02/15/24 17:19	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 17:19	
2-Hexanone	ND U	20	1	02/15/24 17:19	
Isopropylbenzene	ND U	2.0	1	02/15/24 17:19	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 17:19	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2401622-001	**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	02/15/24 17:19	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 17:19	
Methylene Chloride	ND U	2.0	1	02/15/24 17:19	
Naphthalene	ND U	2.0	1	02/15/24 17:19	
n-Propylbenzene	ND U	2.0	1	02/15/24 17:19	
Styrene	ND U	0.50	1	02/15/24 17:19	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 17:19	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 17:19	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 17:19	
Toluene	ND U	0.50	1	02/15/24 17:19	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 17:19	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 17:19	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 17:19	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 17:19	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 17:19	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 17:19	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 17:19	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 17:19	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 17:19	
Vinyl Chloride	ND U	0.50	1	02/15/24 17:19	
o-Xylene	ND U	0.50	1	02/15/24 17:19	
m,p-Xylenes	ND U	0.50	1	02/15/24 17:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 17:19	
Dibromofluoromethane	104	73 - 122	02/15/24 17:19	
Toluene-d8	98	65 - 144	02/15/24 17:19	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 08:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-01-5D	**Units:**	ug/L
Lab Code:	K2401622-002	**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	02/15/24 17:41	
Benzene	ND U	0.50	1	02/15/24 17:41	
Bromobenzene	ND U	2.0	1	02/15/24 17:41	
Bromochloromethane	ND U	0.50	1	02/15/24 17:41	
Bromodichloromethane	ND U	0.50	1	02/15/24 17:41	
Bromoform	ND U	0.50	1	02/15/24 17:41	
Bromomethane	ND U	0.50	1	02/15/24 17:41	
2-Butanone (MEK)	ND U	20	1	02/15/24 17:41	
n-Butylbenzene	ND U	4.0	1	02/15/24 17:41	
sec-Butylbenzene	ND U	2.0	1	02/15/24 17:41	
tert-Butylbenzene	ND U	2.0	1	02/15/24 17:41	
Carbon Disulfide	ND U	0.50	1	02/15/24 17:41	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 17:41	
Chlorobenzene	ND U	0.50	1	02/15/24 17:41	
Chloroethane	ND U	0.50	1	02/15/24 17:41	
Chloroform	ND U	0.50	1	02/15/24 17:41	
Chloromethane	ND U	0.50	1	02/15/24 17:41	
2-Chlorotoluene	ND U	2.0	1	02/15/24 17:41	
4-Chlorotoluene	ND U	2.0	1	02/15/24 17:41	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 17:41	
Dibromochloromethane	ND U	0.50	1	02/15/24 17:41	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 17:41	
Dibromomethane	ND U	0.50	1	02/15/24 17:41	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 17:41	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 17:41	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 17:41	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 17:41	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 17:41	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 17:41	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 17:41	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 17:41	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 17:41	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 17:41	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 17:41	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 17:41	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 17:41	
Ethylbenzene	ND U	0.50	1	02/15/24 17:41	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 17:41	
2-Hexanone	ND U	20	1	02/15/24 17:41	
Isopropylbenzene	ND U	2.0	1	02/15/24 17:41	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 17:41	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 08:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-01-5D	**Units:**	ug/L
Lab Code:	K2401622-002	**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	02/15/24 17:41	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 17:41	
Methylene Chloride	ND U	2.0	1	02/15/24 17:41	
Naphthalene	ND U	2.0	1	02/15/24 17:41	
n-Propylbenzene	ND U	2.0	1	02/15/24 17:41	
Styrene	ND U	0.50	1	02/15/24 17:41	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 17:41	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 17:41	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 17:41	
Toluene	ND U	0.50	1	02/15/24 17:41	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 17:41	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 17:41	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 17:41	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 17:41	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 17:41	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 17:41	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 17:41	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 17:41	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 17:41	
Vinyl Chloride	ND U	0.50	1	02/15/24 17:41	
o-Xylene	ND U	0.50	1	02/15/24 17:41	
m,p-Xylenes	ND U	0.50	1	02/15/24 17:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 17:41	
Dibromofluoromethane	101	73 - 122	02/15/24 17:41	
Toluene-d8	99	65 - 144	02/15/24 17:41	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 09:45
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-02-17D	**Units:**	ug/L
Lab Code:	K2401622-003	**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	02/15/24 18:04	
Benzene	ND U	0.50	1	02/15/24 18:04	
Bromobenzene	ND U	2.0	1	02/15/24 18:04	
Bromochloromethane	ND U	0.50	1	02/15/24 18:04	
Bromodichloromethane	ND U	0.50	1	02/15/24 18:04	
Bromoform	ND U	0.50	1	02/15/24 18:04	
Bromomethane	ND U	0.50	1	02/15/24 18:04	
2-Butanone (MEK)	ND U	20	1	02/15/24 18:04	
n-Butylbenzene	ND U	4.0	1	02/15/24 18:04	
sec-Butylbenzene	ND U	2.0	1	02/15/24 18:04	
tert-Butylbenzene	ND U	2.0	1	02/15/24 18:04	
Carbon Disulfide	ND U	0.50	1	02/15/24 18:04	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 18:04	
Chlorobenzene	ND U	0.50	1	02/15/24 18:04	
Chloroethane	ND U	0.50	1	02/15/24 18:04	
Chloroform	ND U	0.50	1	02/15/24 18:04	
Chloromethane	ND U	0.50	1	02/15/24 18:04	
2-Chlorotoluene	ND U	2.0	1	02/15/24 18:04	
4-Chlorotoluene	ND U	2.0	1	02/15/24 18:04	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 18:04	
Dibromochloromethane	ND U	0.50	1	02/15/24 18:04	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 18:04	
Dibromomethane	ND U	0.50	1	02/15/24 18:04	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 18:04	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 18:04	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 18:04	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 18:04	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 18:04	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:04	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:04	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 18:04	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 18:04	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 18:04	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 18:04	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:04	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:04	
Ethylbenzene	ND U	0.50	1	02/15/24 18:04	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 18:04	
2-Hexanone	ND U	20	1	02/15/24 18:04	
Isopropylbenzene	ND U	2.0	1	02/15/24 18:04	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 18:04	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 09:45
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-02-17D	**Units:**	ug/L
Lab Code:	K2401622-003	**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	02/15/24 18:04	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 18:04	
Methylene Chloride	ND U	2.0	1	02/15/24 18:04	
Naphthalene	ND U	2.0	1	02/15/24 18:04	
n-Propylbenzene	ND U	2.0	1	02/15/24 18:04	
Styrene	ND U	0.50	1	02/15/24 18:04	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:04	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:04	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 18:04	
Toluene	ND U	0.50	1	02/15/24 18:04	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 18:04	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 18:04	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 18:04	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 18:04	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 18:04	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 18:04	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 18:04	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 18:04	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 18:04	
Vinyl Chloride	ND U	0.50	1	02/15/24 18:04	
o-Xylene	ND U	0.50	1	02/15/24 18:04	
m,p-Xylenes	ND U	0.50	1	02/15/24 18:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	68 - 117	02/15/24 18:04	
Dibromofluoromethane	103	73 - 122	02/15/24 18:04	
Toluene-d8	99	65 - 144	02/15/24 18:04	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-03-17I	**Units:**	ug/L
Lab Code:	K2401622-004	**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	02/15/24 18:27	
Benzene	ND U	0.50	1	02/15/24 18:27	
Bromobenzene	ND U	2.0	1	02/15/24 18:27	
Bromochloromethane	ND U	0.50	1	02/15/24 18:27	
Bromodichloromethane	ND U	0.50	1	02/15/24 18:27	
Bromoform	ND U	0.50	1	02/15/24 18:27	
Bromomethane	ND U	0.50	1	02/15/24 18:27	
2-Butanone (MEK)	ND U	20	1	02/15/24 18:27	
n-Butylbenzene	ND U	4.0	1	02/15/24 18:27	
sec-Butylbenzene	ND U	2.0	1	02/15/24 18:27	
tert-Butylbenzene	ND U	2.0	1	02/15/24 18:27	
Carbon Disulfide	ND U	0.50	1	02/15/24 18:27	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 18:27	
Chlorobenzene	ND U	0.50	1	02/15/24 18:27	
Chloroethane	ND U	0.50	1	02/15/24 18:27	
Chloroform	ND U	0.50	1	02/15/24 18:27	
Chloromethane	ND U	0.50	1	02/15/24 18:27	
2-Chlorotoluene	ND U	2.0	1	02/15/24 18:27	
4-Chlorotoluene	ND U	2.0	1	02/15/24 18:27	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 18:27	
Dibromochloromethane	ND U	0.50	1	02/15/24 18:27	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 18:27	
Dibromomethane	ND U	0.50	1	02/15/24 18:27	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 18:27	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 18:27	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 18:27	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 18:27	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 18:27	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:27	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:27	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 18:27	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 18:27	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 18:27	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 18:27	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:27	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:27	
Ethylbenzene	ND U	0.50	1	02/15/24 18:27	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 18:27	
2-Hexanone	ND U	20	1	02/15/24 18:27	
Isopropylbenzene	ND U	2.0	1	02/15/24 18:27	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 18:27	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-03-17I	**Units:**	ug/L
Lab Code:	K2401622-004	**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	02/15/24 18:27	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 18:27	
Methylene Chloride	ND U	2.0	1	02/15/24 18:27	
Naphthalene	ND U	2.0	1	02/15/24 18:27	
n-Propylbenzene	ND U	2.0	1	02/15/24 18:27	
Styrene	ND U	0.50	1	02/15/24 18:27	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:27	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:27	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 18:27	
Toluene	ND U	0.50	1	02/15/24 18:27	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 18:27	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 18:27	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 18:27	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 18:27	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 18:27	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 18:27	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 18:27	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 18:27	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 18:27	
Vinyl Chloride	ND U	0.50	1	02/15/24 18:27	
o-Xylene	ND U	0.50	1	02/15/24 18:27	
m,p-Xylenes	ND U	0.50	1	02/15/24 18:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/15/24 18:27	
Dibromofluoromethane	101	73 - 122	02/15/24 18:27	
Toluene-d8	100	65 - 144	02/15/24 18:27	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-04-DUP1	**Units:**	ug/L
Lab Code:	K2401622-005	**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	02/15/24 18:50	
Benzene	ND U	0.50	1	02/15/24 18:50	
Bromobenzene	ND U	2.0	1	02/15/24 18:50	
Bromochloromethane	ND U	0.50	1	02/15/24 18:50	
Bromodichloromethane	ND U	0.50	1	02/15/24 18:50	
Bromoform	ND U	0.50	1	02/15/24 18:50	
Bromomethane	ND U	0.50	1	02/15/24 18:50	
2-Butanone (MEK)	ND U	20	1	02/15/24 18:50	
n-Butylbenzene	ND U	4.0	1	02/15/24 18:50	
sec-Butylbenzene	ND U	2.0	1	02/15/24 18:50	
tert-Butylbenzene	ND U	2.0	1	02/15/24 18:50	
Carbon Disulfide	ND U	0.50	1	02/15/24 18:50	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 18:50	
Chlorobenzene	ND U	0.50	1	02/15/24 18:50	
Chloroethane	ND U	0.50	1	02/15/24 18:50	
Chloroform	ND U	0.50	1	02/15/24 18:50	
Chloromethane	ND U	0.50	1	02/15/24 18:50	
2-Chlorotoluene	ND U	2.0	1	02/15/24 18:50	
4-Chlorotoluene	ND U	2.0	1	02/15/24 18:50	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 18:50	
Dibromochloromethane	ND U	0.50	1	02/15/24 18:50	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 18:50	
Dibromomethane	ND U	0.50	1	02/15/24 18:50	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 18:50	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 18:50	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 18:50	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 18:50	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 18:50	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:50	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 18:50	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 18:50	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 18:50	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 18:50	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 18:50	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:50	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 18:50	
Ethylbenzene	ND U	0.50	1	02/15/24 18:50	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 18:50	
2-Hexanone	ND U	20	1	02/15/24 18:50	
Isopropylbenzene	ND U	2.0	1	02/15/24 18:50	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 18:50	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-04-DUP1	**Units:**	ug/L
Lab Code:	K2401622-005	**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	02/15/24 18:50	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 18:50	
Methylene Chloride	ND U	2.0	1	02/15/24 18:50	
Naphthalene	ND U	2.0	1	02/15/24 18:50	
n-Propylbenzene	ND U	2.0	1	02/15/24 18:50	
Styrene	ND U	0.50	1	02/15/24 18:50	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:50	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 18:50	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 18:50	
Toluene	ND U	0.50	1	02/15/24 18:50	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 18:50	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 18:50	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 18:50	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 18:50	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 18:50	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 18:50	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 18:50	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 18:50	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 18:50	
Vinyl Chloride	ND U	0.50	1	02/15/24 18:50	
o-Xylene	ND U	0.50	1	02/15/24 18:50	
m,p-Xylenes	ND U	0.50	1	02/15/24 18:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 18:50	
Dibromofluoromethane	102	73 - 122	02/15/24 18:50	
Toluene-d8	100	65 - 144	02/15/24 18:50	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-05-26D	**Units:**	ug/L
Lab Code:	K2401622-006	**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	02/15/24 19:12	
Benzene	ND U	0.50	1	02/15/24 19:12	
Bromobenzene	ND U	2.0	1	02/15/24 19:12	
Bromochloromethane	ND U	0.50	1	02/15/24 19:12	
Bromodichloromethane	ND U	0.50	1	02/15/24 19:12	
Bromoform	ND U	0.50	1	02/15/24 19:12	
Bromomethane	ND U	0.50	1	02/15/24 19:12	
2-Butanone (MEK)	ND U	20	1	02/15/24 19:12	
n-Butylbenzene	ND U	4.0	1	02/15/24 19:12	
sec-Butylbenzene	ND U	2.0	1	02/15/24 19:12	
tert-Butylbenzene	ND U	2.0	1	02/15/24 19:12	
Carbon Disulfide	ND U	0.50	1	02/15/24 19:12	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 19:12	
Chlorobenzene	ND U	0.50	1	02/15/24 19:12	
Chloroethane	ND U	0.50	1	02/15/24 19:12	
Chloroform	ND U	0.50	1	02/15/24 19:12	
Chloromethane	ND U	0.50	1	02/15/24 19:12	
2-Chlorotoluene	ND U	2.0	1	02/15/24 19:12	
4-Chlorotoluene	ND U	2.0	1	02/15/24 19:12	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 19:12	
Dibromochloromethane	ND U	0.50	1	02/15/24 19:12	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 19:12	
Dibromomethane	ND U	0.50	1	02/15/24 19:12	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 19:12	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 19:12	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 19:12	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 19:12	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 19:12	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:12	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:12	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 19:12	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 19:12	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 19:12	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 19:12	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:12	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:12	
Ethylbenzene	ND U	0.50	1	02/15/24 19:12	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 19:12	
2-Hexanone	ND U	20	1	02/15/24 19:12	
Isopropylbenzene	ND U	2.0	1	02/15/24 19:12	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 19:12	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-05-26D	**Units:**	ug/L
Lab Code:	K2401622-006	**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	02/15/24 19:12	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 19:12	
Methylene Chloride	ND U	2.0	1	02/15/24 19:12	
Naphthalene	ND U	2.0	1	02/15/24 19:12	
n-Propylbenzene	ND U	2.0	1	02/15/24 19:12	
Styrene	ND U	0.50	1	02/15/24 19:12	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:12	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:12	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 19:12	
Toluene	ND U	0.50	1	02/15/24 19:12	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 19:12	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 19:12	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 19:12	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 19:12	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 19:12	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 19:12	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 19:12	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 19:12	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 19:12	
Vinyl Chloride	ND U	0.50	1	02/15/24 19:12	
o-Xylene	ND U	0.50	1	02/15/24 19:12	
m,p-Xylenes	ND U	0.50	1	02/15/24 19:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 19:12	
Dibromofluoromethane	104	73 - 122	02/15/24 19:12	
Toluene-d8	99	65 - 144	02/15/24 19:12	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-06-FB1	**Units:**	ug/L
Lab Code:	K2401622-007	**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	02/15/24 19:35	
Benzene	ND U	0.50	1	02/15/24 19:35	
Bromobenzene	ND U	2.0	1	02/15/24 19:35	
Bromochloromethane	ND U	0.50	1	02/15/24 19:35	
Bromodichloromethane	ND U	0.50	1	02/15/24 19:35	
Bromoform	ND U	0.50	1	02/15/24 19:35	
Bromomethane	ND U	0.50	1	02/15/24 19:35	
2-Butanone (MEK)	ND U	20	1	02/15/24 19:35	
n-Butylbenzene	ND U	4.0	1	02/15/24 19:35	
sec-Butylbenzene	ND U	2.0	1	02/15/24 19:35	
tert-Butylbenzene	ND U	2.0	1	02/15/24 19:35	
Carbon Disulfide	ND U	0.50	1	02/15/24 19:35	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 19:35	
Chlorobenzene	ND U	0.50	1	02/15/24 19:35	
Chloroethane	ND U	0.50	1	02/15/24 19:35	
Chloroform	ND U	0.50	1	02/15/24 19:35	
Chloromethane	ND U	0.50	1	02/15/24 19:35	
2-Chlorotoluene	ND U	2.0	1	02/15/24 19:35	
4-Chlorotoluene	ND U	2.0	1	02/15/24 19:35	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 19:35	
Dibromochloromethane	ND U	0.50	1	02/15/24 19:35	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 19:35	
Dibromomethane	ND U	0.50	1	02/15/24 19:35	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 19:35	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 19:35	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 19:35	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 19:35	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 19:35	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:35	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:35	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 19:35	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 19:35	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 19:35	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 19:35	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:35	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:35	
Ethylbenzene	ND U	0.50	1	02/15/24 19:35	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 19:35	
2-Hexanone	ND U	20	1	02/15/24 19:35	
Isopropylbenzene	ND U	2.0	1	02/15/24 19:35	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 19:35	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-06-FB1	**Units:**	ug/L
Lab Code:	K2401622-007	**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	02/15/24 19:35	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 19:35	
Methylene Chloride	ND U	2.0	1	02/15/24 19:35	
Naphthalene	ND U	2.0	1	02/15/24 19:35	
n-Propylbenzene	ND U	2.0	1	02/15/24 19:35	
Styrene	ND U	0.50	1	02/15/24 19:35	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:35	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:35	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 19:35	
Toluene	ND U	0.50	1	02/15/24 19:35	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 19:35	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 19:35	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 19:35	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 19:35	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 19:35	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 19:35	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 19:35	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 19:35	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 19:35	
Vinyl Chloride	ND U	0.50	1	02/15/24 19:35	
o-Xylene	ND U	0.50	1	02/15/24 19:35	
m,p-Xylenes	ND U	0.50	1	02/15/24 19:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 19:35	
Dibromofluoromethane	104	73 - 122	02/15/24 19:35	
Toluene-d8	100	65 - 144	02/15/24 19:35	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 12:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-07-13D	**Units:**	ug/L
Lab Code:	K2401622-008	**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	02/15/24 19:58	
Benzene	ND U	0.50	1	02/15/24 19:58	
Bromobenzene	ND U	2.0	1	02/15/24 19:58	
Bromochloromethane	ND U	0.50	1	02/15/24 19:58	
Bromodichloromethane	ND U	0.50	1	02/15/24 19:58	
Bromoform	ND U	0.50	1	02/15/24 19:58	
Bromomethane	ND U	0.50	1	02/15/24 19:58	
2-Butanone (MEK)	ND U	20	1	02/15/24 19:58	
n-Butylbenzene	ND U	4.0	1	02/15/24 19:58	
sec-Butylbenzene	ND U	2.0	1	02/15/24 19:58	
tert-Butylbenzene	ND U	2.0	1	02/15/24 19:58	
Carbon Disulfide	ND U	0.50	1	02/15/24 19:58	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 19:58	
Chlorobenzene	ND U	0.50	1	02/15/24 19:58	
Chloroethane	ND U	0.50	1	02/15/24 19:58	
Chloroform	ND U	0.50	1	02/15/24 19:58	
Chloromethane	ND U	0.50	1	02/15/24 19:58	
2-Chlorotoluene	ND U	2.0	1	02/15/24 19:58	
4-Chlorotoluene	ND U	2.0	1	02/15/24 19:58	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 19:58	
Dibromochloromethane	ND U	0.50	1	02/15/24 19:58	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 19:58	
Dibromomethane	ND U	0.50	1	02/15/24 19:58	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 19:58	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 19:58	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 19:58	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 19:58	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 19:58	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:58	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 19:58	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 19:58	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 19:58	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 19:58	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 19:58	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:58	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 19:58	
Ethylbenzene	ND U	0.50	1	02/15/24 19:58	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 19:58	
2-Hexanone	ND U	20	1	02/15/24 19:58	
Isopropylbenzene	ND U	2.0	1	02/15/24 19:58	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 19:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 12:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-07-13D	**Units:**	ug/L
Lab Code:	K2401622-008	**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	02/15/24 19:58	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 19:58	
Methylene Chloride	ND U	2.0	1	02/15/24 19:58	
Naphthalene	ND U	2.0	1	02/15/24 19:58	
n-Propylbenzene	ND U	2.0	1	02/15/24 19:58	
Styrene	ND U	0.50	1	02/15/24 19:58	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:58	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 19:58	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 19:58	
Toluene	ND U	0.50	1	02/15/24 19:58	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 19:58	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 19:58	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 19:58	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 19:58	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 19:58	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 19:58	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 19:58	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 19:58	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 19:58	
Vinyl Chloride	ND U	0.50	1	02/15/24 19:58	
o-Xylene	ND U	0.50	1	02/15/24 19:58	
m,p-Xylenes	ND U	0.50	1	02/15/24 19:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 19:58	
Dibromofluoromethane	103	73 - 122	02/15/24 19:58	
Toluene-d8	99	65 - 144	02/15/24 19:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 13:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-08-27D	**Units:**	ug/L
Lab Code:	K2401622-009	**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	02/15/24 20:21	
Benzene	ND U	0.50	1	02/15/24 20:21	
Bromobenzene	ND U	2.0	1	02/15/24 20:21	
Bromochloromethane	ND U	0.50	1	02/15/24 20:21	
Bromodichloromethane	ND U	0.50	1	02/15/24 20:21	
Bromoform	ND U	0.50	1	02/15/24 20:21	
Bromomethane	ND U	0.50	1	02/15/24 20:21	
2-Butanone (MEK)	ND U	20	1	02/15/24 20:21	
n-Butylbenzene	ND U	4.0	1	02/15/24 20:21	
sec-Butylbenzene	ND U	2.0	1	02/15/24 20:21	
tert-Butylbenzene	ND U	2.0	1	02/15/24 20:21	
Carbon Disulfide	ND U	0.50	1	02/15/24 20:21	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 20:21	
Chlorobenzene	ND U	0.50	1	02/15/24 20:21	
Chloroethane	ND U	0.50	1	02/15/24 20:21	
Chloroform	ND U	0.50	1	02/15/24 20:21	
Chloromethane	ND U	0.50	1	02/15/24 20:21	
2-Chlorotoluene	ND U	2.0	1	02/15/24 20:21	
4-Chlorotoluene	ND U	2.0	1	02/15/24 20:21	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 20:21	
Dibromochloromethane	ND U	0.50	1	02/15/24 20:21	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 20:21	
Dibromomethane	ND U	0.50	1	02/15/24 20:21	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 20:21	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 20:21	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 20:21	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 20:21	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 20:21	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 20:21	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 20:21	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 20:21	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 20:21	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 20:21	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 20:21	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 20:21	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 20:21	
Ethylbenzene	ND U	0.50	1	02/15/24 20:21	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 20:21	
2-Hexanone	ND U	20	1	02/15/24 20:21	
Isopropylbenzene	ND U	2.0	1	02/15/24 20:21	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 20:21	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 13:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-08-27D	**Units:**	ug/L
Lab Code:	K2401622-009	**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	02/15/24 20:21	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 20:21	
Methylene Chloride	ND U	2.0	1	02/15/24 20:21	
Naphthalene	ND U	2.0	1	02/15/24 20:21	
n-Propylbenzene	ND U	2.0	1	02/15/24 20:21	
Styrene	ND U	0.50	1	02/15/24 20:21	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 20:21	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 20:21	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 20:21	
Toluene	ND U	0.50	1	02/15/24 20:21	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 20:21	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 20:21	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 20:21	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 20:21	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 20:21	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 20:21	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 20:21	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 20:21	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 20:21	
Vinyl Chloride	ND U	0.50	1	02/15/24 20:21	
o-Xylene	ND U	0.50	1	02/15/24 20:21	
m,p-Xylenes	ND U	0.50	1	02/15/24 20:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 20:21	
Dibromofluoromethane	101	73 - 122	02/15/24 20:21	
Toluene-d8	99	65 - 144	02/15/24 20:21	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 14:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-09-27I	**Units:**	ug/L
Lab Code:	K2401622-010	**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	02/16/24 13:14	
Benzene	ND U	0.50	1	02/16/24 13:14	
Bromobenzene	ND U	2.0	1	02/16/24 13:14	
Bromochloromethane	ND U	0.50	1	02/16/24 13:14	
Bromodichloromethane	ND U	0.50	1	02/16/24 13:14	
Bromoform	ND U	0.50	1	02/16/24 13:14	
Bromomethane	ND U	0.50	1	02/16/24 13:14	*
2-Butanone (MEK)	ND U	20	1	02/16/24 13:14	
n-Butylbenzene	ND U	4.0	1	02/16/24 13:14	
sec-Butylbenzene	ND U	2.0	1	02/16/24 13:14	
tert-Butylbenzene	ND U	2.0	1	02/16/24 13:14	
Carbon Disulfide	ND U	0.50	1	02/16/24 13:14	
Carbon Tetrachloride	ND U	0.50	1	02/16/24 13:14	
Chlorobenzene	ND U	0.50	1	02/16/24 13:14	
Chloroethane	ND U	0.50	1	02/16/24 13:14	
Chloroform	ND U	0.50	1	02/16/24 13:14	
Chloromethane	ND U	0.50	1	02/16/24 13:14	
2-Chlorotoluene	ND U	2.0	1	02/16/24 13:14	
4-Chlorotoluene	ND U	2.0	1	02/16/24 13:14	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/16/24 13:14	
Dibromochloromethane	ND U	0.50	1	02/16/24 13:14	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/16/24 13:14	
Dibromomethane	ND U	0.50	1	02/16/24 13:14	
1,2-Dichlorobenzene	ND U	0.50	1	02/16/24 13:14	
1,3-Dichlorobenzene	ND U	0.50	1	02/16/24 13:14	
1,4-Dichlorobenzene	ND U	0.50	1	02/16/24 13:14	
Dichlorodifluoromethane	ND U	0.50	1	02/16/24 13:14	
1,1-Dichloroethane	ND U	0.50	1	02/16/24 13:14	
cis-1,2-Dichloroethene	ND U	0.50	1	02/16/24 13:14	
trans-1,2-Dichloroethene	ND U	0.50	1	02/16/24 13:14	
1,2-Dichloropropane	ND U	0.50	1	02/16/24 13:14	
1,3-Dichloropropane	ND U	0.50	1	02/16/24 13:14	
2,2-Dichloropropane	ND U	0.50	1	02/16/24 13:14	
1,1-Dichloropropene	ND U	0.50	1	02/16/24 13:14	
cis-1,3-Dichloropropene	ND U	0.50	1	02/16/24 13:14	
trans-1,3-Dichloropropene	ND U	0.50	1	02/16/24 13:14	
Ethylbenzene	ND U	0.50	1	02/16/24 13:14	
Hexachlorobutadiene	ND U	2.0	1	02/16/24 13:14	
2-Hexanone	ND U	20	1	02/16/24 13:14	
Isopropylbenzene	ND U	2.0	1	02/16/24 13:14	
4-Isopropyltoluene	ND U	2.0	1	02/16/24 13:14	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 14:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-09-27I	**Units:**	ug/L
Lab Code:	K2401622-010	**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	02/16/24 13:14	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/16/24 13:14	
Methylene Chloride	ND U	2.0	1	02/16/24 13:14	
Naphthalene	ND U	2.0	1	02/16/24 13:14	
n-Propylbenzene	ND U	2.0	1	02/16/24 13:14	
Styrene	ND U	0.50	1	02/16/24 13:14	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/16/24 13:14	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/16/24 13:14	
Tetrachloroethene (PCE)	ND U	0.50	1	02/16/24 13:14	
Toluene	ND U	0.50	1	02/16/24 13:14	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/16/24 13:14	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/16/24 13:14	
1,1,2-Trichloroethane	ND U	0.50	1	02/16/24 13:14	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/16/24 13:14	
Trichloroethene (TCE)	ND U	0.50	1	02/16/24 13:14	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/16/24 13:14	
1,2,3-Trichloropropane	ND U	0.50	1	02/16/24 13:14	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/16/24 13:14	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/16/24 13:14	
Vinyl Chloride	ND U	0.50	1	02/16/24 13:14	
o-Xylene	ND U	0.50	1	02/16/24 13:14	
m,p-Xylenes	ND U	0.50	1	02/16/24 13:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/16/24 13:14	
Dibromofluoromethane	101	73 - 122	02/16/24 13:14	
Toluene-d8	99	65 - 144	02/16/24 13:14	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 15:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-10-13I	**Units:**	ug/L
Lab Code:	K2401622-011	**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	02/16/24 13:37	
Benzene	ND U	0.50	1	02/16/24 13:37	
Bromobenzene	ND U	2.0	1	02/16/24 13:37	
Bromochloromethane	ND U	0.50	1	02/16/24 13:37	
Bromodichloromethane	ND U	0.50	1	02/16/24 13:37	
Bromoform	ND U	0.50	1	02/16/24 13:37	
Bromomethane	ND U	0.50	1	02/16/24 13:37	*
2-Butanone (MEK)	ND U	20	1	02/16/24 13:37	
n-Butylbenzene	ND U	4.0	1	02/16/24 13:37	
sec-Butylbenzene	ND U	2.0	1	02/16/24 13:37	
tert-Butylbenzene	ND U	2.0	1	02/16/24 13:37	
Carbon Disulfide	ND U	0.50	1	02/16/24 13:37	
Carbon Tetrachloride	ND U	0.50	1	02/16/24 13:37	
Chlorobenzene	ND U	0.50	1	02/16/24 13:37	
Chloroethane	ND U	0.50	1	02/16/24 13:37	
Chloroform	ND U	0.50	1	02/16/24 13:37	
Chloromethane	ND U	0.50	1	02/16/24 13:37	
2-Chlorotoluene	ND U	2.0	1	02/16/24 13:37	
4-Chlorotoluene	ND U	2.0	1	02/16/24 13:37	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/16/24 13:37	
Dibromochloromethane	ND U	0.50	1	02/16/24 13:37	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/16/24 13:37	
Dibromomethane	ND U	0.50	1	02/16/24 13:37	
1,2-Dichlorobenzene	ND U	0.50	1	02/16/24 13:37	
1,3-Dichlorobenzene	ND U	0.50	1	02/16/24 13:37	
1,4-Dichlorobenzene	ND U	0.50	1	02/16/24 13:37	
Dichlorodifluoromethane	ND U	0.50	1	02/16/24 13:37	
1,1-Dichloroethane	ND U	0.50	1	02/16/24 13:37	
cis-1,2-Dichloroethene	ND U	0.50	1	02/16/24 13:37	
trans-1,2-Dichloroethene	ND U	0.50	1	02/16/24 13:37	
1,2-Dichloropropane	ND U	0.50	1	02/16/24 13:37	
1,3-Dichloropropane	ND U	0.50	1	02/16/24 13:37	
2,2-Dichloropropane	ND U	0.50	1	02/16/24 13:37	
1,1-Dichloropropene	ND U	0.50	1	02/16/24 13:37	
cis-1,3-Dichloropropene	ND U	0.50	1	02/16/24 13:37	
trans-1,3-Dichloropropene	ND U	0.50	1	02/16/24 13:37	
Ethylbenzene	ND U	0.50	1	02/16/24 13:37	
Hexachlorobutadiene	ND U	2.0	1	02/16/24 13:37	
2-Hexanone	ND U	20	1	02/16/24 13:37	
Isopropylbenzene	ND U	2.0	1	02/16/24 13:37	
4-Isopropyltoluene	ND U	2.0	1	02/16/24 13:37	

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 15:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-10-13I	**Units:**	ug/L
Lab Code:	K2401622-011	**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	02/16/24 13:37	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/16/24 13:37	
Methylene Chloride	ND U	2.0	1	02/16/24 13:37	
Naphthalene	ND U	2.0	1	02/16/24 13:37	
n-Propylbenzene	ND U	2.0	1	02/16/24 13:37	
Styrene	ND U	0.50	1	02/16/24 13:37	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/16/24 13:37	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/16/24 13:37	
Tetrachloroethene (PCE)	ND U	0.50	1	02/16/24 13:37	
Toluene	ND U	0.50	1	02/16/24 13:37	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/16/24 13:37	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/16/24 13:37	
1,1,2-Trichloroethane	ND U	0.50	1	02/16/24 13:37	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/16/24 13:37	
Trichloroethene (TCE)	ND U	0.50	1	02/16/24 13:37	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/16/24 13:37	
1,2,3-Trichloropropane	ND U	0.50	1	02/16/24 13:37	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/16/24 13:37	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/16/24 13:37	
Vinyl Chloride	ND U	0.50	1	02/16/24 13:37	
o-Xylene	ND U	0.50	1	02/16/24 13:37	
m,p-Xylenes	ND U	0.50	1	02/16/24 13:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	68 - 117	02/16/24 13:37	
Dibromofluoromethane	103	73 - 122	02/16/24 13:37	
Toluene-d8	99	65 - 144	02/16/24 13:37	

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:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 08:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-01-5D	**Basis:**	NA
Lab Code:	K2401622-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:49	02/15/24	
Manganese	6010C	**1.1**	ug/L	1.1	1	02/21/24 09:49	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 09:45
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-02-17D	**Basis:**	NA
Lab Code:	K2401622-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**320**	ug/L	42	1	02/21/24 09:52	02/15/24	
Manganese	6010C	**3860**	ug/L	1.1	1	02/21/24 09:52	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-03-17I	**Basis:**	NA
Lab Code:	K2401622-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**7830**	ug/L	42	1	02/21/24 10:02	02/15/24	
Manganese	6010C	**1700**	ug/L	1.1	1	02/21/24 10:02	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-04-DUP1	**Basis:**	NA
Lab Code:	K2401622-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**7850**	ug/L	42	1	02/21/24 10:05	02/15/24	
Manganese	6010C	**1700**	ug/L	1.1	1	02/21/24 10:05	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-05-26D	**Basis:**	NA
Lab Code:	K2401622-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:08	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 10:08	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-06-FB1	**Basis:**	NA
Lab Code:	K2401622-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:10	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 10:10	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 12:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-07-13D	**Basis:**	NA
Lab Code:	K2401622-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:13	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 10:13	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 13:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-08-27D	**Basis:**	NA
Lab Code:	K2401622-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:16	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 10:16	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 14:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-09-27I	**Basis:**	NA
Lab Code:	K2401622-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:19	02/15/24	
Manganese	6010C	**128**	ug/L	1.1	1	02/21/24 10:19	02/15/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 15:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-10-13I	**Basis:**	NA
Lab Code:	K2401622-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 10:21	02/15/24	
Manganese	6010C	**3.4**	ug/L	1.1	1	02/21/24 10:21	02/15/24	

General Chemistry

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:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 08:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-01-5D	**Basis:**	NA
Lab Code:	K2401622-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.54**	mg/L	0.20	2	02/14/24 19:55	
Nitrate as Nitrogen	300.0	**1.66**	mg/L	0.10	2	02/14/24 19:55	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 08:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-01-5D	**Basis:**	NA
Lab Code:	K2401622-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**217**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 09:45
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-02-17D	**Basis:**	NA
Lab Code:	K2401622-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**8.33**	mg/L	0.20	2	02/14/24 20:30	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/14/24 20:30	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 09:45
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-02-17D	**Basis:**	NA
Lab Code:	K2401622-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**179**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-03-17I	**Basis:**	NA
Lab Code:	K2401622-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.49**	mg/L	0.20	2	02/14/24 20:39	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/14/24 20:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-03-17I	**Basis:**	NA
Lab Code:	K2401622-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**191**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-04-DUP1	**Basis:**	NA
Lab Code:	K2401622-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.48**	mg/L	0.20	2	02/14/24 20:47	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/14/24 20:47	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-04-DUP1	**Basis:**	NA
Lab Code:	K2401622-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**191**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-05-26D	**Basis:**	NA
Lab Code:	K2401622-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.68**	mg/L	0.20	2	02/14/24 20:56	
Nitrate as Nitrogen	300.0	**4.21**	mg/L	0.10	2	02/14/24 20:56	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:35
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-05-26D	**Basis:**	NA
Lab Code:	K2401622-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**165**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-06-FB1	**Basis:**	NA
Lab Code:	K2401622-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/14/24 21:05	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/14/24 21:05	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 11:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-06-FB1	**Basis:**	NA
Lab Code:	K2401622-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 12:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-07-13D	**Basis:**	NA
Lab Code:	K2401622-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.63**	mg/L	0.20	2	02/14/24 21:39	
Nitrate as Nitrogen	300.0	**4.40**	mg/L	0.10	2	02/14/24 21:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 12:30
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-031324-07-13D	**Basis:**	NA
Lab Code:	K2401622-008		

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	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 13:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-08-27D	**Basis:**	NA
Lab Code:	K2401622-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.90**	mg/L	0.20	2	02/14/24 21:48	
Nitrate as Nitrogen	300.0	**4.27**	mg/L	0.10	2	02/14/24 21:48	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 13:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-08-27D	**Basis:**	NA
Lab Code:	K2401622-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**196**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 14:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-09-27I	**Basis:**	NA
Lab Code:	K2401622-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.00**	mg/L	0.20	2	02/14/24 21:57	
Nitrate as Nitrogen	300.0	**2.37**	mg/L	0.10	2	02/14/24 21:57	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 14:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-09-27I	**Basis:**	NA
Lab Code:	K2401622-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**260**	mg/L	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 15:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-10-13I	**Basis:**	NA
Lab Code:	K2401622-011		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**6.25**	mg/L	0.20	2	02/14/24 22:05	
Nitrate as Nitrogen	300.0	**3.61**	mg/L	0.10	2	02/14/24 22:05	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24 15:20
Sample Matrix:	Ground Water	**Date Received:**	02/14/24 11:55
Sample Name:	LB-021324-10-13I	**Basis:**	NA
Lab Code:	K2401622-011		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**188**	mg/L	10	1	02/16/24 12:11	

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:** K2401622
Project: Leichner Landfill/04224030.13
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	K2401622-001	96	104	98
LB-021324-01-5D	K2401622-002	96	101	99
LB-021324-02-17D	K2401622-003	94	103	99
LB-021324-03-17I	K2401622-004	97	101	100
LB-021324-04-DUP1	K2401622-005	96	102	100
LB-021324-05-26D	K2401622-006	96	104	99
LB-031324-06-FB1	K2401622-007	96	104	100
LB-031324-07-13D	K2401622-008	96	103	99
LB-021324-08-27D	K2401622-009	96	101	99
LB-021324-09-27I	K2401622-010	96	101	99
LB-021324-10-13I	K2401622-011	92	103	99
Lab Control Sample	KQ2402449-03	103	101	103
Duplicate Lab Control Sample	KQ2402449-04	105	98	102
Method Blank	KQ2402449-05	96	104	100
Lab Control Sample	KQ2402772-03	102	101	104
Duplicate Lab Control Sample	KQ2402772-04	103	104	104
Method Blank	KQ2402772-05	95	103	102

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402449-05	**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	02/15/24 12:46	
Benzene	ND U	0.50	1	02/15/24 12:46	
Bromobenzene	ND U	2.0	1	02/15/24 12:46	
Bromochloromethane	ND U	0.50	1	02/15/24 12:46	
Bromodichloromethane	ND U	0.50	1	02/15/24 12:46	
Bromoform	ND U	0.50	1	02/15/24 12:46	
Bromomethane	ND U	0.50	1	02/15/24 12:46	
2-Butanone (MEK)	ND U	20	1	02/15/24 12:46	
n-Butylbenzene	ND U	4.0	1	02/15/24 12:46	
sec-Butylbenzene	ND U	2.0	1	02/15/24 12:46	
tert-Butylbenzene	ND U	2.0	1	02/15/24 12:46	
Carbon Disulfide	ND U	0.50	1	02/15/24 12:46	
Carbon Tetrachloride	ND U	0.50	1	02/15/24 12:46	
Chlorobenzene	ND U	0.50	1	02/15/24 12:46	
Chloroethane	ND U	0.50	1	02/15/24 12:46	
Chloroform	ND U	0.50	1	02/15/24 12:46	
Chloromethane	ND U	0.50	1	02/15/24 12:46	
2-Chlorotoluene	ND U	2.0	1	02/15/24 12:46	
4-Chlorotoluene	ND U	2.0	1	02/15/24 12:46	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/15/24 12:46	
Dibromochloromethane	ND U	0.50	1	02/15/24 12:46	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/15/24 12:46	
Dibromomethane	ND U	0.50	1	02/15/24 12:46	
1,2-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
1,3-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
1,4-Dichlorobenzene	ND U	0.50	1	02/15/24 12:46	
Dichlorodifluoromethane	ND U	0.50	1	02/15/24 12:46	
1,1-Dichloroethane	ND U	0.50	1	02/15/24 12:46	
cis-1,2-Dichloroethene	ND U	0.50	1	02/15/24 12:46	
trans-1,2-Dichloroethene	ND U	0.50	1	02/15/24 12:46	
1,2-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
1,3-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
2,2-Dichloropropane	ND U	0.50	1	02/15/24 12:46	
1,1-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
cis-1,3-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
trans-1,3-Dichloropropene	ND U	0.50	1	02/15/24 12:46	
Ethylbenzene	ND U	0.50	1	02/15/24 12:46	
Hexachlorobutadiene	ND U	2.0	1	02/15/24 12:46	
2-Hexanone	ND U	20	1	02/15/24 12:46	
Isopropylbenzene	ND U	2.0	1	02/15/24 12:46	
4-Isopropyltoluene	ND U	2.0	1	02/15/24 12:46	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402449-05	**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	02/15/24 12:46	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/15/24 12:46	
Methylene Chloride	ND U	2.0	1	02/15/24 12:46	
Naphthalene	ND U	2.0	1	02/15/24 12:46	
n-Propylbenzene	ND U	2.0	1	02/15/24 12:46	
Styrene	ND U	0.50	1	02/15/24 12:46	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/15/24 12:46	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/15/24 12:46	
Tetrachloroethene (PCE)	ND U	0.50	1	02/15/24 12:46	
Toluene	ND U	0.50	1	02/15/24 12:46	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/15/24 12:46	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/15/24 12:46	
1,1,2-Trichloroethane	ND U	0.50	1	02/15/24 12:46	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/15/24 12:46	
Trichloroethene (TCE)	ND U	0.50	1	02/15/24 12:46	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/15/24 12:46	
1,2,3-Trichloropropane	ND U	0.50	1	02/15/24 12:46	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/15/24 12:46	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/15/24 12:46	
Vinyl Chloride	ND U	0.50	1	02/15/24 12:46	
o-Xylene	ND U	0.50	1	02/15/24 12:46	
m,p-Xylenes	ND U	0.50	1	02/15/24 12:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/15/24 12:46	
Dibromofluoromethane	104	73 - 122	02/15/24 12:46	
Toluene-d8	100	65 - 144	02/15/24 12:46	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402772-05	**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	02/16/24 12:52	
Benzene	ND U	0.50	1	02/16/24 12:52	
Bromobenzene	ND U	2.0	1	02/16/24 12:52	
Bromochloromethane	ND U	0.50	1	02/16/24 12:52	
Bromodichloromethane	ND U	0.50	1	02/16/24 12:52	
Bromoform	ND U	0.50	1	02/16/24 12:52	
Bromomethane	ND U	0.50	1	02/16/24 12:52	
2-Butanone (MEK)	ND U	20	1	02/16/24 12:52	
n-Butylbenzene	ND U	4.0	1	02/16/24 12:52	
sec-Butylbenzene	ND U	2.0	1	02/16/24 12:52	
tert-Butylbenzene	ND U	2.0	1	02/16/24 12:52	
Carbon Disulfide	ND U	0.50	1	02/16/24 12:52	
Carbon Tetrachloride	ND U	0.50	1	02/16/24 12:52	
Chlorobenzene	ND U	0.50	1	02/16/24 12:52	
Chloroethane	ND U	0.50	1	02/16/24 12:52	
Chloroform	ND U	0.50	1	02/16/24 12:52	
Chloromethane	ND U	0.50	1	02/16/24 12:52	
2-Chlorotoluene	ND U	2.0	1	02/16/24 12:52	
4-Chlorotoluene	ND U	2.0	1	02/16/24 12:52	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/16/24 12:52	
Dibromochloromethane	ND U	0.50	1	02/16/24 12:52	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/16/24 12:52	
Dibromomethane	ND U	0.50	1	02/16/24 12:52	
1,2-Dichlorobenzene	ND U	0.50	1	02/16/24 12:52	
1,3-Dichlorobenzene	ND U	0.50	1	02/16/24 12:52	
1,4-Dichlorobenzene	ND U	0.50	1	02/16/24 12:52	
Dichlorodifluoromethane	ND U	0.50	1	02/16/24 12:52	
1,1-Dichloroethane	ND U	0.50	1	02/16/24 12:52	
cis-1,2-Dichloroethene	ND U	0.50	1	02/16/24 12:52	
trans-1,2-Dichloroethene	ND U	0.50	1	02/16/24 12:52	
1,2-Dichloropropane	ND U	0.50	1	02/16/24 12:52	
1,3-Dichloropropane	ND U	0.50	1	02/16/24 12:52	
2,2-Dichloropropane	ND U	0.50	1	02/16/24 12:52	
1,1-Dichloropropene	ND U	0.50	1	02/16/24 12:52	
cis-1,3-Dichloropropene	ND U	0.50	1	02/16/24 12:52	
trans-1,3-Dichloropropene	ND U	0.50	1	02/16/24 12:52	
Ethylbenzene	ND U	0.50	1	02/16/24 12:52	
Hexachlorobutadiene	ND U	2.0	1	02/16/24 12:52	
2-Hexanone	ND U	20	1	02/16/24 12:52	
Isopropylbenzene	ND U	2.0	1	02/16/24 12:52	
4-Isopropyltoluene	ND U	2.0	1	02/16/24 12:52	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2402772-05	**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	02/16/24 12:52	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/16/24 12:52	
Methylene Chloride	ND U	2.0	1	02/16/24 12:52	
Naphthalene	ND U	2.0	1	02/16/24 12:52	
n-Propylbenzene	ND U	2.0	1	02/16/24 12:52	
Styrene	ND U	0.50	1	02/16/24 12:52	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/16/24 12:52	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/16/24 12:52	
Tetrachloroethene (PCE)	ND U	0.50	1	02/16/24 12:52	
Toluene	ND U	0.50	1	02/16/24 12:52	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/16/24 12:52	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/16/24 12:52	
1,1,2-Trichloroethane	ND U	0.50	1	02/16/24 12:52	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/16/24 12:52	
Trichloroethene (TCE)	ND U	0.50	1	02/16/24 12:52	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/16/24 12:52	
1,2,3-Trichloropropane	ND U	0.50	1	02/16/24 12:52	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/16/24 12:52	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/16/24 12:52	
Vinyl Chloride	ND U	0.50	1	02/16/24 12:52	
o-Xylene	ND U	0.50	1	02/16/24 12:52	
m,p-Xylenes	ND U	0.50	1	02/16/24 12:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	68 - 117	02/16/24 12:52	
Dibromofluoromethane	103	73 - 122	02/16/24 12:52	
Toluene-d8	102	65 - 144	02/16/24 12:52	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/15/24
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:	832512

	Lab Control Sample KQ2402449-03			Duplicate Lab Control Sample KQ2402449-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.91	10.0	89	9.16	10.0	92	66-124	3	30
1,1,1-Trichloroethane (TCA)	9.96	10.0	100	10.1	10.0	101	59-136	1	30
1,1,2,2-Tetrachloroethane	8.80	10.0	88	9.23	10.0	92	70-127	5	30
1,1,2-Trichloroethane	8.87	10.0	89	9.25	10.0	93	74-118	4	30
1,1-Dichloroethane	9.53	10.0	95	9.54	10.0	95	68-132	<1	30
1,1-Dichloropropene	10.0	10.0	100	10.3	10.0	103	59-134	3	30
1,2,3-Trichlorobenzene	9.32	10.0	93	10.2	10.0	102	68-120	9	30
1,2,3-Trichloropropane	8.18	10.0	82	8.68	10.0	87	69-123	6	30
1,2,4-Trichlorobenzene	9.12	10.0	91	9.74	10.0	97	58-126	7	30
1,2,4-Trimethylbenzene	10.1	10.0	101	10.4	10.0	104	63-122	3	30
1,2-Dibromo-3-chloropropane	8.33	10.0	83	9.19	10.0	92	55-132	10	30
1,2-Dibromoethane (EDB)	8.75	10.0	88	9.12	10.0	91	74-118	4	30
1,2-Dichlorobenzene	9.04	10.0	90	9.46	10.0	95	72-115	5	30
1,2-Dichloropropane	9.20	10.0	92	9.24	10.0	92	67-126	<1	30
1,3,5-Trimethylbenzene	9.80	10.0	98	10.2	10.0	102	62-126	4	30
1,3-Dichlorobenzene	9.01	10.0	90	9.39	10.0	94	70-116	4	30
1,3-Dichloropropane	8.82	10.0	88	9.04	10.0	90	75-116	2	30
1,4-Dichlorobenzene	9.06	10.0	91	9.45	10.0	95	73-115	4	30
2,2-Dichloropropane	9.87	10.0	99	9.95	10.0	100	37-145	<1	30
2-Butanone (MEK)	53.5	50.0	107	54.9	50.0	110	71-149	3	30
2-Chlorotoluene	9.78	10.0	98	9.99	10.0	100	55-131	2	30
2-Hexanone	54.6	50.0	109	56.2	50.0	112	59-131	3	30
4-Chlorotoluene	9.47	10.0	95	9.80	10.0	98	66-121	3	30
4-Isopropyltoluene	10.6	10.0	106	11.0	10.0	110	61-128	4	30
4-Methyl-2-pentanone (MIBK)	52.7	50.0	105	55.1	50.0	110	64-134	4	30
Acetone	56.2	50.0	112	54.7	50.0	109	68-135	3	30
Benzene	9.45	10.0	95	9.35	10.0	94	69-124	1	30
Bromobenzene	8.96	10.0	90	9.19	10.0	92	72-116	3	30
Bromochloromethane	9.81	10.0	98	9.57	10.0	96	75-131	2	30
Bromodichloromethane	9.15	10.0	92	9.22	10.0	92	63-129	<1	30
Bromoform	8.49	10.0	85	8.79	10.0	88	52-144	3	30
Bromomethane	10.7	10.0	107	10.9	10.0	109	35-113	2	30
Carbon Disulfide	18.2	20.0	91	18.3	20.0	91	46-144	<1	30
Carbon Tetrachloride	9.87	10.0	99	9.95	10.0	100	55-140	<1	30
Chlorobenzene	9.33	10.0	93	9.45	10.0	95	72-116	1	30
Chloroethane	9.78	10.0	98	9.66	10.0	97	58-134	1	30
Chloroform	9.08	10.0	91	9.16	10.0	92	70-129	<1	30
Chloromethane	8.81	10.0	88	8.90	10.0	89	34-130	1	30
cis-1,2-Dichloroethene	9.18	10.0	92	9.37	10.0	94	71-118	2	30
cis-1,3-Dichloropropene	9.49	10.0	95	9.65	10.0	97	62-132	2	30
Dibromochloromethane	8.29	10.0	83	8.62	10.0	86	67-126	4	30

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/15/24
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:	832512

	Lab Control Sample KQ2402449-03			Duplicate Lab Control Sample KQ2402449-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.21	10.0	92	9.28	10.0	93	69-128	<1	30
Dichlorodifluoromethane	8.49	10.0	85	8.51	10.0	85	32-124	<1	30
Ethylbenzene	9.79	10.0	98	9.97	10.0	100	67-121	2	30
Hexachlorobutadiene	9.20	10.0	92	9.65	10.0	97	57-119	5	30
Isopropylbenzene	9.45	10.0	95	9.68	10.0	97	67-129	2	30
m,p-Xylenes	20.0	20.0	100	20.4	20.0	102	69-121	2	30
Methyl tert-Butyl Ether	9.36	10.0	94	9.81	10.0	98	54-126	5	30
Methylene Chloride	9.19	10.0	92	9.25	10.0	93	71-122	<1	30
Naphthalene	9.31	10.0	93	9.98	10.0	100	64-126	7	30
n-Butylbenzene	9.93	10.0	99	10.5	10.0	105	55-130	5	30
n-Propylbenzene	10.0	10.0	100	10.3	10.0	103	61-124	3	30
o-Xylene	9.65	10.0	97	10.0	10.0	100	71-119	4	30
sec-Butylbenzene	10.3	10.0	103	10.7	10.0	107	59-128	4	30
Styrene	9.49	10.0	95	9.83	10.0	98	74-121	4	30
tert-Butylbenzene	10.0	10.0	100	10.3	10.0	103	61-127	3	30
Tetrachloroethene (PCE)	9.62	10.0	96	9.75	10.0	98	62-126	1	30
Toluene	9.60	10.0	96	9.80	10.0	98	69-124	2	30
trans-1,2-Dichloroethene	9.45	10.0	95	9.60	10.0	96	67-125	2	30
trans-1,3-Dichloropropene	9.55	10.0	96	9.61	10.0	96	59-125	<1	30
Trichloroethene (TCE)	9.58	10.0	96	9.58	10.0	96	67-128	<1	30
Trichlorofluoromethane (CFC 11)	10.2	10.0	102	10.3	10.0	103	52-141	1	30
Vinyl Chloride	10.1	10.0	101	10.2	10.0	102	55-123	<1	30

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/16/24
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:	832660

	Lab Control Sample KQ2402772-03			Duplicate Lab Control Sample KQ2402772-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.92	10.0	89	9.18	10.0	92	66-124	3	30
1,1,1-Trichloroethane (TCA)	9.77	10.0	98	10.1	10.0	101	59-136	4	30
1,1,2,2-Tetrachloroethane	8.99	10.0	90	9.93	10.0	99	70-127	10	30
1,1,2-Trichloroethane	8.96	10.0	90	9.63	10.0	96	74-118	7	30
1,1-Dichloroethane	9.83	10.0	98	10.1	10.0	101	68-132	3	30
1,1-Dichloropropene	10.0	10.0	100	10.4	10.0	104	59-134	4	30
1,2,3-Trichlorobenzene	8.84	10.0	88	10.5	10.0	105	68-120	17	30
1,2,3-Trichloropropane	8.56	10.0	86	9.03	10.0	90	69-123	5	30
1,2,4-Trichlorobenzene	8.88	10.0	89	9.98	10.0	100	58-126	12	30
1,2,4-Trimethylbenzene	10.1	10.0	101	10.4	10.0	104	63-122	3	30
1,2-Dibromo-3-chloropropane	7.74	10.0	77	8.85	10.0	89	55-132	13	30
1,2-Dibromoethane (EDB)	8.74	10.0	87	9.47	10.0	95	74-118	8	30
1,2-Dichlorobenzene	9.07	10.0	91	9.40	10.0	94	72-115	4	30
1,2-Dichloropropane	9.60	10.0	96	9.79	10.0	98	67-126	2	30
1,3,5-Trimethylbenzene	9.86	10.0	99	10.2	10.0	102	62-126	3	30
1,3-Dichlorobenzene	8.98	10.0	90	9.47	10.0	95	70-116	5	30
1,3-Dichloropropane	8.96	10.0	90	9.43	10.0	94	75-116	5	30
1,4-Dichlorobenzene	9.19	10.0	92	9.59	10.0	96	73-115	4	30
2,2-Dichloropropane	10.2	10.0	102	10.3	10.0	103	37-145	<1	30
2-Butanone (MEK)	54.6	50.0	109	61.2	50.0	122	71-149	11	30
2-Chlorotoluene	9.79	10.0	98	10.2	10.0	102	55-131	4	30
2-Hexanone	56.5	50.0	113	59.4	50.0	119	59-131	5	30
4-Chlorotoluene	9.62	10.0	96	10.0	10.0	100	66-121	4	30
4-Isopropyltoluene	10.7	10.0	107	10.8	10.0	108	61-128	1	30
4-Methyl-2-pentanone (MIBK)	54.1	50.0	108	59.8	50.0	120	64-134	10	30
Acetone	57.5	50.0	115	59.5	50.0	119	68-135	4	30
Benzene	9.64	10.0	96	10.1	10.0	101	69-124	4	30
Bromobenzene	9.05	10.0	91	9.36	10.0	94	72-116	3	30
Bromochloromethane	9.75	10.0	98	10.1	10.0	101	75-131	3	30
Bromodichloromethane	9.11	10.0	91	9.52	10.0	95	63-129	4	30
Bromoform	8.32	10.0	83	8.98	10.0	90	52-144	8	30
Bromomethane	11.0	10.0	110	11.0	10.0	110	35-113	<1	30
Carbon Disulfide	18.4	20.0	92	18.8	20.0	94	46-144	2	30
Carbon Tetrachloride	9.75	10.0	98	10.1	10.0	101	55-140	4	30
Chlorobenzene	9.28	10.0	93	9.42	10.0	94	72-116	1	30
Chloroethane	9.61	10.0	96	9.83	10.0	98	58-134	2	30
Chloroform	9.35	10.0	94	9.73	10.0	97	70-129	4	30
Chloromethane	8.91	10.0	89	9.21	10.0	92	34-130	3	30
cis-1,2-Dichloroethene	9.30	10.0	93	9.83	10.0	98	71-118	6	30
cis-1,3-Dichloropropene	9.57	10.0	96	10.1	10.0	101	62-132	6	30
Dibromochloromethane	8.27	10.0	83	8.77	10.0	88	67-126	6	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/16/24
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:	832660

	Lab Control Sample KQ2402772-03			Duplicate Lab Control Sample KQ2402772-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.11	10.0	91	9.92	10.0	99	69-128	9	30
Dichlorodifluoromethane	8.62	10.0	86	8.56	10.0	86	32-124	<1	30
Ethylbenzene	9.43	10.0	94	9.77	10.0	98	67-121	4	30
Hexachlorobutadiene	8.82	10.0	88	9.44	10.0	94	57-119	7	30
Isopropylbenzene	9.36	10.0	94	9.49	10.0	95	67-129	1	30
m,p-Xylenes	19.8	20.0	99	20.2	20.0	101	69-121	2	30
Methyl tert-Butyl Ether	9.30	10.0	93	10.4	10.0	104	54-126	11	30
Methylene Chloride	9.49	10.0	95	9.68	10.0	97	71-122	2	30
Naphthalene	8.83	10.0	88	10.3	10.0	103	64-126	15	30
n-Butylbenzene	10.1	10.0	101	10.3	10.0	103	55-130	2	30
n-Propylbenzene	10.2	10.0	102	10.3	10.0	103	61-124	1	30
o-Xylene	9.63	10.0	96	9.86	10.0	99	71-119	2	30
sec-Butylbenzene	10.4	10.0	104	10.7	10.0	107	59-128	3	30
Styrene	9.36	10.0	94	9.79	10.0	98	74-121	4	30
tert-Butylbenzene	10.1	10.0	101	10.4	10.0	104	61-127	3	30
Tetrachloroethene (PCE)	9.47	10.0	95	9.52	10.0	95	62-126	<1	30
Toluene	9.82	10.0	98	10.0	10.0	100	69-124	2	30
trans-1,2-Dichloroethene	9.70	10.0	97	9.93	10.0	99	67-125	2	30
trans-1,3-Dichloropropene	9.46	10.0	95	9.93	10.0	99	59-125	5	30
Trichloroethene (TCE)	9.62	10.0	96	10.0	10.0	100	67-128	4	30
Trichlorofluoromethane (CFC 11)	10.3	10.0	103	10.5	10.0	105	52-141	2	30
Vinyl Chloride	10.1	10.0	101	10.3	10.0	103	55-123	1	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:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2402284-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/21/24 09:06	02/15/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/21/24 09:06	02/15/24	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401622
Date Analyzed: 02/21/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2402284-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2490	2500	99	80-120
Manganese	6010C	1240	1250	99	80-120

General Chemistry

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:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401622-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	02/14/24 15:53	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/14/24 15:53	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401622-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	10	1	02/16/24 12:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401622-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	02/14/24 19:38	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/14/24 19:38	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401622
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401622-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	10	1	02/16/24 12:11	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request:K2401622
Date Collected:02/13/24
Date Received:02/14/24
Date Analyzed:2/14/24

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: LB-021324-01-5D
Lab Code: K2401622-002

Units:mg/L
Basis:NA

			Matrix Spike K2401622-002MS			Duplicate Matrix Spike K2401622-002DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	7.54	22.8	16.0	96	22.8	16.0	96	90-110	<1	20
Nitrate as Nitrogen	300.0	1.66	9.64	8.00	100	9.64	8.00	100	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:**	K2401622
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24
Sample Matrix:	Ground Water	**Date Received:**	02/14/24
		Date Analyzed:	02/14/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021324-01-5D	**Units:**	mg/L
Lab Code:	K2401622-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401622-002DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	7.54	7.52	7.53	<1	20
Nitrate as Nitrogen	300.0	0.10	1.66	1.65	1.65	<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:**	K2401622
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/13/24
Sample Matrix:	Ground Water	**Date Received:**	02/14/24
		Date Analyzed:	02/16/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021324-09-27I	**Units:**	mg/L
Lab Code:	K2401622-010	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401622-010DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	10	260	264	262	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
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401622
Date Analyzed: 02/14/24 - 02/16/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401622-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.78	5.00	96	90-110
Nitrate as Nitrogen	300.0	2.52	2.50	101	90-110
Solids, Total Dissolved	SM 2540 C	1420	1430	99	85-115

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401622
Date Analyzed: 02/14/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401622-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.82	5.00	96	90-110
Nitrate as Nitrogen	300.0	2.54	2.50	102	90-110

March 01, 2024 Service Request No:K2401667

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, 2024
For your reference, these analyses have been assigned our service request number **K2401667.**

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
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www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

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

Service Request: K2401667
Date Received: 02/15/2024

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 02/15/2024. 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:

No significant anomalies were noted with this analysis.

Approved by _____ Date 03/01/2024

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-021424-01-5S			Lab ID: K2401667-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.62			0.20	mg/L	300.0
Nitrate as Nitrogen	5.03			0.10	mg/L	300.0
Solids, Total Dissolved	153			10	mg/L	SM 2540 C

CLIENT ID: LB-021424-03-26I			Lab ID: K2401667-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.40			0.20	mg/L	300.0
Manganese, Dissolved	3.0			1.1	ug/L	6010C
Nitrate as Nitrogen	4.03			0.10	mg/L	300.0
Solids, Total Dissolved	184			10	mg/L	SM 2540 C

CLIENT ID: LB-021424-04-6S			Lab ID: K2401667-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.61			0.20	mg/L	300.0
Nitrate as Nitrogen	3.27			0.10	mg/L	300.0
Solids, Total Dissolved	168			10	mg/L	SM 2540 C

CLIENT ID: LB-021424-05-20S			Lab ID: K2401667-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	28.4			1.0	mg/L	300.0
Iron, Dissolved	85			42	ug/L	6010C
Manganese, Dissolved	652			1.1	ug/L	6010C
Solids, Total Dissolved	257			10	mg/L	SM 2540 C

CLIENT ID: LB-021424-06-DUP1			Lab ID: K2401667-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	28.9			1.0	mg/L	300.0
Iron, Dissolved	96			42	ug/L	6010C
Manganese, Dissolved	651			1.1	ug/L	6010C
Solids, Total Dissolved	257			10	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:**K2401667

Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2401667-001	TB3	2/14/2024	0700
K2401667-002	LB-021424-01-5S	2/14/2024	0910
K2401667-003	LB-021424-02-FB1	2/14/2024	0920
K2401667-004	LB-021424-03-26I	2/14/2024	1040
K2401667-005	LB-021424-04-6S	2/14/2024	1155
K2401667-006	LB-021424-05-20S	2/14/2024	1300
K2401667-007	LB-021424-06-DUP1	2/14/2024	1310

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

KZ401667

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB 3	2/14/24	0700	W		2	X						Metals are Field Filtered	
2	LB-021424-01-5S	2/14/24	0910	W		5	X	X	X	X	X			
3	LB-021424-02-FB1	2/14/24	0920	W		5	X	X	X	X	X			
4	LB-021424-03-26I	2/14/24	1040	W		5	X	X	X	X	X			
5	LB-021424-04-6S	2/14/24	1155	W		5	X	X	X	X	X			
6	LB-021424-05-20S	2/14/24	1300	W		5	X	X	X	X	X			
7	LB-021424-06-DUP1	2/14/24	1310	W		5	X	X	X	X	X			
8														
9														
10														

Sampler(s): Please Print & Sign: J. Mack

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐10 Wk Days ☐5 Wk Days ☐3 Wk Days ☐2 Wk Days ☐24 Hour ☑Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
	2/15/24	0850		2/15/24	0850	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
	2-15-24	1000	ALS	2/15/24	1000	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐Level II: Standard QC	☐Level III: Raw Data
		☐TRRP LRC	☐TRRP Level IV
		☐Level IV: SW846 Methods/CLP like	
		☐Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM HH

Cooler Receipt and Preservation Form

Client SCS Service Request K2401667

Received: 2/15/24 Opened: 2/15/24 By: VM Unloaded: 2/15/24 By: VM

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
	1.7	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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD

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

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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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:** K2401667
Project: Leichner Landfill/04224030.13

Sample Name: TB3 **Date Collected:** 02/14/24
Lab Code: K2401667-001 **Date Received:** 02/15/24
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		GROETTGER

Sample Name: LB-021424-01-5S **Date Collected:** 02/14/24
Lab Code: K2401667-002 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Sample Name: LB-021424-02-FB1 **Date Collected:** 02/14/24
Lab Code: K2401667-003 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Sample Name: LB-021424-03-26I **Date Collected:** 02/14/24
Lab Code: K2401667-004 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Client: SCS Engineers **Service Request:** K2401667
Project: Leichner Landfill/04224030.13

Sample Name: LB-021424-04-6S **Date Collected:** 02/14/24
Lab Code: K2401667-005 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Sample Name: LB-021424-05-20S **Date Collected:** 02/14/24
Lab Code: K2401667-006 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Sample Name: LB-021424-05-20S **Date Collected:** 02/14/24
Lab Code: K2401667-006.R01 **Date Received:** 02/15/24
Sample Matrix: Ground Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

Sample Name: LB-021424-06-DUP1 **Date Collected:** 02/14/24
Lab Code: K2401667-007 **Date Received:** 02/15/24
Sample Matrix: Ground Water

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

Analyst Summary report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-021424-06-DUP1	**Date Collected:**	02/14/24
Lab Code:	K2401667-007.R01	**Date Received:**	02/15/24
Sample Matrix:	Ground Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

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
www.alsglobal.com

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	TB3	**Units:**	ug/L
Lab Code:	K2401667-001	**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	02/23/24 14:44	
Benzene	ND U	0.50	1	02/23/24 14:44	
Bromobenzene	ND U	2.0	1	02/23/24 14:44	
Bromochloromethane	ND U	0.50	1	02/23/24 14:44	
Bromodichloromethane	ND U	0.50	1	02/23/24 14:44	
Bromoform	ND U	0.50	1	02/23/24 14:44	
Bromomethane	ND U	0.50	1	02/23/24 14:44	
2-Butanone (MEK)	ND U	20	1	02/23/24 14:44	
n-Butylbenzene	ND U	4.0	1	02/23/24 14:44	
sec-Butylbenzene	ND U	2.0	1	02/23/24 14:44	
tert-Butylbenzene	ND U	2.0	1	02/23/24 14:44	
Carbon Disulfide	ND U	0.50	1	02/23/24 14:44	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 14:44	
Chlorobenzene	ND U	0.50	1	02/23/24 14:44	
Chloroethane	ND U	0.50	1	02/23/24 14:44	
Chloroform	ND U	0.50	1	02/23/24 14:44	
Chloromethane	ND U	0.50	1	02/23/24 14:44	
2-Chlorotoluene	ND U	2.0	1	02/23/24 14:44	
4-Chlorotoluene	ND U	2.0	1	02/23/24 14:44	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 14:44	
Dibromochloromethane	ND U	0.50	1	02/23/24 14:44	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 14:44	
Dibromomethane	ND U	0.50	1	02/23/24 14:44	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 14:44	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 14:44	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 14:44	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 14:44	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 14:44	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 14:44	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 14:44	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 14:44	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 14:44	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 14:44	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 14:44	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 14:44	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 14:44	
Ethylbenzene	ND U	0.50	1	02/23/24 14:44	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 14:44	
2-Hexanone	ND U	20	1	02/23/24 14:44	
Isopropylbenzene	ND U	2.0	1	02/23/24 14:44	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 14:44	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 07:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	TB3	**Units:**	ug/L
Lab Code:	K2401667-001	**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	02/23/24 14:44	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 14:44	
Methylene Chloride	ND U	2.0	1	02/23/24 14:44	
Naphthalene	ND U	2.0	1	02/23/24 14:44	
n-Propylbenzene	ND U	2.0	1	02/23/24 14:44	
Styrene	ND U	0.50	1	02/23/24 14:44	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 14:44	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 14:44	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 14:44	
Toluene	ND U	0.50	1	02/23/24 14:44	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 14:44	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 14:44	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 14:44	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 14:44	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 14:44	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 14:44	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 14:44	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 14:44	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 14:44	
Vinyl Chloride	ND U	0.50	1	02/23/24 14:44	
o-Xylene	ND U	0.50	1	02/23/24 14:44	
m,p-Xylenes	ND U	0.50	1	02/23/24 14:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/23/24 14:44	
Dibromofluoromethane	99	73 - 122	02/23/24 14:44	
Toluene-d8	99	65 - 144	02/23/24 14:44	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-01-5S	**Units:**	ug/L
Lab Code:	K2401667-002	**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	02/23/24 15:08	
Benzene	ND U	0.50	1	02/23/24 15:08	
Bromobenzene	ND U	2.0	1	02/23/24 15:08	
Bromochloromethane	ND U	0.50	1	02/23/24 15:08	
Bromodichloromethane	ND U	0.50	1	02/23/24 15:08	
Bromoform	ND U	0.50	1	02/23/24 15:08	
Bromomethane	ND U	0.50	1	02/23/24 15:08	
2-Butanone (MEK)	ND U	20	1	02/23/24 15:08	
n-Butylbenzene	ND U	4.0	1	02/23/24 15:08	
sec-Butylbenzene	ND U	2.0	1	02/23/24 15:08	
tert-Butylbenzene	ND U	2.0	1	02/23/24 15:08	
Carbon Disulfide	ND U	0.50	1	02/23/24 15:08	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 15:08	
Chlorobenzene	ND U	0.50	1	02/23/24 15:08	
Chloroethane	ND U	0.50	1	02/23/24 15:08	
Chloroform	ND U	0.50	1	02/23/24 15:08	
Chloromethane	ND U	0.50	1	02/23/24 15:08	
2-Chlorotoluene	ND U	2.0	1	02/23/24 15:08	
4-Chlorotoluene	ND U	2.0	1	02/23/24 15:08	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 15:08	
Dibromochloromethane	ND U	0.50	1	02/23/24 15:08	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 15:08	
Dibromomethane	ND U	0.50	1	02/23/24 15:08	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 15:08	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 15:08	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 15:08	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 15:08	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 15:08	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:08	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:08	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 15:08	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 15:08	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 15:08	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 15:08	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:08	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:08	
Ethylbenzene	ND U	0.50	1	02/23/24 15:08	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 15:08	
2-Hexanone	ND U	20	1	02/23/24 15:08	
Isopropylbenzene	ND U	2.0	1	02/23/24 15:08	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 15:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-01-5S	**Units:**	ug/L
Lab Code:	K2401667-002	**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	02/23/24 15:08	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 15:08	
Methylene Chloride	ND U	2.0	1	02/23/24 15:08	
Naphthalene	ND U	2.0	1	02/23/24 15:08	
n-Propylbenzene	ND U	2.0	1	02/23/24 15:08	
Styrene	ND U	0.50	1	02/23/24 15:08	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:08	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:08	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 15:08	
Toluene	ND U	0.50	1	02/23/24 15:08	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 15:08	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 15:08	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 15:08	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 15:08	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 15:08	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 15:08	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 15:08	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 15:08	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 15:08	
Vinyl Chloride	ND U	0.50	1	02/23/24 15:08	
o-Xylene	ND U	0.50	1	02/23/24 15:08	
m,p-Xylenes	ND U	0.50	1	02/23/24 15:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/23/24 15:08	
Dibromofluoromethane	102	73 - 122	02/23/24 15:08	
Toluene-d8	100	65 - 144	02/23/24 15:08	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-02-FB1	**Units:**	ug/L
Lab Code:	K2401667-003	**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	02/23/24 15:32	
Benzene	ND U	0.50	1	02/23/24 15:32	
Bromobenzene	ND U	2.0	1	02/23/24 15:32	
Bromochloromethane	ND U	0.50	1	02/23/24 15:32	
Bromodichloromethane	ND U	0.50	1	02/23/24 15:32	
Bromoform	ND U	0.50	1	02/23/24 15:32	
Bromomethane	ND U	0.50	1	02/23/24 15:32	
2-Butanone (MEK)	ND U	20	1	02/23/24 15:32	
n-Butylbenzene	ND U	4.0	1	02/23/24 15:32	
sec-Butylbenzene	ND U	2.0	1	02/23/24 15:32	
tert-Butylbenzene	ND U	2.0	1	02/23/24 15:32	
Carbon Disulfide	ND U	0.50	1	02/23/24 15:32	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 15:32	
Chlorobenzene	ND U	0.50	1	02/23/24 15:32	
Chloroethane	ND U	0.50	1	02/23/24 15:32	
Chloroform	ND U	0.50	1	02/23/24 15:32	
Chloromethane	ND U	0.50	1	02/23/24 15:32	
2-Chlorotoluene	ND U	2.0	1	02/23/24 15:32	
4-Chlorotoluene	ND U	2.0	1	02/23/24 15:32	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 15:32	
Dibromochloromethane	ND U	0.50	1	02/23/24 15:32	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 15:32	
Dibromomethane	ND U	0.50	1	02/23/24 15:32	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 15:32	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 15:32	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 15:32	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 15:32	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 15:32	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:32	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:32	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 15:32	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 15:32	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 15:32	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 15:32	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:32	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:32	
Ethylbenzene	ND U	0.50	1	02/23/24 15:32	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 15:32	
2-Hexanone	ND U	20	1	02/23/24 15:32	
Isopropylbenzene	ND U	2.0	1	02/23/24 15:32	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 15:32	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-02-FB1	**Units:**	ug/L
Lab Code:	K2401667-003	**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	02/23/24 15:32	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 15:32	
Methylene Chloride	ND U	2.0	1	02/23/24 15:32	
Naphthalene	ND U	2.0	1	02/23/24 15:32	
n-Propylbenzene	ND U	2.0	1	02/23/24 15:32	
Styrene	ND U	0.50	1	02/23/24 15:32	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:32	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:32	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 15:32	
Toluene	ND U	0.50	1	02/23/24 15:32	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 15:32	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 15:32	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 15:32	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 15:32	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 15:32	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 15:32	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 15:32	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 15:32	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 15:32	
Vinyl Chloride	ND U	0.50	1	02/23/24 15:32	
o-Xylene	ND U	0.50	1	02/23/24 15:32	
m,p-Xylenes	ND U	0.50	1	02/23/24 15:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/23/24 15:32	
Dibromofluoromethane	100	73 - 122	02/23/24 15:32	
Toluene-d8	99	65 - 144	02/23/24 15:32	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-03-26I	**Units:**	ug/L
Lab Code:	K2401667-004	**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	02/23/24 15:56	
Benzene	ND U	0.50	1	02/23/24 15:56	
Bromobenzene	ND U	2.0	1	02/23/24 15:56	
Bromochloromethane	ND U	0.50	1	02/23/24 15:56	
Bromodichloromethane	ND U	0.50	1	02/23/24 15:56	
Bromoform	ND U	0.50	1	02/23/24 15:56	
Bromomethane	ND U	0.50	1	02/23/24 15:56	
2-Butanone (MEK)	ND U	20	1	02/23/24 15:56	
n-Butylbenzene	ND U	4.0	1	02/23/24 15:56	
sec-Butylbenzene	ND U	2.0	1	02/23/24 15:56	
tert-Butylbenzene	ND U	2.0	1	02/23/24 15:56	
Carbon Disulfide	ND U	0.50	1	02/23/24 15:56	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 15:56	
Chlorobenzene	ND U	0.50	1	02/23/24 15:56	
Chloroethane	ND U	0.50	1	02/23/24 15:56	
Chloroform	ND U	0.50	1	02/23/24 15:56	
Chloromethane	ND U	0.50	1	02/23/24 15:56	
2-Chlorotoluene	ND U	2.0	1	02/23/24 15:56	
4-Chlorotoluene	ND U	2.0	1	02/23/24 15:56	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 15:56	
Dibromochloromethane	ND U	0.50	1	02/23/24 15:56	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 15:56	
Dibromomethane	ND U	0.50	1	02/23/24 15:56	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 15:56	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 15:56	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 15:56	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 15:56	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 15:56	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:56	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 15:56	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 15:56	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 15:56	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 15:56	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 15:56	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:56	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 15:56	
Ethylbenzene	ND U	0.50	1	02/23/24 15:56	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 15:56	
2-Hexanone	ND U	20	1	02/23/24 15:56	
Isopropylbenzene	ND U	2.0	1	02/23/24 15:56	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 15:56	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-03-26I	**Units:**	ug/L
Lab Code:	K2401667-004	**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	02/23/24 15:56	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 15:56	
Methylene Chloride	ND U	2.0	1	02/23/24 15:56	
Naphthalene	ND U	2.0	1	02/23/24 15:56	
n-Propylbenzene	ND U	2.0	1	02/23/24 15:56	
Styrene	ND U	0.50	1	02/23/24 15:56	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:56	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 15:56	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 15:56	
Toluene	ND U	0.50	1	02/23/24 15:56	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 15:56	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 15:56	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 15:56	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 15:56	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 15:56	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 15:56	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 15:56	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 15:56	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 15:56	
Vinyl Chloride	ND U	0.50	1	02/23/24 15:56	
o-Xylene	ND U	0.50	1	02/23/24 15:56	
m,p-Xylenes	ND U	0.50	1	02/23/24 15:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/23/24 15:56	
Dibromofluoromethane	99	73 - 122	02/23/24 15:56	
Toluene-d8	100	65 - 144	02/23/24 15:56	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-04-6S	**Units:**	ug/L
Lab Code:	K2401667-005	**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	02/23/24 16:20	
Benzene	ND U	0.50	1	02/23/24 16:20	
Bromobenzene	ND U	2.0	1	02/23/24 16:20	
Bromochloromethane	ND U	0.50	1	02/23/24 16:20	
Bromodichloromethane	ND U	0.50	1	02/23/24 16:20	
Bromoform	ND U	0.50	1	02/23/24 16:20	
Bromomethane	ND U	0.50	1	02/23/24 16:20	
2-Butanone (MEK)	ND U	20	1	02/23/24 16:20	
n-Butylbenzene	ND U	4.0	1	02/23/24 16:20	
sec-Butylbenzene	ND U	2.0	1	02/23/24 16:20	
tert-Butylbenzene	ND U	2.0	1	02/23/24 16:20	
Carbon Disulfide	ND U	0.50	1	02/23/24 16:20	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 16:20	
Chlorobenzene	ND U	0.50	1	02/23/24 16:20	
Chloroethane	ND U	0.50	1	02/23/24 16:20	
Chloroform	ND U	0.50	1	02/23/24 16:20	
Chloromethane	ND U	0.50	1	02/23/24 16:20	
2-Chlorotoluene	ND U	2.0	1	02/23/24 16:20	
4-Chlorotoluene	ND U	2.0	1	02/23/24 16:20	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 16:20	
Dibromochloromethane	ND U	0.50	1	02/23/24 16:20	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 16:20	
Dibromomethane	ND U	0.50	1	02/23/24 16:20	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 16:20	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 16:20	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 16:20	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 16:20	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 16:20	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 16:20	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 16:20	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 16:20	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 16:20	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 16:20	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 16:20	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 16:20	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 16:20	
Ethylbenzene	ND U	0.50	1	02/23/24 16:20	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 16:20	
2-Hexanone	ND U	20	1	02/23/24 16:20	
Isopropylbenzene	ND U	2.0	1	02/23/24 16:20	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 16:20	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-04-6S	**Units:**	ug/L
Lab Code:	K2401667-005	**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	02/23/24 16:20	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 16:20	
Methylene Chloride	ND U	2.0	1	02/23/24 16:20	
Naphthalene	ND U	2.0	1	02/23/24 16:20	
n-Propylbenzene	ND U	2.0	1	02/23/24 16:20	
Styrene	ND U	0.50	1	02/23/24 16:20	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 16:20	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 16:20	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 16:20	
Toluene	ND U	0.50	1	02/23/24 16:20	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 16:20	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 16:20	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 16:20	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 16:20	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 16:20	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 16:20	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 16:20	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 16:20	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 16:20	
Vinyl Chloride	ND U	0.50	1	02/23/24 16:20	
o-Xylene	ND U	0.50	1	02/23/24 16:20	
m,p-Xylenes	ND U	0.50	1	02/23/24 16:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/23/24 16:20	
Dibromofluoromethane	104	73 - 122	02/23/24 16:20	
Toluene-d8	101	65 - 144	02/23/24 16:20	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-05-20S	**Units:**	ug/L
Lab Code:	K2401667-006	**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	02/23/24 16:44	
Benzene	ND U	0.50	1	02/23/24 16:44	
Bromobenzene	ND U	2.0	1	02/23/24 16:44	
Bromochloromethane	ND U	0.50	1	02/23/24 16:44	
Bromodichloromethane	ND U	0.50	1	02/23/24 16:44	
Bromoform	ND U	0.50	1	02/23/24 16:44	
Bromomethane	ND U	0.50	1	02/23/24 16:44	
2-Butanone (MEK)	ND U	20	1	02/23/24 16:44	
n-Butylbenzene	ND U	4.0	1	02/23/24 16:44	
sec-Butylbenzene	ND U	2.0	1	02/23/24 16:44	
tert-Butylbenzene	ND U	2.0	1	02/23/24 16:44	
Carbon Disulfide	ND U	0.50	1	02/23/24 16:44	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 16:44	
Chlorobenzene	ND U	0.50	1	02/23/24 16:44	
Chloroethane	ND U	0.50	1	02/23/24 16:44	
Chloroform	ND U	0.50	1	02/23/24 16:44	
Chloromethane	ND U	0.50	1	02/23/24 16:44	
2-Chlorotoluene	ND U	2.0	1	02/23/24 16:44	
4-Chlorotoluene	ND U	2.0	1	02/23/24 16:44	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 16:44	
Dibromochloromethane	ND U	0.50	1	02/23/24 16:44	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 16:44	
Dibromomethane	ND U	0.50	1	02/23/24 16:44	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 16:44	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 16:44	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 16:44	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 16:44	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 16:44	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 16:44	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 16:44	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 16:44	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 16:44	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 16:44	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 16:44	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 16:44	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 16:44	
Ethylbenzene	ND U	0.50	1	02/23/24 16:44	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 16:44	
2-Hexanone	ND U	20	1	02/23/24 16:44	
Isopropylbenzene	ND U	2.0	1	02/23/24 16:44	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 16:44	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-05-20S	**Units:**	ug/L
Lab Code:	K2401667-006	**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	02/23/24 16:44	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 16:44	
Methylene Chloride	ND U	2.0	1	02/23/24 16:44	
Naphthalene	ND U	2.0	1	02/23/24 16:44	
n-Propylbenzene	ND U	2.0	1	02/23/24 16:44	
Styrene	ND U	0.50	1	02/23/24 16:44	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 16:44	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 16:44	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 16:44	
Toluene	ND U	0.50	1	02/23/24 16:44	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 16:44	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 16:44	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 16:44	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 16:44	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 16:44	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 16:44	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 16:44	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 16:44	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 16:44	
Vinyl Chloride	ND U	0.50	1	02/23/24 16:44	
o-Xylene	ND U	0.50	1	02/23/24 16:44	
m,p-Xylenes	ND U	0.50	1	02/23/24 16:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	68 - 117	02/23/24 16:44	
Dibromofluoromethane	104	73 - 122	02/23/24 16:44	
Toluene-d8	101	65 - 144	02/23/24 16:44	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-06-DUP1	**Units:**	ug/L
Lab Code:	K2401667-007	**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	02/23/24 17:08	
Benzene	ND U	0.50	1	02/23/24 17:08	
Bromobenzene	ND U	2.0	1	02/23/24 17:08	
Bromochloromethane	ND U	0.50	1	02/23/24 17:08	
Bromodichloromethane	ND U	0.50	1	02/23/24 17:08	
Bromoform	ND U	0.50	1	02/23/24 17:08	
Bromomethane	ND U	0.50	1	02/23/24 17:08	
2-Butanone (MEK)	ND U	20	1	02/23/24 17:08	
n-Butylbenzene	ND U	4.0	1	02/23/24 17:08	
sec-Butylbenzene	ND U	2.0	1	02/23/24 17:08	
tert-Butylbenzene	ND U	2.0	1	02/23/24 17:08	
Carbon Disulfide	ND U	0.50	1	02/23/24 17:08	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 17:08	
Chlorobenzene	ND U	0.50	1	02/23/24 17:08	
Chloroethane	ND U	0.50	1	02/23/24 17:08	
Chloroform	ND U	0.50	1	02/23/24 17:08	
Chloromethane	ND U	0.50	1	02/23/24 17:08	
2-Chlorotoluene	ND U	2.0	1	02/23/24 17:08	
4-Chlorotoluene	ND U	2.0	1	02/23/24 17:08	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 17:08	
Dibromochloromethane	ND U	0.50	1	02/23/24 17:08	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 17:08	
Dibromomethane	ND U	0.50	1	02/23/24 17:08	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 17:08	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 17:08	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 17:08	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 17:08	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 17:08	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 17:08	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 17:08	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 17:08	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 17:08	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 17:08	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 17:08	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 17:08	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 17:08	
Ethylbenzene	ND U	0.50	1	02/23/24 17:08	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 17:08	
2-Hexanone	ND U	20	1	02/23/24 17:08	
Isopropylbenzene	ND U	2.0	1	02/23/24 17:08	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 17:08	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-06-DUP1	**Units:**	ug/L
Lab Code:	K2401667-007	**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	02/23/24 17:08	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 17:08	
Methylene Chloride	ND U	2.0	1	02/23/24 17:08	
Naphthalene	ND U	2.0	1	02/23/24 17:08	
n-Propylbenzene	ND U	2.0	1	02/23/24 17:08	
Styrene	ND U	0.50	1	02/23/24 17:08	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 17:08	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 17:08	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 17:08	
Toluene	ND U	0.50	1	02/23/24 17:08	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 17:08	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 17:08	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 17:08	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 17:08	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 17:08	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 17:08	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 17:08	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 17:08	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 17:08	
Vinyl Chloride	ND U	0.50	1	02/23/24 17:08	
o-Xylene	ND U	0.50	1	02/23/24 17:08	
m,p-Xylenes	ND U	0.50	1	02/23/24 17:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	02/23/24 17:08	
Dibromofluoromethane	106	73 - 122	02/23/24 17:08	
Toluene-d8	101	65 - 144	02/23/24 17:08	

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:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-01-5S	**Basis:**	NA
Lab Code:	K2401667-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/22/24 08:04	02/21/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/22/24 08:04	02/21/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-02-FB1	**Basis:**	NA
Lab Code:	K2401667-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/22/24 08:14	02/21/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/22/24 08:14	02/21/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-03-26I	**Basis:**	NA
Lab Code:	K2401667-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/22/24 08:17	02/21/24	
Manganese	6010C	**3.0**	ug/L	1.1	1	02/22/24 08:17	02/21/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-04-6S	**Basis:**	NA
Lab Code:	K2401667-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/22/24 08:20	02/21/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/22/24 08:20	02/21/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-05-20S	**Basis:**	NA
Lab Code:	K2401667-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**85**	ug/L	42	1	02/22/24 08:23	02/21/24	
Manganese	6010C	**652**	ug/L	1.1	1	02/22/24 08:23	02/21/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-06-DUP1	**Basis:**	NA
Lab Code:	K2401667-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	**96**	ug/L	42	1	02/22/24 08:41	02/21/24	
Manganese	6010C	**651**	ug/L	1.1	1	02/22/24 08:41	02/21/24	

General Chemistry

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:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-01-5S	**Basis:**	NA
Lab Code:	K2401667-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.62**	mg/L	0.20	2	02/15/24 22:11	
Nitrate as Nitrogen	300.0	**5.03**	mg/L	0.10	2	02/15/24 22:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-01-5S	**Basis:**	NA
Lab Code:	K2401667-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**153**	mg/L	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-02-FB1	**Basis:**	NA
Lab Code:	K2401667-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/15/24 22:46	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/24 22:46	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 09:20
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-02-FB1	**Basis:**	NA
Lab Code:	K2401667-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-03-26I	**Basis:**	NA
Lab Code:	K2401667-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.40**	mg/L	0.20	2	02/15/24 22:54	
Nitrate as Nitrogen	300.0	**4.03**	mg/L	0.10	2	02/15/24 22:54	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 10:40
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-03-26I	**Basis:**	NA
Lab Code:	K2401667-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**184**	mg/L	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-04-6S	**Basis:**	NA
Lab Code:	K2401667-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.61**	mg/L	0.20	2	02/15/24 23:03	
Nitrate as Nitrogen	300.0	**3.27**	mg/L	0.10	2	02/15/24 23:03	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 11:55
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-04-6S	**Basis:**	NA
Lab Code:	K2401667-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**168**	mg/L	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-05-20S	**Basis:**	NA
Lab Code:	K2401667-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**28.4**	mg/L	1.0	10	02/16/24 16:32	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/15/24 23:12	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:00
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-05-20S	**Basis:**	NA
Lab Code:	K2401667-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**257**	mg/L	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-06-DUP1	**Basis:**	NA
Lab Code:	K2401667-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**28.9**	mg/L	1.0	10	02/16/24 17:07	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	02/15/24 23:20	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24 13:10
Sample Matrix:	Ground Water	**Date Received:**	02/15/24 10:00
Sample Name:	LB-021424-06-DUP1	**Basis:**	NA
Lab Code:	K2401667-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**257**	mg/L	10	1	02/21/24 16:39	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Phone (360) 577-7222 Fax (360) 425-9096
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Client: SCS Engineers **Service Request:** K2401667
Project: Leichner Landfill/04224030.13
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	K2401667-001	96	99	99
LB-021424-01-5S	K2401667-002	96	102	100
LB-021424-02-FB1	K2401667-003	96	100	99
LB-021424-03-26I	K2401667-004	97	99	100
LB-021424-04-6S	K2401667-005	97	104	101
LB-021424-05-20S	K2401667-006	95	104	101
LB-021424-06-DUP1	K2401667-007	97	106	101
Lab Control Sample	KQ2403019-02	103	103	104
Duplicate Lab Control Sample	KQ2403019-03	103	101	104
Method Blank	KQ2403019-05	96	105	102

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2403019-05	**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	02/23/24 13:56	
Benzene	ND U	0.50	1	02/23/24 13:56	
Bromobenzene	ND U	2.0	1	02/23/24 13:56	
Bromochloromethane	ND U	0.50	1	02/23/24 13:56	
Bromodichloromethane	ND U	0.50	1	02/23/24 13:56	
Bromoform	ND U	0.50	1	02/23/24 13:56	
Bromomethane	ND U	0.50	1	02/23/24 13:56	
2-Butanone (MEK)	ND U	20	1	02/23/24 13:56	
n-Butylbenzene	ND U	4.0	1	02/23/24 13:56	
sec-Butylbenzene	ND U	2.0	1	02/23/24 13:56	
tert-Butylbenzene	ND U	2.0	1	02/23/24 13:56	
Carbon Disulfide	ND U	0.50	1	02/23/24 13:56	
Carbon Tetrachloride	ND U	0.50	1	02/23/24 13:56	
Chlorobenzene	ND U	0.50	1	02/23/24 13:56	
Chloroethane	ND U	0.50	1	02/23/24 13:56	
Chloroform	ND U	0.50	1	02/23/24 13:56	
Chloromethane	ND U	0.50	1	02/23/24 13:56	
2-Chlorotoluene	ND U	2.0	1	02/23/24 13:56	
4-Chlorotoluene	ND U	2.0	1	02/23/24 13:56	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	02/23/24 13:56	
Dibromochloromethane	ND U	0.50	1	02/23/24 13:56	
1,2-Dibromoethane (EDB)	ND U	2.0	1	02/23/24 13:56	
Dibromomethane	ND U	0.50	1	02/23/24 13:56	
1,2-Dichlorobenzene	ND U	0.50	1	02/23/24 13:56	
1,3-Dichlorobenzene	ND U	0.50	1	02/23/24 13:56	
1,4-Dichlorobenzene	ND U	0.50	1	02/23/24 13:56	
Dichlorodifluoromethane	ND U	0.50	1	02/23/24 13:56	
1,1-Dichloroethane	ND U	0.50	1	02/23/24 13:56	
cis-1,2-Dichloroethene	ND U	0.50	1	02/23/24 13:56	
trans-1,2-Dichloroethene	ND U	0.50	1	02/23/24 13:56	
1,2-Dichloropropane	ND U	0.50	1	02/23/24 13:56	
1,3-Dichloropropane	ND U	0.50	1	02/23/24 13:56	
2,2-Dichloropropane	ND U	0.50	1	02/23/24 13:56	
1,1-Dichloropropene	ND U	0.50	1	02/23/24 13:56	
cis-1,3-Dichloropropene	ND U	0.50	1	02/23/24 13:56	
trans-1,3-Dichloropropene	ND U	0.50	1	02/23/24 13:56	
Ethylbenzene	ND U	0.50	1	02/23/24 13:56	
Hexachlorobutadiene	ND U	2.0	1	02/23/24 13:56	
2-Hexanone	ND U	20	1	02/23/24 13:56	
Isopropylbenzene	ND U	2.0	1	02/23/24 13:56	
4-Isopropyltoluene	ND U	2.0	1	02/23/24 13:56	

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2403019-05	**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	02/23/24 13:56	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	02/23/24 13:56	
Methylene Chloride	ND U	2.0	1	02/23/24 13:56	
Naphthalene	ND U	2.0	1	02/23/24 13:56	
n-Propylbenzene	ND U	2.0	1	02/23/24 13:56	
Styrene	ND U	0.50	1	02/23/24 13:56	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	02/23/24 13:56	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	02/23/24 13:56	
Tetrachloroethene (PCE)	ND U	0.50	1	02/23/24 13:56	
Toluene	ND U	0.50	1	02/23/24 13:56	
1,2,3-Trichlorobenzene	ND U	2.0	1	02/23/24 13:56	
1,2,4-Trichlorobenzene	ND U	2.0	1	02/23/24 13:56	
1,1,2-Trichloroethane	ND U	0.50	1	02/23/24 13:56	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	02/23/24 13:56	
Trichloroethene (TCE)	ND U	0.50	1	02/23/24 13:56	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	02/23/24 13:56	
1,2,3-Trichloropropane	ND U	0.50	1	02/23/24 13:56	
1,2,4-Trimethylbenzene	ND U	2.0	1	02/23/24 13:56	
1,3,5-Trimethylbenzene	ND U	2.0	1	02/23/24 13:56	
Vinyl Chloride	ND U	0.50	1	02/23/24 13:56	
o-Xylene	ND U	0.50	1	02/23/24 13:56	
m,p-Xylenes	ND U	0.50	1	02/23/24 13:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	02/23/24 13:56	
Dibromofluoromethane	105	73 - 122	02/23/24 13:56	
Toluene-d8	102	65 - 144	02/23/24 13:56	

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/23/24
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:	833246

	Lab Control Sample KQ2403019-02			Duplicate Lab Control Sample KQ2403019-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	9.42	10.0	94	8.72	10.0	87	66-124	8	30
1,1,1-Trichloroethane (TCA)	10.6	10.0	106	9.58	10.0	96	59-136	10	30
1,1,2,2-Tetrachloroethane	9.62	10.0	96	9.05	10.0	91	70-127	6	30
1,1,2-Trichloroethane	9.41	10.0	94	9.01	10.0	90	74-118	4	30
1,1-Dichloroethane	10.9	10.0	109	9.54	10.0	95	68-132	13	30
1,1-Dichloropropene	10.5	10.0	105	9.78	10.0	98	59-134	7	30
1,2,3-Trichlorobenzene	9.48	10.0	95	9.89	10.0	99	68-120	4	30
1,2,3-Trichloropropane	9.04	10.0	90	8.56	10.0	86	69-123	5	30
1,2,4-Trichlorobenzene	9.32	10.0	93	9.05	10.0	91	58-126	3	30
1,2,4-Trimethylbenzene	10.7	10.0	107	9.82	10.0	98	63-122	9	30
1,2-Dibromo-3-chloropropane	8.64	10.0	86	8.07	10.0	81	55-132	7	30
1,2-Dibromoethane (EDB)	9.49	10.0	95	8.92	10.0	89	74-118	6	30
1,2-Dichlorobenzene	9.40	10.0	94	8.83	10.0	88	72-115	6	30
1,2-Dichloropropane	9.59	10.0	96	9.41	10.0	94	67-126	2	30
1,3,5-Trimethylbenzene	10.5	10.0	105	9.56	10.0	96	62-126	9	30
1,3-Dichlorobenzene	9.61	10.0	96	8.76	10.0	88	70-116	9	30
1,3-Dichloropropane	9.41	10.0	94	8.85	10.0	89	75-116	6	30
1,4-Dichlorobenzene	9.71	10.0	97	8.89	10.0	89	73-115	9	30
2,2-Dichloropropane	10.5	10.0	105	9.91	10.0	99	37-145	5	30
2-Butanone (MEK)	57.5	50.0	115	54.3	50.0	109	71-149	6	30
2-Chlorotoluene	10.3	10.0	103	9.47	10.0	95	55-131	8	30
2-Hexanone	57.7	50.0	115	54.2	50.0	108	59-131	6	30
4-Chlorotoluene	10.1	10.0	101	9.31	10.0	93	66-121	9	30
4-Isopropyltoluene	11.0	10.0	110	10.1	10.0	101	61-128	8	30
4-Methyl-2-pentanone (MIBK)	56.9	50.0	114	55.7	50.0	111	64-134	2	30
Acetone	60.5	50.0	121	53.4	50.0	107	68-135	12	30
Benzene	10.3	10.0	103	9.39	10.0	94	69-124	9	30
Bromobenzene	9.59	10.0	96	8.78	10.0	88	72-116	9	30
Bromochloromethane	10.4	10.0	104	10.1	10.0	101	75-131	4	30
Bromodichloromethane	9.92	10.0	99	9.25	10.0	93	63-129	7	30
Bromoform	8.89	10.0	89	8.38	10.0	84	52-144	6	30
Bromomethane	8.09	10.0	81	7.84	10.0	78	35-113	3	30
Carbon Disulfide	19.0	20.0	95	17.4	20.0	87	46-144	9	30
Carbon Tetrachloride	10.6	10.0	106	9.80	10.0	98	55-140	7	30
Chlorobenzene	9.76	10.0	98	8.96	10.0	90	72-116	9	30
Chloroethane	10.3	10.0	103	9.50	10.0	95	58-134	8	30
Chloroform	9.92	10.0	99	9.19	10.0	92	70-129	8	30
Chloromethane	8.52	10.0	85	8.04	10.0	80	34-130	6	30
cis-1,2-Dichloroethene	9.73	10.0	97	9.32	10.0	93	71-118	4	30
cis-1,3-Dichloropropene	10.3	10.0	103	9.64	10.0	96	62-132	7	30
Dibromochloromethane	8.88	10.0	89	8.28	10.0	83	67-126	7	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/23/24
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:	833246

	Lab Control Sample KQ2403019-02			Duplicate Lab Control Sample KQ2403019-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.97	10.0	100	9.63	10.0	96	69-128	3	30
Dichlorodifluoromethane	8.04	10.0	80	7.34	10.0	73	32-124	9	30
Ethylbenzene	10.1	10.0	101	9.35	10.0	94	67-121	8	30
Hexachlorobutadiene	9.43	10.0	94	8.85	10.0	89	57-119	6	30
Isopropylbenzene	9.65	10.0	97	8.86	10.0	89	67-129	9	30
m,p-Xylenes	20.7	20.0	104	19.1	20.0	96	69-121	8	30
Methyl tert-Butyl Ether	9.81	10.0	98	9.62	10.0	96	54-126	2	30
Methylene Chloride	9.77	10.0	98	8.98	10.0	90	71-122	8	30
Naphthalene	9.50	10.0	95	9.91	10.0	99	64-126	4	30
n-Butylbenzene	10.4	10.0	104	9.76	10.0	98	55-130	7	30
n-Propylbenzene	10.6	10.0	106	9.66	10.0	97	61-124	9	30
o-Xylene	10.0	10.0	100	9.44	10.0	94	71-119	6	30
sec-Butylbenzene	10.8	10.0	108	9.94	10.0	99	59-128	8	30
Styrene	10.0	10.0	100	9.01	10.0	90	74-121	11	30
tert-Butylbenzene	10.5	10.0	105	9.70	10.0	97	61-127	7	30
Tetrachloroethene (PCE)	9.98	10.0	100	9.22	10.0	92	62-126	8	30
Toluene	10.3	10.0	103	9.61	10.0	96	69-124	7	30
trans-1,2-Dichloroethene	10.1	10.0	101	9.15	10.0	92	67-125	9	30
trans-1,3-Dichloropropene	9.96	10.0	100	9.42	10.0	94	59-125	6	30
Trichloroethene (TCE)	10.3	10.0	103	9.57	10.0	96	67-128	7	30
Trichlorofluoromethane (CFC 11)	10.8	10.0	108	9.61	10.0	96	52-141	11	30
Vinyl Chloride	10.3	10.0	103	9.54	10.0	95	55-123	8	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2402511-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6010C	ND U	ug/L	42	1	02/22/24 07:59	02/21/24	
Manganese	6010C	ND U	ug/L	1.1	1	02/22/24 07:59	02/21/24	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	02/22/24
		Date Extracted:	02/21/24

Matrix Spike Summary
Dissolved Metals

Sample Name:	LB-021424-01-5S	**Units:**	ug/L
Lab Code:	K2401667-002	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2402511-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	ND U	995	1000	100	75-125
Manganese	ND U	497	500	99	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:**	K2401667
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	02/22/24

Replicate Sample Summary
Dissolved Metals

Sample Name:	LB-021424-01-5S	**Units:**	ug/L
Lab Code:	K2401667-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample KQ2402511-03 Result	Average	RPD	RPD Limit
Iron	6010C	42	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.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/22/24
Sample Matrix:	Ground Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2402511-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6010C	2490	2500	100	80-120
Manganese	6010C	1260	1250	100	80-120

General Chemistry

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:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	02/15/24 14:24	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/24 14:24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	10	1	02/21/24 16:39	

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	02/15/24 18:09	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/24 18:09	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	10	1	02/21/24 16:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	02/15/24 20:10	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	02/15/24 20:10	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-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	02/16/24 14:31	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2401667-MB5		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	02/16/24 18:16	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	2/15/24

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name:	LB-021424-01-5S	**Units:**	mg/L
Lab Code:	K2401667-002	**Basis:**	NA

			Matrix Spike				Duplicate Matrix Spike					
			K2401667-002MS				K2401667-002DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	300.0	4.62	12.1	8.00	94	12.1	8.00	94	90-110	<1	20
Nitrate as Nitrogen	300.0	5.03	9.00	4.00	99	8.99	4.00	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:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	02/16/24
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Chloride

Sample Name:	LB-021424-05-20S	**Units:**	mg/L
Lab Code:	K2401667-006	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike			**Duplicate Matrix Spike**					
		K2401667-006MS			K2401667-006DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	28.4	65.7	40.0	93	64.8	40.0	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.

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:**	K2401667
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	02/15/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021424-01-5S	**Units:**	mg/L
Lab Code:	K2401667-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401667-002DUP Result	Average	RPD	RPD Limit
Chloride	300.0	0.20	4.62	4.59	4.60	<1	20
Nitrate as Nitrogen	300.0	0.10	5.03	5.01	5.02	<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:**	K2401667
Project	Leichner Landfill/04224030.13	**Date Collected:**	02/14/24
Sample Matrix:	Ground Water	**Date Received:**	02/15/24
		Date Analyzed:	02/16/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	LB-021424-05-20S	**Units:**	mg/L
Lab Code:	K2401667-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K2401667-006DUP Result	Average	RPD	RPD Limit
Chloride	300.0	1.0	28.4	27.5	27.9	3	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
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401667
Date Analyzed: 02/15/24 - 02/21/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401667-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.85	5.00	97	90-110
Nitrate as Nitrogen	300.0	2.53	2.50	101	90-110
Solids, Total Dissolved	SM 2540 C	1370	1430	96	85-115

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401667
Date Analyzed: 02/15/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401667-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.83	5.00	97	90-110
Nitrate as Nitrogen	300.0	2.55	2.50	102	90-110

ALS Group USA, Corp.
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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Ground Water

Service Request: K2401667
Date Analyzed: 02/15/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2401667-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.83	5.00	97	90-110
Nitrate as Nitrogen	300.0	2.54	2.50	102	90-110

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/16/24
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:	832681

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2401667-LCS4	4.83	5.00	97	90-110

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2401667
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	02/16/24
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:	832681

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2401667-LCS5	4.85	5.00	97	90-110

Third Quarter (August) Laboratory Reports

August 22, 2024 Service Request No:K2408131

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 August 07, 2024
For your reference, these analyses have been assigned our service request number **K2408131.**

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: Water

Service Request: K2408131
Date Received: 08/07/2024

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 water samples were received for analysis at ALS Environmental on 08/07/2024. 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, 08/16/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. This rounds to 20 which is the upper limit. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.
Method 8260C, 08/16/2024:Chloromethane 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.
Method 8260C, 08/16/2024:The lower control criterion was exceeded for Dichlorodifluoromethane in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the analyte in question and the analyte was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Approved by  Date 08/22/2024

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-080624-02-27I			Lab ID: K2408131-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	13.6			0.20	mg/L	300.0
Iron, Dissolved	19.8			2.0	ug/L	6020B
Manganese, Dissolved	137			0.20	ug/L	6020B
Solids, Total Dissolved	258			10	mg/L	SM 2540 C

CLIENT ID: LB-080624-03-13I			Lab ID: K2408131-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.29			0.20	mg/L	300.0
Iron, Dissolved	11.0			2.0	ug/L	6020B
Manganese, Dissolved	1.04			0.20	ug/L	6020B
Nitrate as Nitrogen	3.47			0.10	mg/L	300.0
Solids, Total Dissolved	186			10	mg/L	SM 2540 C

CLIENT ID: LB-080624-04-DUP			Lab ID: K2408131-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	7.34			0.20	mg/L	300.0
Iron, Dissolved	12.2			2.0	ug/L	6020B
Manganese, Dissolved	1.03			0.20	ug/L	6020B
Nitrate as Nitrogen	3.49			0.10	mg/L	300.0
Solids, Total Dissolved	185			10	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:**K2408131

Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2408131-001	LB-080624-01-FB	8/6/2024	1315
K2408131-002	LB-080624-02-27I	8/6/2024	1405
K2408131-003	LB-080624-03-13I	8/6/2024	1600
K2408131-004	LB-080624-04-DUP	8/6/2024	1605
K2408131-005	TB1	8/6/2024	0700

ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

KJ408131

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	LB-080624-01-FB	8/6/24	1315	W	1,2,8	5	X	X	X	X	X		Metals are Field Filtered	
2	LB-080624-02-27I	8/6/24	1405	W	1,2,8	5	X	X	X	X	X			
3	LB-080624-03-13I	8/6/24	1600	W	1,2,8	5	X	X	X	X	X			
4	LB-080624-04-DUP	8/6/24	1605	W	1,2,8	5	X	X	X	X	X			
5	TBI	8/6/24	0700	W	1,8	2	X							
6														
7														
8														
9														
10														

Sampler(s): Please Print & Sign: Sara Campbell Sara Campbell

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Sara Campbell	8/7	0936	Franklin LaBeck	08/07/24	0936	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Franklin LaBeck	8/07/24	1046	Haylee Lutz	8/7/24	1046	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☐ Level II: Standard QC	☐ Level III: Raw Data
		☐ TRRP LRC	☐ TRRP Level IV
		☐ Level IV: SW846 Methods/CLP like	
		☐ Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM HH

Cooler Receipt and Preservation Form

Client SCS Engineers Service Request K24 08131

Received: 8/7/24 Opened: 8/7/24 By: HS Unloaded: 8/7/24 By: HS

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
	4.5	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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM (NA) Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:
		SHORT HOLD

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

Notes, Discrepancies, Resolutions: only rec'd 1 TB sample

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 over the calibration range.
J	The result is an estimated value between the MDL and the MRL.
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:**	K2408131
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-080624-01-FB	**Date Collected:**	08/6/24
Lab Code:	K2408131-001	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080624-02-27I	**Date Collected:**	08/6/24
Lab Code:	K2408131-002	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080624-03-13I	**Date Collected:**	08/6/24
Lab Code:	K2408131-003	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080624-04-DUP	**Date Collected:**	08/6/24
Lab Code:	K2408131-004	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-080624-04-DUP	**Date Collected:**	08/6/24
Lab Code:	K2408131-004	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	TB1	**Date Collected:**	08/6/24
Lab Code:	K2408131-005	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCRESWELL

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:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 13:15
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-01-FB	**Units:**	ug/L
Lab Code:	K2408131-001	**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	08/16/24 12:03	
Benzene	ND U	0.50	1	08/16/24 12:03	
Bromobenzene	ND U	2.0	1	08/16/24 12:03	
Bromochloromethane	ND U	0.50	1	08/16/24 12:03	
Bromodichloromethane	ND U	0.50	1	08/16/24 12:03	
Bromoform	ND U	0.50	1	08/16/24 12:03	
Bromomethane	ND U	0.50	1	08/16/24 12:03	
2-Butanone (MEK)	ND U	20	1	08/16/24 12:03	
n-Butylbenzene	ND U	4.0	1	08/16/24 12:03	
sec-Butylbenzene	ND U	2.0	1	08/16/24 12:03	
tert-Butylbenzene	ND U	2.0	1	08/16/24 12:03	
Carbon Disulfide	ND U	0.50	1	08/16/24 12:03	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 12:03	
Chlorobenzene	ND U	0.50	1	08/16/24 12:03	
Chloroethane	ND U	0.50	1	08/16/24 12:03	
Chloroform	ND U	0.50	1	08/16/24 12:03	
Chloromethane	ND U	0.50	1	08/16/24 12:03	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 12:03	
4-Chlorotoluene	ND U	2.0	1	08/16/24 12:03	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 12:03	*
Dibromochloromethane	ND U	0.50	1	08/16/24 12:03	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 12:03	
Dibromomethane	ND U	0.50	1	08/16/24 12:03	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 12:03	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 12:03	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 12:03	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 12:03	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 12:03	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:03	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:03	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 12:03	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 12:03	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 12:03	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 12:03	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:03	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:03	
Ethylbenzene	ND U	0.50	1	08/16/24 12:03	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 12:03	
2-Hexanone	ND U	20	1	08/16/24 12:03	
Isopropylbenzene	ND U	2.0	1	08/16/24 12:03	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 12:03	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 13:15
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-01-FB	**Units:**	ug/L
Lab Code:	K2408131-001	**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	08/16/24 12:03	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 12:03	
Methylene Chloride	ND U	2.0	1	08/16/24 12:03	
Naphthalene	ND U	2.0	1	08/16/24 12:03	
n-Propylbenzene	ND U	2.0	1	08/16/24 12:03	
Styrene	ND U	0.50	1	08/16/24 12:03	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:03	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:03	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 12:03	
Toluene	ND U	0.50	1	08/16/24 12:03	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 12:03	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 12:03	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 12:03	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 12:03	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 12:03	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 12:03	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 12:03	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 12:03	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 12:03	
Vinyl Chloride	ND U	0.50	1	08/16/24 12:03	
o-Xylene	ND U	0.50	1	08/16/24 12:03	
m,p-Xylenes	ND U	0.50	1	08/16/24 12:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	68 - 117	08/16/24 12:03	
Dibromofluoromethane	100	73 - 122	08/16/24 12:03	
Toluene-d8	98	65 - 144	08/16/24 12:03	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 14:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-02-27I	**Units:**	ug/L
Lab Code:	K2408131-002	**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	08/16/24 12:28	
Benzene	ND U	0.50	1	08/16/24 12:28	
Bromobenzene	ND U	2.0	1	08/16/24 12:28	
Bromochloromethane	ND U	0.50	1	08/16/24 12:28	
Bromodichloromethane	ND U	0.50	1	08/16/24 12:28	
Bromoform	ND U	0.50	1	08/16/24 12:28	
Bromomethane	ND U	0.50	1	08/16/24 12:28	
2-Butanone (MEK)	ND U	20	1	08/16/24 12:28	
n-Butylbenzene	ND U	4.0	1	08/16/24 12:28	
sec-Butylbenzene	ND U	2.0	1	08/16/24 12:28	
tert-Butylbenzene	ND U	2.0	1	08/16/24 12:28	
Carbon Disulfide	ND U	0.50	1	08/16/24 12:28	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 12:28	
Chlorobenzene	ND U	0.50	1	08/16/24 12:28	
Chloroethane	ND U	0.50	1	08/16/24 12:28	
Chloroform	ND U	0.50	1	08/16/24 12:28	
Chloromethane	ND U	0.50	1	08/16/24 12:28	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 12:28	
4-Chlorotoluene	ND U	2.0	1	08/16/24 12:28	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 12:28	*
Dibromochloromethane	ND U	0.50	1	08/16/24 12:28	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 12:28	
Dibromomethane	ND U	0.50	1	08/16/24 12:28	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 12:28	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 12:28	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 12:28	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 12:28	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 12:28	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:28	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:28	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 12:28	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 12:28	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 12:28	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 12:28	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:28	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:28	
Ethylbenzene	ND U	0.50	1	08/16/24 12:28	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 12:28	
2-Hexanone	ND U	20	1	08/16/24 12:28	
Isopropylbenzene	ND U	2.0	1	08/16/24 12:28	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 12:28	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 14:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-02-27I	**Units:**	ug/L
Lab Code:	K2408131-002	**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	08/16/24 12:28	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 12:28	
Methylene Chloride	ND U	2.0	1	08/16/24 12:28	
Naphthalene	ND U	2.0	1	08/16/24 12:28	
n-Propylbenzene	ND U	2.0	1	08/16/24 12:28	
Styrene	ND U	0.50	1	08/16/24 12:28	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:28	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:28	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 12:28	
Toluene	ND U	0.50	1	08/16/24 12:28	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 12:28	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 12:28	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 12:28	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 12:28	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 12:28	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 12:28	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 12:28	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 12:28	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 12:28	
Vinyl Chloride	ND U	0.50	1	08/16/24 12:28	
o-Xylene	ND U	0.50	1	08/16/24 12:28	
m,p-Xylenes	ND U	0.50	1	08/16/24 12:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	68 - 117	08/16/24 12:28	
Dibromofluoromethane	100	73 - 122	08/16/24 12:28	
Toluene-d8	99	65 - 144	08/16/24 12:28	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-03-13I	**Units:**	ug/L
Lab Code:	K2408131-003	**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	08/16/24 12:53	
Benzene	ND U	0.50	1	08/16/24 12:53	
Bromobenzene	ND U	2.0	1	08/16/24 12:53	
Bromochloromethane	ND U	0.50	1	08/16/24 12:53	
Bromodichloromethane	ND U	0.50	1	08/16/24 12:53	
Bromoform	ND U	0.50	1	08/16/24 12:53	
Bromomethane	ND U	0.50	1	08/16/24 12:53	
2-Butanone (MEK)	ND U	20	1	08/16/24 12:53	
n-Butylbenzene	ND U	4.0	1	08/16/24 12:53	
sec-Butylbenzene	ND U	2.0	1	08/16/24 12:53	
tert-Butylbenzene	ND U	2.0	1	08/16/24 12:53	
Carbon Disulfide	ND U	0.50	1	08/16/24 12:53	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 12:53	
Chlorobenzene	ND U	0.50	1	08/16/24 12:53	
Chloroethane	ND U	0.50	1	08/16/24 12:53	
Chloroform	ND U	0.50	1	08/16/24 12:53	
Chloromethane	ND U	0.50	1	08/16/24 12:53	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 12:53	
4-Chlorotoluene	ND U	2.0	1	08/16/24 12:53	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 12:53	*
Dibromochloromethane	ND U	0.50	1	08/16/24 12:53	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 12:53	
Dibromomethane	ND U	0.50	1	08/16/24 12:53	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 12:53	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 12:53	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 12:53	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 12:53	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 12:53	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:53	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 12:53	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 12:53	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 12:53	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 12:53	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 12:53	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:53	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 12:53	
Ethylbenzene	ND U	0.50	1	08/16/24 12:53	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 12:53	
2-Hexanone	ND U	20	1	08/16/24 12:53	
Isopropylbenzene	ND U	2.0	1	08/16/24 12:53	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 12:53	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-03-13I	**Units:**	ug/L
Lab Code:	K2408131-003	**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	08/16/24 12:53	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 12:53	
Methylene Chloride	ND U	2.0	1	08/16/24 12:53	
Naphthalene	ND U	2.0	1	08/16/24 12:53	
n-Propylbenzene	ND U	2.0	1	08/16/24 12:53	
Styrene	ND U	0.50	1	08/16/24 12:53	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:53	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 12:53	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 12:53	
Toluene	ND U	0.50	1	08/16/24 12:53	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 12:53	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 12:53	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 12:53	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 12:53	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 12:53	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 12:53	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 12:53	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 12:53	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 12:53	
Vinyl Chloride	ND U	0.50	1	08/16/24 12:53	
o-Xylene	ND U	0.50	1	08/16/24 12:53	
m,p-Xylenes	ND U	0.50	1	08/16/24 12:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	68 - 117	08/16/24 12:53	
Dibromofluoromethane	103	73 - 122	08/16/24 12:53	
Toluene-d8	100	65 - 144	08/16/24 12:53	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-04-DUP	**Units:**	ug/L
Lab Code:	K2408131-004	**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	08/16/24 13:17	
Benzene	ND U	0.50	1	08/16/24 13:17	
Bromobenzene	ND U	2.0	1	08/16/24 13:17	
Bromochloromethane	ND U	0.50	1	08/16/24 13:17	
Bromodichloromethane	ND U	0.50	1	08/16/24 13:17	
Bromoform	ND U	0.50	1	08/16/24 13:17	
Bromomethane	ND U	0.50	1	08/16/24 13:17	
2-Butanone (MEK)	ND U	20	1	08/16/24 13:17	
n-Butylbenzene	ND U	4.0	1	08/16/24 13:17	
sec-Butylbenzene	ND U	2.0	1	08/16/24 13:17	
tert-Butylbenzene	ND U	2.0	1	08/16/24 13:17	
Carbon Disulfide	ND U	0.50	1	08/16/24 13:17	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 13:17	
Chlorobenzene	ND U	0.50	1	08/16/24 13:17	
Chloroethane	ND U	0.50	1	08/16/24 13:17	
Chloroform	ND U	0.50	1	08/16/24 13:17	
Chloromethane	ND U	0.50	1	08/16/24 13:17	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 13:17	
4-Chlorotoluene	ND U	2.0	1	08/16/24 13:17	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 13:17	*
Dibromochloromethane	ND U	0.50	1	08/16/24 13:17	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 13:17	
Dibromomethane	ND U	0.50	1	08/16/24 13:17	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 13:17	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 13:17	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 13:17	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 13:17	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 13:17	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 13:17	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 13:17	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 13:17	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 13:17	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 13:17	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 13:17	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 13:17	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 13:17	
Ethylbenzene	ND U	0.50	1	08/16/24 13:17	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 13:17	
2-Hexanone	ND U	20	1	08/16/24 13:17	
Isopropylbenzene	ND U	2.0	1	08/16/24 13:17	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 13:17	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-04-DUP	**Units:**	ug/L
Lab Code:	K2408131-004	**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	08/16/24 13:17	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 13:17	
Methylene Chloride	ND U	2.0	1	08/16/24 13:17	
Naphthalene	ND U	2.0	1	08/16/24 13:17	
n-Propylbenzene	ND U	2.0	1	08/16/24 13:17	
Styrene	ND U	0.50	1	08/16/24 13:17	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 13:17	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 13:17	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 13:17	
Toluene	ND U	0.50	1	08/16/24 13:17	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 13:17	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 13:17	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 13:17	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 13:17	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 13:17	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 13:17	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 13:17	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 13:17	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 13:17	
Vinyl Chloride	ND U	0.50	1	08/16/24 13:17	
o-Xylene	ND U	0.50	1	08/16/24 13:17	
m,p-Xylenes	ND U	0.50	1	08/16/24 13:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	68 - 117	08/16/24 13:17	
Dibromofluoromethane	101	73 - 122	08/16/24 13:17	
Toluene-d8	100	65 - 144	08/16/24 13:17	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 07:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2408131-005	**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	08/16/24 13:42	
Benzene	ND U	0.50	1	08/16/24 13:42	
Bromobenzene	ND U	2.0	1	08/16/24 13:42	
Bromochloromethane	ND U	0.50	1	08/16/24 13:42	
Bromodichloromethane	ND U	0.50	1	08/16/24 13:42	
Bromoform	ND U	0.50	1	08/16/24 13:42	
Bromomethane	ND U	0.50	1	08/16/24 13:42	
2-Butanone (MEK)	ND U	20	1	08/16/24 13:42	
n-Butylbenzene	ND U	4.0	1	08/16/24 13:42	
sec-Butylbenzene	ND U	2.0	1	08/16/24 13:42	
tert-Butylbenzene	ND U	2.0	1	08/16/24 13:42	
Carbon Disulfide	ND U	0.50	1	08/16/24 13:42	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 13:42	
Chlorobenzene	ND U	0.50	1	08/16/24 13:42	
Chloroethane	ND U	0.50	1	08/16/24 13:42	
Chloroform	ND U	0.50	1	08/16/24 13:42	
Chloromethane	ND U	0.50	1	08/16/24 13:42	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 13:42	
4-Chlorotoluene	ND U	2.0	1	08/16/24 13:42	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 13:42	*
Dibromochloromethane	ND U	0.50	1	08/16/24 13:42	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 13:42	
Dibromomethane	ND U	0.50	1	08/16/24 13:42	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 13:42	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 13:42	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 13:42	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 13:42	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 13:42	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 13:42	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 13:42	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 13:42	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 13:42	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 13:42	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 13:42	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 13:42	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 13:42	
Ethylbenzene	ND U	0.50	1	08/16/24 13:42	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 13:42	
2-Hexanone	ND U	20	1	08/16/24 13:42	
Isopropylbenzene	ND U	2.0	1	08/16/24 13:42	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 13:42	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 07:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2408131-005	**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	08/16/24 13:42	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 13:42	
Methylene Chloride	ND U	2.0	1	08/16/24 13:42	
Naphthalene	ND U	2.0	1	08/16/24 13:42	
n-Propylbenzene	ND U	2.0	1	08/16/24 13:42	
Styrene	ND U	0.50	1	08/16/24 13:42	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 13:42	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 13:42	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 13:42	
Toluene	ND U	0.50	1	08/16/24 13:42	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 13:42	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 13:42	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 13:42	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 13:42	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 13:42	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 13:42	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 13:42	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 13:42	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 13:42	
Vinyl Chloride	ND U	0.50	1	08/16/24 13:42	
o-Xylene	ND U	0.50	1	08/16/24 13:42	
m,p-Xylenes	ND U	0.50	1	08/16/24 13:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	68 - 117	08/16/24 13:42	
Dibromofluoromethane	101	73 - 122	08/16/24 13:42	
Toluene-d8	101	65 - 144	08/16/24 13:42	

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:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 13:15
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-01-FB	**Basis:**	NA
Lab Code:	K2408131-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	ND U	ug/L	2.0	1	08/21/24 12:19	08/13/24	
Manganese	6020B	ND U	ug/L	0.20	1	08/21/24 12:19	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 14:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-02-27I	**Basis:**	NA
Lab Code:	K2408131-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**19.8**	ug/L	2.0	1	08/21/24 12:07	08/13/24	
Manganese	6020B	**137**	ug/L	0.20	1	08/21/24 12:07	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-03-13I	**Basis:**	NA
Lab Code:	K2408131-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**11.0**	ug/L	2.0	1	08/21/24 12:21	08/13/24	
Manganese	6020B	**1.04**	ug/L	0.20	1	08/21/24 12:21	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-04-DUP	**Basis:**	NA
Lab Code:	K2408131-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**12.2**	ug/L	2.0	1	08/21/24 12:24	08/13/24	
Manganese	6020B	**1.03**	ug/L	0.20	1	08/21/24 12:24	08/13/24	

General Chemistry

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:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 13:15
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-01-FB	**Basis:**	NA
Lab Code:	K2408131-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	08/07/24 18:58	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/07/24 18:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 13:15
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-01-FB	**Basis:**	NA
Lab Code:	K2408131-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	08/13/24 10:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 14:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-02-27I	**Basis:**	NA
Lab Code:	K2408131-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**13.6**	mg/L	0.20	2	08/07/24 19:11	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	2	08/07/24 19:11	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 14:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-02-27I	**Basis:**	NA
Lab Code:	K2408131-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**258**	mg/L	10	1	08/13/24 10:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-03-13I	**Basis:**	NA
Lab Code:	K2408131-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.29**	mg/L	0.20	2	08/07/24 19:25	
Nitrate as Nitrogen	300.0	**3.47**	mg/L	0.10	2	08/07/24 19:25	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-03-13I	**Basis:**	NA
Lab Code:	K2408131-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**186**	mg/L	10	1	08/13/24 10:58	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-04-DUP	**Basis:**	NA
Lab Code:	K2408131-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**7.34**	mg/L	0.20	2	08/07/24 19:38	
Nitrate as Nitrogen	300.0	**3.49**	mg/L	0.10	2	08/07/24 19:38	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 16:05
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-080624-04-DUP	**Basis:**	NA
Lab Code:	K2408131-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**185**	mg/L	10	1	08/13/24 10:58	

QC Summary Forms

ALS Environmental—Kelso Laboratory
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Volatile Organic Compounds by GC/MS

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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: SCS Engineers **Service Request:** K2408131
Project: Leichner Landfill/04224030.13
Sample Matrix: 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-080624-01-FB	K2408131-001	101	100	98
LB-080624-02-27I	K2408131-002	101	100	99
LB-080624-03-13I	K2408131-003	99	103	100
LB-080624-04-DUP	K2408131-004	97	101	100
TB1	K2408131-005	99	101	101
Lab Control Sample	KQ2413046-03	99	103	100
Duplicate Lab Control Sample	KQ2413046-04	99	100	99
Method Blank	KQ2413046-05	99	102	101

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413046-05	**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	08/16/24 11:39	
Benzene	ND U	0.50	1	08/16/24 11:39	
Bromobenzene	ND U	2.0	1	08/16/24 11:39	
Bromochloromethane	ND U	0.50	1	08/16/24 11:39	
Bromodichloromethane	ND U	0.50	1	08/16/24 11:39	
Bromoform	ND U	0.50	1	08/16/24 11:39	
Bromomethane	ND U	0.50	1	08/16/24 11:39	
2-Butanone (MEK)	ND U	20	1	08/16/24 11:39	
n-Butylbenzene	ND U	4.0	1	08/16/24 11:39	
sec-Butylbenzene	ND U	2.0	1	08/16/24 11:39	
tert-Butylbenzene	ND U	2.0	1	08/16/24 11:39	
Carbon Disulfide	ND U	0.50	1	08/16/24 11:39	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 11:39	
Chlorobenzene	ND U	0.50	1	08/16/24 11:39	
Chloroethane	ND U	0.50	1	08/16/24 11:39	
Chloroform	ND U	0.50	1	08/16/24 11:39	
Chloromethane	ND U	0.50	1	08/16/24 11:39	
2-Chlorotoluene	ND U	2.0	1	08/16/24 11:39	
4-Chlorotoluene	ND U	2.0	1	08/16/24 11:39	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 11:39	
Dibromochloromethane	ND U	0.50	1	08/16/24 11:39	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 11:39	
Dibromomethane	ND U	0.50	1	08/16/24 11:39	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 11:39	
1,1-Dichloroethane	ND U	0.50	1	08/16/24 11:39	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 11:39	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 11:39	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
Ethylbenzene	ND U	0.50	1	08/16/24 11:39	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 11:39	
2-Hexanone	ND U	20	1	08/16/24 11:39	
Isopropylbenzene	ND U	2.0	1	08/16/24 11:39	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 11:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413046-05	**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	08/16/24 11:39	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 11:39	
Methylene Chloride	ND U	2.0	1	08/16/24 11:39	
Naphthalene	ND U	2.0	1	08/16/24 11:39	
n-Propylbenzene	ND U	2.0	1	08/16/24 11:39	
Styrene	ND U	0.50	1	08/16/24 11:39	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 11:39	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 11:39	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 11:39	
Toluene	ND U	0.50	1	08/16/24 11:39	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 11:39	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 11:39	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 11:39	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 11:39	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 11:39	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 11:39	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 11:39	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 11:39	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 11:39	
Vinyl Chloride	ND U	0.50	1	08/16/24 11:39	
o-Xylene	ND U	0.50	1	08/16/24 11:39	
m,p-Xylenes	ND U	0.50	1	08/16/24 11:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	68 - 117	08/16/24 11:39	
Dibromofluoromethane	102	73 - 122	08/16/24 11:39	
Toluene-d8	101	65 - 144	08/16/24 11:39	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/16/24
Sample Matrix:	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:	850930

	Lab Control Sample KQ2413046-03			Duplicate Lab Control Sample KQ2413046-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	9.48	10.0	95	9.76	10.0	98	66-124	3	30
1,1,1-Trichloroethane (TCA)	11.1	10.0	111	10.7	10.0	107	59-136	3	30
1,1,2,2-Tetrachloroethane	9.32	10.0	93	9.36	10.0	94	70-127	<1	30
1,1,2-Trichloroethane	9.31	10.0	93	9.48	10.0	95	74-118	2	30
1,1-Dichloroethane	10.6	10.0	106	9.93	10.0	99	68-132	7	30
1,1-Dichloropropene	10.6	10.0	106	10.5	10.0	105	59-134	<1	30
1,2,3-Trichlorobenzene	9.64	10.0	96	9.57	10.0	96	68-120	<1	30
1,2,3-Trichloropropane	9.43	10.0	94	9.45	10.0	95	69-123	<1	30
1,2,4-Trichlorobenzene	9.52	10.0	95	9.59	10.0	96	58-126	<1	30
1,2,4-Trimethylbenzene	10.4	10.0	104	10.4	10.0	104	63-122	<1	30
1,2-Dibromo-3-chloropropane	8.71	10.0	87	8.48	10.0	85	55-132	3	30
1,2-Dibromoethane (EDB)	9.74	10.0	97	9.86	10.0	99	74-118	1	30
1,2-Dichlorobenzene	9.64	10.0	96	9.58	10.0	96	72-115	<1	30
1,2-Dichloropropane	9.59	10.0	96	9.49	10.0	95	67-126	1	30
1,3,5-Trimethylbenzene	10.1	10.0	101	10.0	10.0	100	62-126	<1	30
1,3-Dichlorobenzene	9.85	10.0	99	9.88	10.0	99	70-116	<1	30
1,3-Dichloropropane	9.38	10.0	94	9.41	10.0	94	75-116	<1	30
1,4-Dichlorobenzene	9.57	10.0	96	9.55	10.0	96	73-115	<1	30
2,2-Dichloropropane	10.4	10.0	104	10.1	10.0	101	37-145	3	30
2-Butanone (MEK)	48.6	50.0	97	49.4	50.0	99	71-149	1	30
2-Chlorotoluene	9.64	10.0	96	9.58	10.0	96	55-131	<1	30
2-Hexanone	49.2	50.0	98	48.8	50.0	98	59-131	<1	30
4-Chlorotoluene	9.83	10.0	98	9.81	10.0	98	66-121	<1	30
4-Isopropyltoluene	10.9	10.0	109	10.7	10.0	107	61-128	1	30
4-Methyl-2-pentanone (MIBK)	47.3	50.0	95	46.7	50.0	93	64-134	1	30
Acetone	49.1	50.0	98	48.5	50.0	97	68-135	1	30
Benzene	9.91	10.0	99	9.85	10.0	99	69-124	<1	30
Bromobenzene	9.56	10.0	96	9.53	10.0	95	72-116	<1	30
Bromochloromethane	9.97	10.0	100	9.76	10.0	98	75-131	2	30
Bromodichloromethane	9.90	10.0	99	9.80	10.0	98	63-129	1	30
Bromoform	9.67	10.0	97	9.46	10.0	95	52-144	2	30
Bromomethane	8.61	10.0	86	8.54	10.0	85	35-113	<1	30
Carbon Disulfide	21.1	20.0	106	20.5	20.0	103	46-144	3	30
Carbon Tetrachloride	10.9	10.0	109	10.8	10.0	108	55-140	1	30
Chlorobenzene	9.86	10.0	99	9.97	10.0	100	72-116	1	30
Chloroethane	11.0	10.0	110	10.9	10.0	109	58-134	<1	30
Chloroform	9.88	10.0	99	9.84	10.0	98	70-129	<1	30
Chloromethane	9.61	10.0	96	9.53	10.0	95	34-130	<1	30
cis-1,2-Dichloroethene	9.46	10.0	95	9.39	10.0	94	71-118	<1	30
cis-1,3-Dichloropropene	10.1	10.0	101	10.0	10.0	100	62-132	1	30
Dibromochloromethane	8.83	10.0	88	8.94	10.0	89	67-126	1	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/16/24
Sample Matrix:	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:	850930

	Lab Control Sample KQ2413046-03			Duplicate Lab Control Sample KQ2413046-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.84	10.0	98	9.60	10.0	96	69-128	2	30
Dichlorodifluoromethane	10.5	10.0	105	10.1	10.0	101	32-124	4	30
Ethylbenzene	10.0	10.0	100	10.0	10.0	100	67-121	<1	30
Hexachlorobutadiene	9.85	10.0	99	9.86	10.0	99	57-119	<1	30
Isopropylbenzene	9.68	10.0	97	9.64	10.0	96	67-129	<1	30
m,p-Xylenes	20.5	20.0	103	20.5	20.0	103	69-121	<1	30
Methyl tert-Butyl Ether	9.53	10.0	95	9.39	10.0	94	54-126	1	30
Methylene Chloride	10.2	10.0	102	10.0	10.0	100	71-122	2	30
Naphthalene	8.96	10.0	90	9.00	10.0	90	64-126	<1	30
n-Butylbenzene	10.4	10.0	104	10.2	10.0	102	55-130	2	30
n-Propylbenzene	10.2	10.0	102	10.0	10.0	100	61-124	1	30
o-Xylene	10.2	10.0	102	10.1	10.0	101	71-119	<1	30
sec-Butylbenzene	10.6	10.0	106	10.4	10.0	104	59-128	2	30
Styrene	10.3	10.0	103	10.4	10.0	104	74-121	<1	30
tert-Butylbenzene	10.2	10.0	102	10.1	10.0	101	61-127	1	30
Tetrachloroethene (PCE)	10.6	10.0	106	10.7	10.0	107	62-126	1	30
Toluene	9.97	10.0	100	9.93	10.0	99	69-124	<1	30
trans-1,2-Dichloroethene	10.4	10.0	104	10.0	10.0	100	67-125	4	30
trans-1,3-Dichloropropene	9.76	10.0	98	9.72	10.0	97	59-125	<1	30
Trichloroethene (TCE)	9.79	10.0	98	9.62	10.0	96	67-128	2	30
Trichlorofluoromethane (CFC 11)	11.7	10.0	117	11.4	10.0	114	52-141	2	30
Vinyl Chloride	11.7	10.0	117	11.4	10.0	114	55-123	3	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2412249-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	ND U	ug/L	2.0	1	08/21/24 12:02	08/13/24	
Manganese	6020B	ND U	ug/L	0.20	1	08/21/24 12:02	08/13/24	

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24
Sample Matrix:	Water	**Date Received:**	08/07/24
		Date Analyzed:	08/21/24
		Date Extracted:	08/13/24

Matrix Spike Summary
Dissolved Metals

Sample Name:	LB-080624-02-27I	**Units:**	ug/L
Lab Code:	K2408131-002	**Basis:**	NA
Analysis Method:	6020B		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2412249-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	19.8	73.2	50.0	107	75-125
Manganese	137	163	25.0	106 #	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:**	K2408131
Project	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24
Sample Matrix:	Water	**Date Received:**	08/07/24
		Date Analyzed:	08/21/24

Replicate Sample Summary
Dissolved Metals

Sample Name:	LB-080624-02-27I	**Units:**	ug/L
Lab Code:	K2408131-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample KQ2412249-03 Result	Average	RPD	RPD Limit
Iron	6020B	2.0	19.8	19.5	19.7	2	20
Manganese	6020B	0.20	137	137	137	<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:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/21/24
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2412249-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6020B	53.4	50.0	107	80-120
Manganese	6020B	25.6	25.0	102	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408131-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	ND U	mg/L	0.10	1	08/07/24 14:00	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/07/24 14:00	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408131
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408131-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	08/13/24 10:58	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408131
Date Analyzed: 08/07/24 - 08/13/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2408131-LCS

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	2.47	2.50	99	90-110
Solids, Total Dissolved	SM 2540 C	1690	1760	96	85-115

August 22, 2024 Service Request No:K2408134

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 August 07, 2024
For your reference, these analyses have been assigned our service request number **K2408134.**

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 Landfill
Sample Matrix: Water

Service Request: K2408134
Date Received: 08/07/2024

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:

Two water samples were received for analysis at ALS Environmental on 08/07/2024. 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, 08/09/2024: The analysis of sample LB-17S for Nitrate as Nitrogen was initially performed within the recommended holding time. Reanalysis at a larger dilution was required. The reanalysis was performed 1 day past the recommended holding time. The results from the second analysis were reported.

Volatiles by GC/MS:

Method 8260C, 08/16/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. This rounds to 20 which is the upper limit. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.
Method 8260C, 08/16/2024:Chloromethane 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.
Method 8260C, 08/16/2024:The lower control criterion was exceeded for Dichlorodifluoromethane in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the analyte in question and the analyte was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Approved by  Date 08/22/2024

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-17S			Lab ID: K2408134-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	10.8			0.20	mg/L	300.0
Iron, Dissolved	40.3			2.0	ug/L	6020B
Manganese, Dissolved	1.14			0.20	ug/L	6020B
Nitrate as Nitrogen	13.1			0.50	mg/L	300.0
Solids, Total Dissolved	304			10	mg/L	SM 2540 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Client: SCS Engineers **Service Request:**K2408134
Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2408134-001	TB1	8/6/2024	0700
K2408134-002	LB-17S	8/6/2024	1220

☐ ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

K2408134

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB1	8/6/24	0900	W	1,8	2	X						Metals are Field Filtered	
2	LB-175	8/6/24	1220	W	1,2,8	5	X	X	X	X	X			
3														
4														
5														
6														
7														
8														
9														
10														

Sampler(s): Please Print & Sign: Ian Holtquist / S. Campbell / Sara Campbell

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Sara Campbell	8/7	0936	Franklin LaBiche	8/07/24	0936	
Relinquished by: Franklin LaBiche	Date: 8/07/24	Time: 1046	Received by (Laboratory): Hayleigh Smith	Date: 8/7/24	Time: 1046	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)
		☐ Level II: Standard QC ☐ Level III: Raw Data
		☐ TRRP LRC ☐ TRRP Level IV
		☐ Level IV: SW846 Methods/CLP like
		☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM HH

Cooler Receipt and Preservation Form

Client SCS Engineers Service Request K24 08134

Received: 8/7/24 Opened: 8/7/24 By: HS Unloaded: 8/7/24 By: HS

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
	4.5	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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM (NA) Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD

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

Notes, Discrepancies, Resolutions: only rec'd 1 VOA for TB1

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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 over the calibration range.
J	The result is an estimated value between the MDL and the MRL.
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:**	K2408134
Project:	Leichner Landfill/04224030.13		

Sample Name:	TB1	**Date Collected:**	08/6/24
Lab Code:	K2408134-001	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCRESWELL

Sample Name:	LB-17S	**Date Collected:**	08/6/24
Lab Code:	K2408134-002	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-17S	**Date Collected:**	08/6/24
Lab Code:	K2408134-002.R01	**Date Received:**	08/7/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH

Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 07:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2408134-001	**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	08/16/24 14:06	
Benzene	ND U	0.50	1	08/16/24 14:06	
Bromobenzene	ND U	2.0	1	08/16/24 14:06	
Bromochloromethane	ND U	0.50	1	08/16/24 14:06	
Bromodichloromethane	ND U	0.50	1	08/16/24 14:06	
Bromoform	ND U	0.50	1	08/16/24 14:06	
Bromomethane	ND U	0.50	1	08/16/24 14:06	
2-Butanone (MEK)	ND U	20	1	08/16/24 14:06	
n-Butylbenzene	ND U	4.0	1	08/16/24 14:06	
sec-Butylbenzene	ND U	2.0	1	08/16/24 14:06	
tert-Butylbenzene	ND U	2.0	1	08/16/24 14:06	
Carbon Disulfide	ND U	0.50	1	08/16/24 14:06	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 14:06	
Chlorobenzene	ND U	0.50	1	08/16/24 14:06	
Chloroethane	ND U	0.50	1	08/16/24 14:06	
Chloroform	ND U	0.50	1	08/16/24 14:06	
Chloromethane	ND U	0.50	1	08/16/24 14:06	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 14:06	
4-Chlorotoluene	ND U	2.0	1	08/16/24 14:06	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 14:06	*
Dibromochloromethane	ND U	0.50	1	08/16/24 14:06	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 14:06	
Dibromomethane	ND U	0.50	1	08/16/24 14:06	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 14:06	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 14:06	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 14:06	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 14:06	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 14:06	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 14:06	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 14:06	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 14:06	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 14:06	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 14:06	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 14:06	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 14:06	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 14:06	
Ethylbenzene	ND U	0.50	1	08/16/24 14:06	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 14:06	
2-Hexanone	ND U	20	1	08/16/24 14:06	
Isopropylbenzene	ND U	2.0	1	08/16/24 14:06	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 14:06	

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 07:00
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	TB1	**Units:**	ug/L
Lab Code:	K2408134-001	**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	08/16/24 14:06	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 14:06	
Methylene Chloride	ND U	2.0	1	08/16/24 14:06	
Naphthalene	ND U	2.0	1	08/16/24 14:06	
n-Propylbenzene	ND U	2.0	1	08/16/24 14:06	
Styrene	ND U	0.50	1	08/16/24 14:06	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 14:06	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 14:06	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 14:06	
Toluene	ND U	0.50	1	08/16/24 14:06	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 14:06	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 14:06	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 14:06	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 14:06	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 14:06	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 14:06	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 14:06	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 14:06	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 14:06	
Vinyl Chloride	ND U	0.50	1	08/16/24 14:06	
o-Xylene	ND U	0.50	1	08/16/24 14:06	
m,p-Xylenes	ND U	0.50	1	08/16/24 14:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	68 - 117	08/16/24 14:06	
Dibromofluoromethane	102	73 - 122	08/16/24 14:06	
Toluene-d8	98	65 - 144	08/16/24 14:06	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 12:20
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-17S	**Units:**	ug/L
Lab Code:	K2408134-002	**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	08/16/24 14:31	
Benzene	ND U	0.50	1	08/16/24 14:31	
Bromobenzene	ND U	2.0	1	08/16/24 14:31	
Bromochloromethane	ND U	0.50	1	08/16/24 14:31	
Bromodichloromethane	ND U	0.50	1	08/16/24 14:31	
Bromoform	ND U	0.50	1	08/16/24 14:31	
Bromomethane	ND U	0.50	1	08/16/24 14:31	
2-Butanone (MEK)	ND U	20	1	08/16/24 14:31	
n-Butylbenzene	ND U	4.0	1	08/16/24 14:31	
sec-Butylbenzene	ND U	2.0	1	08/16/24 14:31	
tert-Butylbenzene	ND U	2.0	1	08/16/24 14:31	
Carbon Disulfide	ND U	0.50	1	08/16/24 14:31	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 14:31	
Chlorobenzene	ND U	0.50	1	08/16/24 14:31	
Chloroethane	ND U	0.50	1	08/16/24 14:31	
Chloroform	ND U	0.50	1	08/16/24 14:31	
Chloromethane	ND U	0.50	1	08/16/24 14:31	*
2-Chlorotoluene	ND U	2.0	1	08/16/24 14:31	
4-Chlorotoluene	ND U	2.0	1	08/16/24 14:31	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 14:31	*
Dibromochloromethane	ND U	0.50	1	08/16/24 14:31	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 14:31	
Dibromomethane	ND U	0.50	1	08/16/24 14:31	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 14:31	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 14:31	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 14:31	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 14:31	*
1,1-Dichloroethane	ND U	0.50	1	08/16/24 14:31	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 14:31	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 14:31	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 14:31	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 14:31	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 14:31	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 14:31	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 14:31	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 14:31	
Ethylbenzene	ND U	0.50	1	08/16/24 14:31	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 14:31	
2-Hexanone	ND U	20	1	08/16/24 14:31	
Isopropylbenzene	ND U	2.0	1	08/16/24 14:31	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 14:31	

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 12:20
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-17S	**Units:**	ug/L
Lab Code:	K2408134-002	**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	08/16/24 14:31	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 14:31	
Methylene Chloride	ND U	2.0	1	08/16/24 14:31	
Naphthalene	ND U	2.0	1	08/16/24 14:31	
n-Propylbenzene	ND U	2.0	1	08/16/24 14:31	
Styrene	ND U	0.50	1	08/16/24 14:31	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 14:31	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 14:31	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 14:31	
Toluene	ND U	0.50	1	08/16/24 14:31	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 14:31	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 14:31	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 14:31	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 14:31	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 14:31	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 14:31	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 14:31	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 14:31	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 14:31	
Vinyl Chloride	ND U	0.50	1	08/16/24 14:31	
o-Xylene	ND U	0.50	1	08/16/24 14:31	
m,p-Xylenes	ND U	0.50	1	08/16/24 14:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	68 - 117	08/16/24 14:31	
Dibromofluoromethane	101	73 - 122	08/16/24 14:31	
Toluene-d8	99	65 - 144	08/16/24 14:31	

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 12:20
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-17S	**Basis:**	NA
Lab Code:	K2408134-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**40.3**	ug/L	2.0	1	08/21/24 12:31	08/13/24	
Manganese	6020B	**1.14**	ug/L	0.20	1	08/21/24 12:31	08/13/24	

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 12:20
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-17S	**Basis:**	NA
Lab Code:	K2408134-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**10.8**	mg/L	0.20	2	08/07/24 19:52	
Nitrate as Nitrogen	300.0	**13.1**	mg/L	0.50	10	08/09/24 01:34	*

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/06/24 12:20
Sample Matrix:	Water	**Date Received:**	08/07/24 10:46
Sample Name:	LB-17S	**Basis:**	NA
Lab Code:	K2408134-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**304**	mg/L	10	1	08/10/24 15:00	

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:** K2408134
Project: Leichner Landfill/04224030.13
Sample Matrix: 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	K2408134-001	100	102	98
LB-17S	K2408134-002	98	101	99
Lab Control Sample	KQ2413046-03	99	103	100
Duplicate Lab Control Sample	KQ2413046-04	99	100	99
Method Blank	KQ2413046-05	99	102	101

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413046-05	**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	08/16/24 11:39	
Benzene	ND U	0.50	1	08/16/24 11:39	
Bromobenzene	ND U	2.0	1	08/16/24 11:39	
Bromochloromethane	ND U	0.50	1	08/16/24 11:39	
Bromodichloromethane	ND U	0.50	1	08/16/24 11:39	
Bromoform	ND U	0.50	1	08/16/24 11:39	
Bromomethane	ND U	0.50	1	08/16/24 11:39	
2-Butanone (MEK)	ND U	20	1	08/16/24 11:39	
n-Butylbenzene	ND U	4.0	1	08/16/24 11:39	
sec-Butylbenzene	ND U	2.0	1	08/16/24 11:39	
tert-Butylbenzene	ND U	2.0	1	08/16/24 11:39	
Carbon Disulfide	ND U	0.50	1	08/16/24 11:39	
Carbon Tetrachloride	ND U	0.50	1	08/16/24 11:39	
Chlorobenzene	ND U	0.50	1	08/16/24 11:39	
Chloroethane	ND U	0.50	1	08/16/24 11:39	
Chloroform	ND U	0.50	1	08/16/24 11:39	
Chloromethane	ND U	0.50	1	08/16/24 11:39	
2-Chlorotoluene	ND U	2.0	1	08/16/24 11:39	
4-Chlorotoluene	ND U	2.0	1	08/16/24 11:39	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/16/24 11:39	
Dibromochloromethane	ND U	0.50	1	08/16/24 11:39	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/16/24 11:39	
Dibromomethane	ND U	0.50	1	08/16/24 11:39	
1,2-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
1,3-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
1,4-Dichlorobenzene	ND U	0.50	1	08/16/24 11:39	
Dichlorodifluoromethane	ND U	0.50	1	08/16/24 11:39	
1,1-Dichloroethane	ND U	0.50	1	08/16/24 11:39	
cis-1,2-Dichloroethene	ND U	0.50	1	08/16/24 11:39	
trans-1,2-Dichloroethene	ND U	0.50	1	08/16/24 11:39	
1,2-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
1,3-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
2,2-Dichloropropane	ND U	0.50	1	08/16/24 11:39	
1,1-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
cis-1,3-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
trans-1,3-Dichloropropene	ND U	0.50	1	08/16/24 11:39	
Ethylbenzene	ND U	0.50	1	08/16/24 11:39	
Hexachlorobutadiene	ND U	2.0	1	08/16/24 11:39	
2-Hexanone	ND U	20	1	08/16/24 11:39	
Isopropylbenzene	ND U	2.0	1	08/16/24 11:39	
4-Isopropyltoluene	ND U	2.0	1	08/16/24 11:39	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413046-05	**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	08/16/24 11:39	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/16/24 11:39	
Methylene Chloride	ND U	2.0	1	08/16/24 11:39	
Naphthalene	ND U	2.0	1	08/16/24 11:39	
n-Propylbenzene	ND U	2.0	1	08/16/24 11:39	
Styrene	ND U	0.50	1	08/16/24 11:39	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/16/24 11:39	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/16/24 11:39	
Tetrachloroethene (PCE)	ND U	0.50	1	08/16/24 11:39	
Toluene	ND U	0.50	1	08/16/24 11:39	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/16/24 11:39	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/16/24 11:39	
1,1,2-Trichloroethane	ND U	0.50	1	08/16/24 11:39	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/16/24 11:39	
Trichloroethene (TCE)	ND U	0.50	1	08/16/24 11:39	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/16/24 11:39	
1,2,3-Trichloropropane	ND U	0.50	1	08/16/24 11:39	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/16/24 11:39	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/16/24 11:39	
Vinyl Chloride	ND U	0.50	1	08/16/24 11:39	
o-Xylene	ND U	0.50	1	08/16/24 11:39	
m,p-Xylenes	ND U	0.50	1	08/16/24 11:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	68 - 117	08/16/24 11:39	
Dibromofluoromethane	102	73 - 122	08/16/24 11:39	
Toluene-d8	101	65 - 144	08/16/24 11:39	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/16/24
Sample Matrix:	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:	850930

	Lab Control Sample KQ2413046-03			Duplicate Lab Control Sample KQ2413046-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	9.48	10.0	95	9.76	10.0	98	66-124	3	30
1,1,1-Trichloroethane (TCA)	11.1	10.0	111	10.7	10.0	107	59-136	3	30
1,1,2,2-Tetrachloroethane	9.32	10.0	93	9.36	10.0	94	70-127	<1	30
1,1,2-Trichloroethane	9.31	10.0	93	9.48	10.0	95	74-118	2	30
1,1-Dichloroethane	10.6	10.0	106	9.93	10.0	99	68-132	7	30
1,1-Dichloropropene	10.6	10.0	106	10.5	10.0	105	59-134	<1	30
1,2,3-Trichlorobenzene	9.64	10.0	96	9.57	10.0	96	68-120	<1	30
1,2,3-Trichloropropane	9.43	10.0	94	9.45	10.0	95	69-123	<1	30
1,2,4-Trichlorobenzene	9.52	10.0	95	9.59	10.0	96	58-126	<1	30
1,2,4-Trimethylbenzene	10.4	10.0	104	10.4	10.0	104	63-122	<1	30
1,2-Dibromo-3-chloropropane	8.71	10.0	87	8.48	10.0	85	55-132	3	30
1,2-Dibromoethane (EDB)	9.74	10.0	97	9.86	10.0	99	74-118	1	30
1,2-Dichlorobenzene	9.64	10.0	96	9.58	10.0	96	72-115	<1	30
1,2-Dichloropropane	9.59	10.0	96	9.49	10.0	95	67-126	1	30
1,3,5-Trimethylbenzene	10.1	10.0	101	10.0	10.0	100	62-126	<1	30
1,3-Dichlorobenzene	9.85	10.0	99	9.88	10.0	99	70-116	<1	30
1,3-Dichloropropane	9.38	10.0	94	9.41	10.0	94	75-116	<1	30
1,4-Dichlorobenzene	9.57	10.0	96	9.55	10.0	96	73-115	<1	30
2,2-Dichloropropane	10.4	10.0	104	10.1	10.0	101	37-145	3	30
2-Butanone (MEK)	48.6	50.0	97	49.4	50.0	99	71-149	1	30
2-Chlorotoluene	9.64	10.0	96	9.58	10.0	96	55-131	<1	30
2-Hexanone	49.2	50.0	98	48.8	50.0	98	59-131	<1	30
4-Chlorotoluene	9.83	10.0	98	9.81	10.0	98	66-121	<1	30
4-Isopropyltoluene	10.9	10.0	109	10.7	10.0	107	61-128	1	30
4-Methyl-2-pentanone (MIBK)	47.3	50.0	95	46.7	50.0	93	64-134	1	30
Acetone	49.1	50.0	98	48.5	50.0	97	68-135	1	30
Benzene	9.91	10.0	99	9.85	10.0	99	69-124	<1	30
Bromobenzene	9.56	10.0	96	9.53	10.0	95	72-116	<1	30
Bromochloromethane	9.97	10.0	100	9.76	10.0	98	75-131	2	30
Bromodichloromethane	9.90	10.0	99	9.80	10.0	98	63-129	1	30
Bromoform	9.67	10.0	97	9.46	10.0	95	52-144	2	30
Bromomethane	8.61	10.0	86	8.54	10.0	85	35-113	<1	30
Carbon Disulfide	21.1	20.0	106	20.5	20.0	103	46-144	3	30
Carbon Tetrachloride	10.9	10.0	109	10.8	10.0	108	55-140	1	30
Chlorobenzene	9.86	10.0	99	9.97	10.0	100	72-116	1	30
Chloroethane	11.0	10.0	110	10.9	10.0	109	58-134	<1	30
Chloroform	9.88	10.0	99	9.84	10.0	98	70-129	<1	30
Chloromethane	9.61	10.0	96	9.53	10.0	95	34-130	<1	30
cis-1,2-Dichloroethene	9.46	10.0	95	9.39	10.0	94	71-118	<1	30
cis-1,3-Dichloropropene	10.1	10.0	101	10.0	10.0	100	62-132	1	30
Dibromochloromethane	8.83	10.0	88	8.94	10.0	89	67-126	1	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/16/24
Sample Matrix:	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:	850930

	Lab Control Sample KQ2413046-03			Duplicate Lab Control Sample KQ2413046-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	9.84	10.0	98	9.60	10.0	96	69-128	2	30
Dichlorodifluoromethane	10.5	10.0	105	10.1	10.0	101	32-124	4	30
Ethylbenzene	10.0	10.0	100	10.0	10.0	100	67-121	<1	30
Hexachlorobutadiene	9.85	10.0	99	9.86	10.0	99	57-119	<1	30
Isopropylbenzene	9.68	10.0	97	9.64	10.0	96	67-129	<1	30
m,p-Xylenes	20.5	20.0	103	20.5	20.0	103	69-121	<1	30
Methyl tert-Butyl Ether	9.53	10.0	95	9.39	10.0	94	54-126	1	30
Methylene Chloride	10.2	10.0	102	10.0	10.0	100	71-122	2	30
Naphthalene	8.96	10.0	90	9.00	10.0	90	64-126	<1	30
n-Butylbenzene	10.4	10.0	104	10.2	10.0	102	55-130	2	30
n-Propylbenzene	10.2	10.0	102	10.0	10.0	100	61-124	1	30
o-Xylene	10.2	10.0	102	10.1	10.0	101	71-119	<1	30
sec-Butylbenzene	10.6	10.0	106	10.4	10.0	104	59-128	2	30
Styrene	10.3	10.0	103	10.4	10.0	104	74-121	<1	30
tert-Butylbenzene	10.2	10.0	102	10.1	10.0	101	61-127	1	30
Tetrachloroethene (PCE)	10.6	10.0	106	10.7	10.0	107	62-126	1	30
Toluene	9.97	10.0	100	9.93	10.0	99	69-124	<1	30
trans-1,2-Dichloroethene	10.4	10.0	104	10.0	10.0	100	67-125	4	30
trans-1,3-Dichloropropene	9.76	10.0	98	9.72	10.0	97	59-125	<1	30
Trichloroethene (TCE)	9.79	10.0	98	9.62	10.0	96	67-128	2	30
Trichlorofluoromethane (CFC 11)	11.7	10.0	117	11.4	10.0	114	52-141	2	30
Vinyl Chloride	11.7	10.0	117	11.4	10.0	114	55-123	3	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2412249-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	ND U	ug/L	2.0	1	08/21/24 12:02	08/13/24	
Manganese	6020B	ND U	ug/L	0.20	1	08/21/24 12:02	08/13/24	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408134
Date Analyzed: 08/21/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2412249-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6020B	53.4	50.0	107	80-120
Manganese	6020B	25.6	25.0	102	80-120

General Chemistry

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408134-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	08/07/24 14:00	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 16:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408134-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	10	1	08/10/24 15:00	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408134-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 18:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408134-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	10	1	08/10/24 15:00	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408134-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 20:07	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408134
Date Analyzed: 08/07/24 - 08/10/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2408134-LCS1

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	2.50	2.50	100	90-110
Solids, Total Dissolved	SM 2540 C	1690	1760	96	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/08/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	850052

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2408134-LCS2	2.51	2.50	100	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408134
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/08/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	850052

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2408134-LCS3	2.50	2.50	100	90-110

August 22, 2024 Service Request No:K2408211

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 August 08, 2024
For your reference, these analyses have been assigned our service request number **K2408211.**

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: Water

Service Request: K2408211
Date Received: 08/08/2024

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 water samples were received for analysis at ALS Environmental on 08/08/2024. 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, 08/19/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.

Approved by  Date 08/22/2024

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-080724-01-26I	Lab ID: K2408211-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.52			0.20	mg/L	300.0
Iron, Dissolved	9.8			2.0	ug/L	6020B
Manganese, Dissolved	2.06			0.20	ug/L	6020B
Nitrate as Nitrogen	3.88			0.10	mg/L	300.0
Solids, Total Dissolved	188			10	mg/L	SM 2540 C

CLIENT ID: LB-080724-02-FB	Lab ID: K2408211-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	0.56			0.10	mg/L	300.0

CLIENT ID: LB-080724-03-6S	Lab ID: K2408211-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	4.01			0.20	mg/L	300.0
Iron, Dissolved	7.1			2.0	ug/L	6020B
Manganese, Dissolved	0.34			0.20	ug/L	6020B
Nitrate as Nitrogen	2.32			0.10	mg/L	300.0
Solids, Total Dissolved	156			10	mg/L	SM 2540 C

CLIENT ID: LB-080724-04-5S	Lab ID: K2408211-005					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	2.60			0.20	mg/L	300.0
Iron, Dissolved	5.9			2.0	ug/L	6020B
Manganese, Dissolved	0.29			0.20	ug/L	6020B
Nitrate as Nitrogen	2.47			0.10	mg/L	300.0
Solids, Total Dissolved	164			10	mg/L	SM 2540 C

CLIENT ID: LB-080724-05-1S	Lab ID: K2408211-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	5.68			0.20	mg/L	300.0
Iron, Dissolved	4.0			2.0	ug/L	6020B
Manganese, Dissolved	0.24			0.20	ug/L	6020B
Nitrate as Nitrogen	4.22			0.10	mg/L	300.0
Solids, Total Dissolved	189			10	mg/L	SM 2540 C

CLIENT ID: LB-080724-06-10SR	Lab ID: K2408211-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloride	14.8			0.20	mg/L	300.0
Iron, Dissolved	36.9			2.0	ug/L	6020B
Manganese, Dissolved	1.03			0.20	ug/L	6020B
Nitrate as Nitrogen	0.89			0.10	mg/L	300.0
Solids, Total Dissolved	236			10	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:**K2408211

Project: Leichner Landfill/04224030.13

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2408211-001	TB2	8/7/2024	0730
K2408211-002	LB-080724-01-26I	8/7/2024	0940
K2408211-003	LB-080724-02-FB	8/7/2024	0945
K2408211-004	LB-080724-03-6S	8/7/2024	1045
K2408211-005	LB-080724-04-5S	8/7/2024	1135
K2408211-006	LB-080724-05-1S	8/7/2024	1315
K2408211-007	LB-080724-06-10SR	8/7/2024	1435

☐ ALS Environmental
1317 South 13th Ave
Kelso, WA 98626
(Tel) 360.577.7222
(Fax) 360.636.1068

Chain of Custody Form

Page 1 of 1

K2508711

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Leichner Landfill	A	Volatile Organics (Method 8260)
Work Order		Project Number	04224030.13	B	Chloride
Company Name	SCS Engineers	Bill To Company	SCS Engineers	C	TDS
Send Report To	Barb Lary	Invoice Attn.	Heather Williams	D	Nitrate (Short Hold)
Address	15940 SW 72nd Ave	Address	15940 SW 72nd Ave	E	Dissolved Metals (Fe, Mn)
				F	
City/State/Zip	Portland OR 97224	City/State/Zip	Portland OR 97224	G	
Phone	(971) 284-1297	Phone	(503) 639-1103	H	
Fax		Fax		I	
e-Mail Address	BLary@scsengineers.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	Notes	Hold
1	TB2	8/7/24	0730	W	2,8	2	X						Metals are Field Filtered	
2	LB-080724-01-26I	8/7/24	0940	W	1,2,8	5	X	X	X	X	X			
3	LB-080724-02-FB	8/7/24	0945	W	1,2,8	5	X	X	X	X	X			
4	LB-080724-03-65	8/7/24	1045	W	1,2,8	5	X	X	X	X	X			
5	LB-080724-04-55	8/7/24	1135	W	1,2,8	5	X	X	X	X	X			
6	LB-080724-05-15	8/7/24	1315	W	1,2,8	5	X	X	X	X	X			
7	LB-080724-06-105R	8/7/24	1435	W	1,2,8	5	X	X	X	X	X			
8														
9														
10														

Sampler(s): Please Print & Sign: Sara Campbell Sara Campbell

Shipment Method: Courier

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other STD

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Sara Campbell	8/7/24	0825	Franklin LaBrie	8/8/24	0825	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	
Franklin LaBrie	8/8/24	1140	Nedesa	8/8/24	1140	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)
		☐ Level II: Standard QC ☐ Level III: Raw Data
		☐ TRRP LRC ☐ TRRP Level IV
		☐ Level IV: SW846 Methods/CLP like
		☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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PM MH

Cooler Receipt and Preservation Form

Client SLS Engineers Service Request K24 08211

Received: 8/8/24 Opened: 8/8/24 By: AP Unloaded: 8/8/24 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? _____
   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
4.1		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 # above 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 samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	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 over the calibration range.
J	The result is an estimated value between the MDL and the MRL.
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:**	K2408211
Project:	Leichner Landfill/04224030.13		

Sample Name:	TB2	**Date Collected:**	08/7/24
Lab Code:	K2408211-001	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCRESWELL

Sample Name:	LB-080724-01-26I	**Date Collected:**	08/7/24
Lab Code:	K2408211-002	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080724-02-FB	**Date Collected:**	08/7/24
Lab Code:	K2408211-003	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080724-03-6S	**Date Collected:**	08/7/24
Lab Code:	K2408211-004	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13		

Sample Name:	LB-080724-04-5S	**Date Collected:**	08/7/24
Lab Code:	K2408211-005	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080724-05-1S	**Date Collected:**	08/7/24
Lab Code:	K2408211-006	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Name:	LB-080724-06-10SR	**Date Collected:**	08/7/24
Lab Code:	K2408211-007	**Date Received:**	08/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		NFOTH
6020B	MCHATTICK	ABOYER
8260C		MCRESWELL
SM 2540 C		AWILSON

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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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:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 07:30
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2408211-001	**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	08/19/24 17:10	
Benzene	ND U	0.50	1	08/19/24 17:10	
Bromobenzene	ND U	2.0	1	08/19/24 17:10	
Bromochloromethane	ND U	0.50	1	08/19/24 17:10	
Bromodichloromethane	ND U	0.50	1	08/19/24 17:10	
Bromoform	ND U	0.50	1	08/19/24 17:10	
Bromomethane	ND U	0.50	1	08/19/24 17:10	
2-Butanone (MEK)	ND U	20	1	08/19/24 17:10	
n-Butylbenzene	ND U	4.0	1	08/19/24 17:10	
sec-Butylbenzene	ND U	2.0	1	08/19/24 17:10	
tert-Butylbenzene	ND U	2.0	1	08/19/24 17:10	
Carbon Disulfide	ND U	0.50	1	08/19/24 17:10	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 17:10	
Chlorobenzene	ND U	0.50	1	08/19/24 17:10	
Chloroethane	ND U	0.50	1	08/19/24 17:10	
Chloroform	ND U	0.50	1	08/19/24 17:10	
Chloromethane	ND U	0.50	1	08/19/24 17:10	
2-Chlorotoluene	ND U	2.0	1	08/19/24 17:10	
4-Chlorotoluene	ND U	2.0	1	08/19/24 17:10	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 17:10	*
Dibromochloromethane	ND U	0.50	1	08/19/24 17:10	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 17:10	
Dibromomethane	ND U	0.50	1	08/19/24 17:10	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 17:10	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 17:10	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 17:10	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 17:10	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 17:10	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 17:10	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 17:10	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 17:10	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 17:10	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 17:10	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 17:10	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 17:10	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 17:10	
Ethylbenzene	ND U	0.50	1	08/19/24 17:10	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 17:10	
2-Hexanone	ND U	20	1	08/19/24 17:10	
Isopropylbenzene	ND U	2.0	1	08/19/24 17:10	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 17:10	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 07:30
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	TB2	**Units:**	ug/L
Lab Code:	K2408211-001	**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	08/19/24 17:10	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 17:10	
Methylene Chloride	ND U	2.0	1	08/19/24 17:10	
Naphthalene	ND U	2.0	1	08/19/24 17:10	
n-Propylbenzene	ND U	2.0	1	08/19/24 17:10	
Styrene	ND U	0.50	1	08/19/24 17:10	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 17:10	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 17:10	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 17:10	
Toluene	ND U	0.50	1	08/19/24 17:10	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 17:10	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 17:10	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 17:10	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 17:10	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 17:10	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 17:10	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 17:10	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 17:10	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 17:10	
Vinyl Chloride	ND U	0.50	1	08/19/24 17:10	
o-Xylene	ND U	0.50	1	08/19/24 17:10	
m,p-Xylenes	ND U	0.50	1	08/19/24 17:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	08/19/24 17:10	
Dibromofluoromethane	94	73 - 122	08/19/24 17:10	
Toluene-d8	94	65 - 144	08/19/24 17:10	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:40
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-01-26I	**Units:**	ug/L
Lab Code:	K2408211-002	**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	08/19/24 17:35	
Benzene	ND U	0.50	1	08/19/24 17:35	
Bromobenzene	ND U	2.0	1	08/19/24 17:35	
Bromochloromethane	ND U	0.50	1	08/19/24 17:35	
Bromodichloromethane	ND U	0.50	1	08/19/24 17:35	
Bromoform	ND U	0.50	1	08/19/24 17:35	
Bromomethane	ND U	0.50	1	08/19/24 17:35	
2-Butanone (MEK)	ND U	20	1	08/19/24 17:35	
n-Butylbenzene	ND U	4.0	1	08/19/24 17:35	
sec-Butylbenzene	ND U	2.0	1	08/19/24 17:35	
tert-Butylbenzene	ND U	2.0	1	08/19/24 17:35	
Carbon Disulfide	ND U	0.50	1	08/19/24 17:35	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 17:35	
Chlorobenzene	ND U	0.50	1	08/19/24 17:35	
Chloroethane	ND U	0.50	1	08/19/24 17:35	
Chloroform	ND U	0.50	1	08/19/24 17:35	
Chloromethane	ND U	0.50	1	08/19/24 17:35	
2-Chlorotoluene	ND U	2.0	1	08/19/24 17:35	
4-Chlorotoluene	ND U	2.0	1	08/19/24 17:35	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 17:35	*
Dibromochloromethane	ND U	0.50	1	08/19/24 17:35	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 17:35	
Dibromomethane	ND U	0.50	1	08/19/24 17:35	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 17:35	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 17:35	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 17:35	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 17:35	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 17:35	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 17:35	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 17:35	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 17:35	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 17:35	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 17:35	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 17:35	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 17:35	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 17:35	
Ethylbenzene	ND U	0.50	1	08/19/24 17:35	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 17:35	
2-Hexanone	ND U	20	1	08/19/24 17:35	
Isopropylbenzene	ND U	2.0	1	08/19/24 17:35	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 17:35	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:40
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-01-26I	**Units:**	ug/L
Lab Code:	K2408211-002	**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	08/19/24 17:35	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 17:35	
Methylene Chloride	ND U	2.0	1	08/19/24 17:35	
Naphthalene	ND U	2.0	1	08/19/24 17:35	
n-Propylbenzene	ND U	2.0	1	08/19/24 17:35	
Styrene	ND U	0.50	1	08/19/24 17:35	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 17:35	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 17:35	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 17:35	
Toluene	ND U	0.50	1	08/19/24 17:35	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 17:35	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 17:35	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 17:35	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 17:35	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 17:35	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 17:35	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 17:35	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 17:35	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 17:35	
Vinyl Chloride	ND U	0.50	1	08/19/24 17:35	
o-Xylene	ND U	0.50	1	08/19/24 17:35	
m,p-Xylenes	ND U	0.50	1	08/19/24 17:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	68 - 117	08/19/24 17:35	
Dibromofluoromethane	94	73 - 122	08/19/24 17:35	
Toluene-d8	95	65 - 144	08/19/24 17:35	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-02-FB	**Units:**	ug/L
Lab Code:	K2408211-003	**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	08/19/24 18:00	
Benzene	ND U	0.50	1	08/19/24 18:00	
Bromobenzene	ND U	2.0	1	08/19/24 18:00	
Bromochloromethane	ND U	0.50	1	08/19/24 18:00	
Bromodichloromethane	ND U	0.50	1	08/19/24 18:00	
Bromoform	ND U	0.50	1	08/19/24 18:00	
Bromomethane	ND U	0.50	1	08/19/24 18:00	
2-Butanone (MEK)	ND U	20	1	08/19/24 18:00	
n-Butylbenzene	ND U	4.0	1	08/19/24 18:00	
sec-Butylbenzene	ND U	2.0	1	08/19/24 18:00	
tert-Butylbenzene	ND U	2.0	1	08/19/24 18:00	
Carbon Disulfide	ND U	0.50	1	08/19/24 18:00	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 18:00	
Chlorobenzene	ND U	0.50	1	08/19/24 18:00	
Chloroethane	ND U	0.50	1	08/19/24 18:00	
Chloroform	ND U	0.50	1	08/19/24 18:00	
Chloromethane	ND U	0.50	1	08/19/24 18:00	
2-Chlorotoluene	ND U	2.0	1	08/19/24 18:00	
4-Chlorotoluene	ND U	2.0	1	08/19/24 18:00	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 18:00	*
Dibromochloromethane	ND U	0.50	1	08/19/24 18:00	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 18:00	
Dibromomethane	ND U	0.50	1	08/19/24 18:00	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 18:00	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 18:00	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 18:00	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 18:00	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 18:00	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:00	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:00	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 18:00	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 18:00	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 18:00	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 18:00	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:00	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:00	
Ethylbenzene	ND U	0.50	1	08/19/24 18:00	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 18:00	
2-Hexanone	ND U	20	1	08/19/24 18:00	
Isopropylbenzene	ND U	2.0	1	08/19/24 18:00	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 18:00	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-02-FB	**Units:**	ug/L
Lab Code:	K2408211-003	**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	08/19/24 18:00	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 18:00	
Methylene Chloride	ND U	2.0	1	08/19/24 18:00	
Naphthalene	ND U	2.0	1	08/19/24 18:00	
n-Propylbenzene	ND U	2.0	1	08/19/24 18:00	
Styrene	ND U	0.50	1	08/19/24 18:00	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:00	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:00	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 18:00	
Toluene	ND U	0.50	1	08/19/24 18:00	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 18:00	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 18:00	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 18:00	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 18:00	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 18:00	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 18:00	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 18:00	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 18:00	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 18:00	
Vinyl Chloride	ND U	0.50	1	08/19/24 18:00	
o-Xylene	ND U	0.50	1	08/19/24 18:00	
m,p-Xylenes	ND U	0.50	1	08/19/24 18:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	68 - 117	08/19/24 18:00	
Dibromofluoromethane	93	73 - 122	08/19/24 18:00	
Toluene-d8	95	65 - 144	08/19/24 18:00	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 10:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-03-6S	**Units:**	ug/L
Lab Code:	K2408211-004	**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	08/19/24 18:24	
Benzene	ND U	0.50	1	08/19/24 18:24	
Bromobenzene	ND U	2.0	1	08/19/24 18:24	
Bromochloromethane	ND U	0.50	1	08/19/24 18:24	
Bromodichloromethane	ND U	0.50	1	08/19/24 18:24	
Bromoform	ND U	0.50	1	08/19/24 18:24	
Bromomethane	ND U	0.50	1	08/19/24 18:24	
2-Butanone (MEK)	ND U	20	1	08/19/24 18:24	
n-Butylbenzene	ND U	4.0	1	08/19/24 18:24	
sec-Butylbenzene	ND U	2.0	1	08/19/24 18:24	
tert-Butylbenzene	ND U	2.0	1	08/19/24 18:24	
Carbon Disulfide	ND U	0.50	1	08/19/24 18:24	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 18:24	
Chlorobenzene	ND U	0.50	1	08/19/24 18:24	
Chloroethane	ND U	0.50	1	08/19/24 18:24	
Chloroform	ND U	0.50	1	08/19/24 18:24	
Chloromethane	ND U	0.50	1	08/19/24 18:24	
2-Chlorotoluene	ND U	2.0	1	08/19/24 18:24	
4-Chlorotoluene	ND U	2.0	1	08/19/24 18:24	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 18:24	*
Dibromochloromethane	ND U	0.50	1	08/19/24 18:24	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 18:24	
Dibromomethane	ND U	0.50	1	08/19/24 18:24	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 18:24	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 18:24	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 18:24	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 18:24	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 18:24	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:24	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:24	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 18:24	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 18:24	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 18:24	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 18:24	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:24	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:24	
Ethylbenzene	ND U	0.50	1	08/19/24 18:24	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 18:24	
2-Hexanone	ND U	20	1	08/19/24 18:24	
Isopropylbenzene	ND U	2.0	1	08/19/24 18:24	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 18:24	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 10:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-03-6S	**Units:**	ug/L
Lab Code:	K2408211-004	**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	08/19/24 18:24	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 18:24	
Methylene Chloride	ND U	2.0	1	08/19/24 18:24	
Naphthalene	ND U	2.0	1	08/19/24 18:24	
n-Propylbenzene	ND U	2.0	1	08/19/24 18:24	
Styrene	ND U	0.50	1	08/19/24 18:24	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:24	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:24	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 18:24	
Toluene	ND U	0.50	1	08/19/24 18:24	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 18:24	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 18:24	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 18:24	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 18:24	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 18:24	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 18:24	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 18:24	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 18:24	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 18:24	
Vinyl Chloride	ND U	0.50	1	08/19/24 18:24	
o-Xylene	ND U	0.50	1	08/19/24 18:24	
m,p-Xylenes	ND U	0.50	1	08/19/24 18:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	68 - 117	08/19/24 18:24	
Dibromofluoromethane	91	73 - 122	08/19/24 18:24	
Toluene-d8	94	65 - 144	08/19/24 18:24	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 11:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-04-5S	**Units:**	ug/L
Lab Code:	K2408211-005	**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	08/19/24 18:49	
Benzene	ND U	0.50	1	08/19/24 18:49	
Bromobenzene	ND U	2.0	1	08/19/24 18:49	
Bromochloromethane	ND U	0.50	1	08/19/24 18:49	
Bromodichloromethane	ND U	0.50	1	08/19/24 18:49	
Bromoform	ND U	0.50	1	08/19/24 18:49	
Bromomethane	ND U	0.50	1	08/19/24 18:49	
2-Butanone (MEK)	ND U	20	1	08/19/24 18:49	
n-Butylbenzene	ND U	4.0	1	08/19/24 18:49	
sec-Butylbenzene	ND U	2.0	1	08/19/24 18:49	
tert-Butylbenzene	ND U	2.0	1	08/19/24 18:49	
Carbon Disulfide	ND U	0.50	1	08/19/24 18:49	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 18:49	
Chlorobenzene	ND U	0.50	1	08/19/24 18:49	
Chloroethane	ND U	0.50	1	08/19/24 18:49	
Chloroform	ND U	0.50	1	08/19/24 18:49	
Chloromethane	ND U	0.50	1	08/19/24 18:49	
2-Chlorotoluene	ND U	2.0	1	08/19/24 18:49	
4-Chlorotoluene	ND U	2.0	1	08/19/24 18:49	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 18:49	*
Dibromochloromethane	ND U	0.50	1	08/19/24 18:49	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 18:49	
Dibromomethane	ND U	0.50	1	08/19/24 18:49	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 18:49	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 18:49	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 18:49	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 18:49	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 18:49	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:49	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 18:49	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 18:49	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 18:49	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 18:49	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 18:49	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:49	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 18:49	
Ethylbenzene	ND U	0.50	1	08/19/24 18:49	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 18:49	
2-Hexanone	ND U	20	1	08/19/24 18:49	
Isopropylbenzene	ND U	2.0	1	08/19/24 18:49	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 18:49	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 11:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-04-5S	**Units:**	ug/L
Lab Code:	K2408211-005	**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	08/19/24 18:49	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 18:49	
Methylene Chloride	ND U	2.0	1	08/19/24 18:49	
Naphthalene	ND U	2.0	1	08/19/24 18:49	
n-Propylbenzene	ND U	2.0	1	08/19/24 18:49	
Styrene	ND U	0.50	1	08/19/24 18:49	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:49	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 18:49	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 18:49	
Toluene	ND U	0.50	1	08/19/24 18:49	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 18:49	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 18:49	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 18:49	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 18:49	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 18:49	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 18:49	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 18:49	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 18:49	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 18:49	
Vinyl Chloride	ND U	0.50	1	08/19/24 18:49	
o-Xylene	ND U	0.50	1	08/19/24 18:49	
m,p-Xylenes	ND U	0.50	1	08/19/24 18:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	68 - 117	08/19/24 18:49	
Dibromofluoromethane	90	73 - 122	08/19/24 18:49	
Toluene-d8	93	65 - 144	08/19/24 18:49	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 13:15
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-05-1S	**Units:**	ug/L
Lab Code:	K2408211-006	**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	08/19/24 19:14	
Benzene	ND U	0.50	1	08/19/24 19:14	
Bromobenzene	ND U	2.0	1	08/19/24 19:14	
Bromochloromethane	ND U	0.50	1	08/19/24 19:14	
Bromodichloromethane	ND U	0.50	1	08/19/24 19:14	
Bromoform	ND U	0.50	1	08/19/24 19:14	
Bromomethane	ND U	0.50	1	08/19/24 19:14	
2-Butanone (MEK)	ND U	20	1	08/19/24 19:14	
n-Butylbenzene	ND U	4.0	1	08/19/24 19:14	
sec-Butylbenzene	ND U	2.0	1	08/19/24 19:14	
tert-Butylbenzene	ND U	2.0	1	08/19/24 19:14	
Carbon Disulfide	ND U	0.50	1	08/19/24 19:14	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 19:14	
Chlorobenzene	ND U	0.50	1	08/19/24 19:14	
Chloroethane	ND U	0.50	1	08/19/24 19:14	
Chloroform	ND U	0.50	1	08/19/24 19:14	
Chloromethane	ND U	0.50	1	08/19/24 19:14	
2-Chlorotoluene	ND U	2.0	1	08/19/24 19:14	
4-Chlorotoluene	ND U	2.0	1	08/19/24 19:14	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 19:14	*
Dibromochloromethane	ND U	0.50	1	08/19/24 19:14	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 19:14	
Dibromomethane	ND U	0.50	1	08/19/24 19:14	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 19:14	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 19:14	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 19:14	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 19:14	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 19:14	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 19:14	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 19:14	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 19:14	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 19:14	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 19:14	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 19:14	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 19:14	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 19:14	
Ethylbenzene	ND U	0.50	1	08/19/24 19:14	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 19:14	
2-Hexanone	ND U	20	1	08/19/24 19:14	
Isopropylbenzene	ND U	2.0	1	08/19/24 19:14	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 19:14	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 13:15
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-05-1S	**Units:**	ug/L
Lab Code:	K2408211-006	**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	08/19/24 19:14	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 19:14	
Methylene Chloride	ND U	2.0	1	08/19/24 19:14	
Naphthalene	ND U	2.0	1	08/19/24 19:14	
n-Propylbenzene	ND U	2.0	1	08/19/24 19:14	
Styrene	ND U	0.50	1	08/19/24 19:14	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 19:14	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 19:14	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 19:14	
Toluene	ND U	0.50	1	08/19/24 19:14	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 19:14	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 19:14	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 19:14	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 19:14	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 19:14	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 19:14	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 19:14	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 19:14	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 19:14	
Vinyl Chloride	ND U	0.50	1	08/19/24 19:14	
o-Xylene	ND U	0.50	1	08/19/24 19:14	
m,p-Xylenes	ND U	0.50	1	08/19/24 19:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	68 - 117	08/19/24 19:14	
Dibromofluoromethane	91	73 - 122	08/19/24 19:14	
Toluene-d8	94	65 - 144	08/19/24 19:14	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 14:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-06-10SR	**Units:**	ug/L
Lab Code:	K2408211-007	**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	08/19/24 19:38	
Benzene	ND U	0.50	1	08/19/24 19:38	
Bromobenzene	ND U	2.0	1	08/19/24 19:38	
Bromochloromethane	ND U	0.50	1	08/19/24 19:38	
Bromodichloromethane	ND U	0.50	1	08/19/24 19:38	
Bromoform	ND U	0.50	1	08/19/24 19:38	
Bromomethane	ND U	0.50	1	08/19/24 19:38	
2-Butanone (MEK)	ND U	20	1	08/19/24 19:38	
n-Butylbenzene	ND U	4.0	1	08/19/24 19:38	
sec-Butylbenzene	ND U	2.0	1	08/19/24 19:38	
tert-Butylbenzene	ND U	2.0	1	08/19/24 19:38	
Carbon Disulfide	ND U	0.50	1	08/19/24 19:38	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 19:38	
Chlorobenzene	ND U	0.50	1	08/19/24 19:38	
Chloroethane	ND U	0.50	1	08/19/24 19:38	
Chloroform	ND U	0.50	1	08/19/24 19:38	
Chloromethane	ND U	0.50	1	08/19/24 19:38	
2-Chlorotoluene	ND U	2.0	1	08/19/24 19:38	
4-Chlorotoluene	ND U	2.0	1	08/19/24 19:38	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 19:38	*
Dibromochloromethane	ND U	0.50	1	08/19/24 19:38	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 19:38	
Dibromomethane	ND U	0.50	1	08/19/24 19:38	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 19:38	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 19:38	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 19:38	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 19:38	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 19:38	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 19:38	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 19:38	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 19:38	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 19:38	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 19:38	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 19:38	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 19:38	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 19:38	
Ethylbenzene	ND U	0.50	1	08/19/24 19:38	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 19:38	
2-Hexanone	ND U	20	1	08/19/24 19:38	
Isopropylbenzene	ND U	2.0	1	08/19/24 19:38	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 19:38	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 14:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-06-10SR	**Units:**	ug/L
Lab Code:	K2408211-007	**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	08/19/24 19:38	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 19:38	
Methylene Chloride	ND U	2.0	1	08/19/24 19:38	
Naphthalene	ND U	2.0	1	08/19/24 19:38	
n-Propylbenzene	ND U	2.0	1	08/19/24 19:38	
Styrene	ND U	0.50	1	08/19/24 19:38	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 19:38	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 19:38	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 19:38	
Toluene	ND U	0.50	1	08/19/24 19:38	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 19:38	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 19:38	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 19:38	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 19:38	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 19:38	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 19:38	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 19:38	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 19:38	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 19:38	
Vinyl Chloride	ND U	0.50	1	08/19/24 19:38	
o-Xylene	ND U	0.50	1	08/19/24 19:38	
m,p-Xylenes	ND U	0.50	1	08/19/24 19:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	08/19/24 19:38	
Dibromofluoromethane	93	73 - 122	08/19/24 19:38	
Toluene-d8	94	65 - 144	08/19/24 19:38	

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:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:40
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-01-26I	**Basis:**	NA
Lab Code:	K2408211-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**9.8**	ug/L	2.0	1	08/21/24 12:33	08/13/24	
Manganese	6020B	**2.06**	ug/L	0.20	1	08/21/24 12:33	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-02-FB	**Basis:**	NA
Lab Code:	K2408211-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	ND U	ug/L	2.0	1	08/21/24 12:35	08/13/24	
Manganese	6020B	ND U	ug/L	0.20	1	08/21/24 12:35	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 10:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-03-6S	**Basis:**	NA
Lab Code:	K2408211-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**7.1**	ug/L	2.0	1	08/21/24 12:38	08/13/24	
Manganese	6020B	**0.34**	ug/L	0.20	1	08/21/24 12:38	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 11:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-04-5S	**Basis:**	NA
Lab Code:	K2408211-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**5.9**	ug/L	2.0	1	08/21/24 12:40	08/13/24	
Manganese	6020B	**0.29**	ug/L	0.20	1	08/21/24 12:40	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 13:15
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-05-1S	**Basis:**	NA
Lab Code:	K2408211-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**4.0**	ug/L	2.0	1	08/21/24 12:42	08/13/24	
Manganese	6020B	**0.24**	ug/L	0.20	1	08/21/24 12:42	08/13/24	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 14:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-06-10SR	**Basis:**	NA
Lab Code:	K2408211-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	**36.9**	ug/L	2.0	1	08/21/24 12:45	08/13/24	
Manganese	6020B	**1.03**	ug/L	0.20	1	08/21/24 12:45	08/13/24	

General Chemistry

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:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:40
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-01-26I	**Basis:**	NA
Lab Code:	K2408211-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.52**	mg/L	0.20	2	08/09/24 00:16	
Nitrate as Nitrogen	300.0	**3.88**	mg/L	0.10	2	08/09/24 00:16	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:40
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-01-26I	**Basis:**	NA
Lab Code:	K2408211-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**188**	mg/L	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-02-FB	**Basis:**	NA
Lab Code:	K2408211-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**0.56**	mg/L	0.10	1	08/09/24 00:25	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/09/24 00:25	

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 09:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-02-FB	**Basis:**	NA
Lab Code:	K2408211-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	ND U	mg/L	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 10:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-03-6S	**Basis:**	NA
Lab Code:	K2408211-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**4.01**	mg/L	0.20	2	08/09/24 00:34	
Nitrate as Nitrogen	300.0	**2.32**	mg/L	0.10	2	08/09/24 00:34	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 10:45
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-03-6S	**Basis:**	NA
Lab Code:	K2408211-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**156**	mg/L	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 11:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-04-5S	**Basis:**	NA
Lab Code:	K2408211-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**2.60**	mg/L	0.20	2	08/09/24 00:42	
Nitrate as Nitrogen	300.0	**2.47**	mg/L	0.10	2	08/09/24 00:42	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 11:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-04-5S	**Basis:**	NA
Lab Code:	K2408211-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**164**	mg/L	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 13:15
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-05-1S	**Basis:**	NA
Lab Code:	K2408211-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**5.68**	mg/L	0.20	2	08/09/24 00:51	
Nitrate as Nitrogen	300.0	**4.22**	mg/L	0.10	2	08/09/24 00:51	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 13:15
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-05-1S	**Basis:**	NA
Lab Code:	K2408211-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**189**	mg/L	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 14:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-06-10SR	**Basis:**	NA
Lab Code:	K2408211-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Chloride	300.0	**14.8**	mg/L	0.20	2	08/09/24 00:59	
Nitrate as Nitrogen	300.0	**0.89**	mg/L	0.10	2	08/09/24 00:59	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	08/07/24 14:35
Sample Matrix:	Water	**Date Received:**	08/08/24 11:40
Sample Name:	LB-080724-06-10SR	**Basis:**	NA
Lab Code:	K2408211-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	**236**	mg/L	10	1	08/14/24 18:16	

QC Summary Forms

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:** K2408211
Project: Leichner Landfill/04224030.13
Sample Matrix: 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	K2408211-001	96	94	94
LB-080724-01-26I	K2408211-002	94	94	95
LB-080724-02-FB	K2408211-003	93	93	95
LB-080724-03-6S	K2408211-004	95	91	94
LB-080724-04-5S	K2408211-005	94	90	93
LB-080724-05-1S	K2408211-006	94	91	94
LB-080724-06-10SR	K2408211-007	96	93	94
Lab Control Sample	KQ2413024-03	96	96	97
Duplicate Lab Control Sample	KQ2413024-04	96	92	95
Method Blank	KQ2413024-05	96	93	96

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413024-05	**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	08/19/24 14:18	
Benzene	ND U	0.50	1	08/19/24 14:18	
Bromobenzene	ND U	2.0	1	08/19/24 14:18	
Bromochloromethane	ND U	0.50	1	08/19/24 14:18	
Bromodichloromethane	ND U	0.50	1	08/19/24 14:18	
Bromoform	ND U	0.50	1	08/19/24 14:18	
Bromomethane	ND U	0.50	1	08/19/24 14:18	
2-Butanone (MEK)	ND U	20	1	08/19/24 14:18	
n-Butylbenzene	ND U	4.0	1	08/19/24 14:18	
sec-Butylbenzene	ND U	2.0	1	08/19/24 14:18	
tert-Butylbenzene	ND U	2.0	1	08/19/24 14:18	
Carbon Disulfide	ND U	0.50	1	08/19/24 14:18	
Carbon Tetrachloride	ND U	0.50	1	08/19/24 14:18	
Chlorobenzene	ND U	0.50	1	08/19/24 14:18	
Chloroethane	ND U	0.50	1	08/19/24 14:18	
Chloroform	ND U	0.50	1	08/19/24 14:18	
Chloromethane	ND U	0.50	1	08/19/24 14:18	
2-Chlorotoluene	ND U	2.0	1	08/19/24 14:18	
4-Chlorotoluene	ND U	2.0	1	08/19/24 14:18	
1,2-Dibromo-3-chloropropane	ND U	2.0	1	08/19/24 14:18	
Dibromochloromethane	ND U	0.50	1	08/19/24 14:18	
1,2-Dibromoethane (EDB)	ND U	2.0	1	08/19/24 14:18	
Dibromomethane	ND U	0.50	1	08/19/24 14:18	
1,2-Dichlorobenzene	ND U	0.50	1	08/19/24 14:18	
1,3-Dichlorobenzene	ND U	0.50	1	08/19/24 14:18	
1,4-Dichlorobenzene	ND U	0.50	1	08/19/24 14:18	
Dichlorodifluoromethane	ND U	0.50	1	08/19/24 14:18	
1,1-Dichloroethane	ND U	0.50	1	08/19/24 14:18	
cis-1,2-Dichloroethene	ND U	0.50	1	08/19/24 14:18	
trans-1,2-Dichloroethene	ND U	0.50	1	08/19/24 14:18	
1,2-Dichloropropane	ND U	0.50	1	08/19/24 14:18	
1,3-Dichloropropane	ND U	0.50	1	08/19/24 14:18	
2,2-Dichloropropane	ND U	0.50	1	08/19/24 14:18	
1,1-Dichloropropene	ND U	0.50	1	08/19/24 14:18	
cis-1,3-Dichloropropene	ND U	0.50	1	08/19/24 14:18	
trans-1,3-Dichloropropene	ND U	0.50	1	08/19/24 14:18	
Ethylbenzene	ND U	0.50	1	08/19/24 14:18	
Hexachlorobutadiene	ND U	2.0	1	08/19/24 14:18	
2-Hexanone	ND U	20	1	08/19/24 14:18	
Isopropylbenzene	ND U	2.0	1	08/19/24 14:18	
4-Isopropyltoluene	ND U	2.0	1	08/19/24 14:18	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ2413024-05	**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	08/19/24 14:18	
4-Methyl-2-pentanone (MIBK)	ND U	20	1	08/19/24 14:18	
Methylene Chloride	ND U	2.0	1	08/19/24 14:18	
Naphthalene	ND U	2.0	1	08/19/24 14:18	
n-Propylbenzene	ND U	2.0	1	08/19/24 14:18	
Styrene	ND U	0.50	1	08/19/24 14:18	
1,1,1,2-Tetrachloroethane	ND U	0.50	1	08/19/24 14:18	
1,1,2,2-Tetrachloroethane	ND U	0.50	1	08/19/24 14:18	
Tetrachloroethene (PCE)	ND U	0.50	1	08/19/24 14:18	
Toluene	ND U	0.50	1	08/19/24 14:18	
1,2,3-Trichlorobenzene	ND U	2.0	1	08/19/24 14:18	
1,2,4-Trichlorobenzene	ND U	2.0	1	08/19/24 14:18	
1,1,2-Trichloroethane	ND U	0.50	1	08/19/24 14:18	
1,1,1-Trichloroethane (TCA)	ND U	0.50	1	08/19/24 14:18	
Trichloroethene (TCE)	ND U	0.50	1	08/19/24 14:18	
Trichlorofluoromethane (CFC 11)	ND U	0.50	1	08/19/24 14:18	
1,2,3-Trichloropropane	ND U	0.50	1	08/19/24 14:18	
1,2,4-Trimethylbenzene	ND U	2.0	1	08/19/24 14:18	
1,3,5-Trimethylbenzene	ND U	2.0	1	08/19/24 14:18	
Vinyl Chloride	ND U	0.50	1	08/19/24 14:18	
o-Xylene	ND U	0.50	1	08/19/24 14:18	
m,p-Xylenes	ND U	0.50	1	08/19/24 14:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	68 - 117	08/19/24 14:18	
Dibromofluoromethane	93	73 - 122	08/19/24 14:18	
Toluene-d8	96	65 - 144	08/19/24 14:18	

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/19/24
Sample Matrix:	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:	851134

	Lab Control Sample KQ2413024-03			Duplicate Lab Control Sample KQ2413024-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8.77	10.0	88	9.24	10.0	92	66-124	5	30
1,1,1-Trichloroethane (TCA)	9.60	10.0	96	9.84	10.0	98	59-136	2	30
1,1,2,2-Tetrachloroethane	8.99	10.0	90	9.30	10.0	93	70-127	3	30
1,1,2-Trichloroethane	8.94	10.0	89	9.08	10.0	91	74-118	2	30
1,1-Dichloroethane	8.73	10.0	87	8.91	10.0	89	68-132	2	30
1,1-Dichloropropene	9.64	10.0	96	9.87	10.0	99	59-134	2	30
1,2,3-Trichlorobenzene	10.2	10.0	102	10.2	10.0	102	68-120	<1	30
1,2,3-Trichloropropane	9.48	10.0	95	9.49	10.0	95	69-123	<1	30
1,2,4-Trichlorobenzene	9.70	10.0	97	9.88	10.0	99	58-126	2	30
1,2,4-Trimethylbenzene	10.3	10.0	103	10.3	10.0	103	63-122	<1	30
1,2-Dibromo-3-chloropropane	7.84	10.0	78	8.08	10.0	81	55-132	3	30
1,2-Dibromoethane (EDB)	9.26	10.0	93	9.50	10.0	95	74-118	3	30
1,2-Dichlorobenzene	9.67	10.0	97	9.83	10.0	98	72-115	2	30
1,2-Dichloropropane	8.39	10.0	84	8.50	10.0	85	67-126	1	30
1,3,5-Trimethylbenzene	9.99	10.0	100	10.1	10.0	101	62-126	<1	30
1,3-Dichlorobenzene	9.79	10.0	98	9.90	10.0	99	70-116	1	30
1,3-Dichloropropane	8.96	10.0	90	9.52	10.0	95	75-116	6	30
1,4-Dichlorobenzene	9.55	10.0	96	9.75	10.0	98	73-115	2	30
2,2-Dichloropropane	8.85	10.0	89	8.90	10.0	89	37-145	<1	30
2-Butanone (MEK)	43.1	50.0	86	45.4	50.0	91	71-149	5	30
2-Chlorotoluene	9.40	10.0	94	9.55	10.0	96	55-131	2	30
2-Hexanone	45.5	50.0	91	47.2	50.0	94	59-131	4	30
4-Chlorotoluene	9.62	10.0	96	9.63	10.0	96	66-121	<1	30
4-Isopropyltoluene	10.9	10.0	109	11.0	10.0	110	61-128	<1	30
4-Methyl-2-pentanone (MIBK)	41.9	50.0	84	42.5	50.0	85	64-134	1	30
Acetone	43.8	50.0	88	44.5	50.0	89	68-135	2	30
Benzene	9.01	10.0	90	9.18	10.0	92	69-124	2	30
Bromobenzene	9.46	10.0	95	9.62	10.0	96	72-116	2	30
Bromochloromethane	9.24	10.0	92	9.16	10.0	92	75-131	<1	30
Bromodichloromethane	8.60	10.0	86	8.78	10.0	88	63-129	2	30
Bromoform	8.41	10.0	84	8.71	10.0	87	52-144	4	30
Bromomethane	10.6	10.0	106	10.4	10.0	104	35-113	2	30
Carbon Disulfide	18.2	20.0	91	18.4	20.0	92	46-144	1	30
Carbon Tetrachloride	8.90	10.0	89	9.27	10.0	93	55-140	4	30
Chlorobenzene	9.53	10.0	95	9.95	10.0	100	72-116	4	30
Chloroethane	11.0	10.0	110	11.4	10.0	114	58-134	4	30
Chloroform	8.91	10.0	89	9.13	10.0	91	70-129	2	30
Chloromethane	8.92	10.0	89	9.02	10.0	90	34-130	1	30
cis-1,2-Dichloroethene	8.60	10.0	86	8.79	10.0	88	71-118	2	30
cis-1,3-Dichloropropene	8.78	10.0	88	8.85	10.0	89	62-132	<1	30
Dibromochloromethane	8.12	10.0	81	8.38	10.0	84	67-126	3	30

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QA/QC Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Analyzed:**	08/19/24
Sample Matrix:	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:	851134

	Lab Control Sample KQ2413024-03			Duplicate Lab Control Sample KQ2413024-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dibromomethane	8.81	10.0	88	9.08	10.0	91	69-128	3	30
Dichlorodifluoromethane	9.14	10.0	91	9.06	10.0	91	32-124	<1	30
Ethylbenzene	9.79	10.0	98	10.2	10.0	102	67-121	4	30
Hexachlorobutadiene	10.1	10.0	101	9.60	10.0	96	57-119	5	30
Isopropylbenzene	9.34	10.0	93	9.73	10.0	97	67-129	4	30
m,p-Xylenes	20.0	20.0	100	20.9	20.0	104	69-121	4	30
Methyl tert-Butyl Ether	8.66	10.0	87	8.70	10.0	87	54-126	<1	30
Methylene Chloride	9.18	10.0	92	9.26	10.0	93	71-122	<1	30
Naphthalene	8.86	10.0	89	8.91	10.0	89	64-126	<1	30
n-Butylbenzene	10.3	10.0	103	10.2	10.0	102	55-130	1	30
n-Propylbenzene	9.97	10.0	100	10.1	10.0	101	61-124	1	30
o-Xylene	9.80	10.0	98	10.2	10.0	102	71-119	4	30
sec-Butylbenzene	10.5	10.0	105	10.5	10.0	105	59-128	<1	30
Styrene	9.87	10.0	99	10.6	10.0	106	74-121	7	30
tert-Butylbenzene	10.2	10.0	102	10.2	10.0	102	61-127	<1	30
Tetrachloroethene (PCE)	10.6	10.0	106	11.0	10.0	110	62-126	3	30
Toluene	9.09	10.0	91	9.19	10.0	92	69-124	1	30
trans-1,2-Dichloroethene	9.27	10.0	93	9.29	10.0	93	67-125	<1	30
trans-1,3-Dichloropropene	8.69	10.0	87	9.11	10.0	91	59-125	5	30
Trichloroethene (TCE)	9.01	10.0	90	9.18	10.0	92	67-128	2	30
Trichlorofluoromethane (CFC 11)	12.0	10.0	120	11.8	10.0	118	52-141	2	30
Vinyl Chloride	10.9	10.0	109	11.0	10.0	110	55-123	<1	30

Metals

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Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2412249-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron	6020B	ND U	ug/L	2.0	1	08/21/24 12:02	08/13/24	
Manganese	6020B	ND U	ug/L	0.20	1	08/21/24 12:02	08/13/24	

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QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408211
Date Analyzed: 08/21/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2412249-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	6020B	53.4	50.0	107	80-120
Manganese	6020B	25.6	25.0	102	80-120

General Chemistry

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:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408211-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	08/08/24 16:07	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 16:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408211-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	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408211-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	08/08/24 18:07	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 18:07	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408211-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	10	1	08/14/24 18:16	

Analytical Report

Client:	SCS Engineers	**Service Request:**	K2408211
Project:	Leichner Landfill/04224030.13	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2408211-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	08/08/24 20:07	
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	1	08/08/24 20:07	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408211
Date Analyzed: 08/08/24 - 08/14/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2408211-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.81	5.00	96	90-110
Nitrate as Nitrogen	300.0	2.50	2.50	100	90-110
Solids, Total Dissolved	SM 2540 C	1690	1760	96	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408211
Date Analyzed: 08/08/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2408211-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.81	5.00	96	90-110
Nitrate as Nitrogen	300.0	2.51	2.50	100	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SCS Engineers
Project: Leichner Landfill/04224030.13
Sample Matrix: Water

Service Request: K2408211
Date Analyzed: 08/08/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2408211-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	4.75	5.00	95	90-110
Nitrate as Nitrogen	300.0	2.50	2.50	100	90-110

APPENDIX D

2024 Groundwater Elevation Data and Groundwater Elevation Hydrographs

Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-R2	2/14/2022	222.27	48.88	173.39
LB-R2	7/25/2022	222.27	46.26	176.01
LB-R2	3/20/2023	222.27	45.71	176.56
LB-R2	7/25/2023	222.27	44.37	177.90
LB-R2	2/12/2024	222.27	43.03	179.24
LB-R2	8/6/2024	222.27	43.99	178.28
LB-1S	2/14/2022	210.12	39.34	170.78
LB-1S	7/25/2022	210.12	34.28	175.84
LB-1S	3/20/2023	210.12	33.75	176.37
LB-1S	7/25/2023	210.12	32.09	178.03
LB-1S	2/12/2024	210.12	30.85	179.27
LB-1S	8/6/2024	210.12	32.12	178.00
LB-1D	2/14/2022	209.74	38.42	171.32
LB-1D	7/25/2022	209.74	37.06	172.68
LB-1D	3/20/2023	209.74	35.92	173.82
LB-1D	7/25/2023	209.74	35.80	173.94
LB-1D	2/12/2024	209.74	33.71	176.03
LB-1D	8/6/2024	209.74	35.50	174.24
LB-3S	2/14/2022	218.25	41.71	176.54
LB-3S	7/25/2022	218.25	39.54	178.71
LB-3S	3/20/2023	218.25	38.70	179.55
LB-3S	7/25/2023	218.25	36.68	181.57
LB-3S	2/12/2024	218.25	35.62	182.63
LB-3S	8/6/2024	218.25	37.41	180.84
LB-3D	2/14/2022	219.29	42.69	176.60
LB-3D	7/25/2022	219.29	40.53	178.76
LB-3D	3/20/2023	219.29	39.67	179.62
LB-3D	7/25/2023	219.29	37.80	181.49
LB-3D	2/12/2024	219.29	36.71	182.58
LB-3D	8/6/2024	219.29	38.43	180.86

Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-5S	2/14/2022	206.89	16.15	190.74
LB-5S	7/25/2022	206.89	15.69	191.20
LB-5S	3/20/2023	206.89	15.58	191.31
LB-5S	7/25/2023	206.89	16.11	190.78
LB-5S	2/12/2024	206.89	15.05	191.84
LB-5S	8/6/2024	206.89	15.62	191.27
LB-5C	2/14/2022	206.70	36.07	170.63
LB-5C	7/25/2022	206.70	37.77	168.93
LB-5C	3/20/2023	206.70	33.47	173.23
LB-5C	7/25/2023	206.70	37.66	169.04
LB-5C	2/12/2024	206.70	31.07	175.63
LB-5C	8/6/2024	206.70	31.89	174.81
LB-5D	2/14/2022	207.56	40.18	167.38
LB-5D	7/25/2022	207.56	38.36	169.20
LB-5D	3/20/2023	207.56	37.40	170.16
LB-5D	7/25/2023	207.56	37.66	169.90
LB-5D	2/12/2024	207.56	35.74	171.82
LB-5D	8/6/2024	207.56	36.68	170.88
LB-6S	2/14/2022	202.80	30.35	172.45
LB-6S	7/25/2022	202.80	28.10	174.70
LB-6S	3/20/2023	202.80	27.46	175.34
LB-6S	7/25/2023	202.80	26.14	176.66
LB-6S	2/12/2024	202.80	24.81	177.99
LB-6S	8/6/2024	202.80	25.93	176.87
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-9S2R	2/12/2024	219.23	30.88	188.35
LB-9S2R	8/6/2024	219.23	34.12	185.11
LB-10SR	2/14/2022	204.04	34.47	169.57
LB-10SR	7/25/2022	204.04	31.99	172.05
LB-10SR	3/20/2023	204.04	31.61	172.43
LB-10SR	7/25/2023	204.04	30.58	173.46
LB-10SR	2/12/2024	204.04	28.85	175.19
LB-10SR	8/6/2024	204.04	29.89	174.15

Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-10CR	2/14/2022	203.05	33.37	169.68
LB-10CR	7/25/2022	203.05	30.91	172.14
LB-10CR	3/20/2023	203.05	30.48	172.57
LB-10CR	7/25/2023	203.05	29.49	173.56
LB-10CR	2/12/2024	203.05	27.76	175.29
LB-10CR	8/6/2024	203.05	28.78	174.27
LB-10DR	2/14/2022	203.36	45.74	157.62
LB-10DR	7/25/2022	203.36	43.43	159.93
LB-10DR	3/20/2023	203.36	43.28	160.08
LB-10DR	7/25/2023	203.36	43.55	159.81
LB-10DR	2/12/2024	203.36	41.45	161.91
LB-10DR	8/6/2024	203.36	41.80	161.56
LB-13I	2/14/2022	202.36	31.16	171.20
LB-13I	7/25/2022	202.36	28.80	173.56
LB-13I	3/20/2023	202.36	28.22	174.14
LB-13I	7/25/2023	202.36	27.05	175.31
LB-13I	2/12/2024	202.36	25.65	176.71
LB-13I	8/6/2024	202.36	26.70	175.66
LB-13C	2/14/2022	202.68	31.73	170.95
LB-13C	7/25/2022	202.68	29.21	173.47
LB-13C	3/20/2023	202.68	28.62	174.06
LB-13C	7/25/2023	202.68	27.47	175.21
LB-13C	2/12/2024	202.68	26.07	176.61
LB-13C	8/6/2024	202.68	27.12	175.56
LB-13D	2/14/2022	202.96	31.62	171.34
LB-13D	7/25/2022	202.96	29.50	173.46
LB-13D	3/20/2023	202.96	28.92	174.04
LB-13D	7/25/2023	202.96	27.77	175.19
LB-13D	2/12/2024	202.96	26.31	176.65
LB-13D	8/6/2024	202.96	27.38	175.58
LB-17S	2/14/2022	208.18	Dry	NA
LB-17S	7/25/2022	208.18	32.11	176.07
LB-17S	3/20/2023	208.18	31.54	176.64
LB-17S	7/25/2023	208.18	30.16	178.02
LB-17S	2/12/2024	208.18	28.85	179.33
LB-17S	8/6/2024	208.18	29.83	178.35

Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-17I	2/14/2022	212.96	39.58	173.38
LB-17I	7/25/2022	212.96	37.23	175.73
LB-17I	3/20/2023	212.96	36.69	176.27
LB-17I	7/25/2023	212.96	35.35	177.61
LB-17I	2/12/2024	212.96	33.99	178.97
LB-17I	8/6/2024	212.96	35.03	177.93
LB-17C	2/14/2022	207.97	33.28	174.69
LB-17C	7/25/2022	207.97	30.93	177.04
LB-17C	3/20/2023	207.97	30.40	177.57
LB-17C	7/25/2023	207.97	29.05	178.92
LB-17C	2/12/2024	207.97	27.66	180.31
LB-17C	8/6/2024	207.97	27.68	180.29
LB-17D	2/14/2022	213.17	40.51	172.66
LB-17D	7/25/2022	213.17	38.20	174.97
LB-17D	3/20/2023	213.17	37.66	175.51
LB-17D	7/25/2023	213.17	36.40	176.77
LB-17D	2/12/2024	213.17	35.01	178.16
LB-17D	8/6/2024	213.17	36.00	177.17
LB-20S	2/14/2022	221.22	43.45	177.77
LB-20S	7/25/2022	221.22	40.88	180.34
LB-20S	3/20/2023	221.22	39.94	181.28
LB-20S	7/25/2023	221.22	38.43	182.79
LB-20S	2/12/2024	221.22	37.65	183.57
LB-20S	8/6/2024	221.22	37.73	183.49
LB-21S	2/14/2022	223.35	40.08	183.27
LB-21S	7/25/2022	223.35	38.77	184.58
LB-21S	3/20/2023	223.35	36.83	186.52
LB-21S	7/25/2023	223.35	35.89	187.46
LB-21S	2/12/2024	223.35	34.78	188.57
LB-21S	8/6/2024	223.35	36.38	186.97
LB-21C	2/14/2022	223.32	40.46	182.86
LB-21C	7/25/2022	223.32	39.10	184.22
LB-21C	3/20/2023	223.32	37.35	185.97
LB-21C	7/25/2023	223.32	36.36	186.96
LB-21C	2/12/2024	223.32	35.27	188.05
LB-21C	8/6/2024	223.32	36.81	186.51

Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-21D	2/14/2022	223.63	43.38	180.25
LB-21D	7/25/2022	223.63	41.92	181.71
LB-21D	3/20/2023	223.63	40.37	183.26
LB-21D	7/25/2023	223.63	39.61	184.02
LB-21D	2/12/2024	223.63	38.21	185.42
LB-21D	8/6/2024	223.63	40.05	183.58
LB-22S	2/17/2021	208.42	8.88	199.54
LB-22S	8/9/2021	208.42	9.82	198.60
LB-22SR	2/12/2024	225.46	20.71	204.75
LB-22SR	8/6/2024	225.46	22.23	203.23
LB-23S	2/14/2022	229.19	34.63	194.56
LB-23S	7/25/2022	229.19	31.01	198.18
LB-23S	3/20/2023	229.19	31.16	198.03
LB-23S	7/25/2023	229.19	31.75	197.44
LB-23S	2/12/2024	229.19	29.98	199.21
LB-23S	8/6/2024	229.19	30.50	198.69
LB-24S	2/14/2022	235.13	39.56	195.57
LB-24S	7/25/2022	235.13	38.61	196.52
LB-24S	3/20/2023	235.13	38.87	196.26
LB-24S	7/25/2023	235.13	39.35	195.78
LB-24S	2/12/2024	235.13	37.91	197.22
LB-24S	8/6/2024	235.13	38.35	196.78
LB-26I	2/14/2022	200.22	28.43	171.79
LB-26I	7/25/2022	200.22	26.13	174.09
LB-26I	3/20/2023	200.22	25.53	174.69
LB-26I	7/25/2023	200.22	24.28	175.94
LB-26I	2/12/2024	200.22	22.91	177.31
LB-26I	8/6/2024	200.22	24.02	176.20
LB-26D	2/14/2022	200.75	29.41	171.34
LB-26D	7/25/2022	200.75	25.92	174.83
LB-26D	3/20/2023	200.75	25.29	175.46
LB-26D	7/25/2023	200.75	24.05	176.70
LB-26D	2/12/2024	200.75	22.57	178.18
LB-26D	8/6/2024	200.75	23.75	177.00

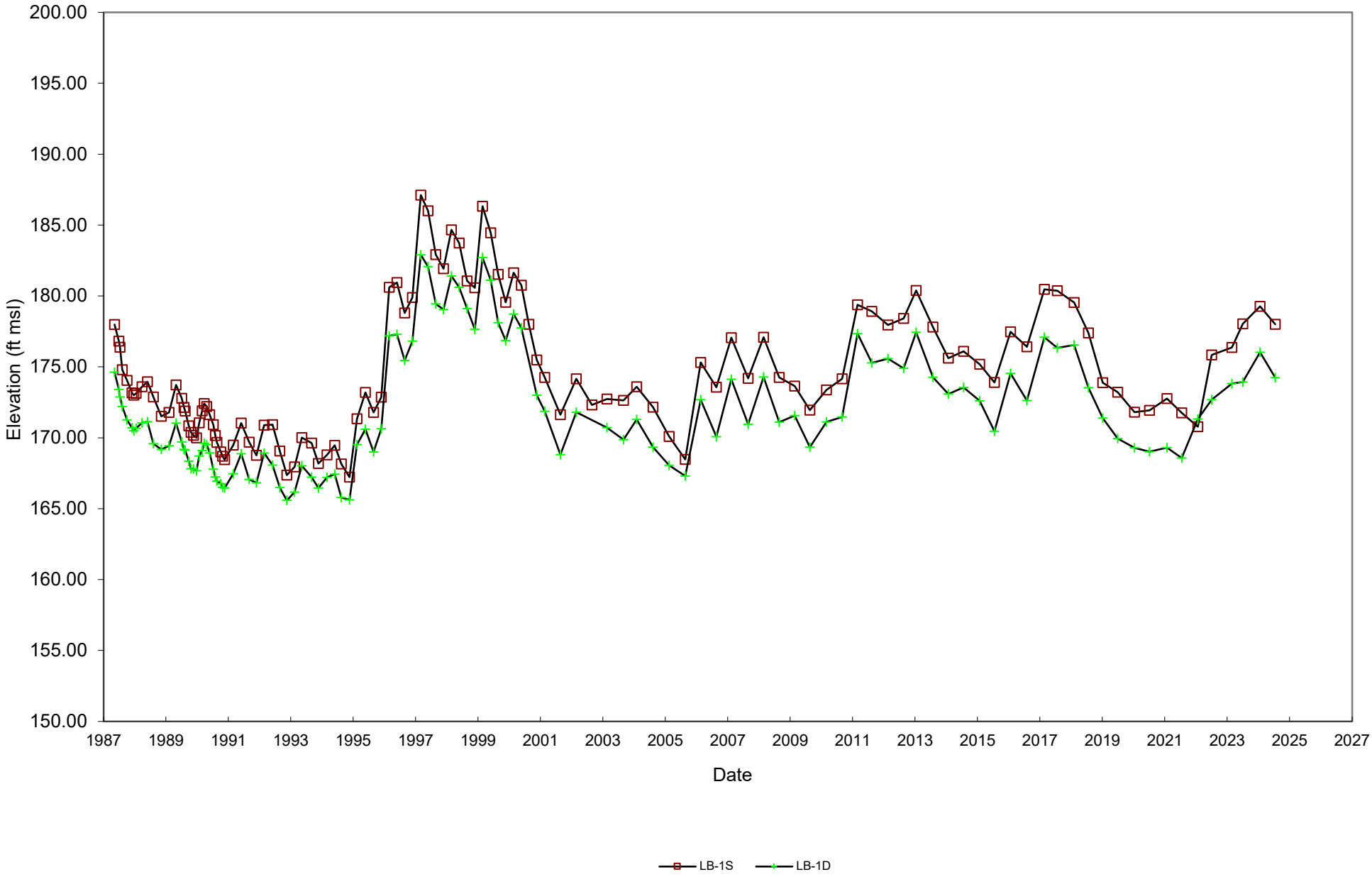
Table D-1
2024 Groundwater Elevation Data
Leichner Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-27I	2/14/2022	205.35	36.42	168.93
LB-27I	7/25/2022	205.35	32.13	173.22
LB-27I	3/20/2023	205.35	31.60	173.75
LB-27I	7/25/2023	205.35	30.50	174.85
LB-27I	2/12/2024	205.35	29.02	176.33
LB-27I	8/6/2024	205.35	30.07	175.28
LB-27D	2/14/2022	204.63	40.61	164.02
LB-27D	7/25/2022	204.63	38.51	166.12
LB-27D	3/20/2023	204.63	37.83	166.80
LB-27D	7/25/2023	204.63	37.98	166.65
LB-27D	2/12/2024	204.63	36.03	168.60
LB-27D	8/6/2024	204.63	36.91	167.72
MW-NE	2/14/2022	220.06	16.31	203.75
MW-NE	7/25/2022	220.06	14.14	205.92
MW-NE	3/20/2023	220.06	13.86	206.20
MW-NE	7/25/2023	220.06	14.90	205.16
MW-NE	2/12/2024	220.06	12.61	207.45
MW-NE	8/6/2024	220.06	13.66	206.40

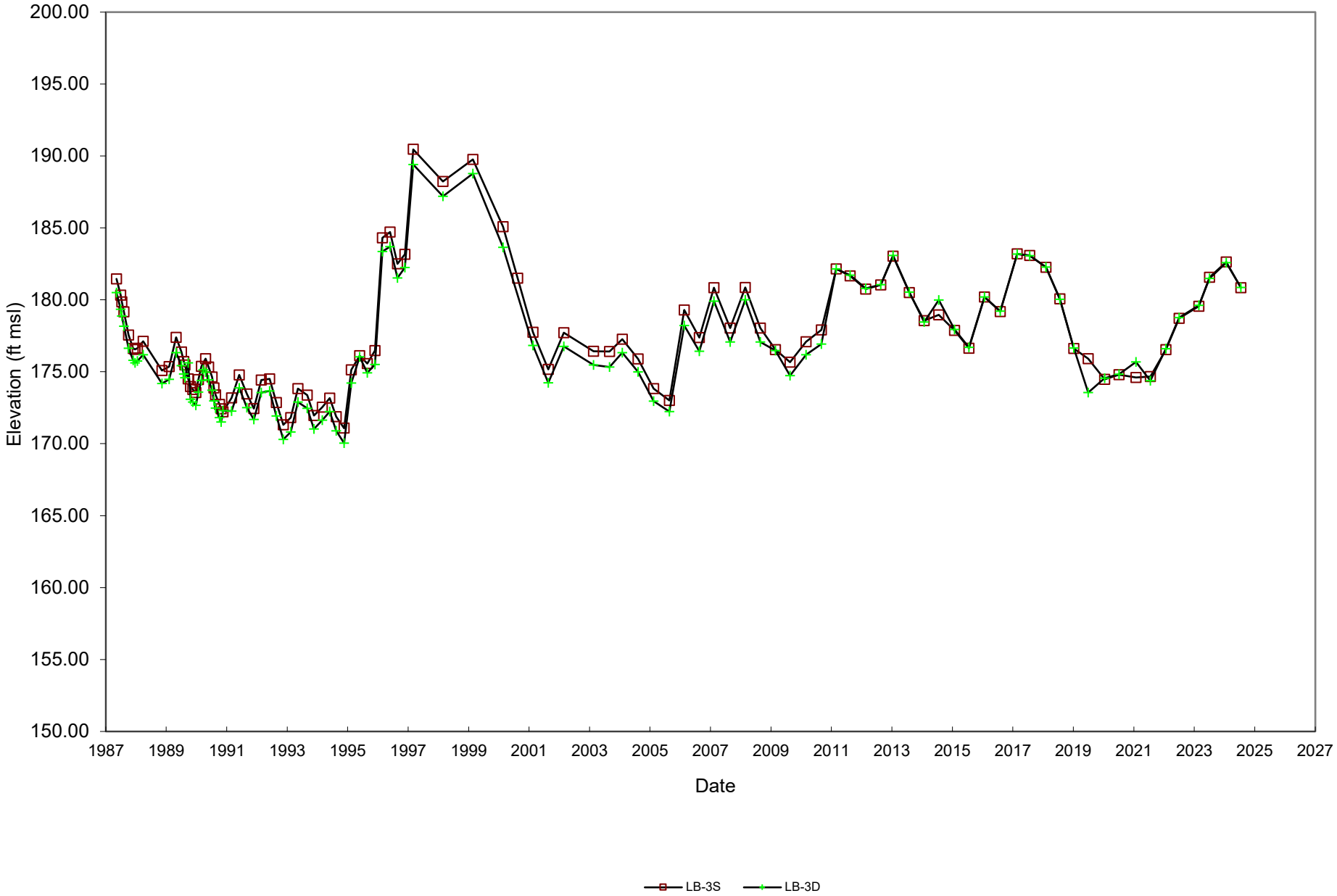
Notes: LB-9S and LB-22S were abandoned in July 2021 in preparation for a street extension across the northern portion of the landfill. Both wells were re-installed in 2024.

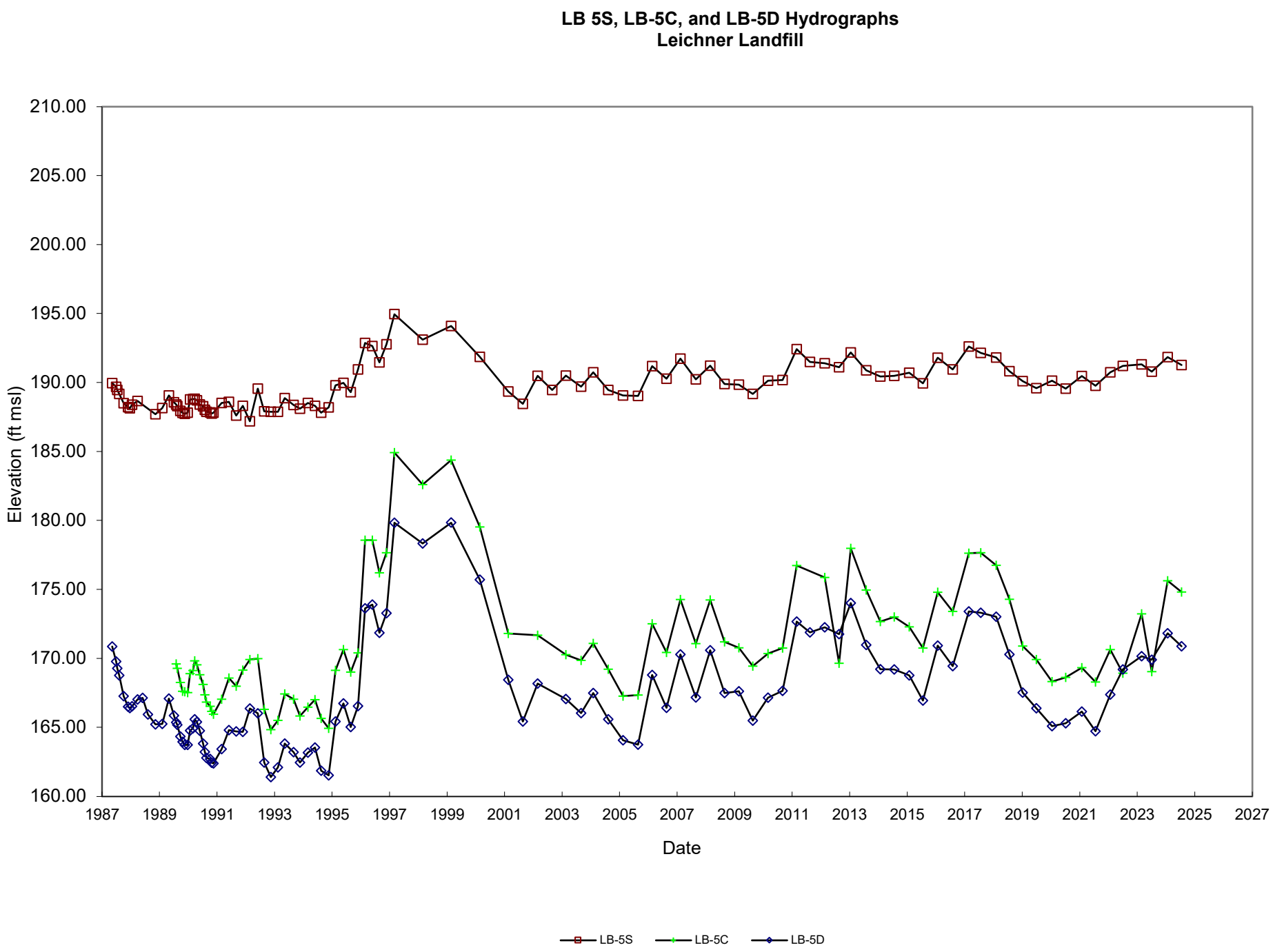
AMSL = above mean sea level
BTOC = below top of casing
NA = not applicable.

LB-1S and LB-1D Hydrographs
Leichner Landfill

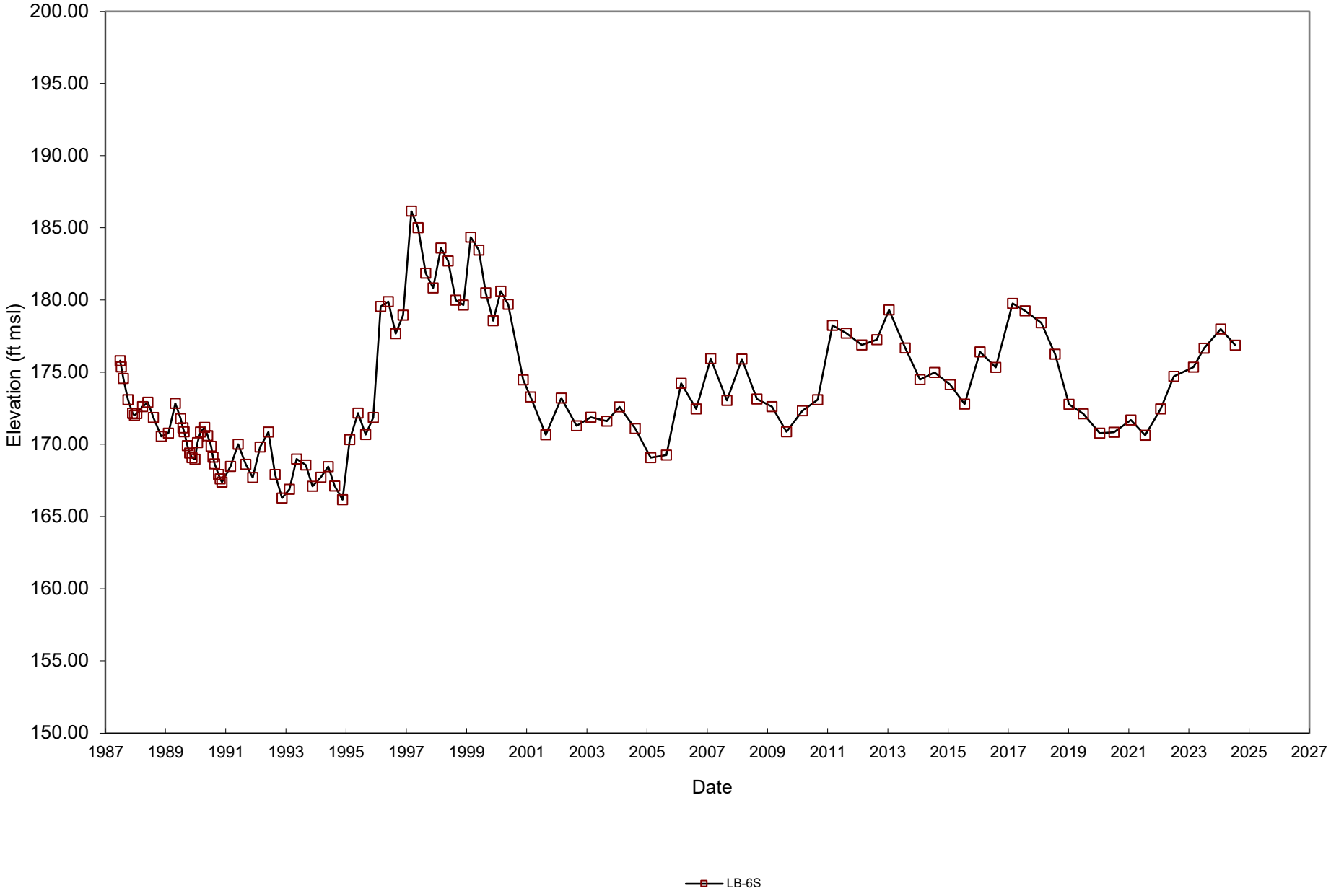


LB-3S and LB-3D Hydrographs
Leichner Landfill

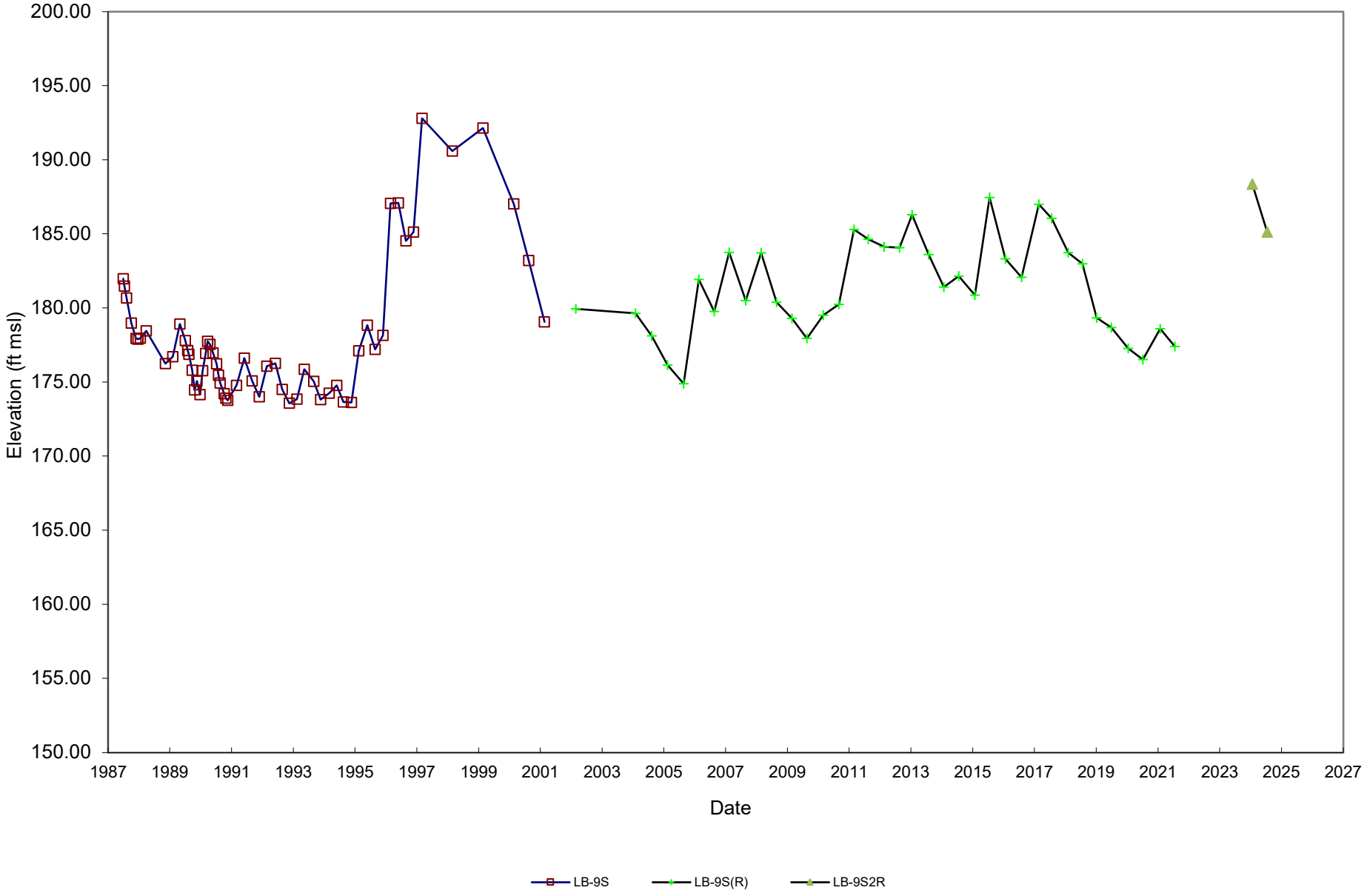



LB 5S, LB-5C, and LB-5D Hydrographs
Leichner Landfill
Elevation (ft msl)
210.00
205.00
200.00
195.00
190.00
185.00
180.00
175.00
170.00
165.00
160.00
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
2027
Date
LB-5S
LB-5C
LB-5D

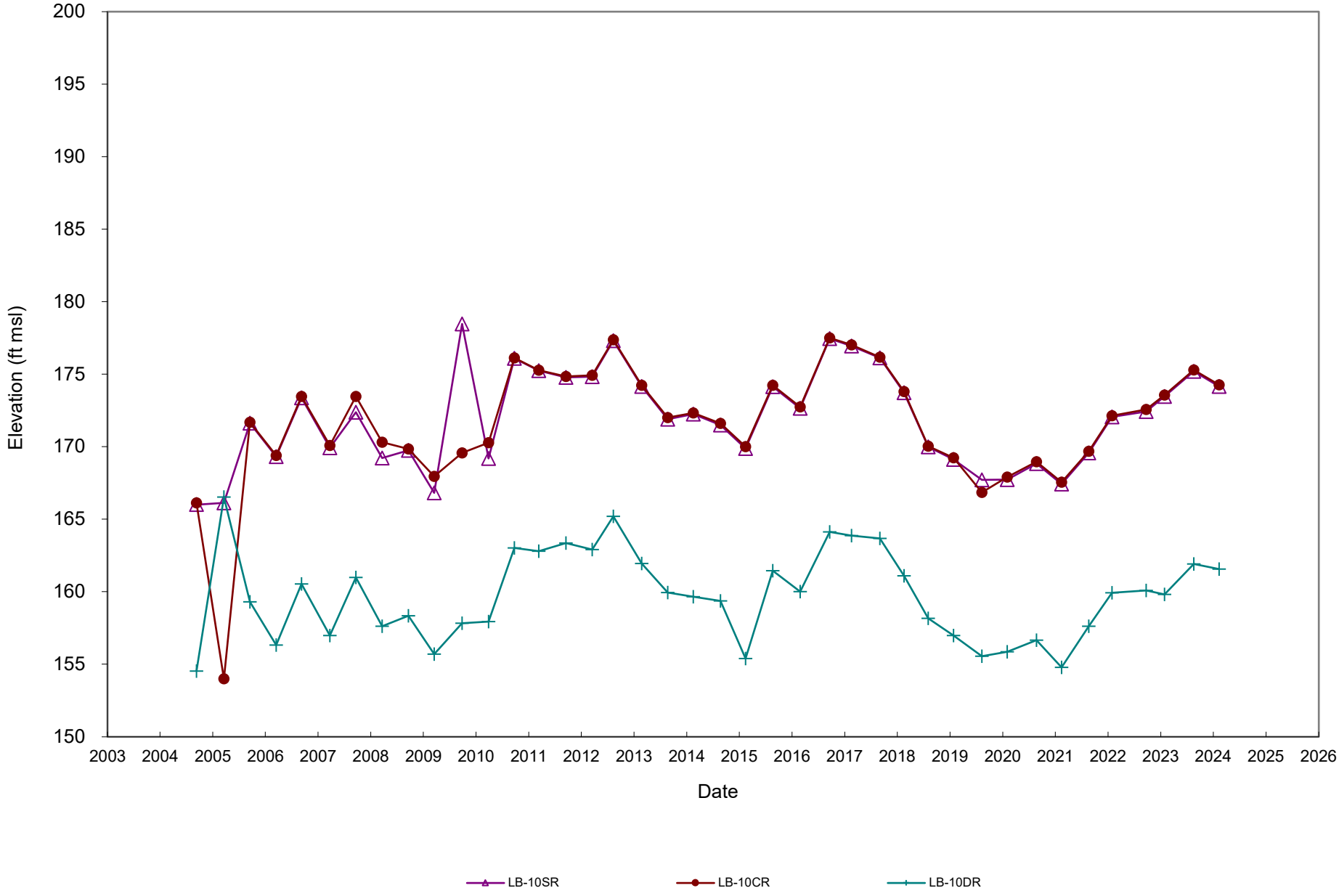
LB-6S Hydrograph
Leichner Landfill



LB-9s, LB-9S(R), and LB-9S2R Hydrographs
Leichner Landfill



LB-10SR, LB-10CR, and LB-10DR Hydrographs
Leichner Landfill



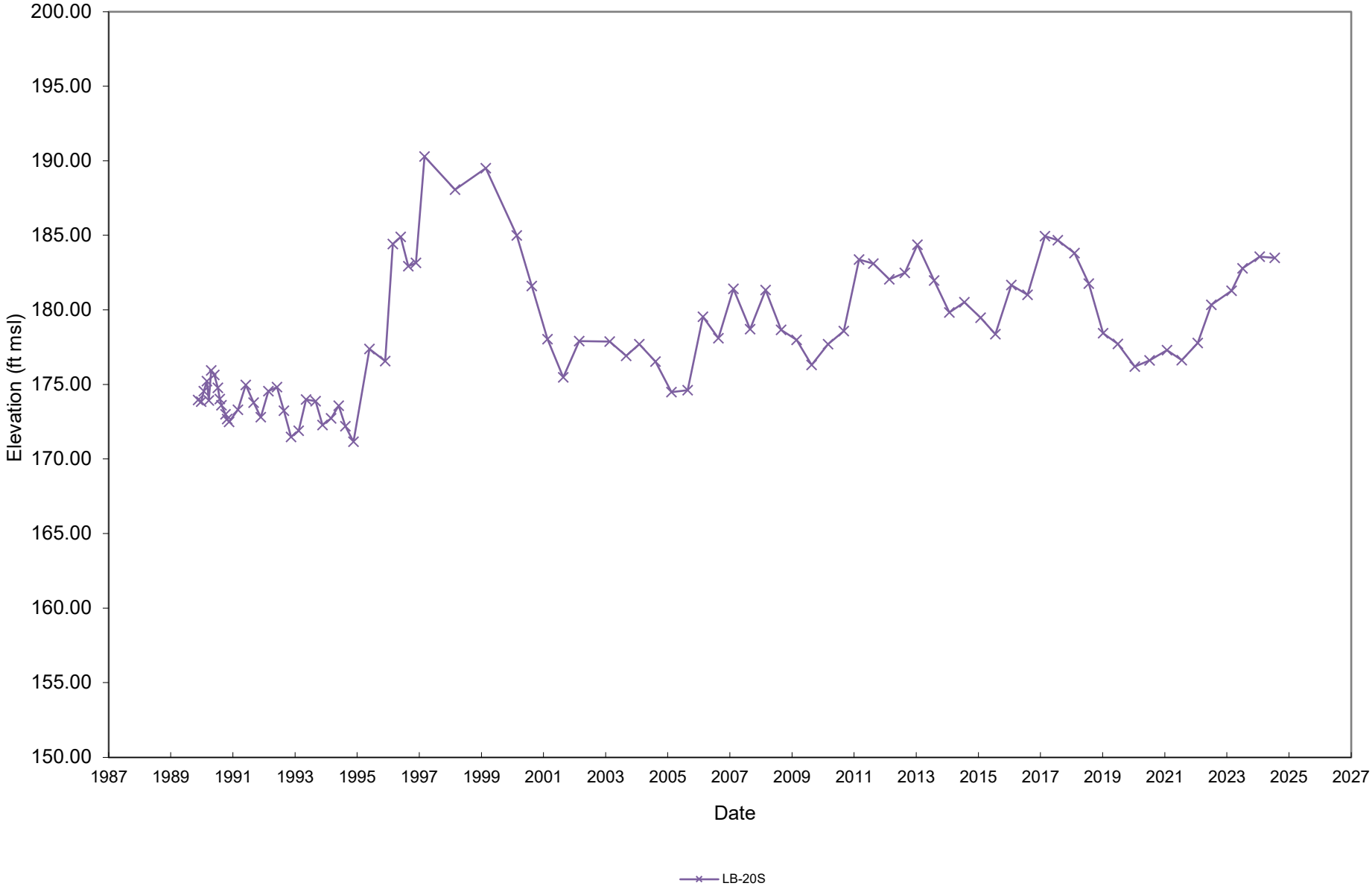
LB-13I, LB-13C, and LB-13D Hydrographs
Leichner Landfill



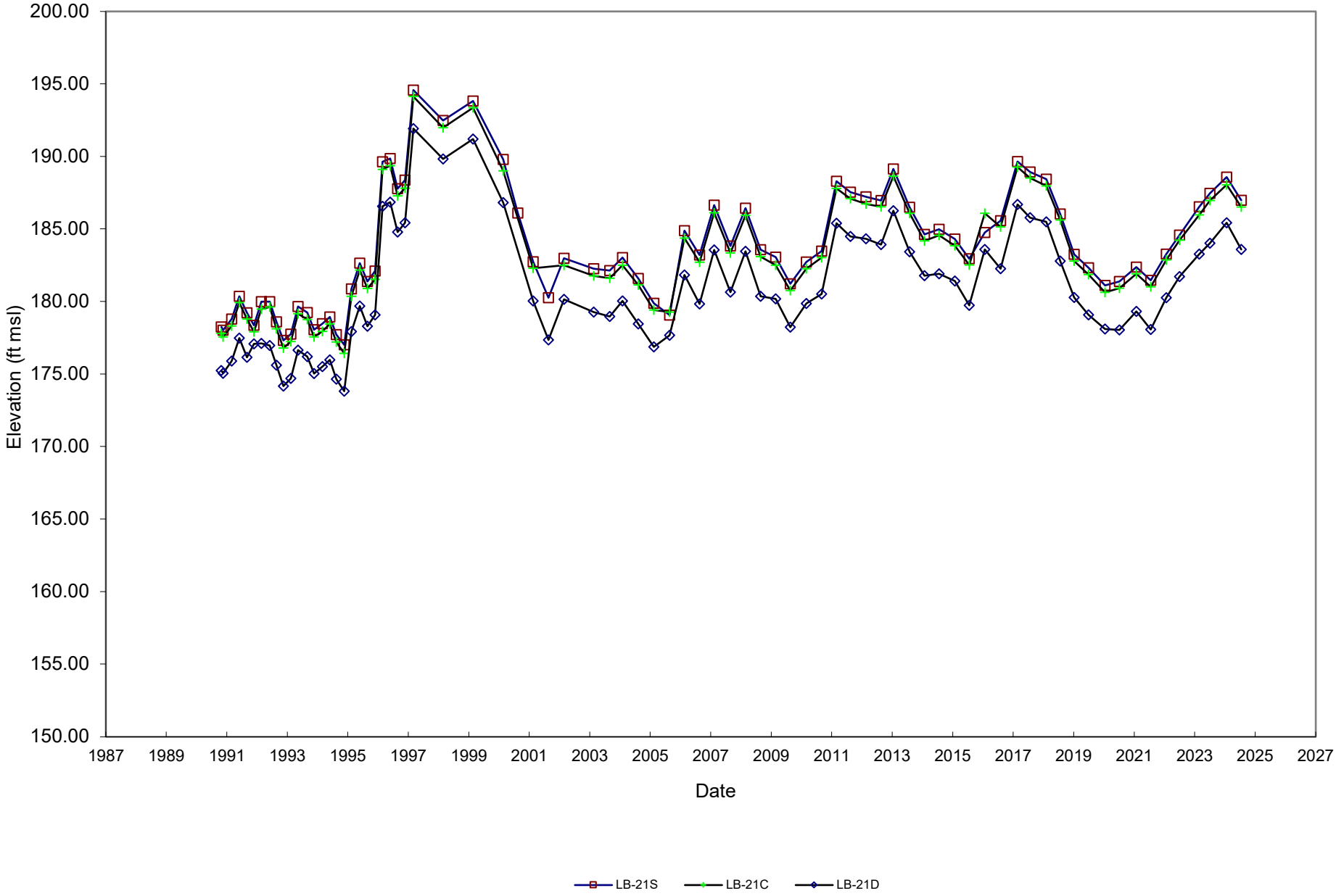
LB-17I and LB-17D Hydrographs
Leichner Landfill



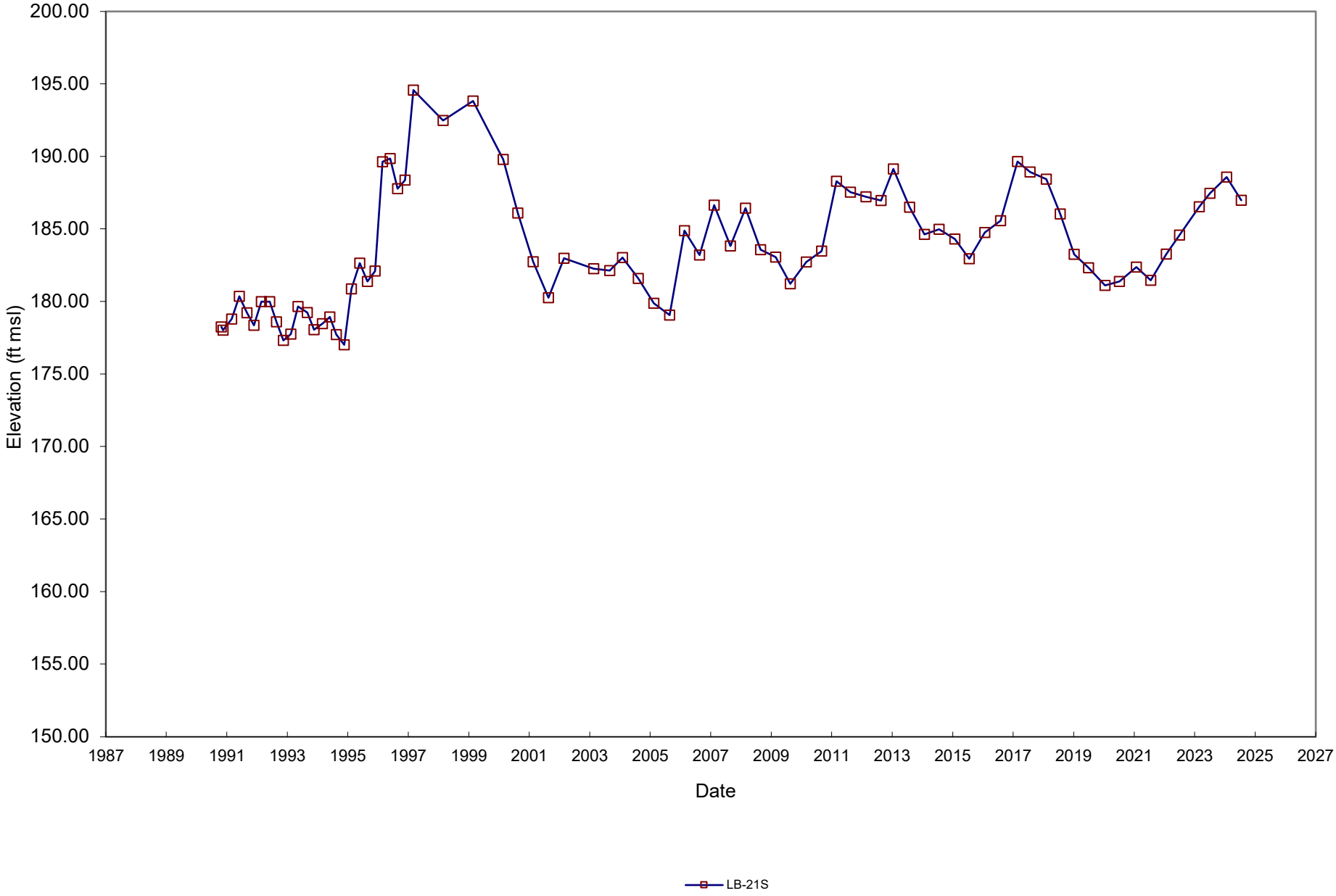
LB-20S Hydrograph
Leichner Landfill



LB-21S, LB-21C, and LB-21D Hydrographs
Leichner Landfill



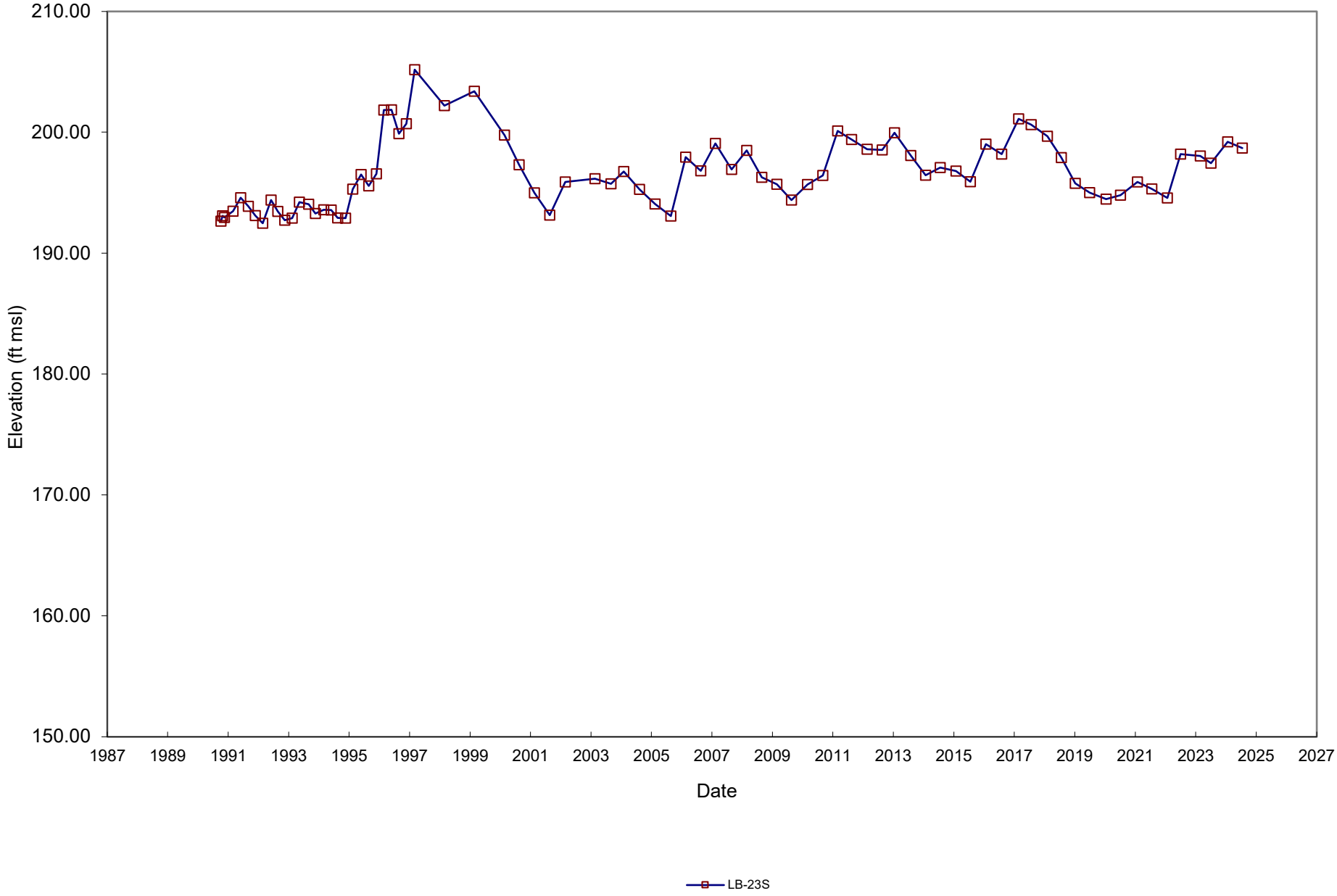
LB-21S Hydrograph
Leichner Landfill



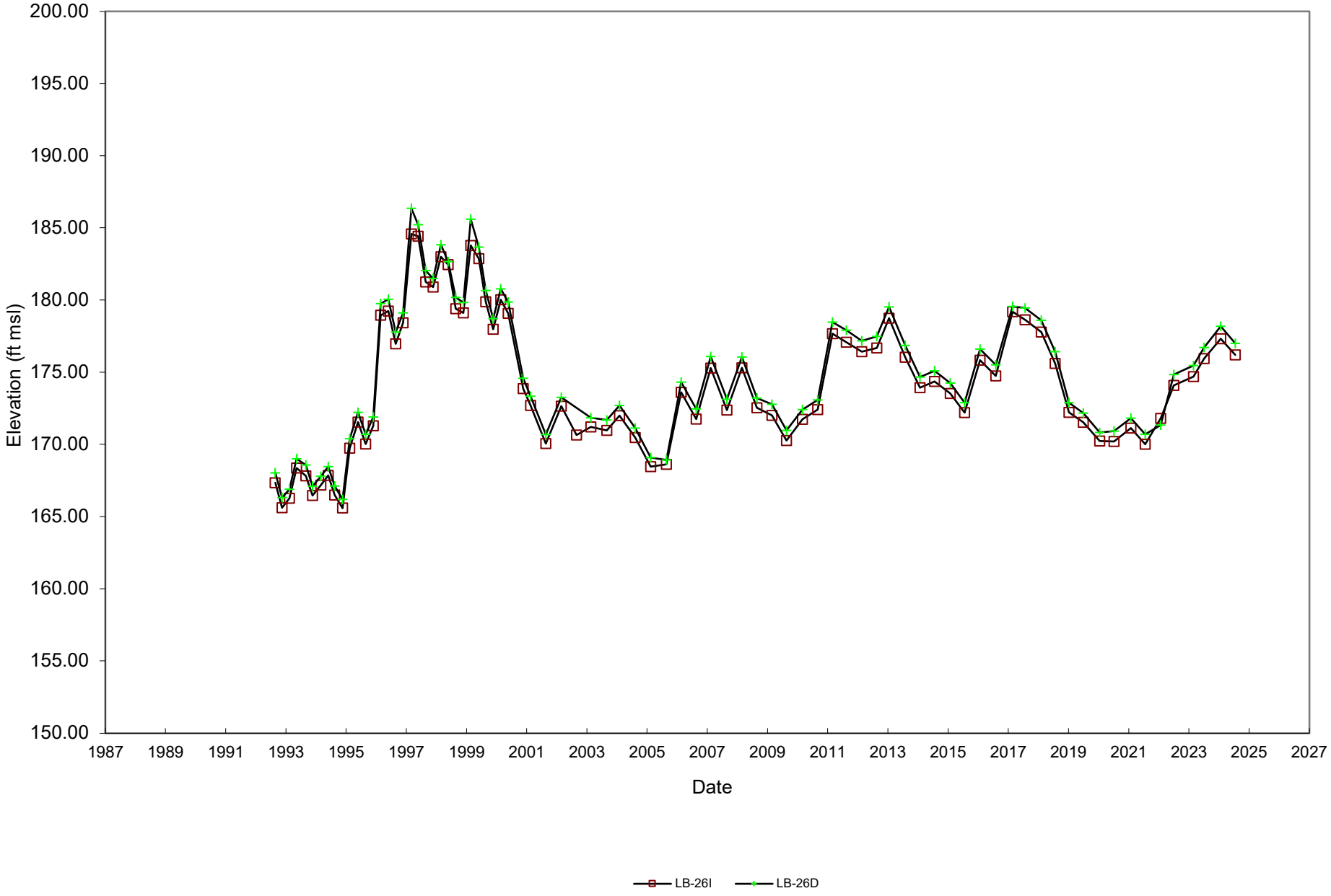
LB-22S and LB-22SR Hydrograph
Leichner Landfill



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 2024 Laboratory Analytical Data

First Quarter (February) 2024 QA/QC Reviews

SCS Engineers QA/QC Review
Groundwater - 1Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2401562

Samples: LB-021224-01-1D (LB-1D), LB-021224-02-1S (LB-1S), LB-021224-03-10DR (LB-10DR), LB-021224-04-FB1 (FB1), LB-021224-05-10SR (LB-10SR), LB-021224-06-DUP1 (DUP1), LB-021224-07-3D (LB-3D), LB-021224-08-3S (LB-3S) and TB1 (Trip Blank)

Sample Date: 02/12/2024
Laboratory Sample Received Date: 02/13/2024
Sample Receipt Temperature: -0.1°C
Laboratory Data Received Date: 02/27/2024
QA/QC Review Date: 02/28/2024 (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.
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-021224-06-DUP1 (LB-10SR) was collected at monitoring well LB-10SR (LB-021223-05-10SR) on 02/12/2024. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 02/12/2024 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

Notes
None.

Data Validation

Upon preliminary review of lab report K2401562 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (02/28/2024; BR).

SCS Engineers QA/QC Review
Groundwater - 1Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2401622

Samples: LB-021324-01-5D (LB-5D), LB-021324-02-17D (LB-17D), LB-021324-03-17I (LB-17I), LB-021324-04-DUP1 (DUP1), LB-021324-05-26D (LB-26D), LB-021324-06-FB1 (FB1), LB-021324-07-13D (LB-13D), LB-021324-08-27D (LB-27D), LB-021324-09-27I (LB-27I), LB-021324-10-13I (LB-13I), and TB2

Sample Date: 02/13/2024
Laboratory Sample Received Date: 02/14/2024
Sample Receipt Temperature: 1.9ºC
Laboratory Data Received Date: 02/27/2024
QA/QC Review Date: 02/28/2024 (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.
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-021324-06-DUP1 (LB-17I) was collected at monitoring well LB-17I (LB-021323-03-17I) on 02/13/2024. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank was carried into the field on 02/13/2024 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

Notes
Bromomethane was flagged as outside the control criterion for Continuing Calibration Verification (CCV) KQ2402772-02. In accordance with the EPA Method, 80% or more of the CCV analytes must have passed

within 20% of the true value. The remaining analytes are allowed a 40% difference as per the ALS SOP. The CCV met these criteria. No further corrective action was required.

Data Validation

Upon preliminary review of lab report K2401622 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (02/28/2024; BR).

SCS Engineers QA/QC Review
Groundwater - 1Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2401667

Samples: TB3, LB-01424-01-5S (LB-5S), LB-021424-02-FB1 (FB1), LB-021424-03-26I (LB-26I), LB-021424-04-6S (LB-6S), LB-021424-05-20S (LB-20S), LB-021424-06-DUP1 (DUP1).

Sample Date: 02/14/2024
Laboratory Sample Received Date: 02/15/2024
Sample Receipt Temperature: 1.7ºC
Laboratory Data Received Date: 02/15/2024
QA/QC Review Date: 01/10/2025 (SC)

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.
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-021424-06-DUP1 (DUP1) was collected at monitoring well LB-20S (LB-021424-05-20S) on 02/14/2024. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank (TB3) was carried into the field on 02/13/2024 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.

Field Blank
A laboratory supplied field blank (FB1) was carried into the field on 02/13/2024 with all samples collected on the same date and returned to the lab. All field blank analytes were reported as non-detect.

DQR
None.

Notes

Data Validation

Upon preliminary review of lab report K2401667 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (01/12/2025; SC).

Third Quarter (August) Laboratory Reports

SCS Engineers QA/QC Review
Groundwater - 3Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2408131

Samples: FB (LB-080624-01-FB), LB-27I (LB-080624-02-27I), LB-13I (LB-080624-03-13I), DUP (LB-080624-04-DUP), TB1.

Sample Date: 08/06/2024
Laboratory Sample Received Date: 08/07/2024
Sample Receipt Temperature: 4.5ºC
Laboratory Data Received Date: 08/22/2024
QA/QC Review Date: 08/30/2024 (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
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-080624-04-DUP1 (LB-13I) was collected at monitoring well LB-13I (LB-080624-03-13I) on 08/06/2024. All calculated RPDs were within 20%.

Trip Blank
A laboratory supplied trip blank (TB1) was carried into the field on 08/06/2024 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, 08/16/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. This rounds to 20 which is the upper limit. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.

Method 8260C, 08/16/2024:Chloromethane 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.

Method 8260C, 08/16/2024:The lower control criterion was exceeded for Dichlorodifluoromethane in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was
adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the analyte in question and the analyte was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Data Validation

Upon preliminary review of lab report K2408131 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (08/30/2024;BR).

SCS Engineers QA/QC Review
Groundwater - 3Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2408134

Samples: LB-17S, TB1

Sample Date: 08/06/2024
Laboratory Sample Received Date: 08/07/2024
Sample Receipt Temperature: 4.5ºC
Laboratory Data Received Date: 08/22/2024
QA/QC Review Date: 08/30/2024 (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
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 08/06/2024 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 300.0, 08/09/2024: The analysis of sample LB-17S for Nitrate as Nitrogen was initially performed within the recommended holding time. Reanalysis at a larger dilution was required. The reanalysis was performed 1 day past the recommended holding time. The results from the second analysis were reported.

Method 8260C, 08/16/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. This rounds to 20 which is the upper limit. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.

Method 8260C, 08/16/2024:Chloromethane 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.

Method 8260C, 08/16/2024:The lower control criterion was exceeded for Dichlorodifluoromethane in Continuing Calibration Verification (CCV). In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verified instrument sensitivity was
adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the analyte in question and the analyte was not detected in the field sample, the data quality was not significantly affected. No further corrective action was appropriate.

Data Validation

Upon preliminary review of lab report K2408134 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (08/30/2024;BR).

SCS Engineers QA/QC Review
Groundwater - 3Q 2024 Groundwater Monitoring Event
Leichner Brothers Landfill
ALS Environmental Lab Report No. K2408211

Samples: LB-1S (LB-080724-05-1S), LB-5S (LB-080724-04-5S), LB-6S (LB-080724-03-6S), LB-10SR (LB-080724-06-10SR), LB-26I (LB-080724-01-26I), FB (LB-080724-02-FB), TB2

Sample Date: 08/07/2024
Laboratory Sample Received Date: 08/08/2024
Sample Receipt Temperature: 4.1ºC
Laboratory Data Received Date: 08/22/2024
QA/QC Review Date: 08/30/2024 (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
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 (TB2) was carried into the field on 08/07/2024 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, 08/19/2024:1,2-Dibromo-3-chloropropane is flagged because the ICAL RSD was 20.02. The LIMS system can erroneously flag an analyte as failing the RSD criteria. The error is a known issue from the outside calibration application, the true value comes from the data processing software which is verified to be passing during review of the ICAL.

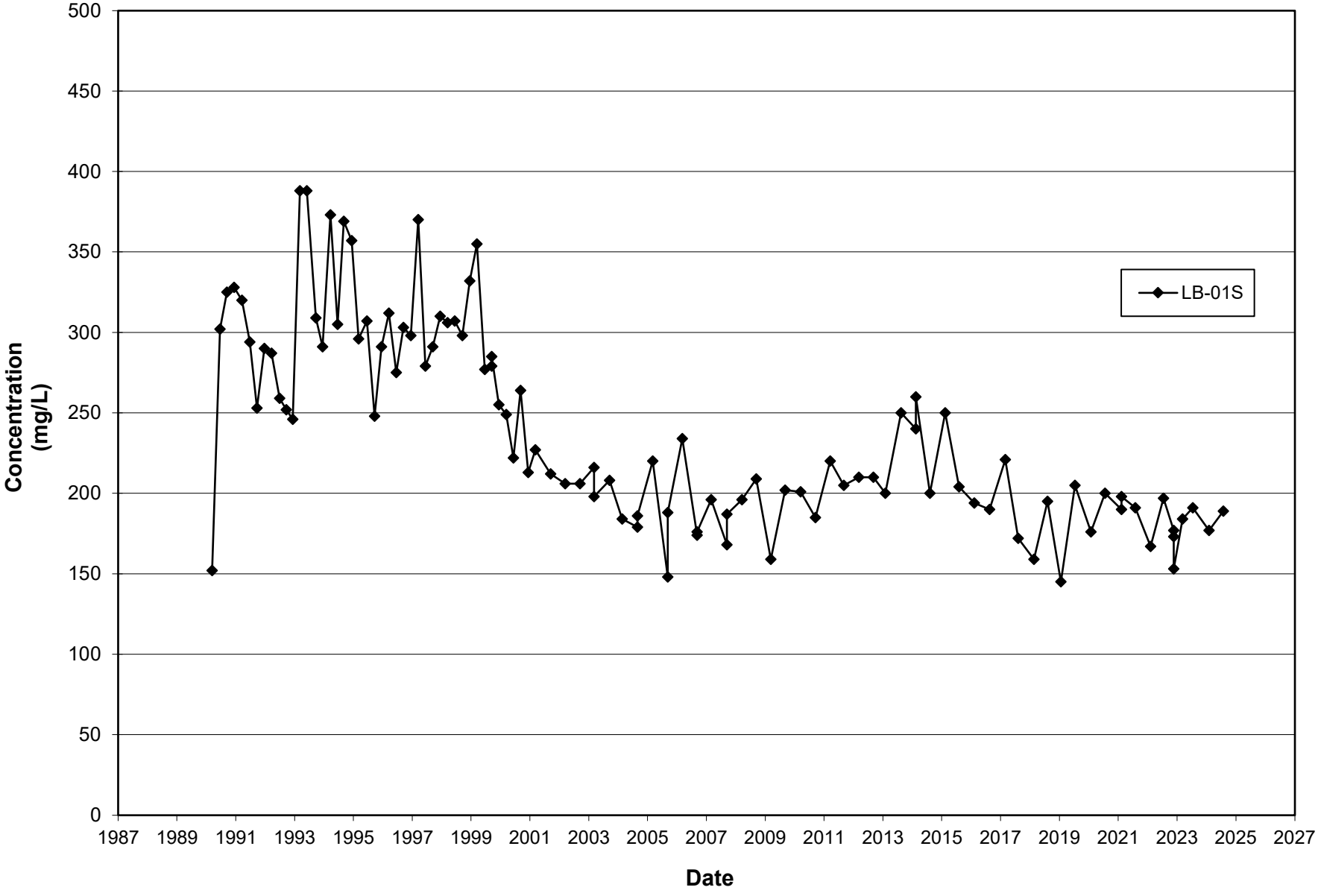
Data Validation
Upon preliminary review of lab report K2408211 for Leichner Landfill, SCS Engineers finds the data are valid for their intended use (08/30/2024;BR).

APPENDIX F

Groundwater Time-Concentration Graphs

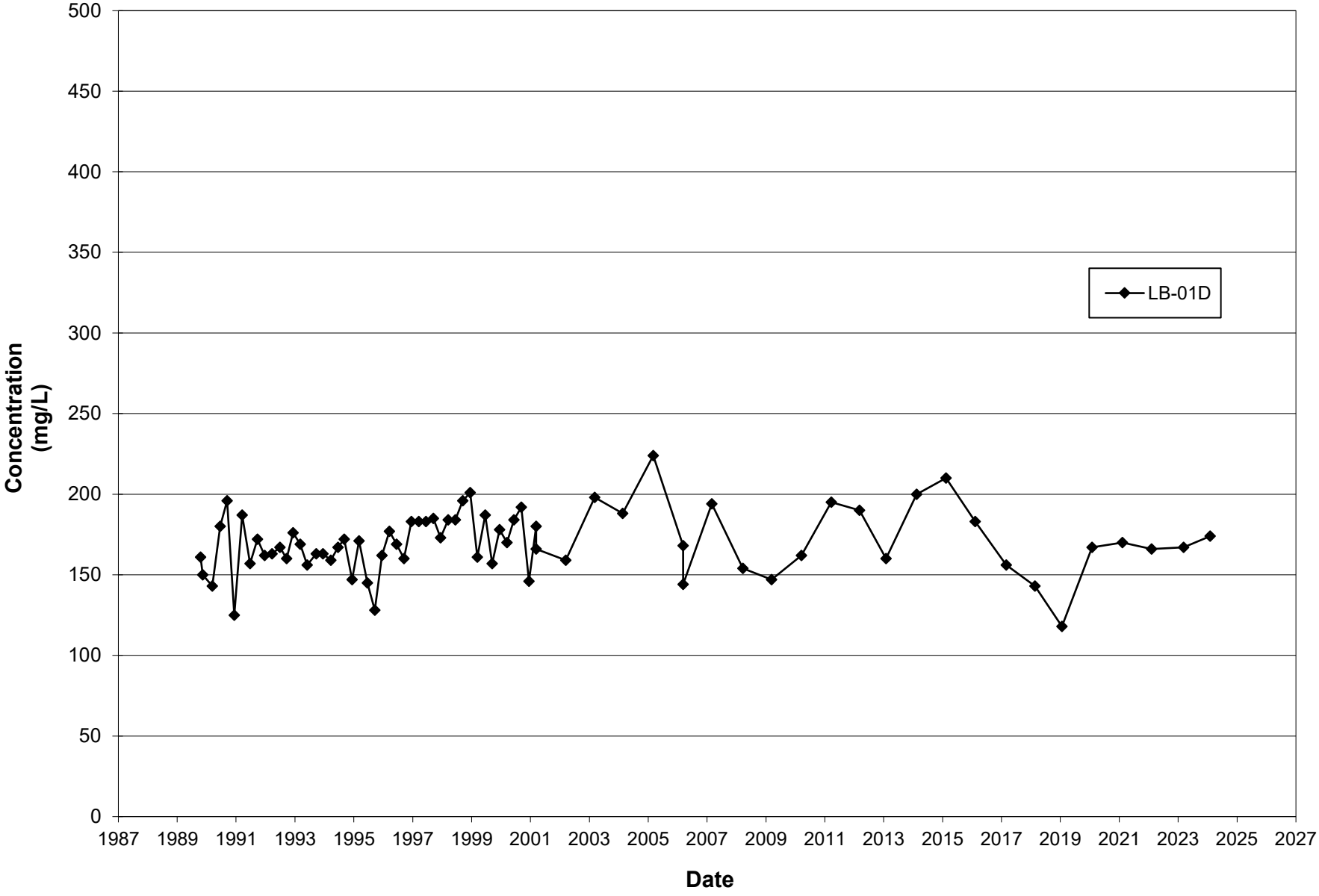
Total Dissolved Solids

Leichner Landfill
Total Dissolved Solids, LB-01S
1987 - 2024



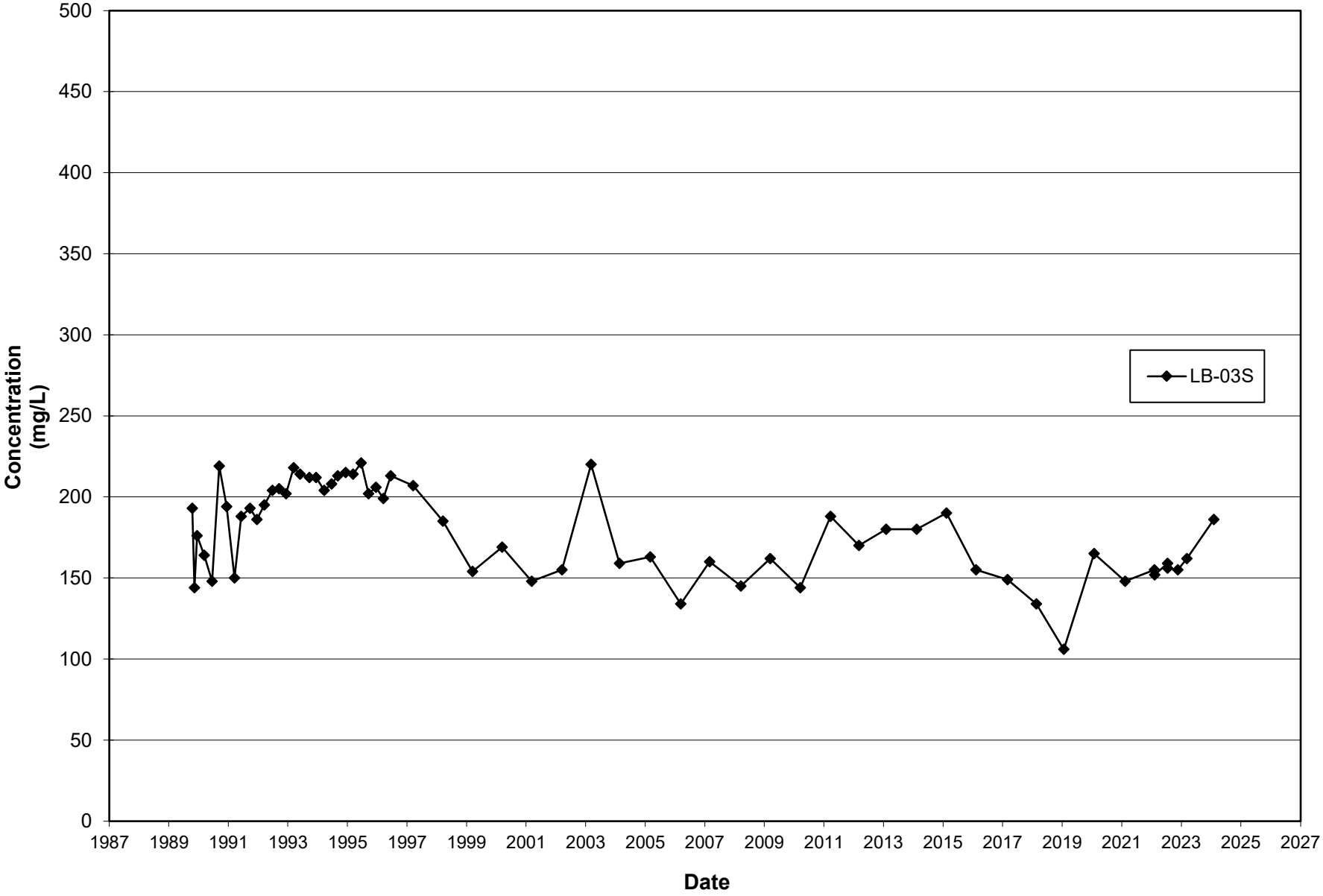
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-01D
1987 - 2024



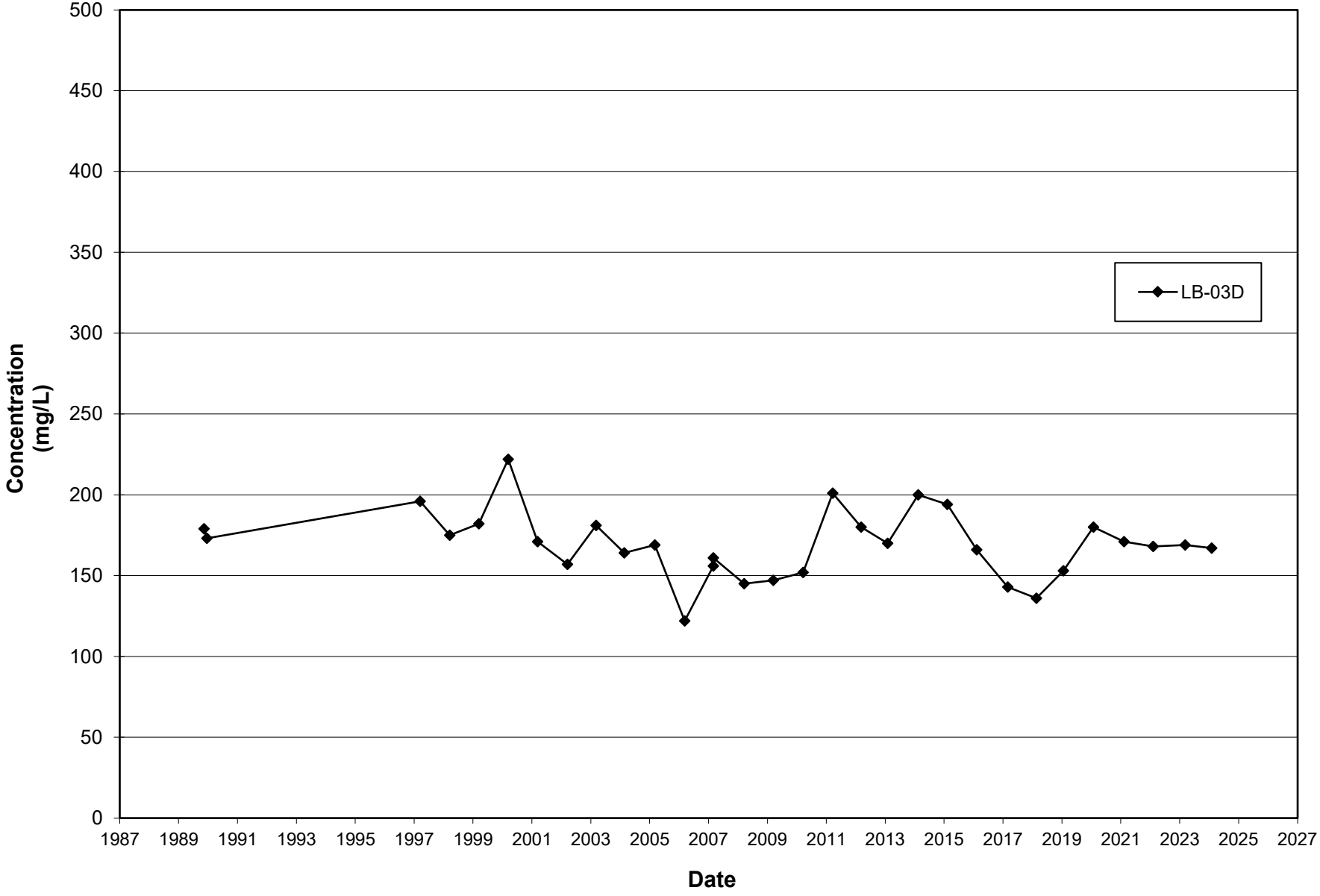
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-03S
1987 - 2024



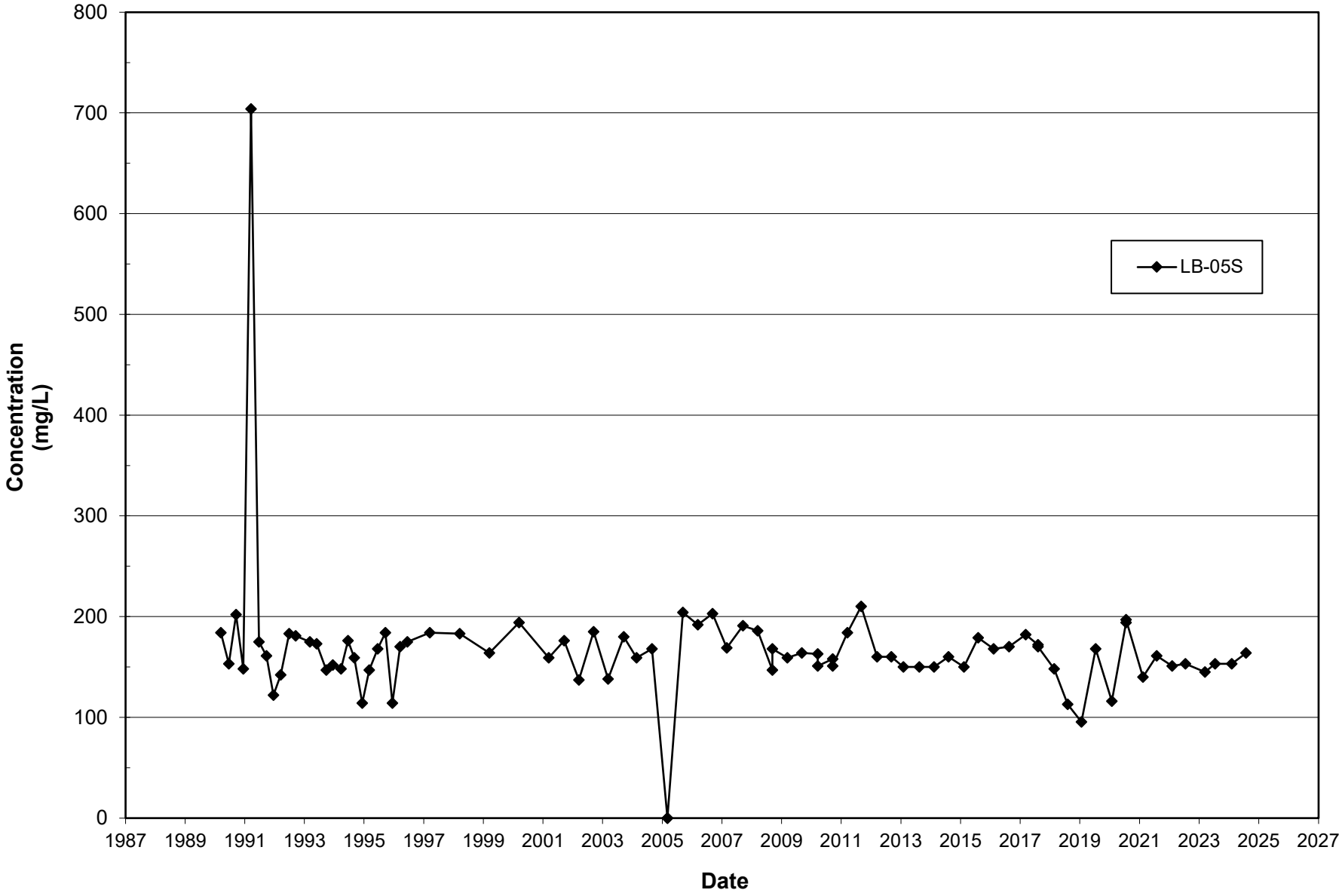
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-03D
1987 - 2024



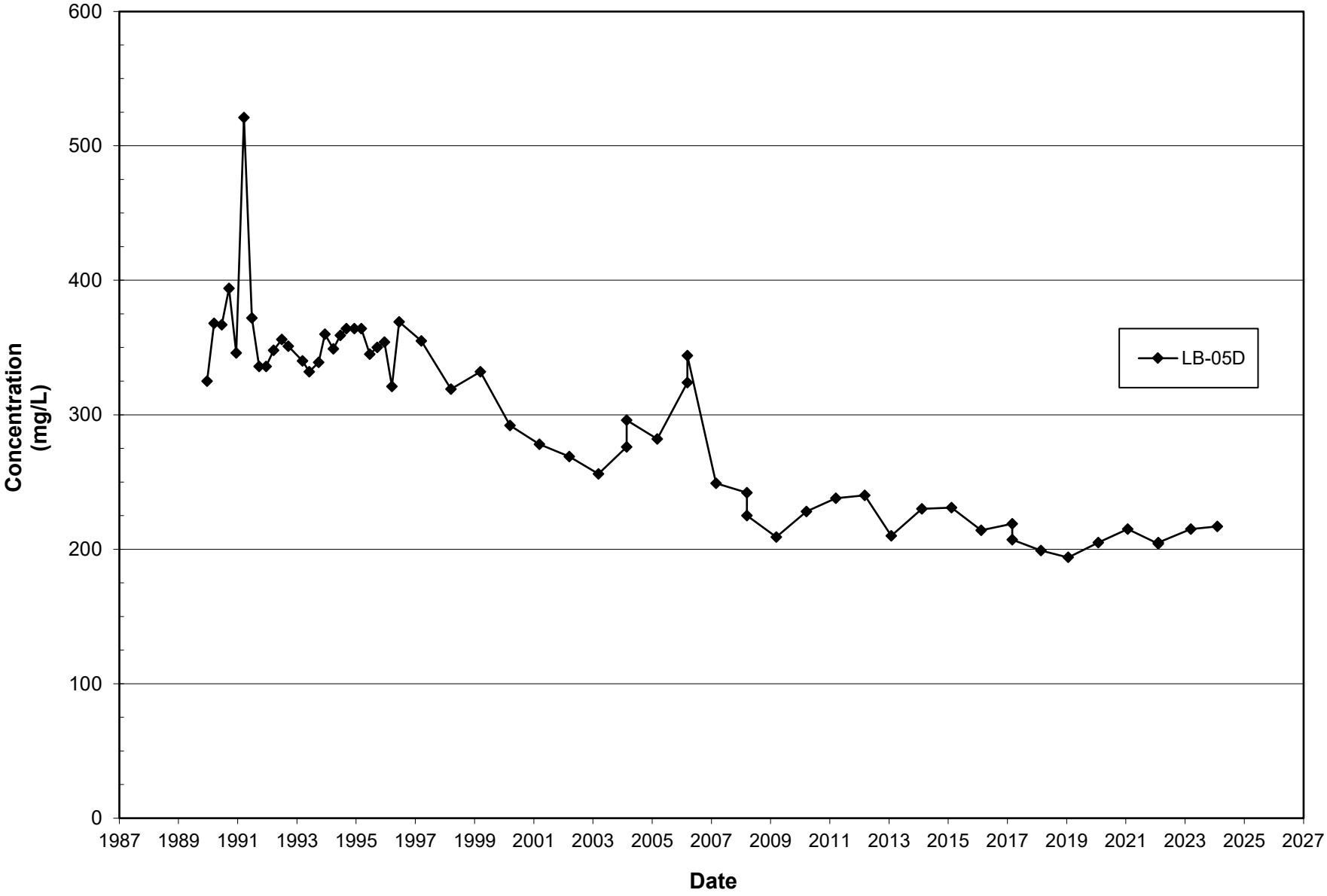
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-05S
1987 - 2024



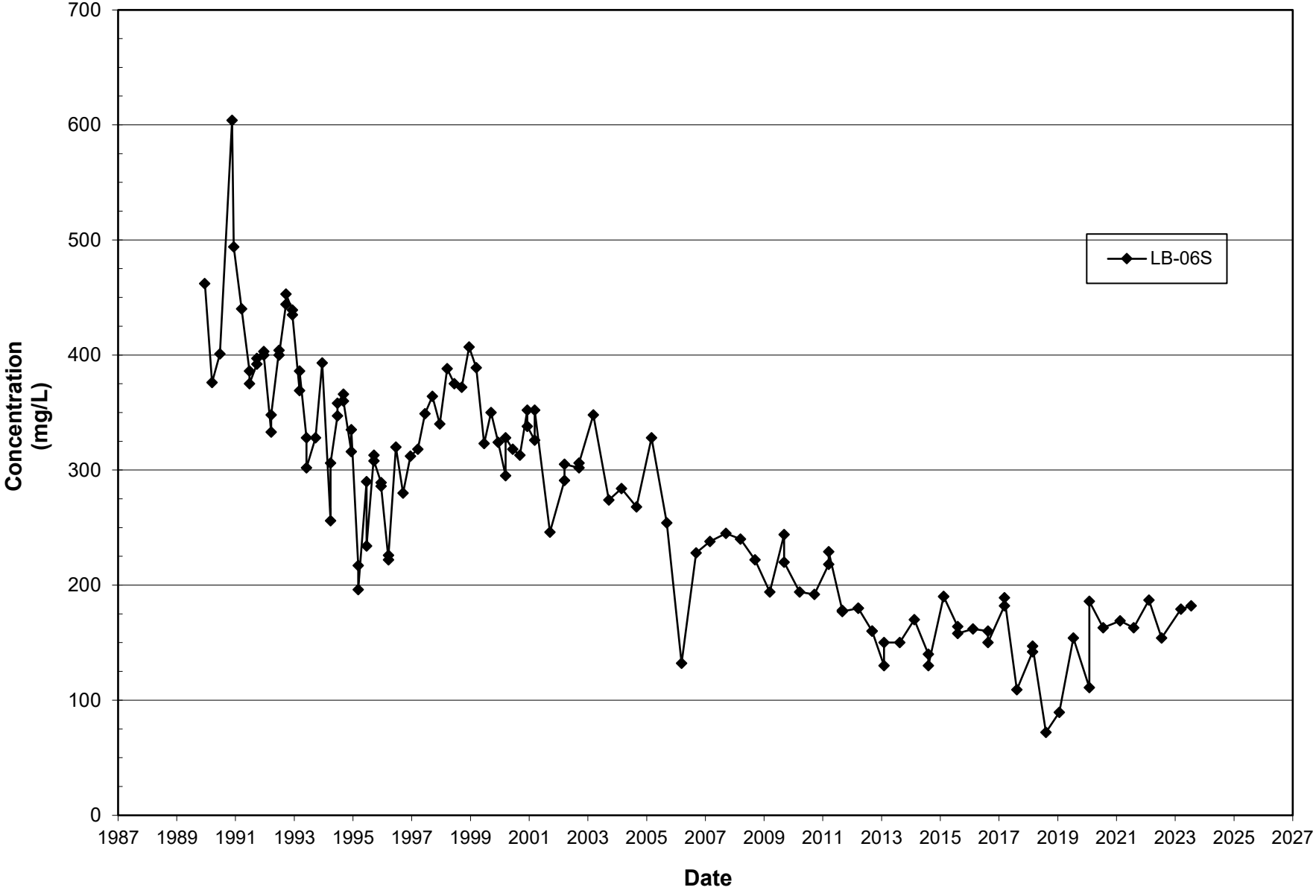
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-05D
1987 - 2024



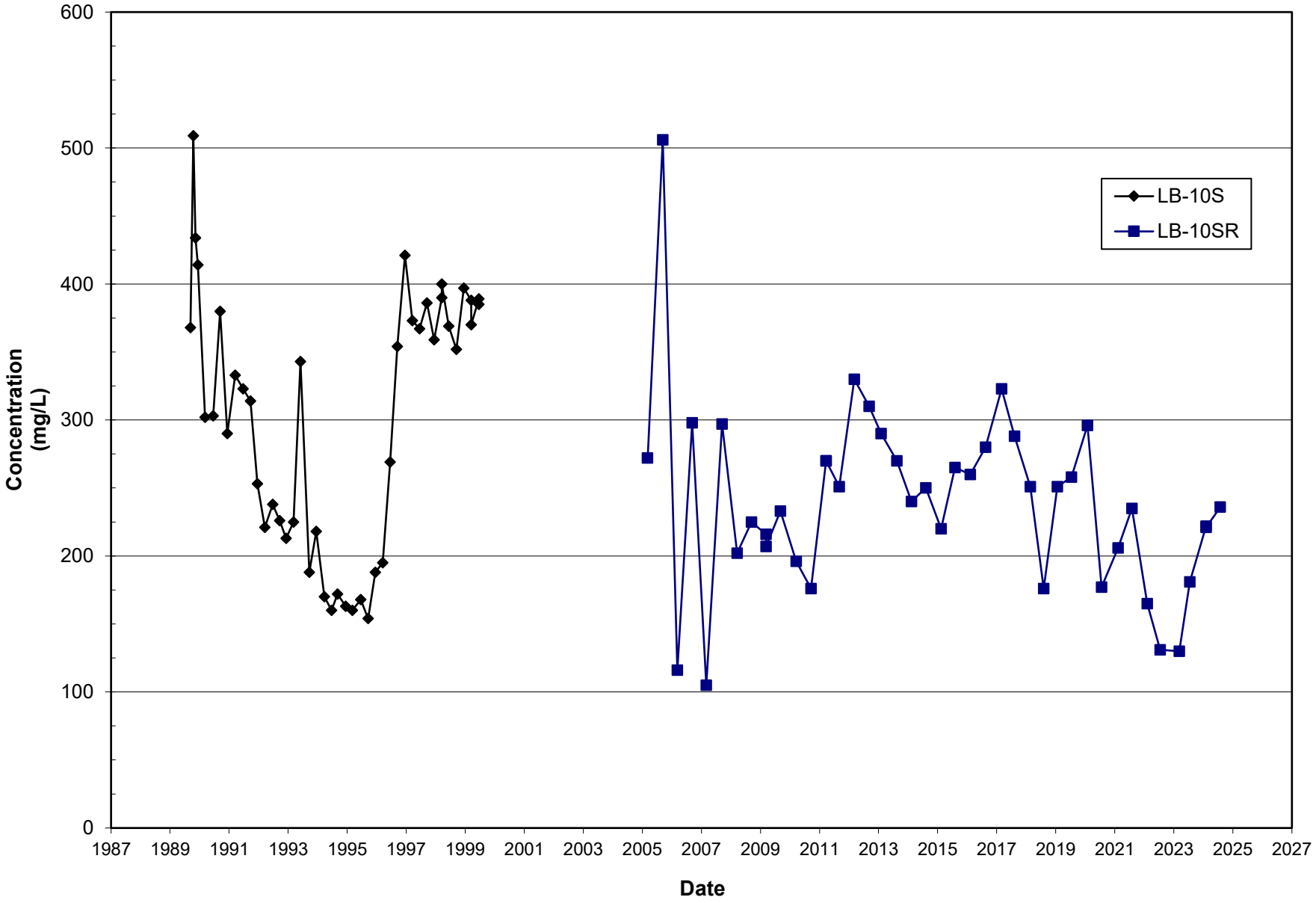
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-06S
1987 - 2024

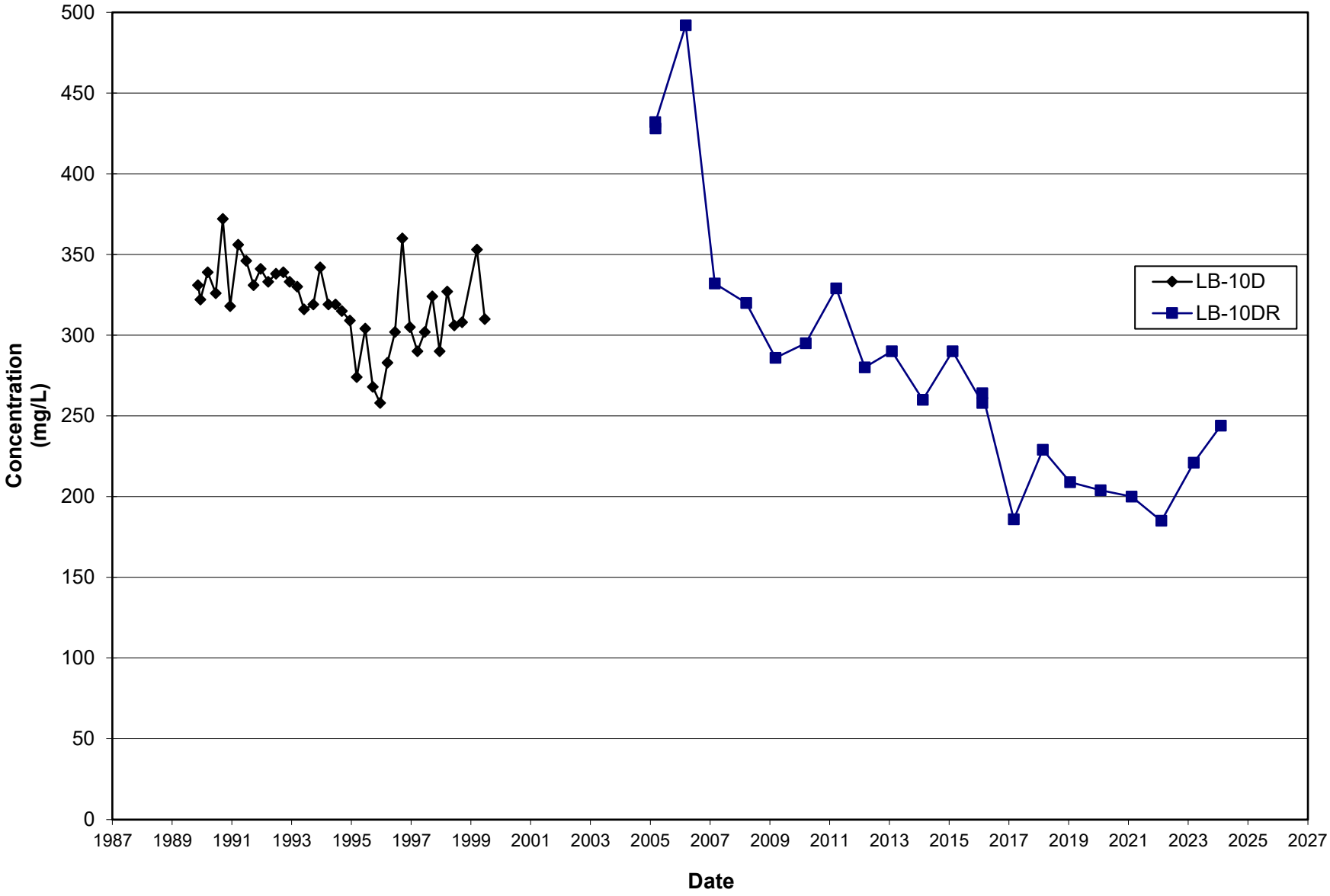


SCS Engineers, 1/29/2025

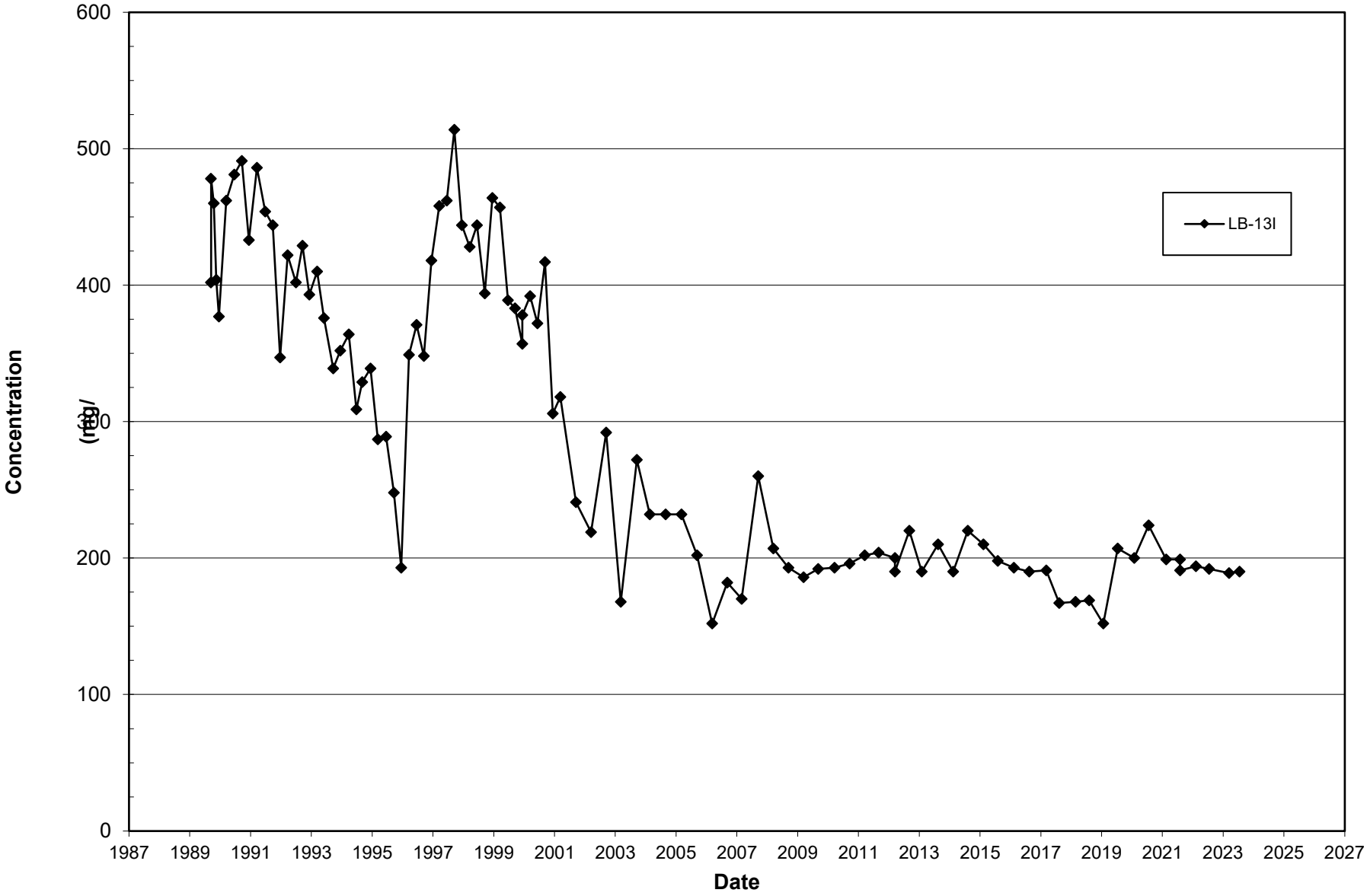
Leichner Landfill
Total Dissolved Solids, LB-10S and LB-10SR
1987 - 2024



Leichner Landfill
Total Dissolved Solids, LB-10D and LB-10DR
1987 - 2024

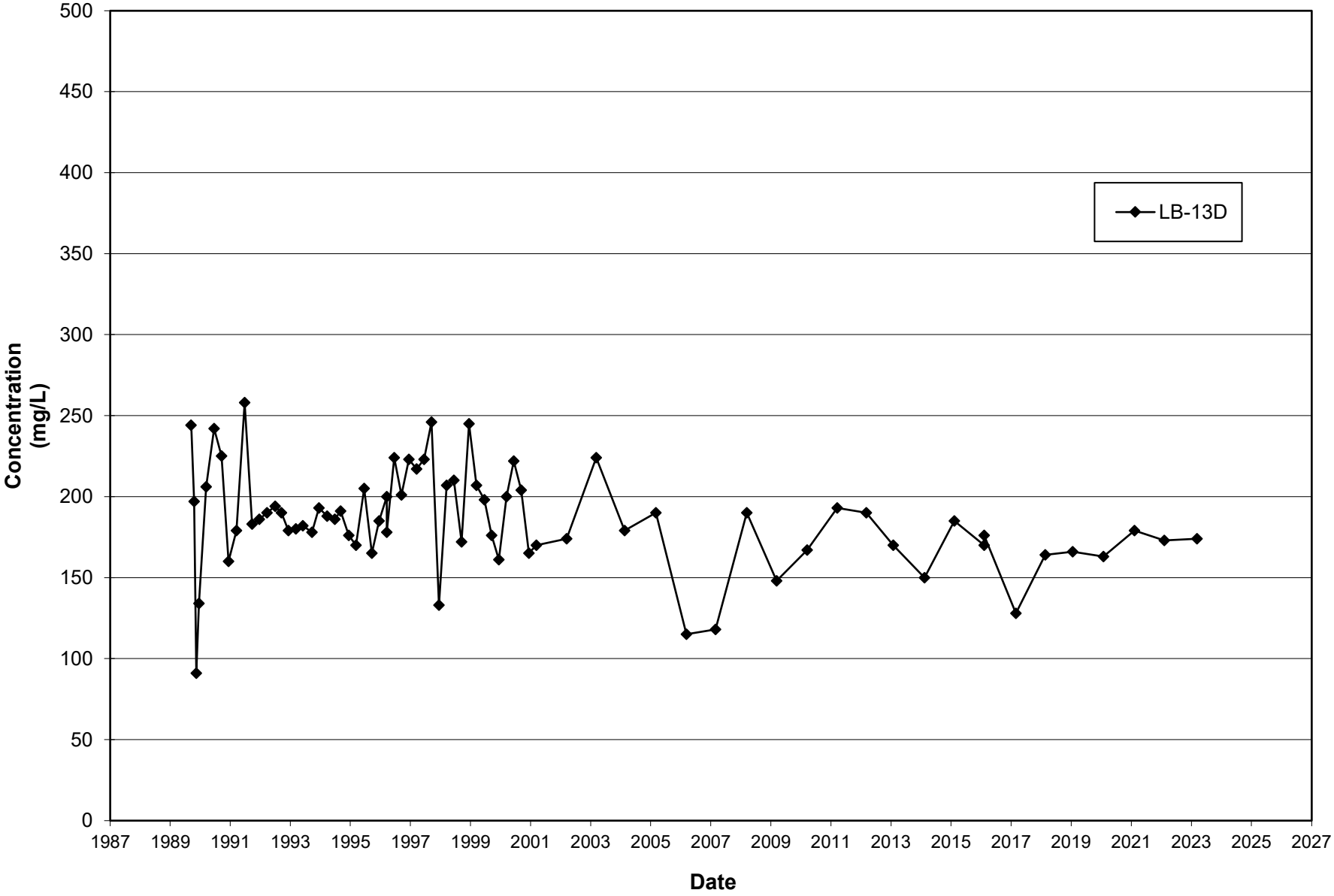


Leichner Landfill
Total Dissolved Solids, LB-13I
1987 - 2024



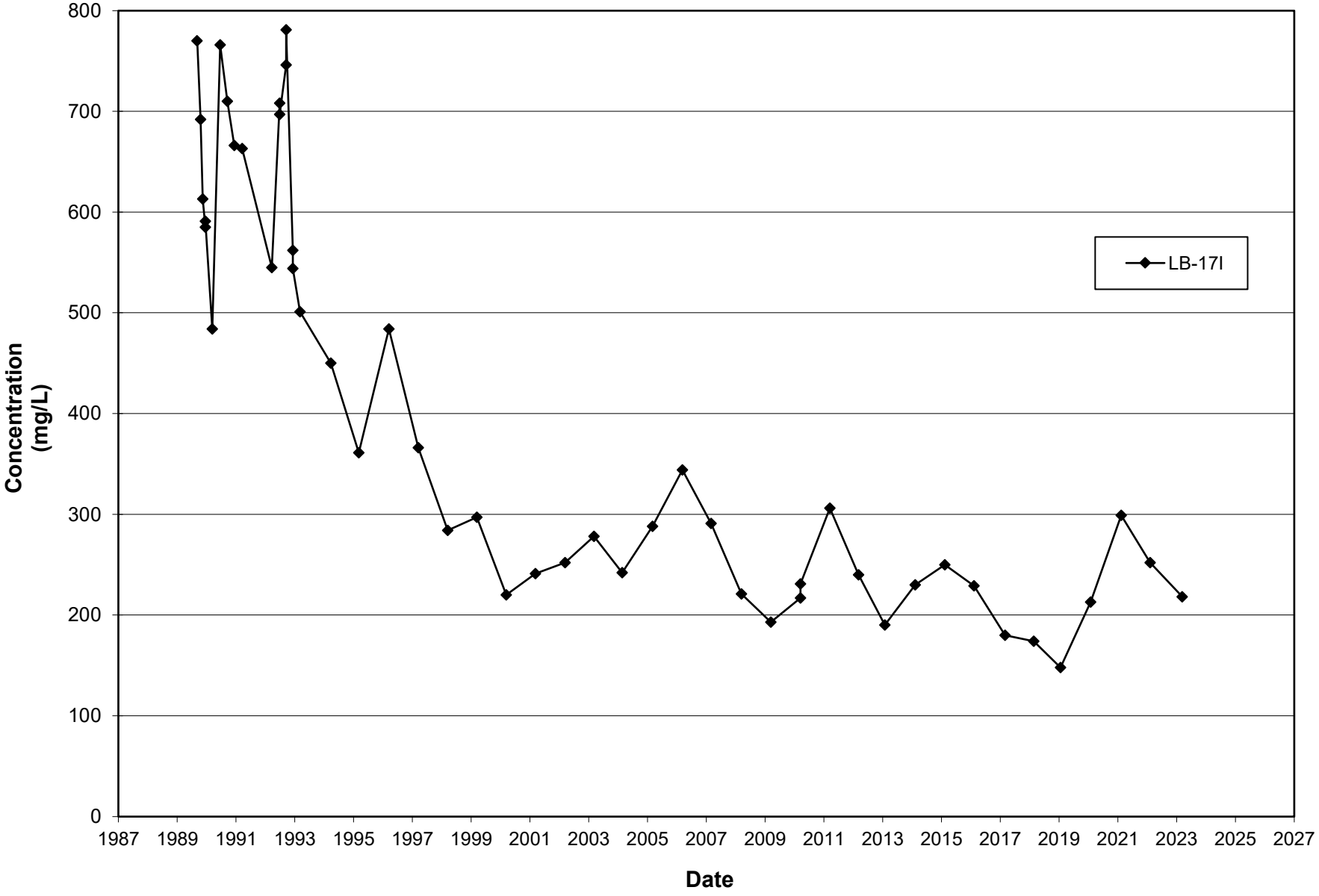
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-13D
1987 - 2024

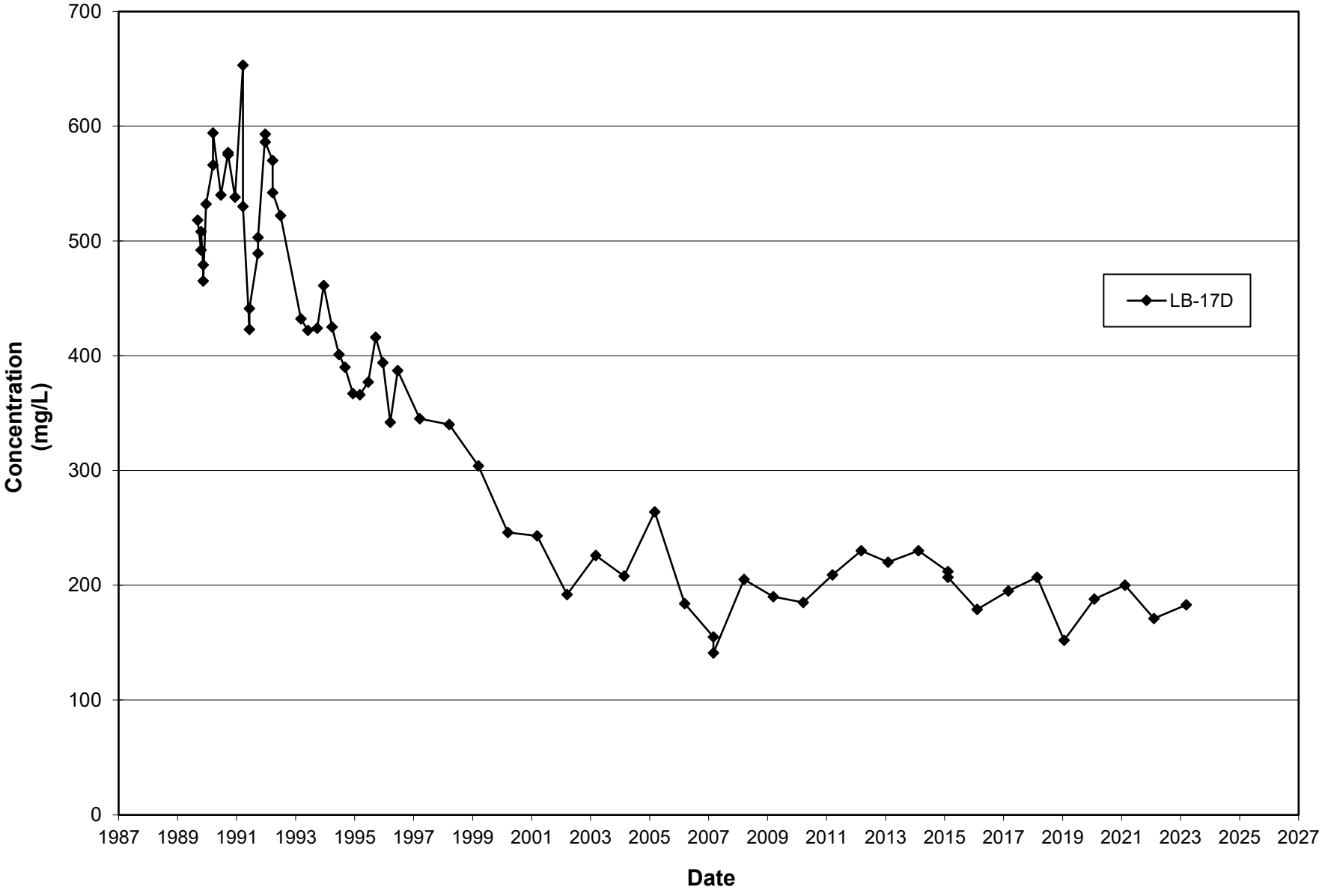


SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-17I
1987 - 2024

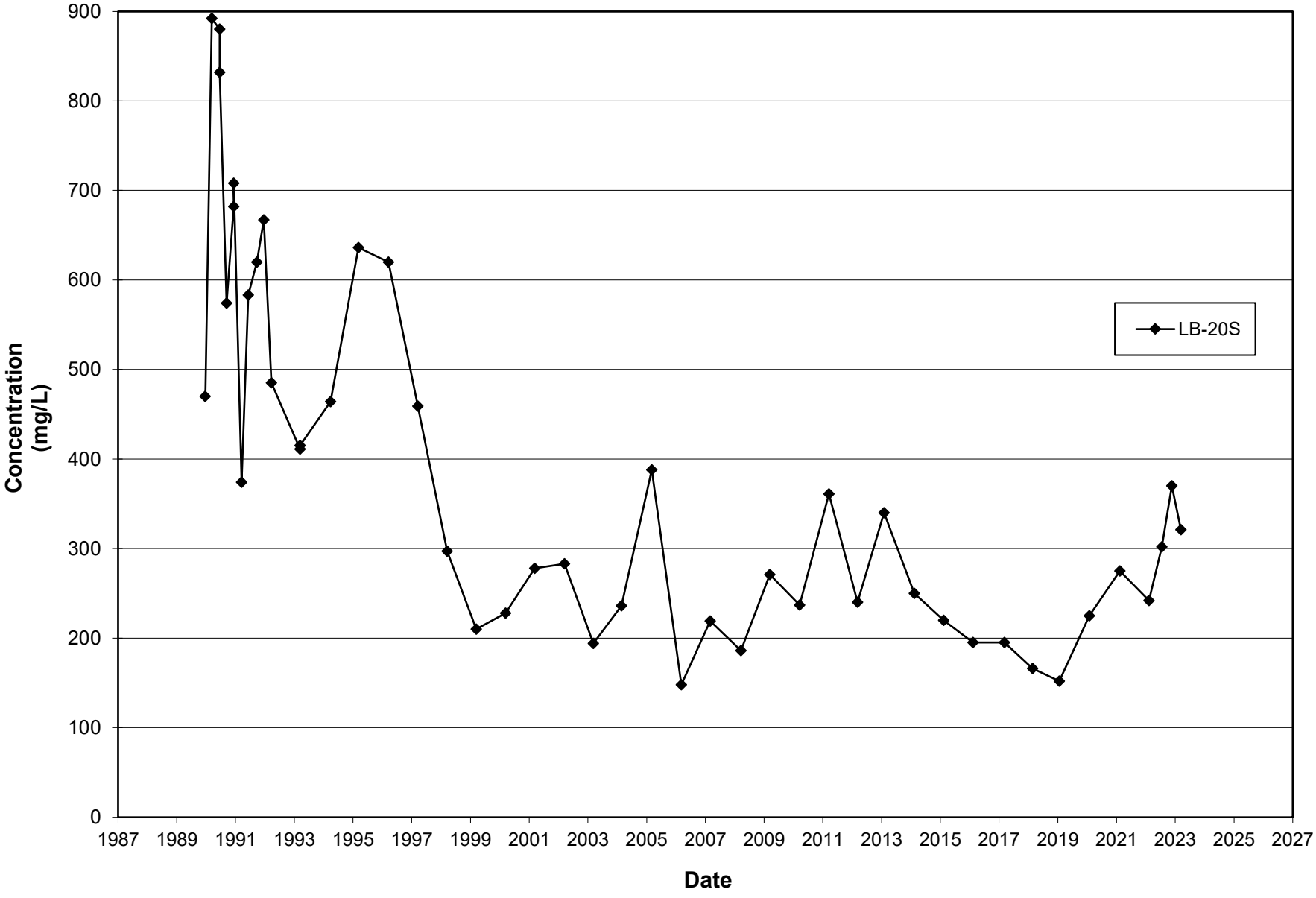


Leichner Landfill
Total Dissolved Solids, LB-17D
1987 - 2024



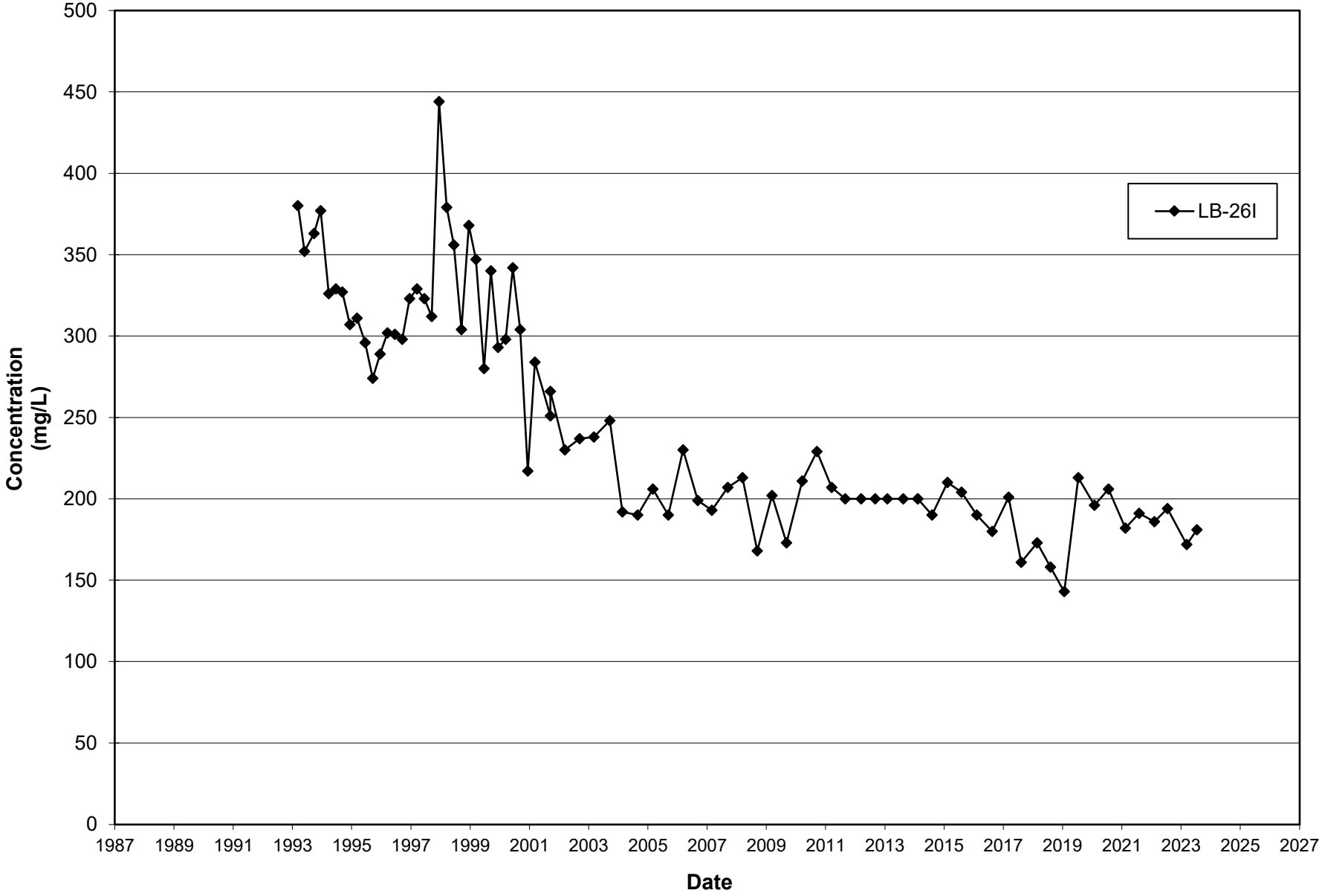
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-20S
1987 - 2024



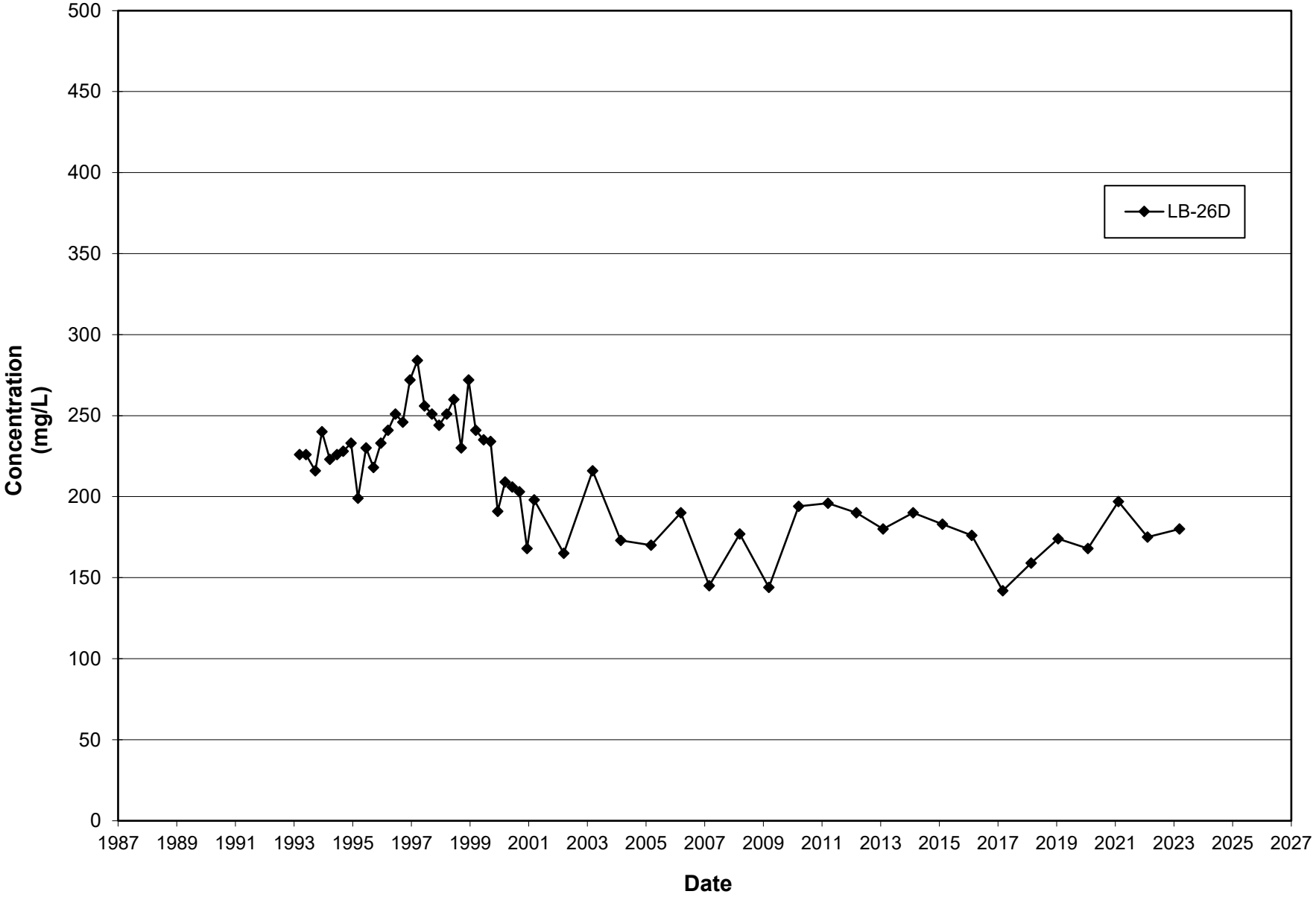
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-26I
1987 - 2024



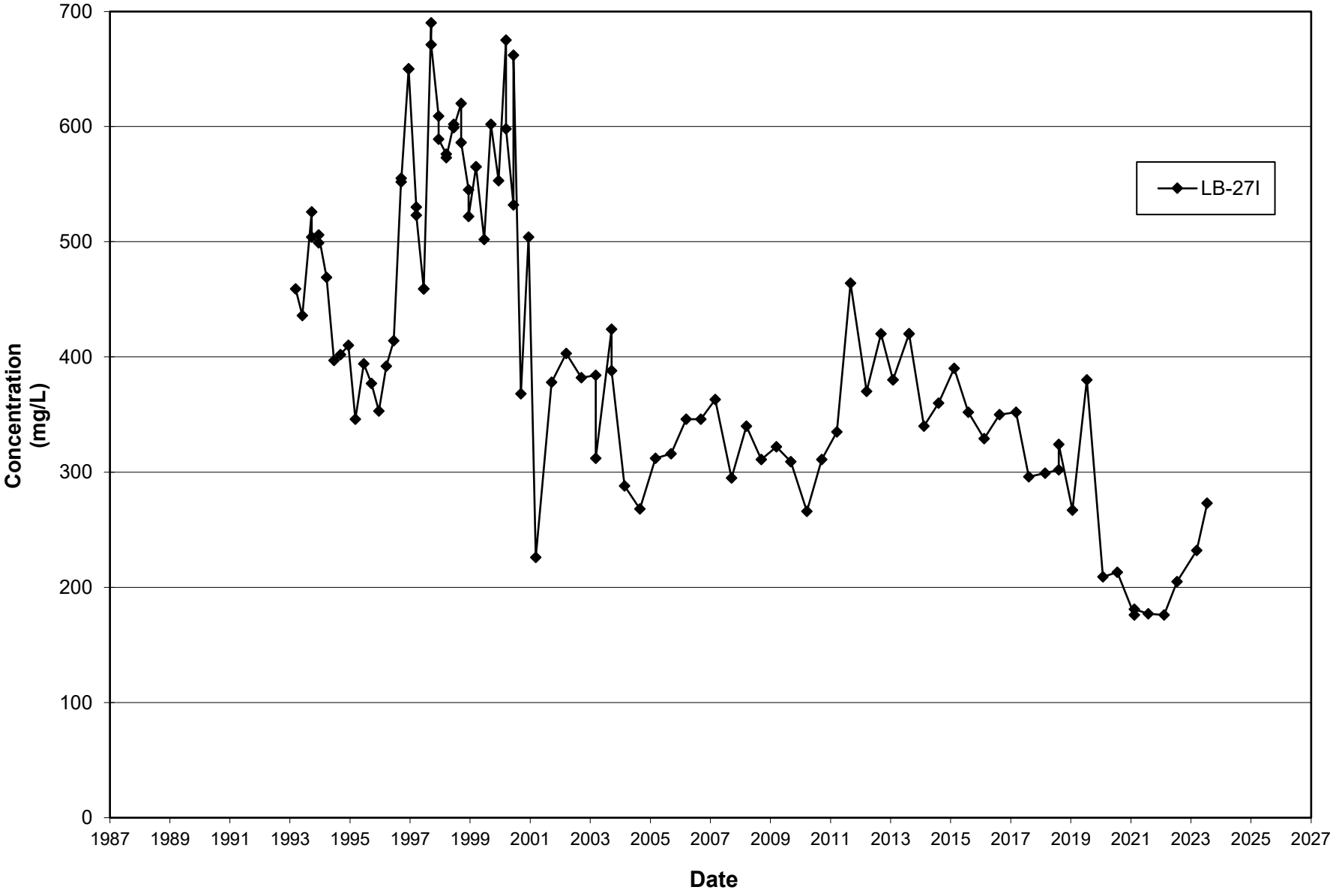
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-26D
1987 - 2024



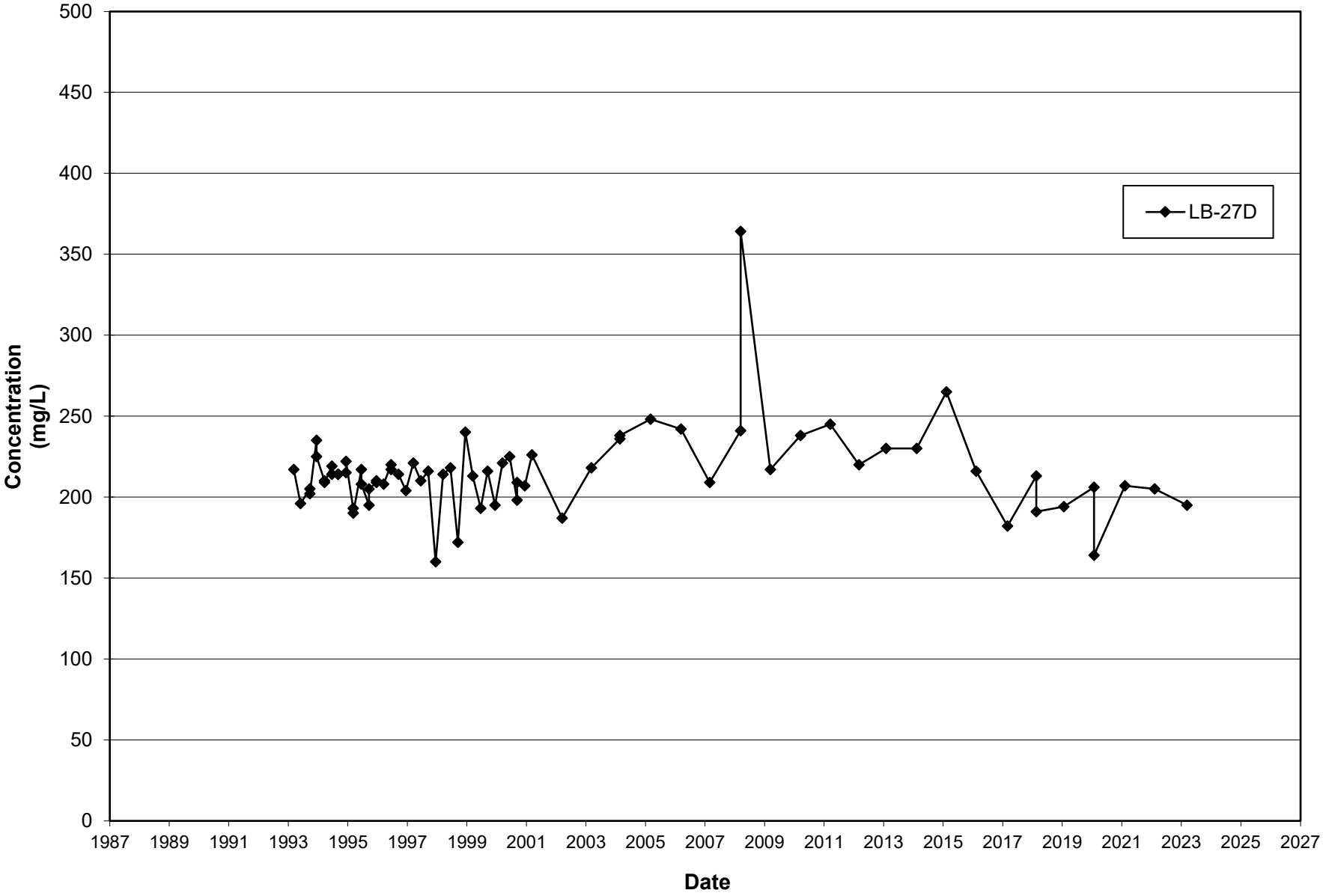
SCS Engineers, 1/29/2025

Leichner Landfill
Total Dissolved Solids, LB-27I
1987 - 2024



SCS Engineers, 1/29/2025

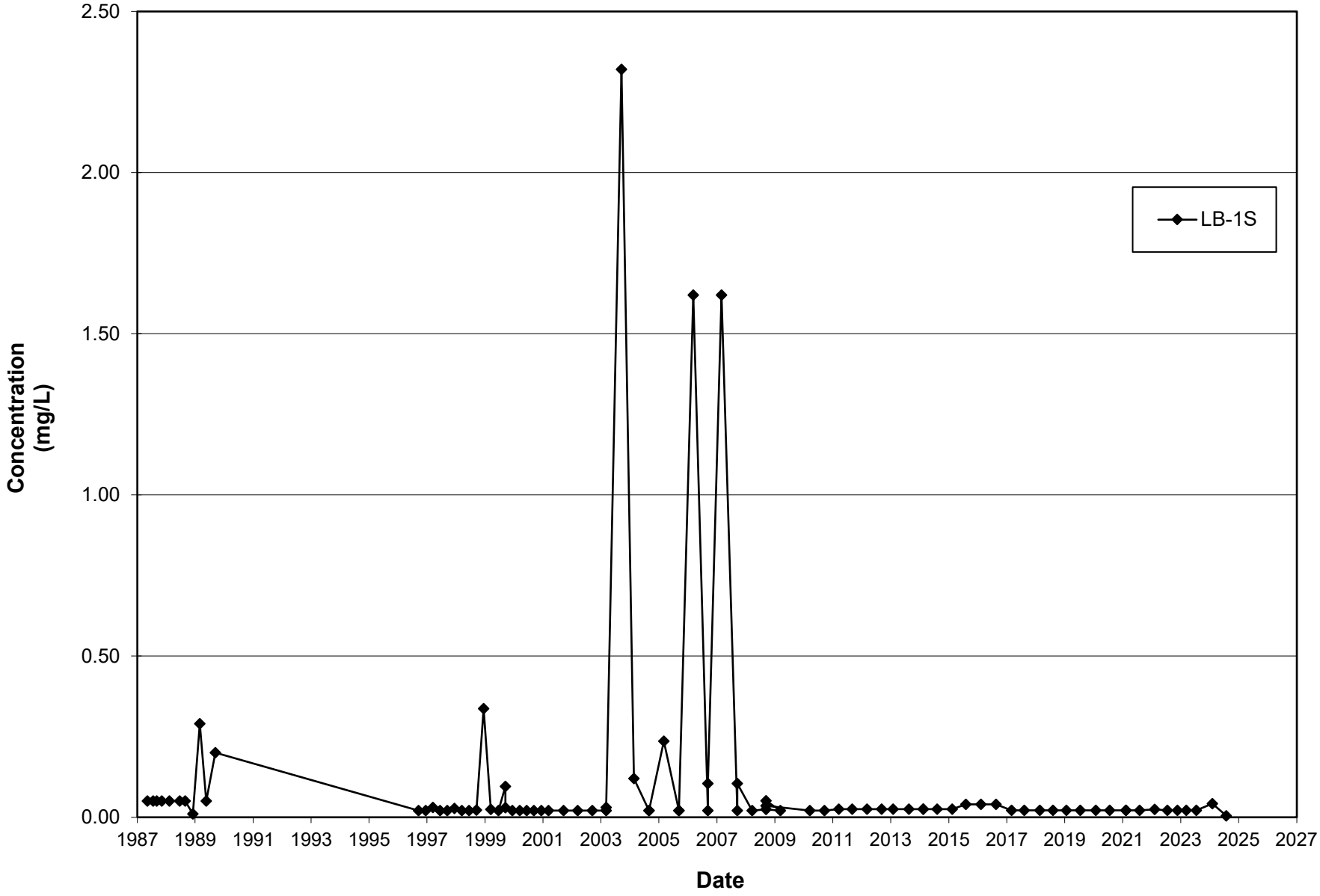
Leichner Landfill
Total Dissolved Solids, LB-27D
1987 - 2024



SCS Engineers, 1/29/2025

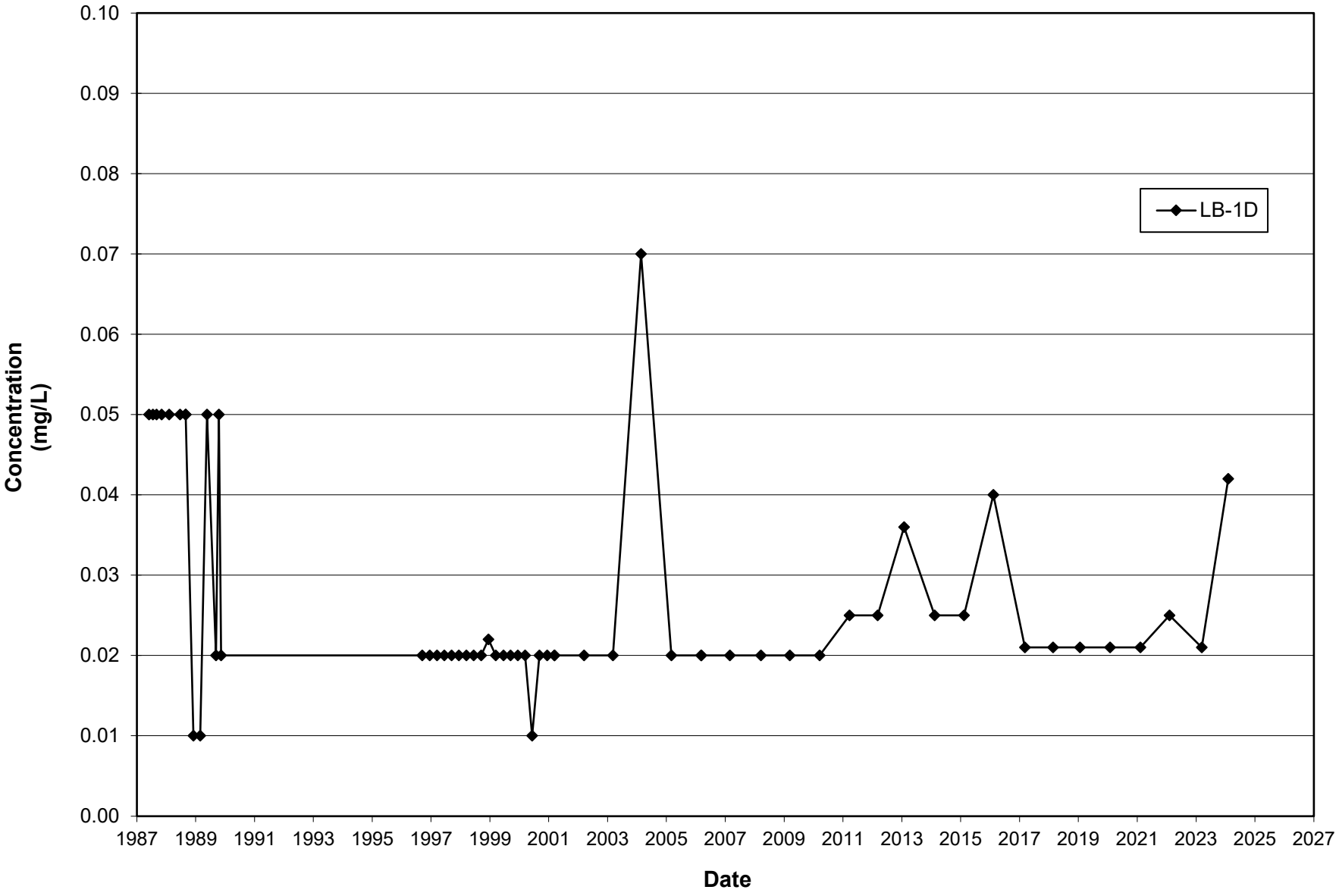
Dissolved Iron

Leichner Landfill
Dissolved Iron, LB-01S
1987 - 2024



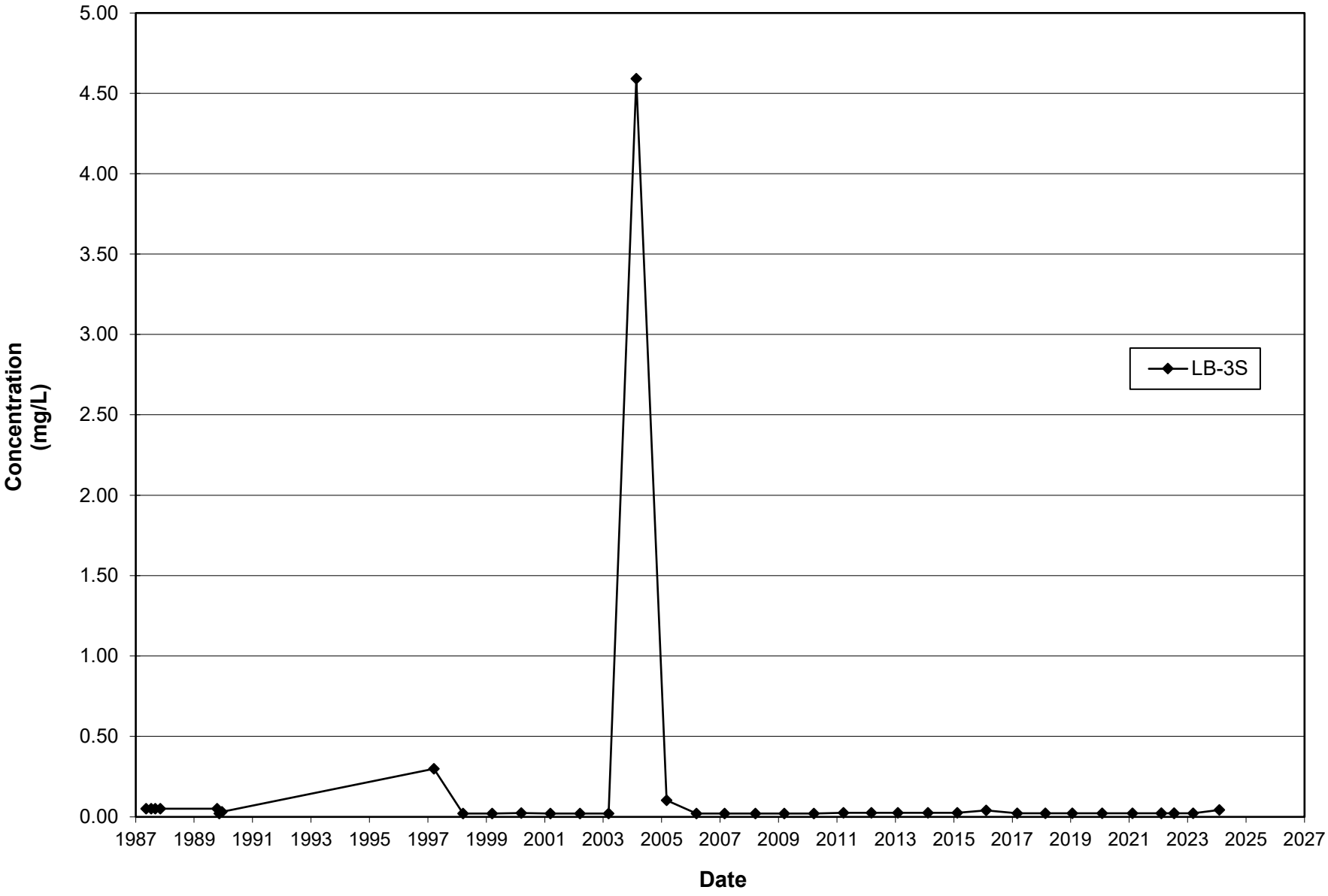
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Iron, LB-01D
1987 - 2024



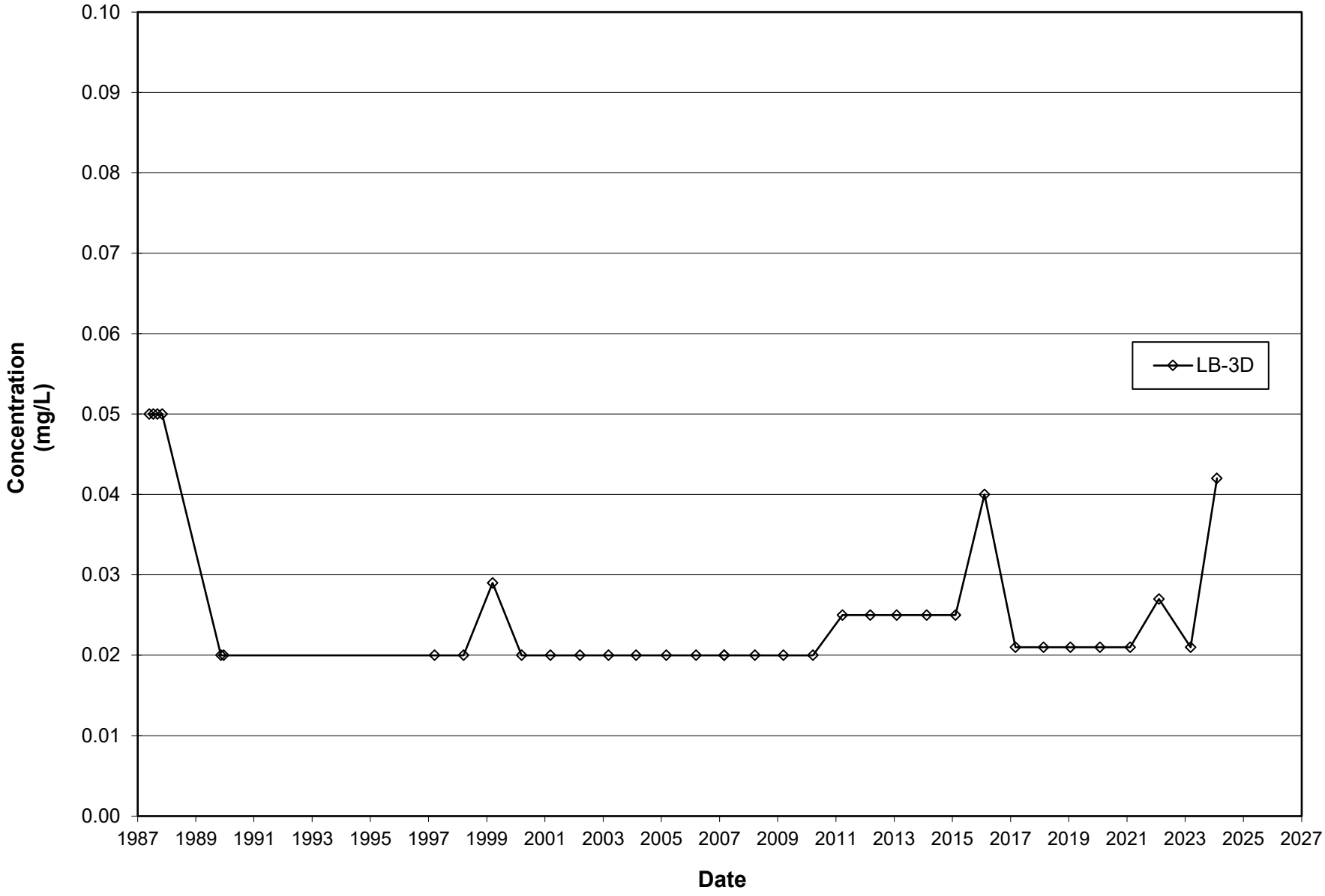
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Iron, LB-03S
1987 - 2024

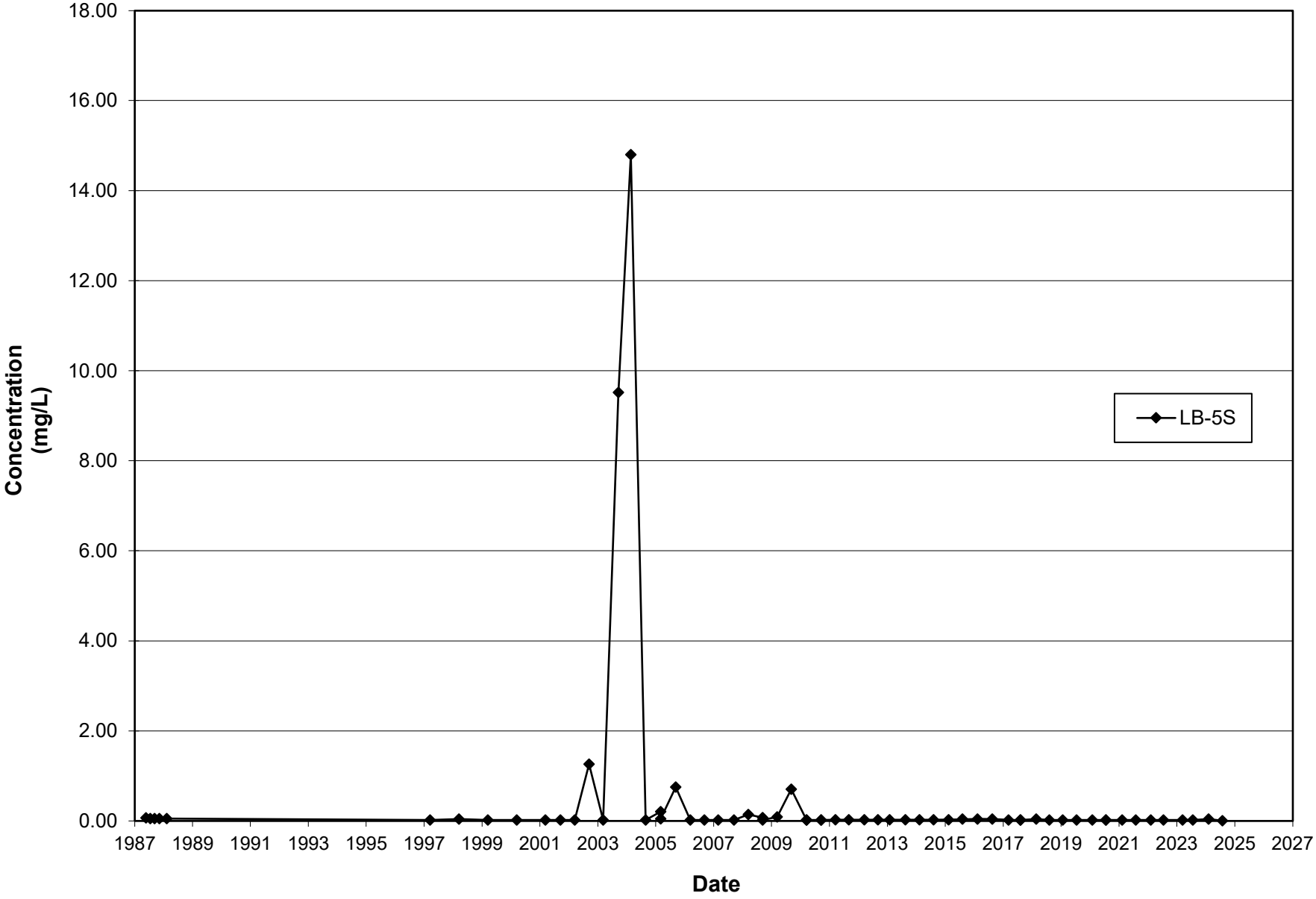


SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Iron, LB-03D
1987 - 2024

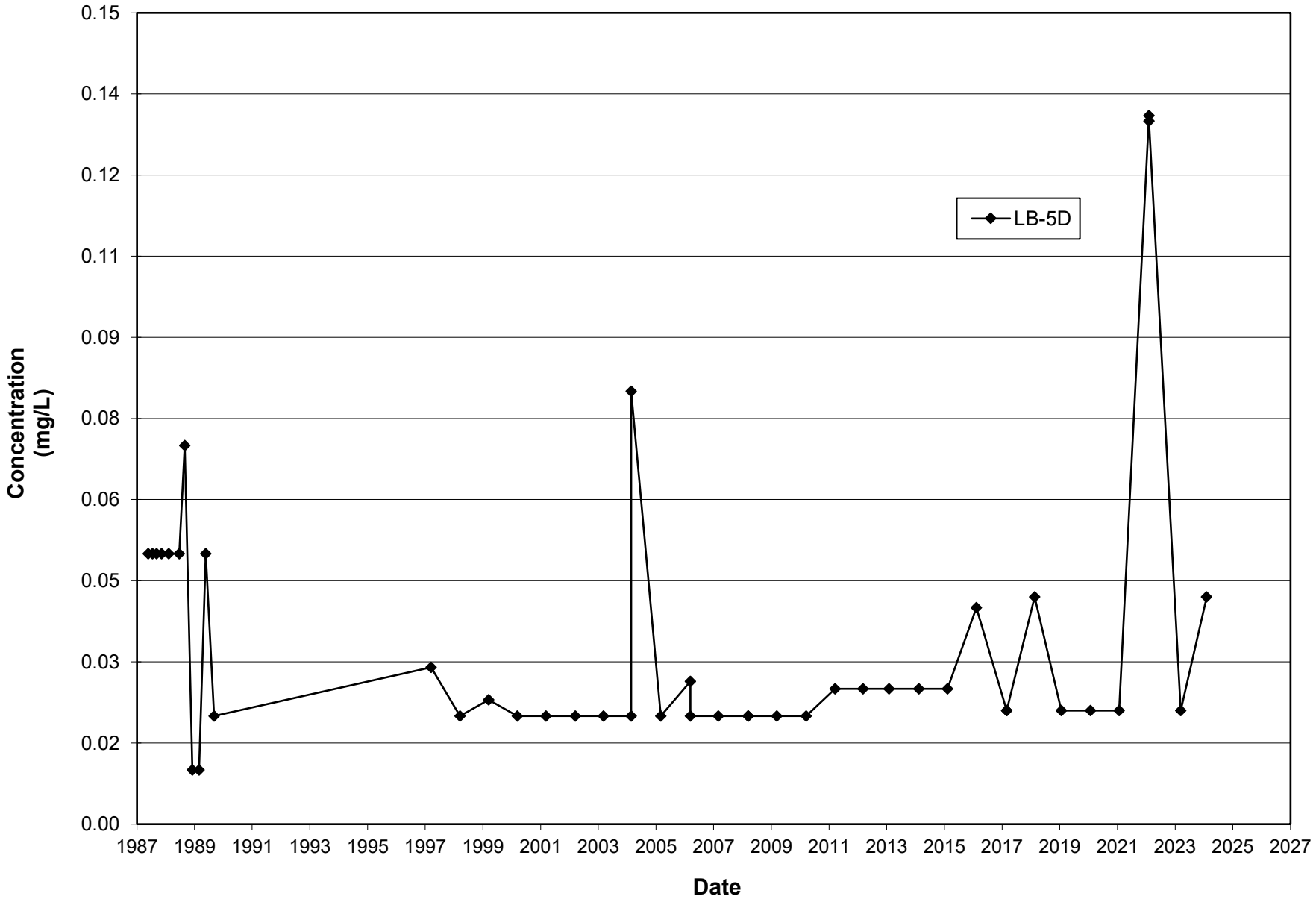


Leichner Landfill
Dissolved Iron, LB-05S
1987 - 2024



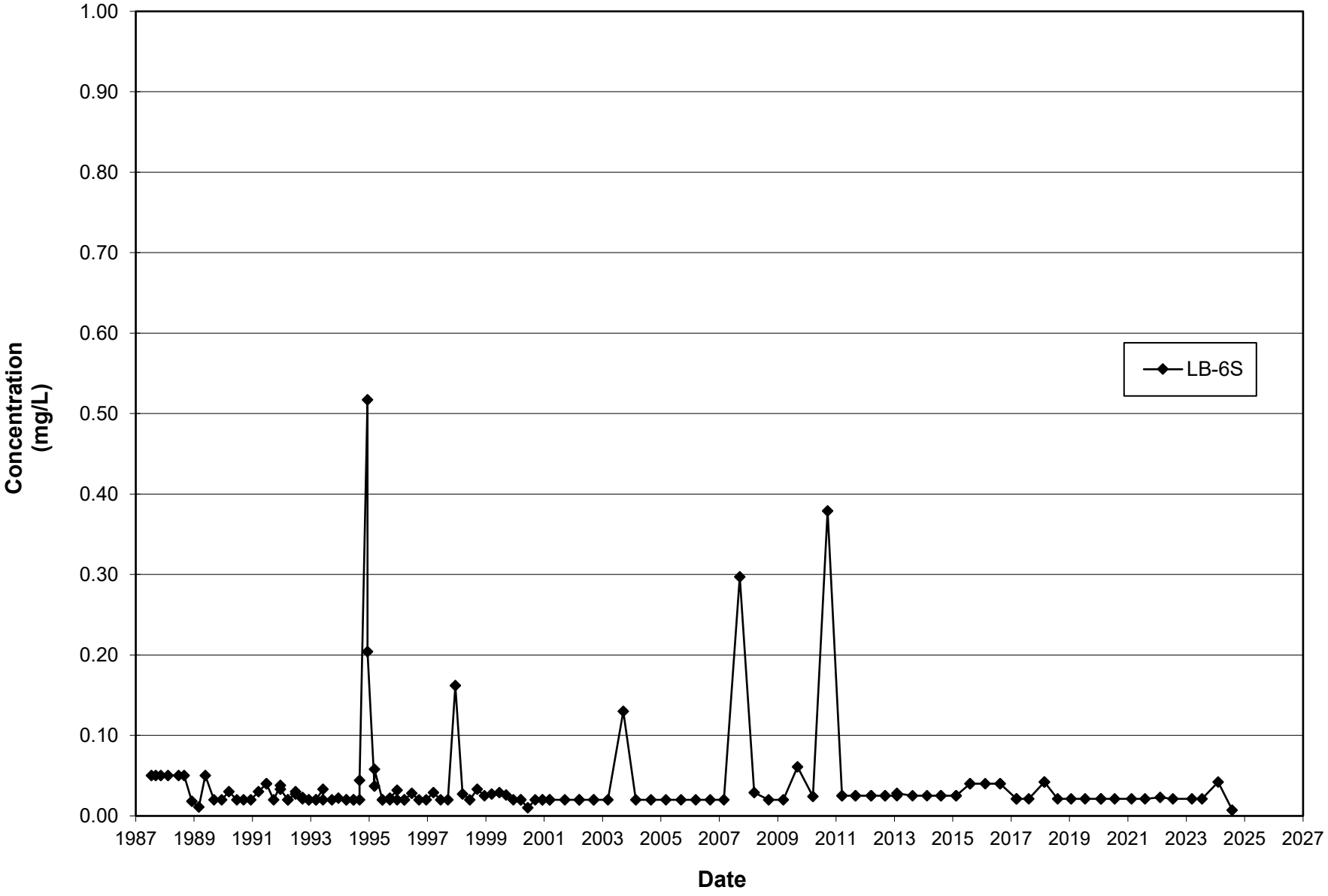
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Iron, LB-05D
1987 - 2024

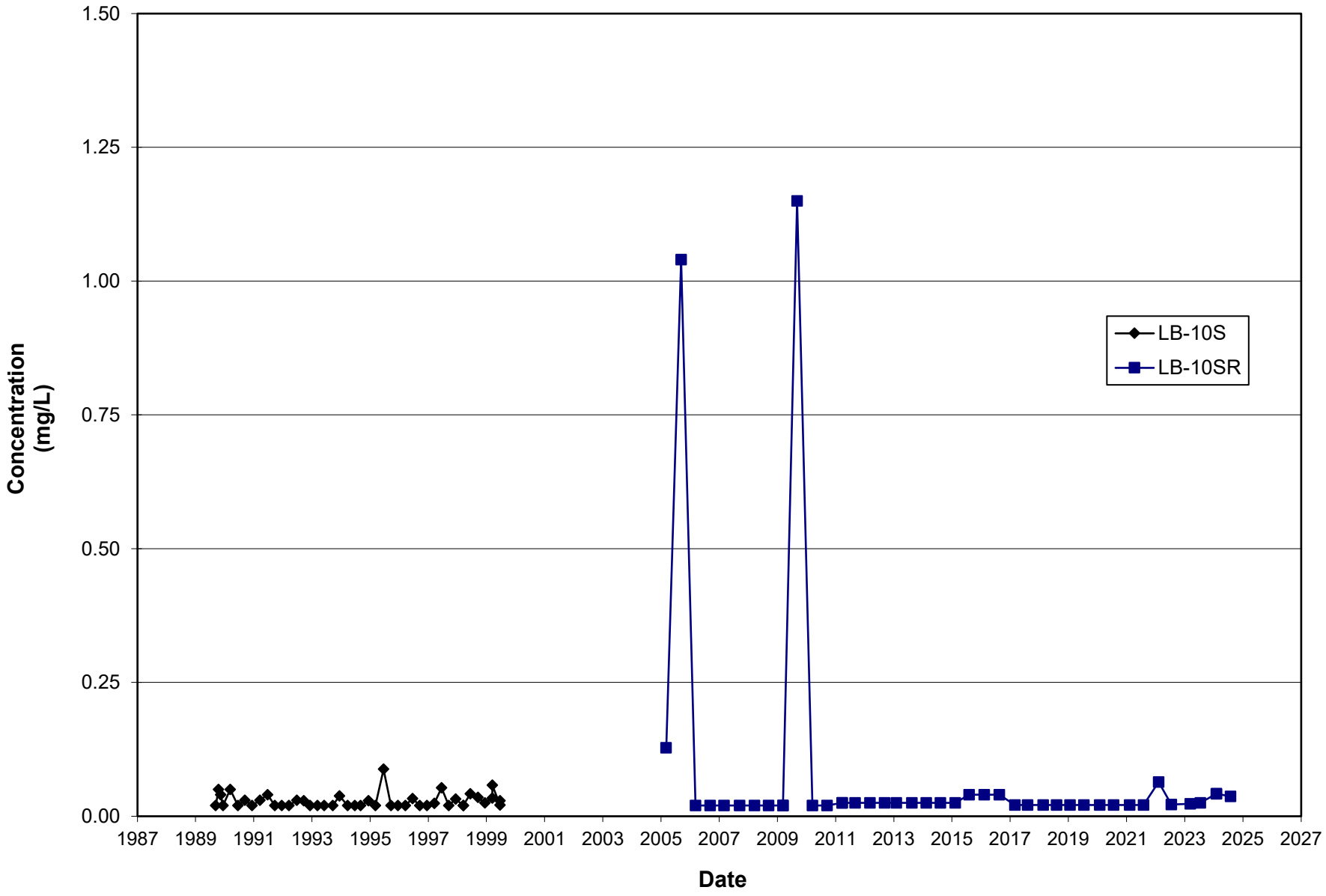


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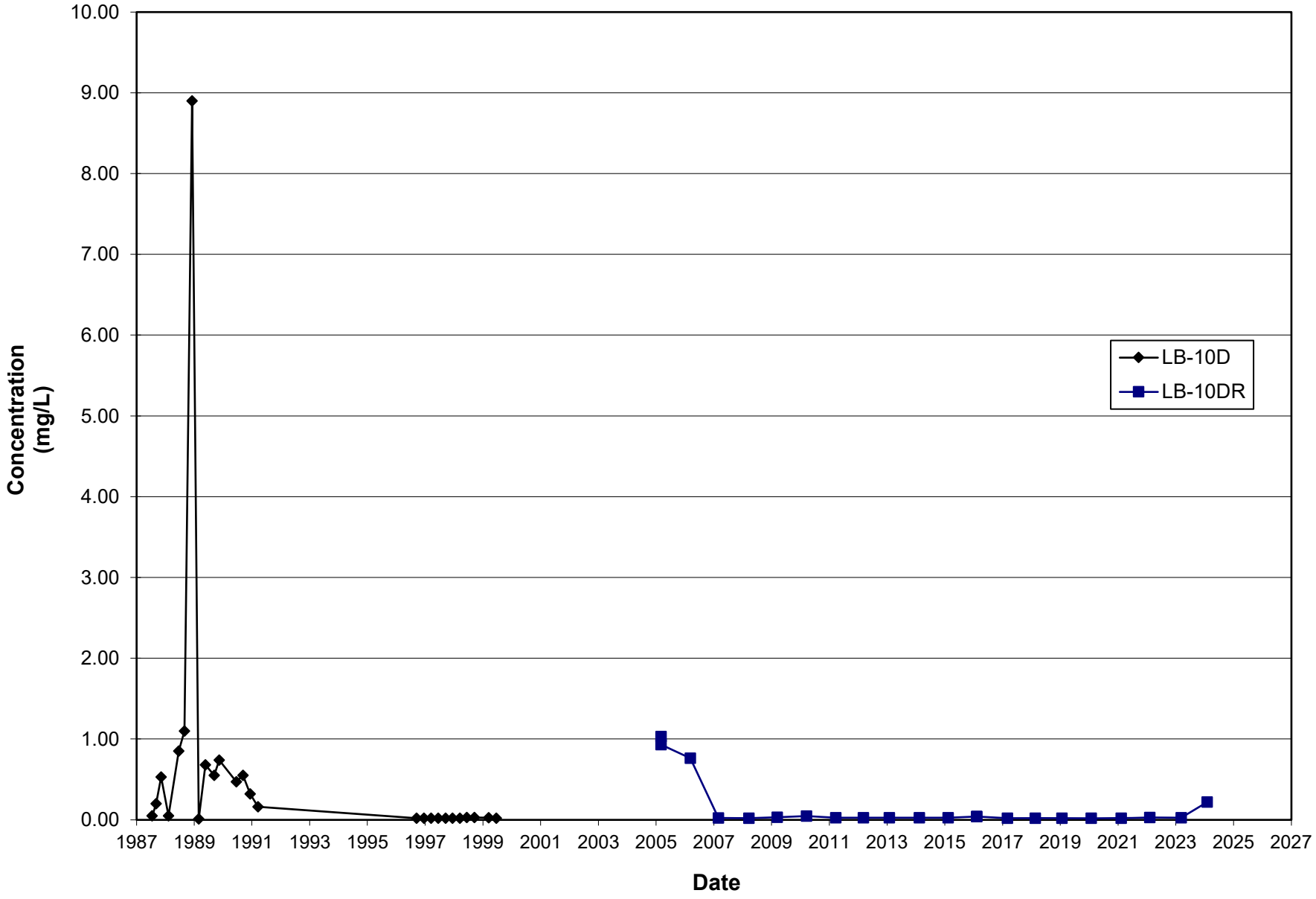
Leichner Landfill
Dissolved Iron, LB-06S
1987 - 2024



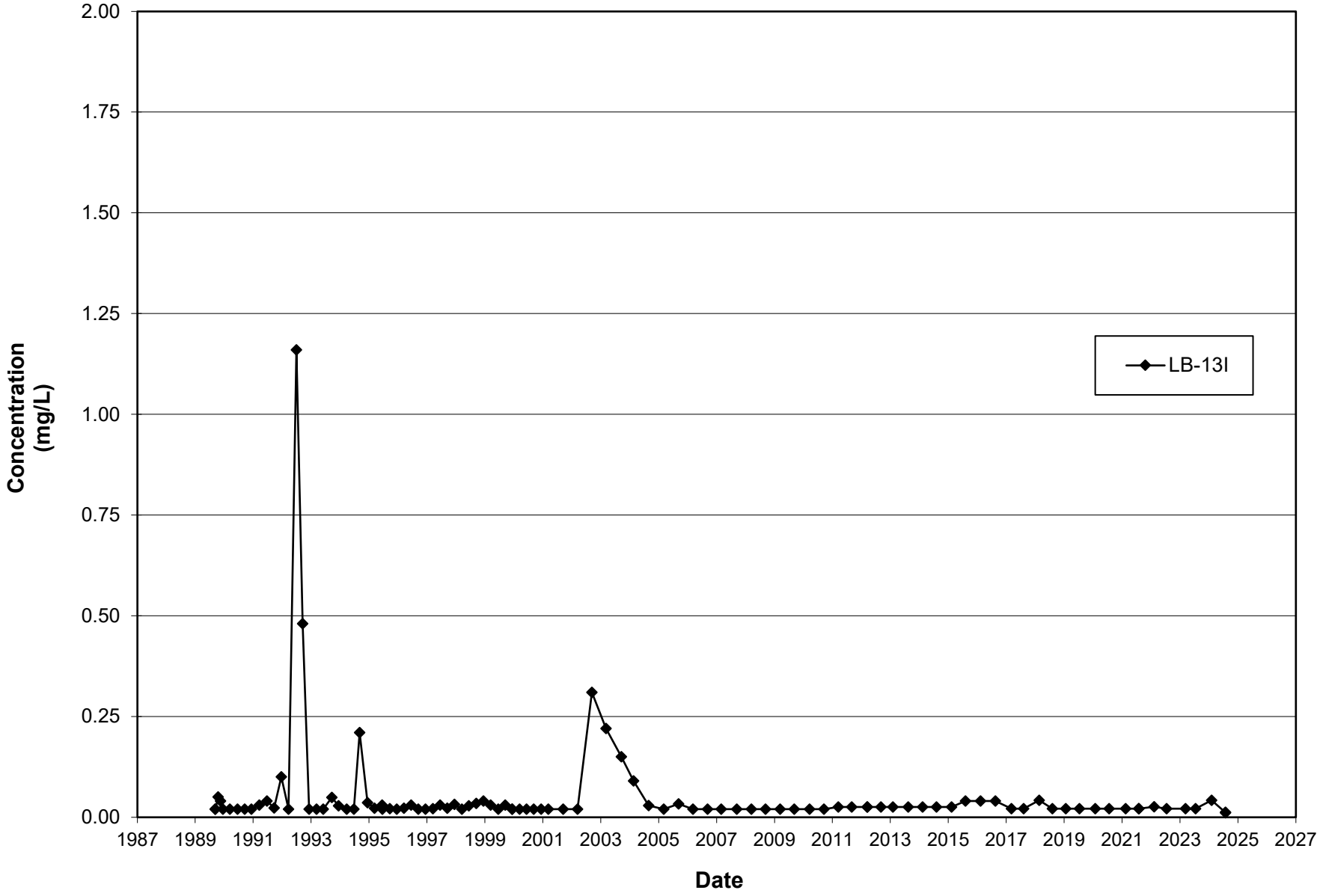
Leichner Landfill
Dissolved Iron, LB-10S and LB-10SR
1987 - 2024



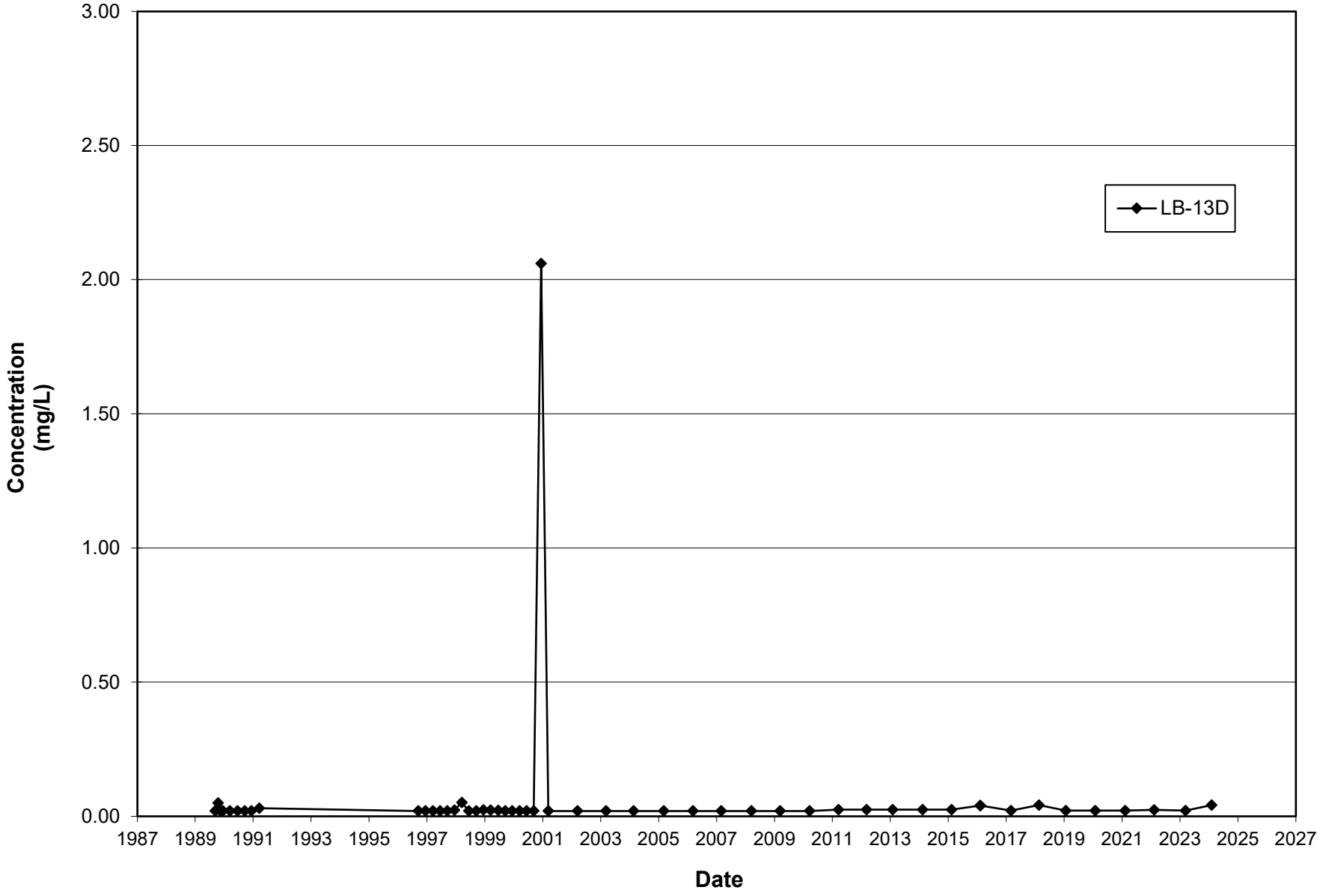
Leichner Landfill
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1987 - 2024



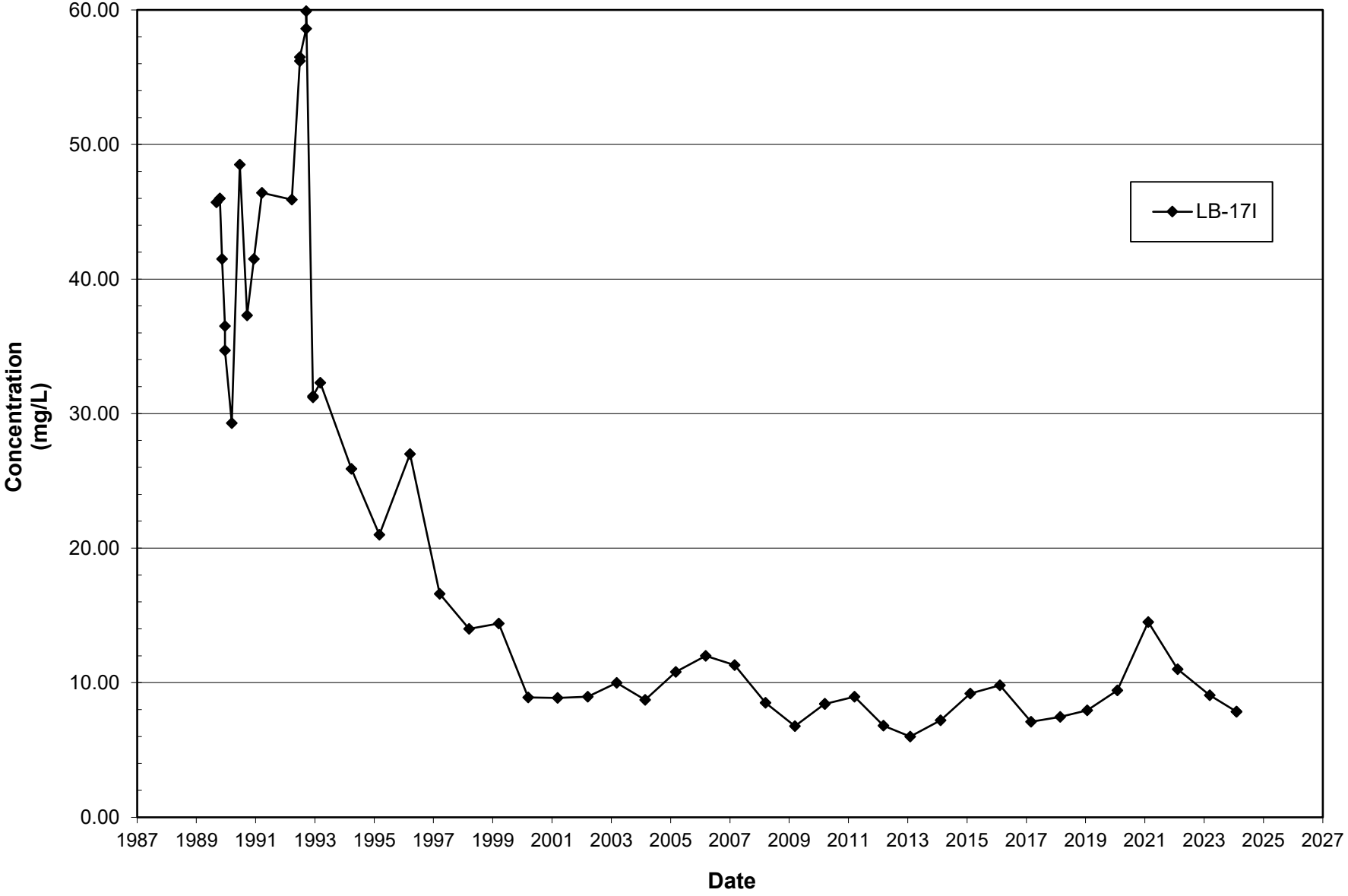
Leichner Landfill
Dissolved Iron, LB-13I
1987 - 2024



Leichner Landfill
Dissolved Iron, LB-13D
1987 - 2024

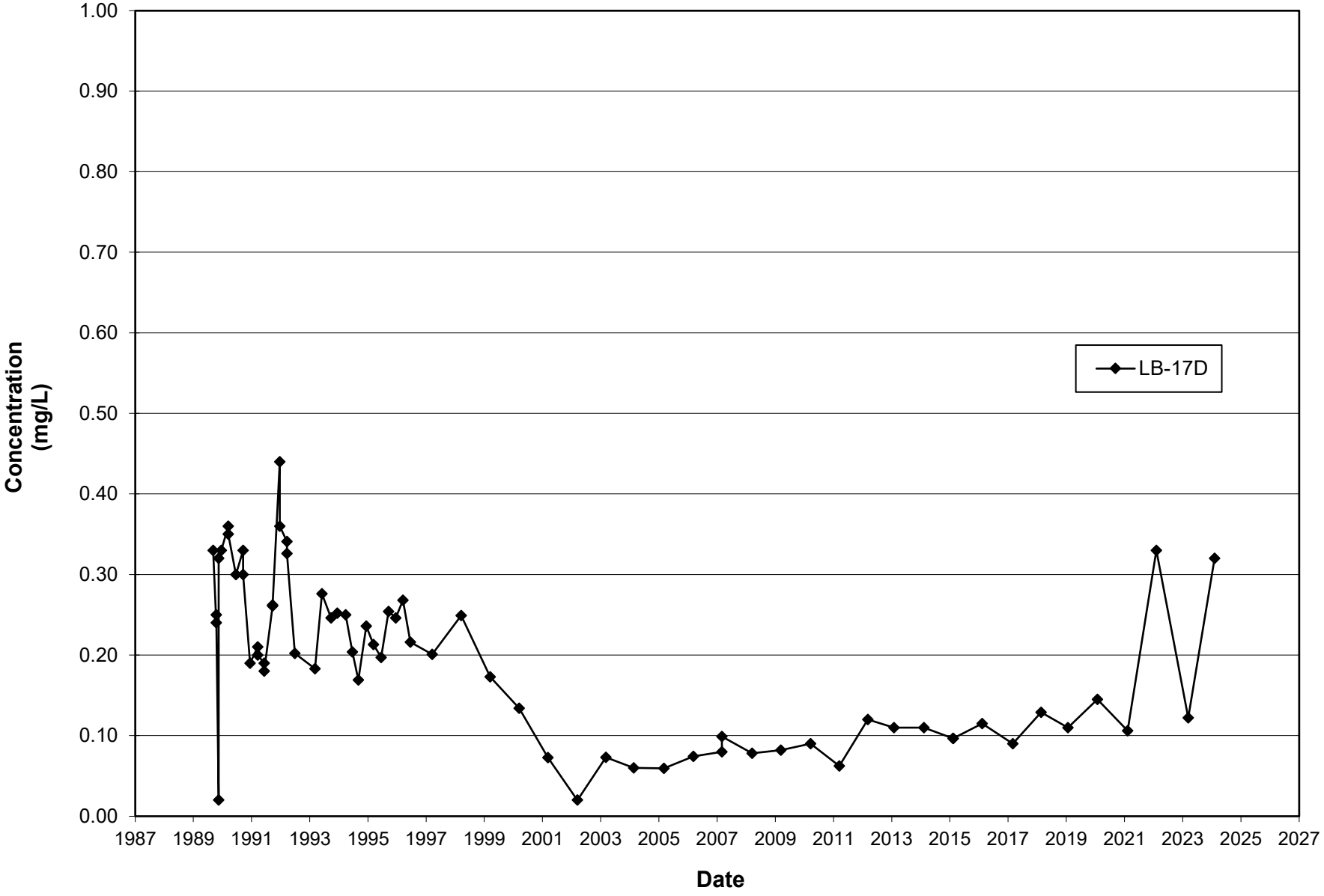


Leichner Landfill
Dissolved Iron, LB-17I
1987 - 2024

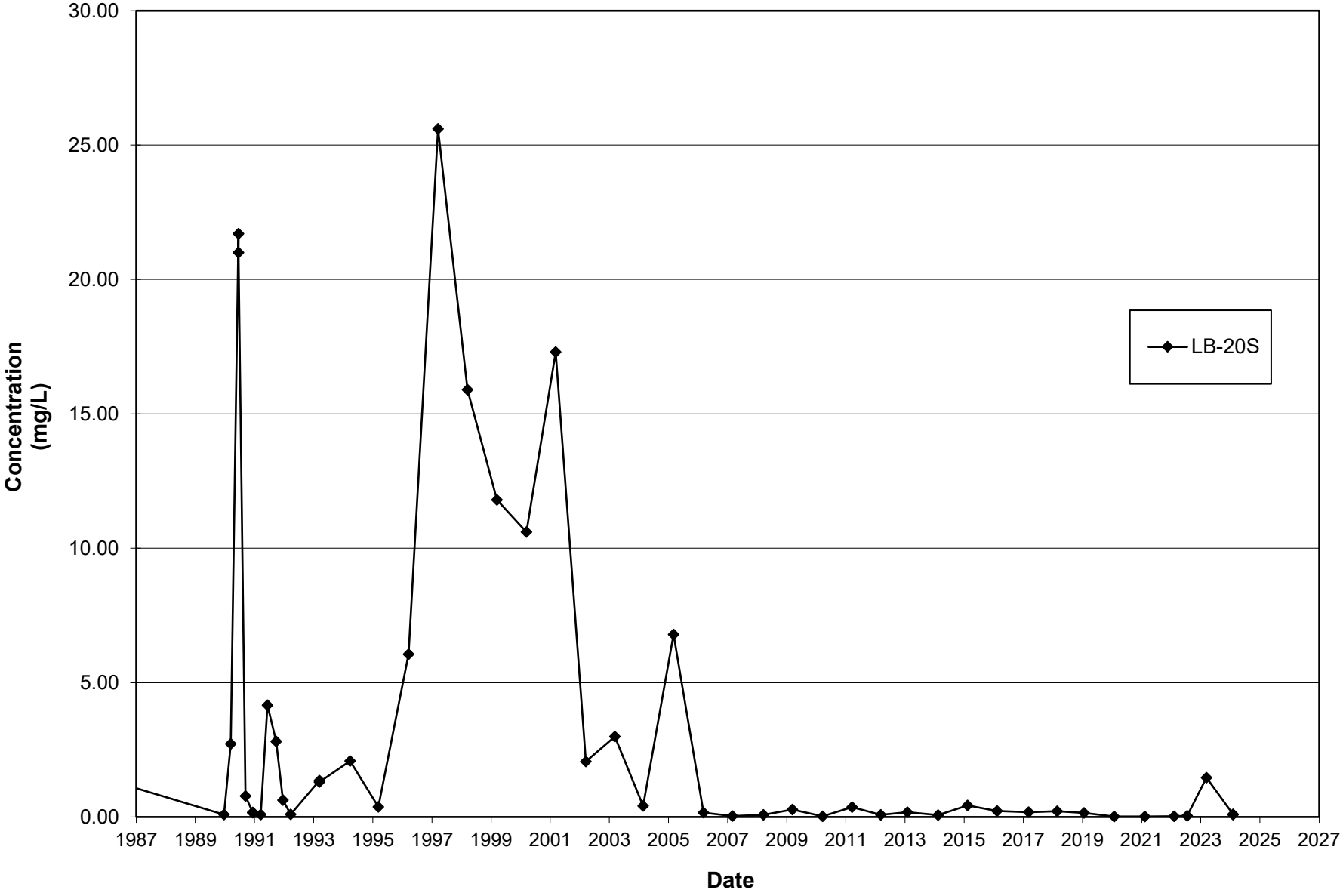


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Leichner Landfill
Dissolved Iron, LB-17D
1987 - 2024

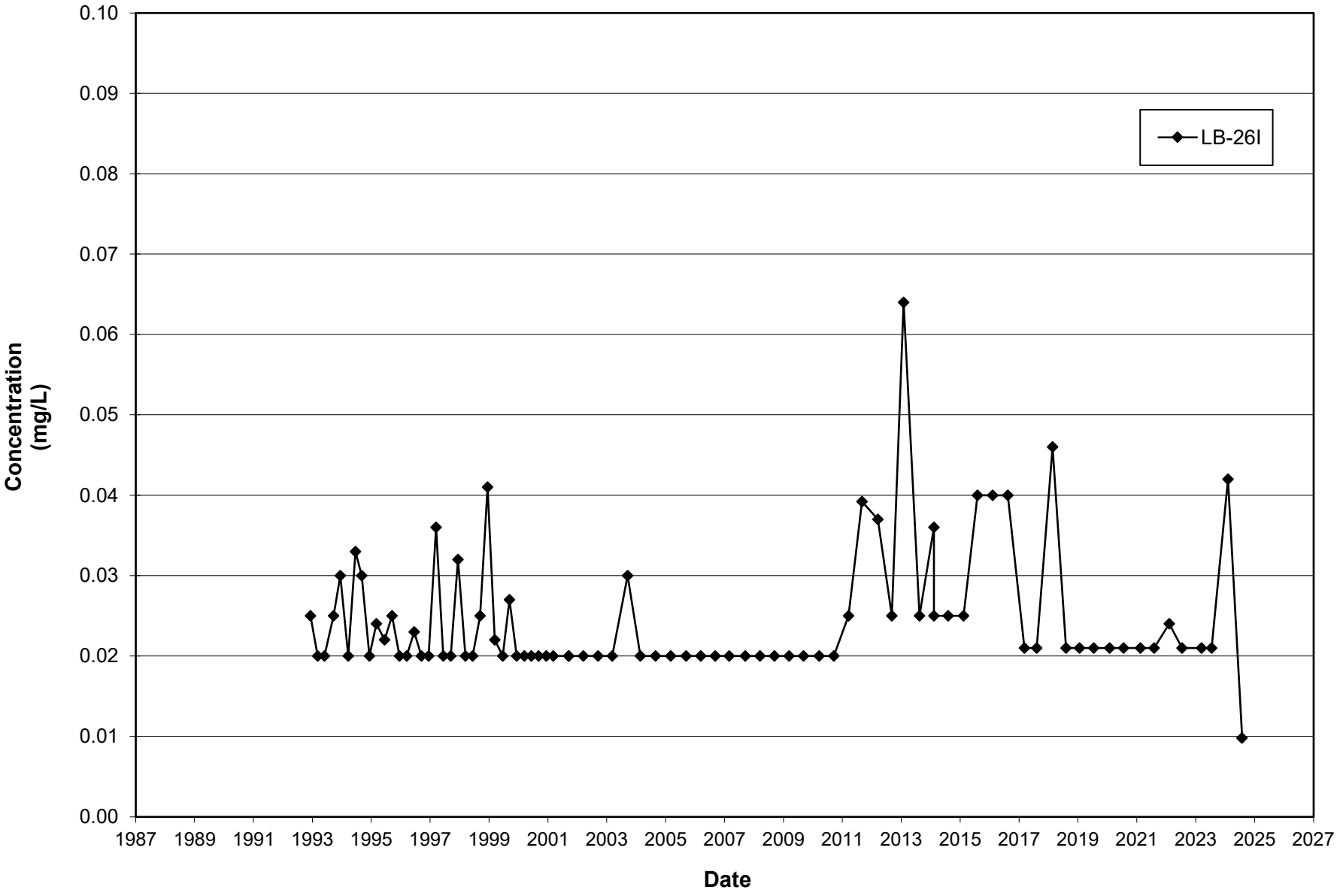


Leichner Landfill
Dissolved Iron, LB-20S
1987 - 2024

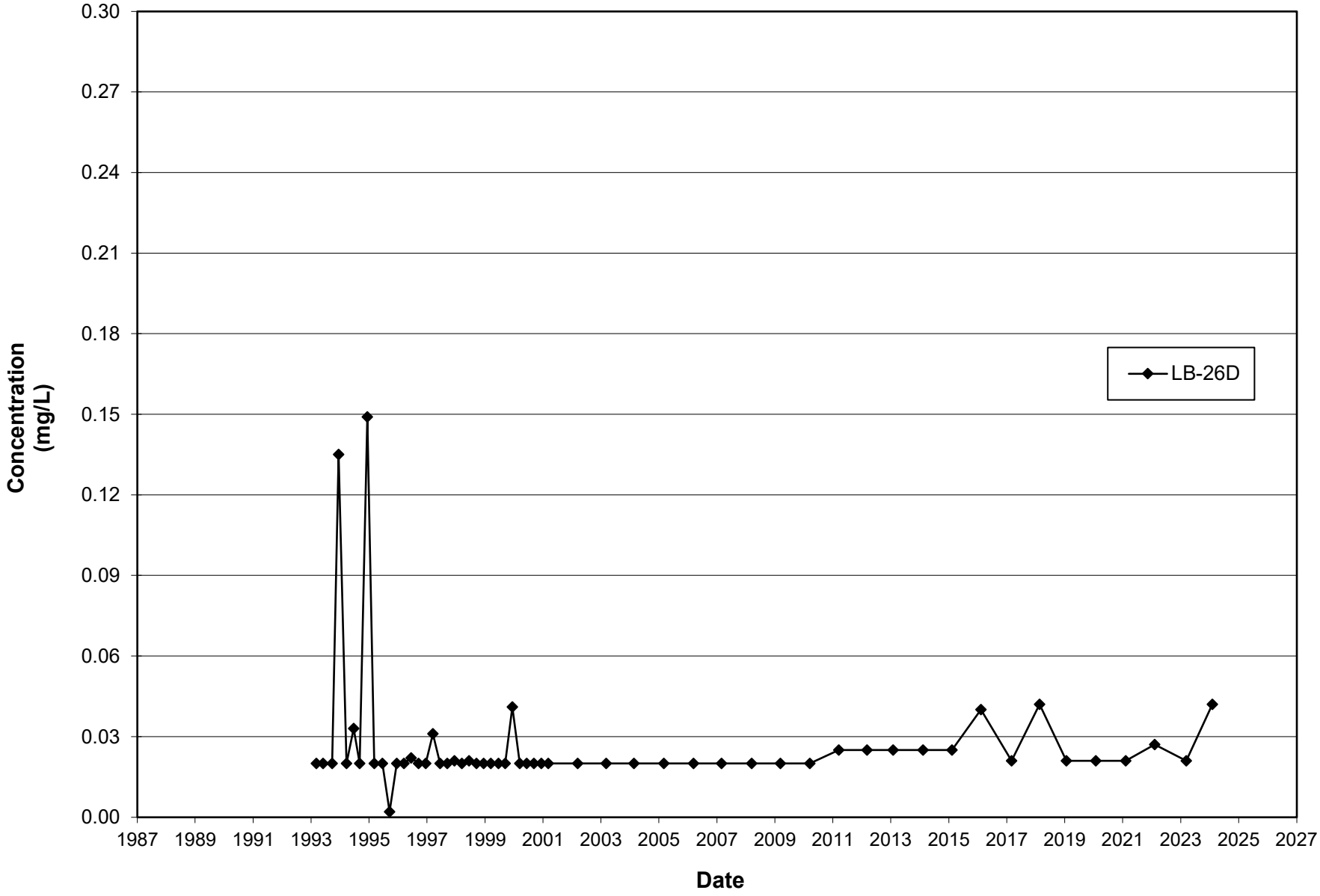


SCS Engineers, 1/29/2025

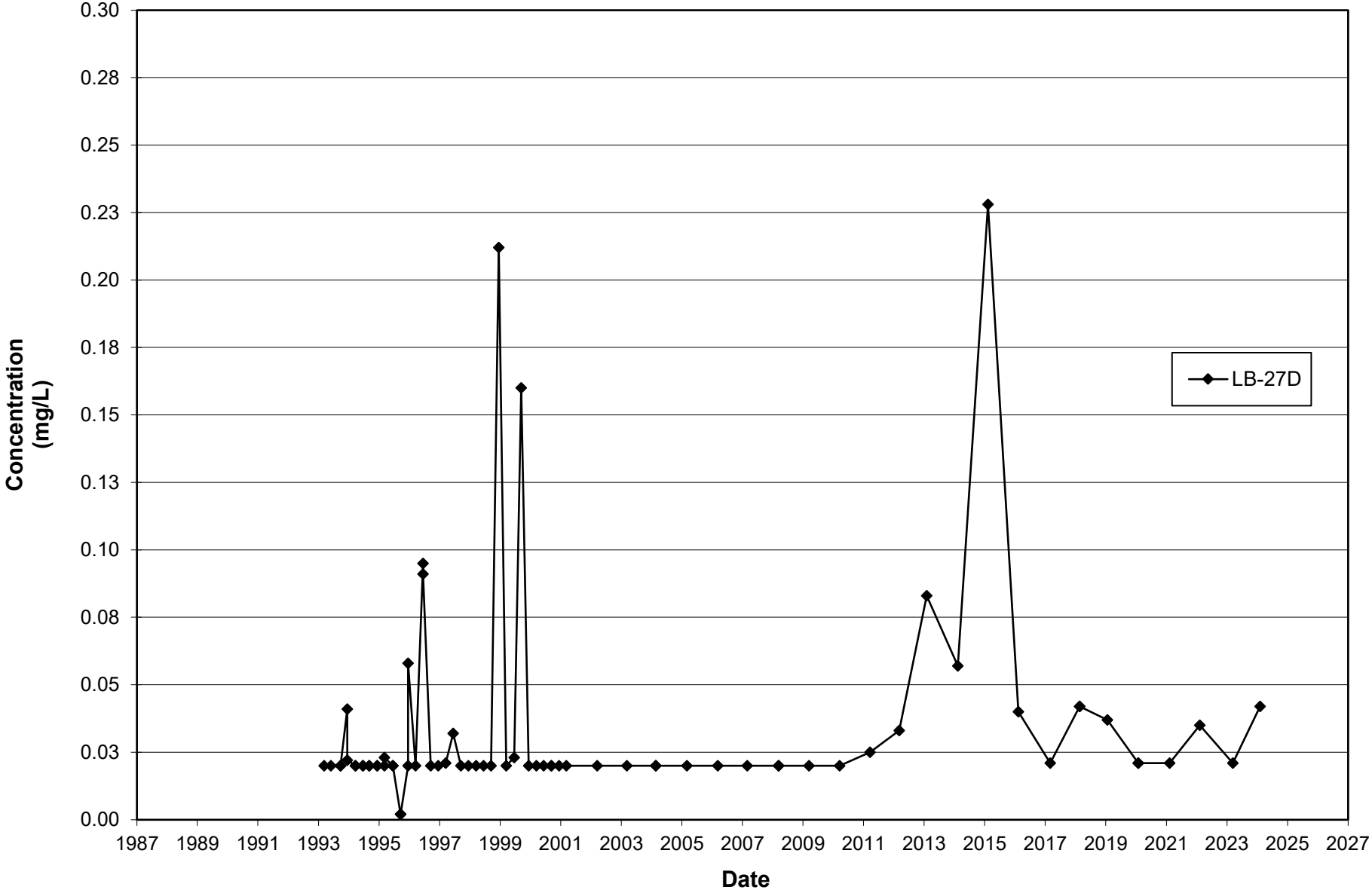
Leichner Landfill
Dissolved Iron, LB-26I
1987 - 2024



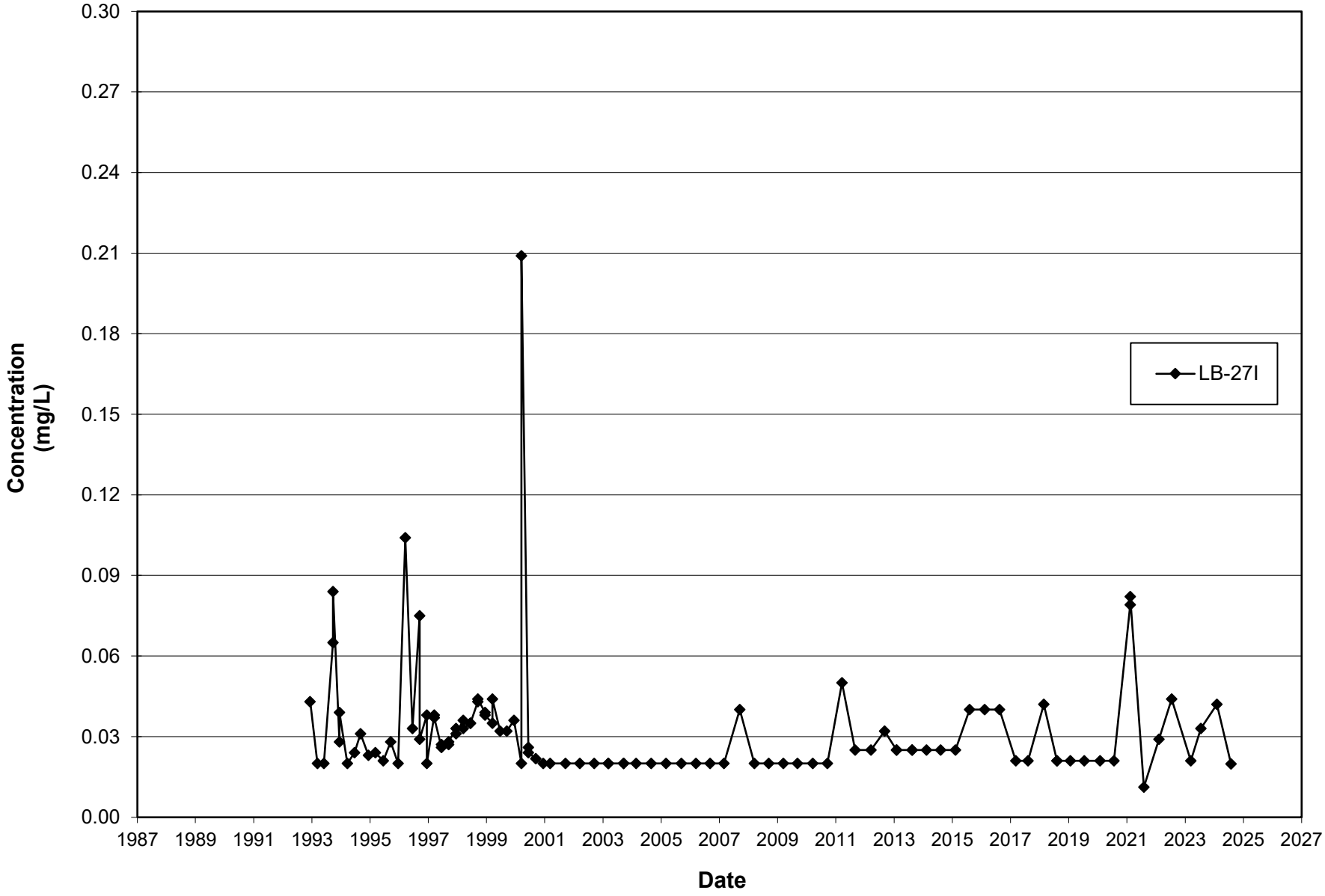
Leichner Landfill
Dissolved Iron, LB-26D
1987 - 2024



Leichner Landfill
Dissolved Iron, LB-27D
1987 - 2024

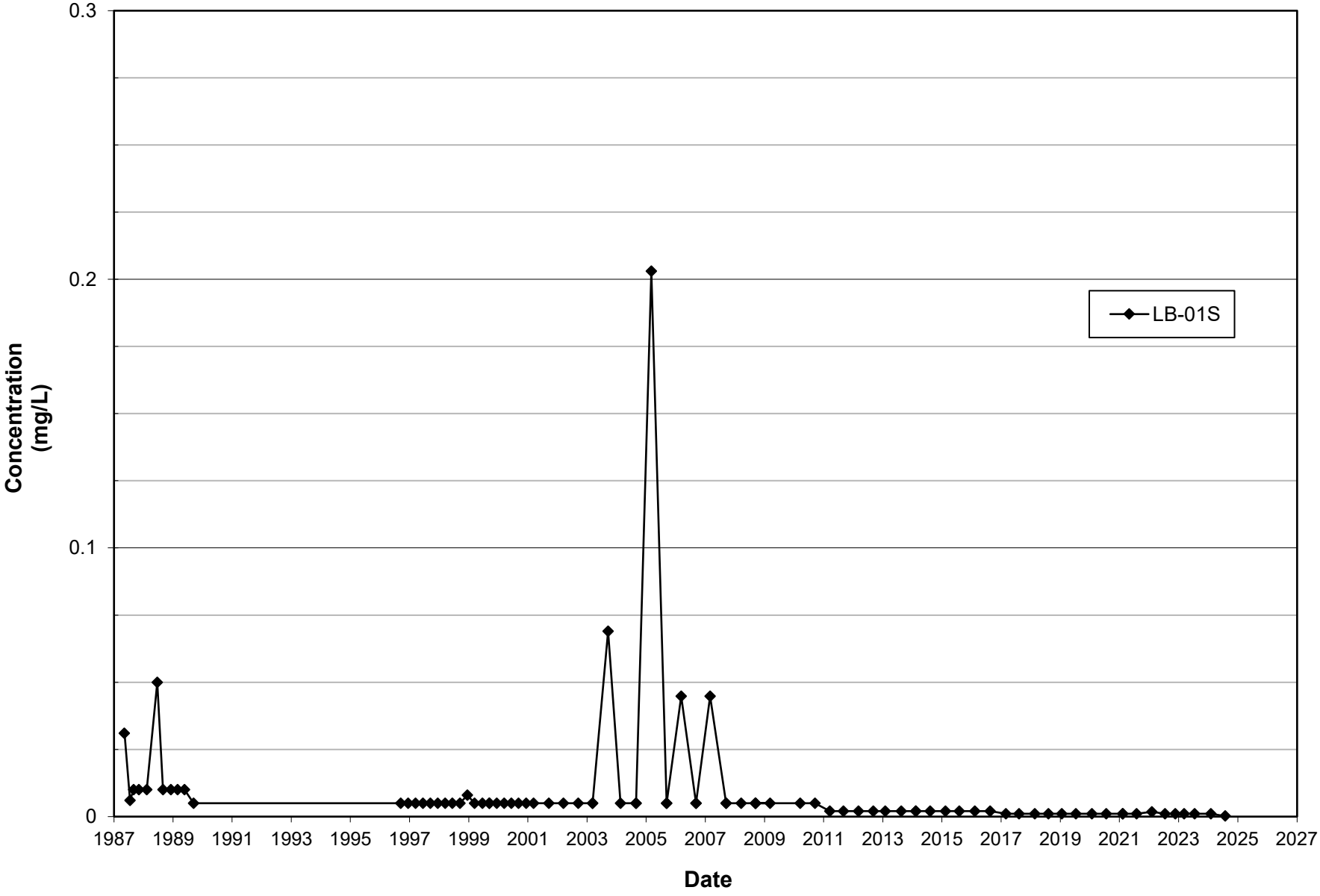


Leichner Landfill
Dissolved Iron, LB-27I
1987 - 2024



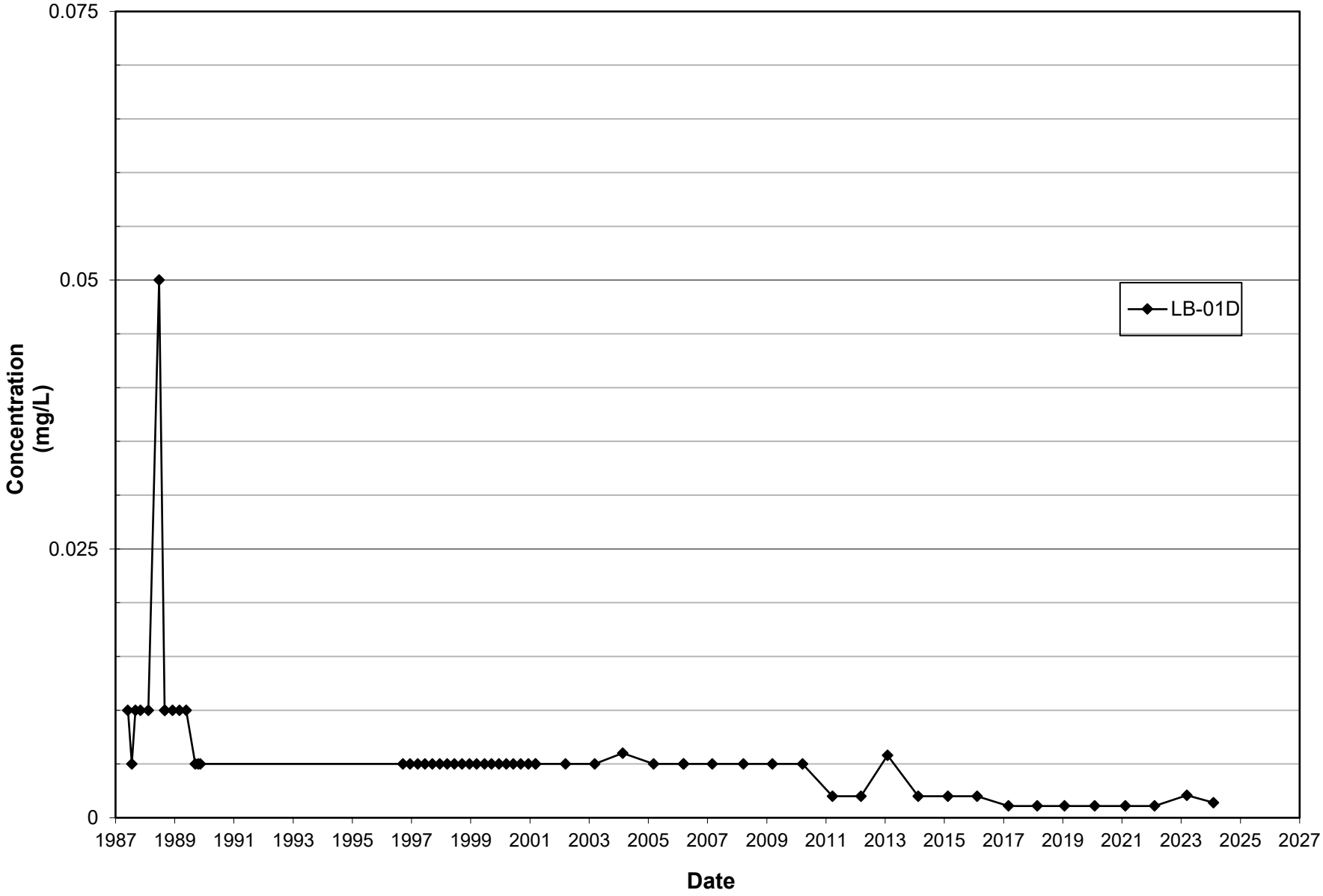
Dissolved Manganese

Leichner Landfill
Dissolved Manganese, LB-01S
1987 - 2024

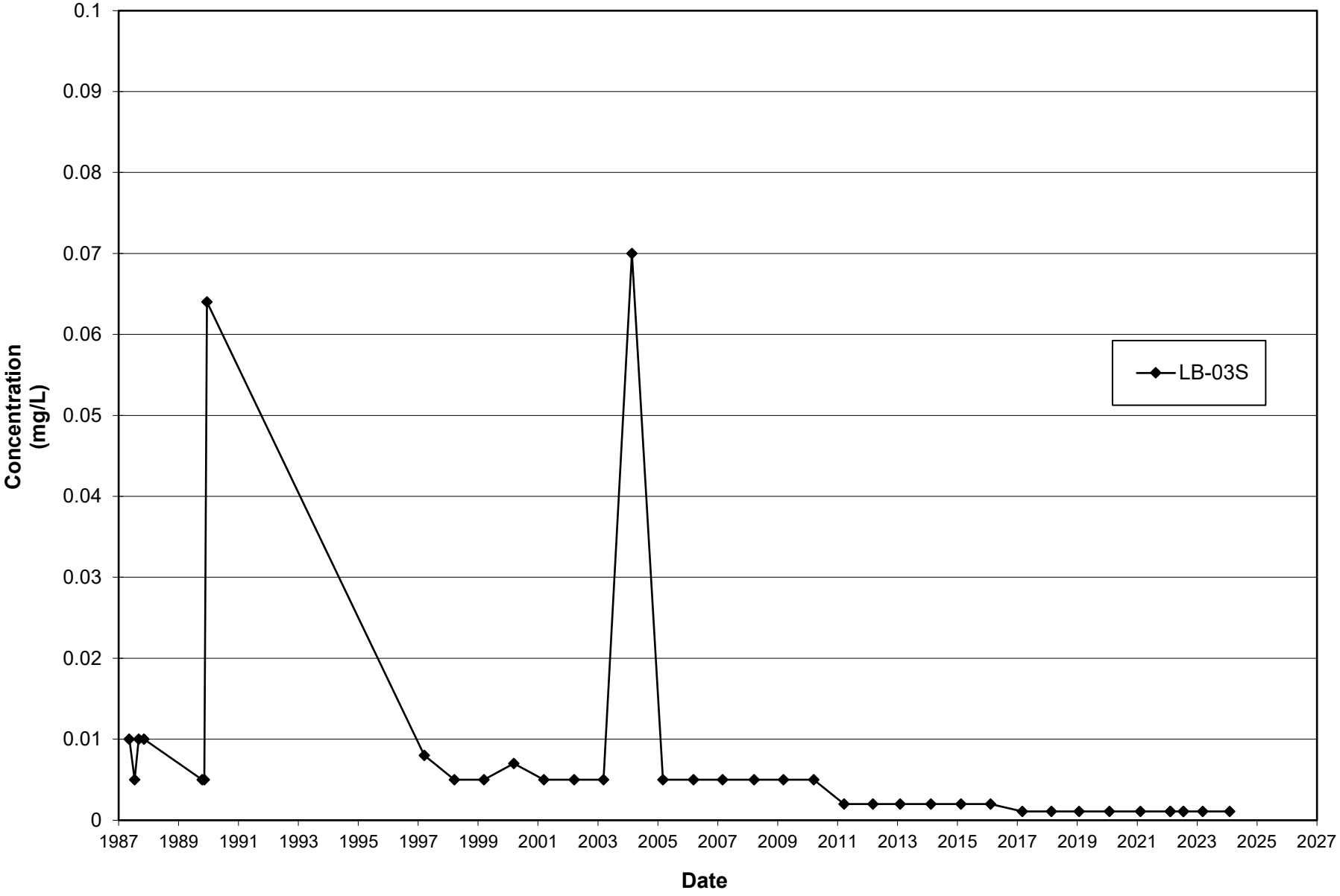


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Leichner Landfill
Dissolved Manganese, LB-01D
1987 - 2024

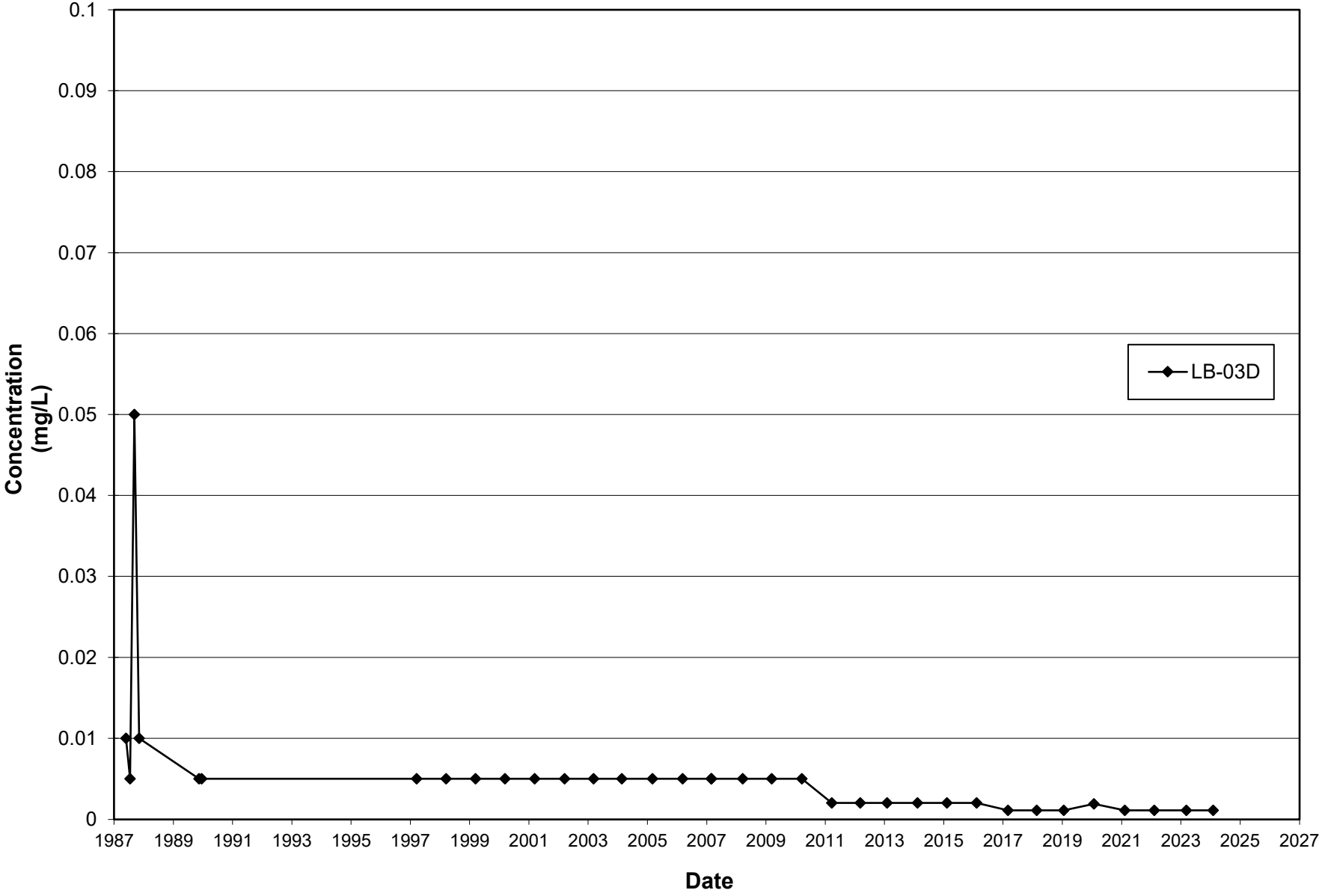


Leichner Landfill
Dissolved Manganese, LB-03S
1987 - 2024



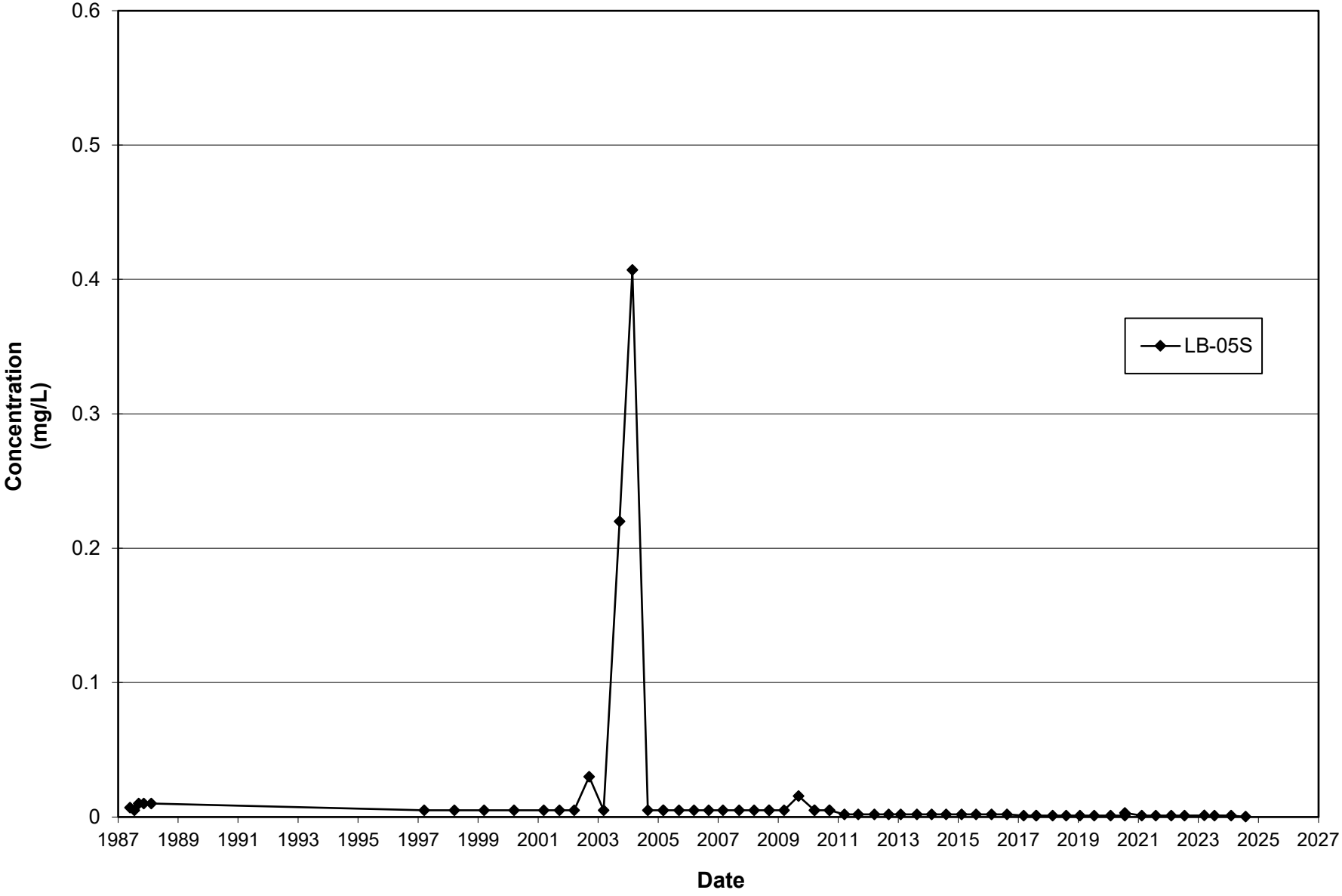
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-03D
1987 - 2024

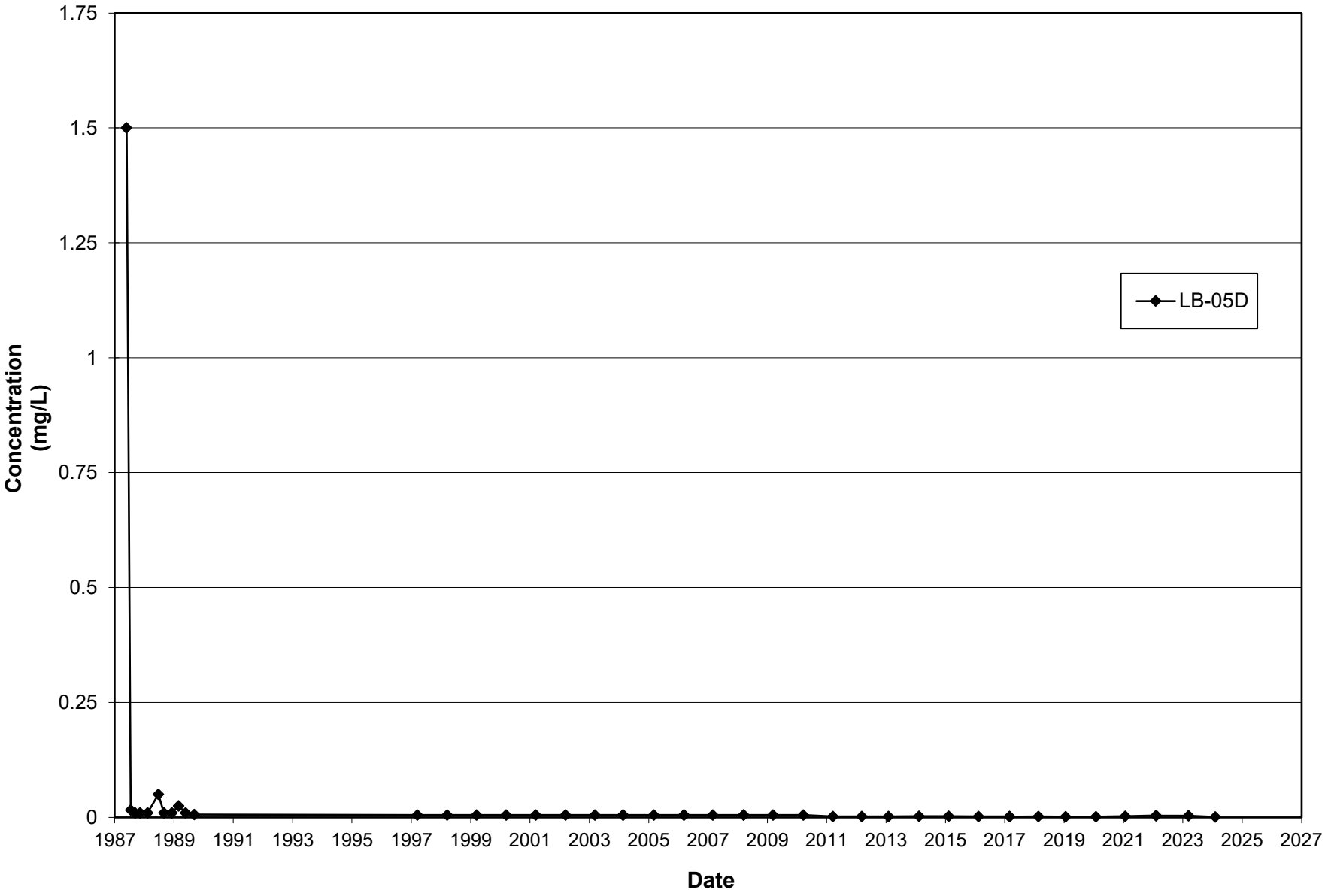


SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-05S
1987 - 2024

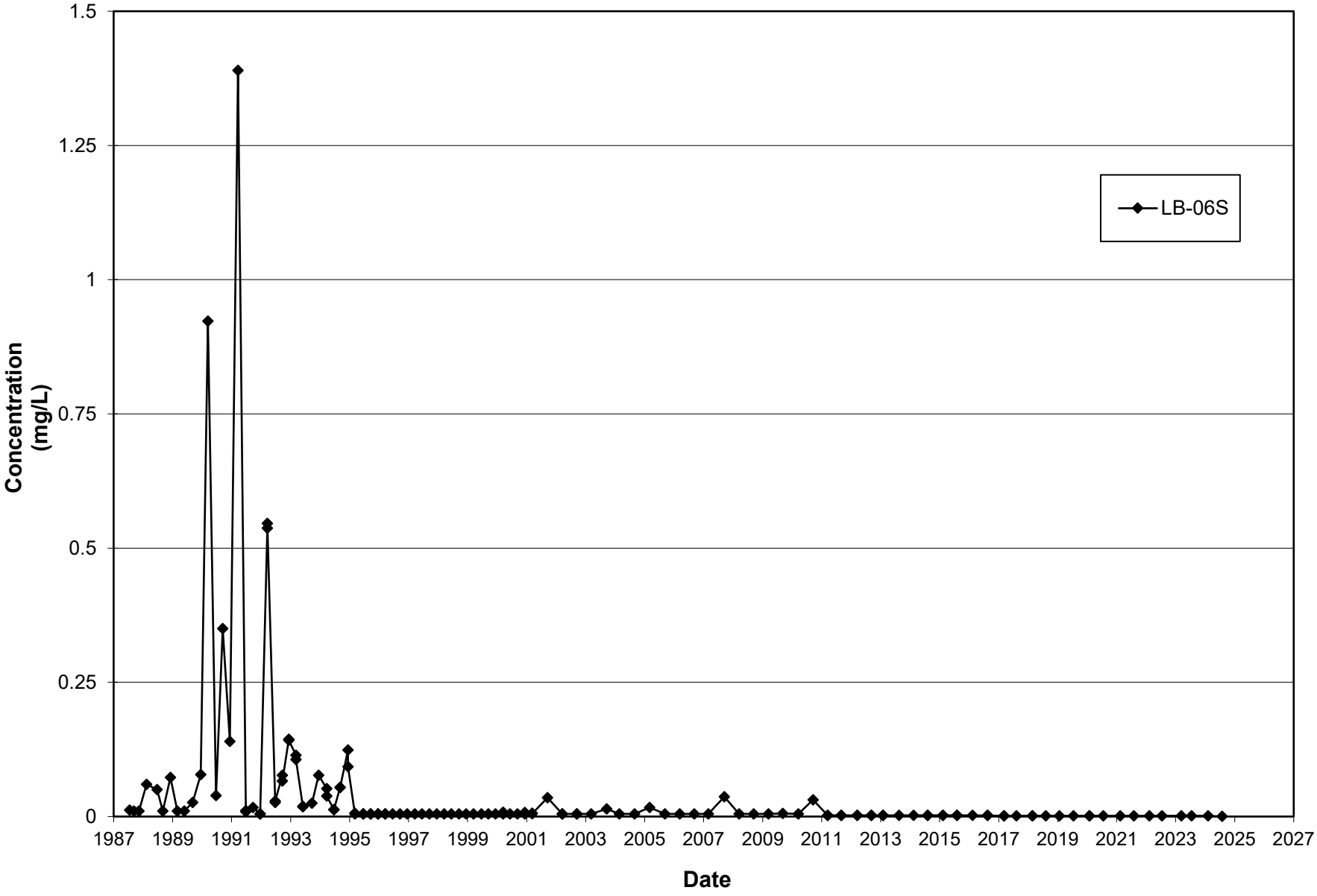


Leichner Landfill
Dissolved Manganese, LB-05D
1987 - 2024



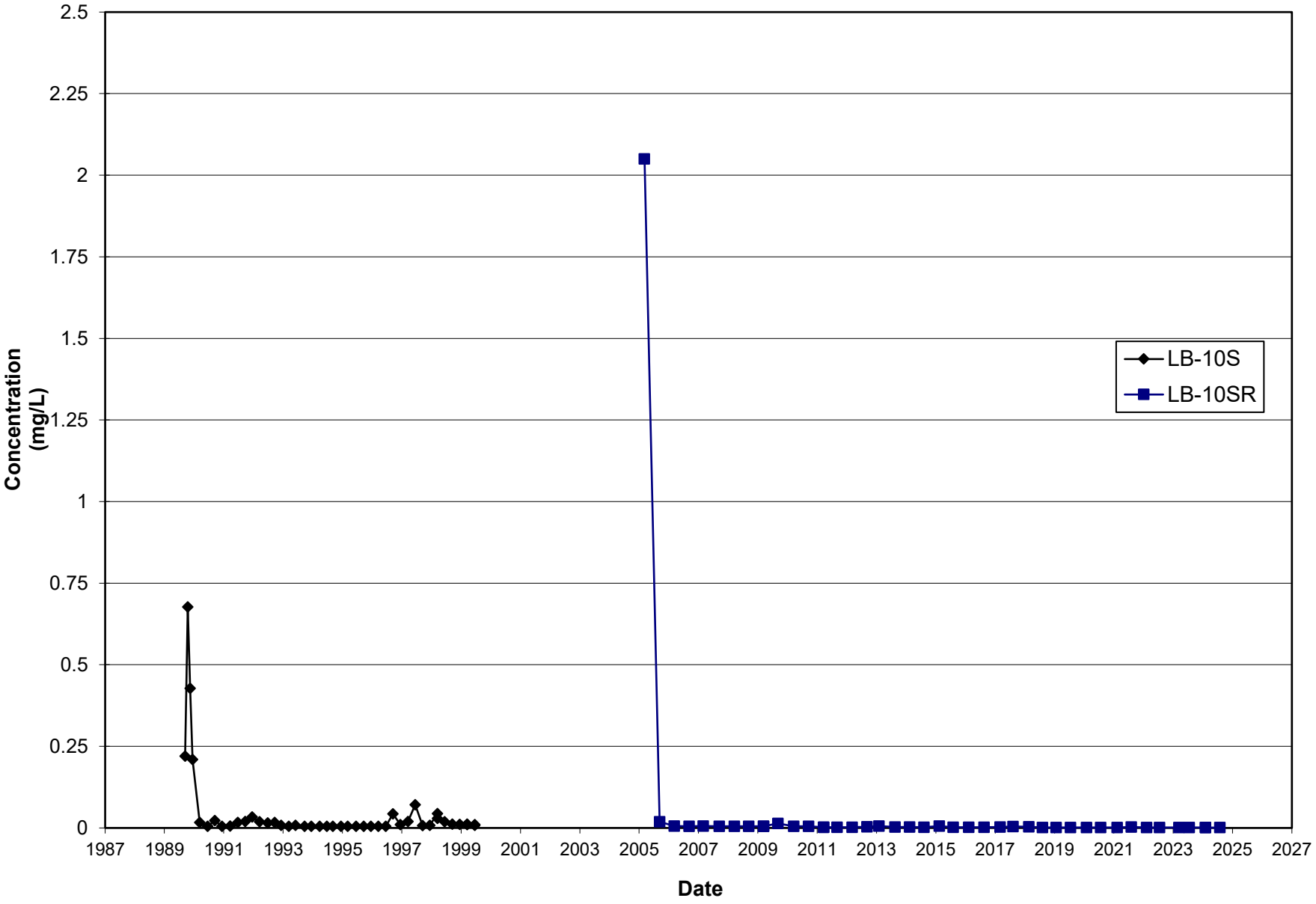
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-06S
1987 - 2024

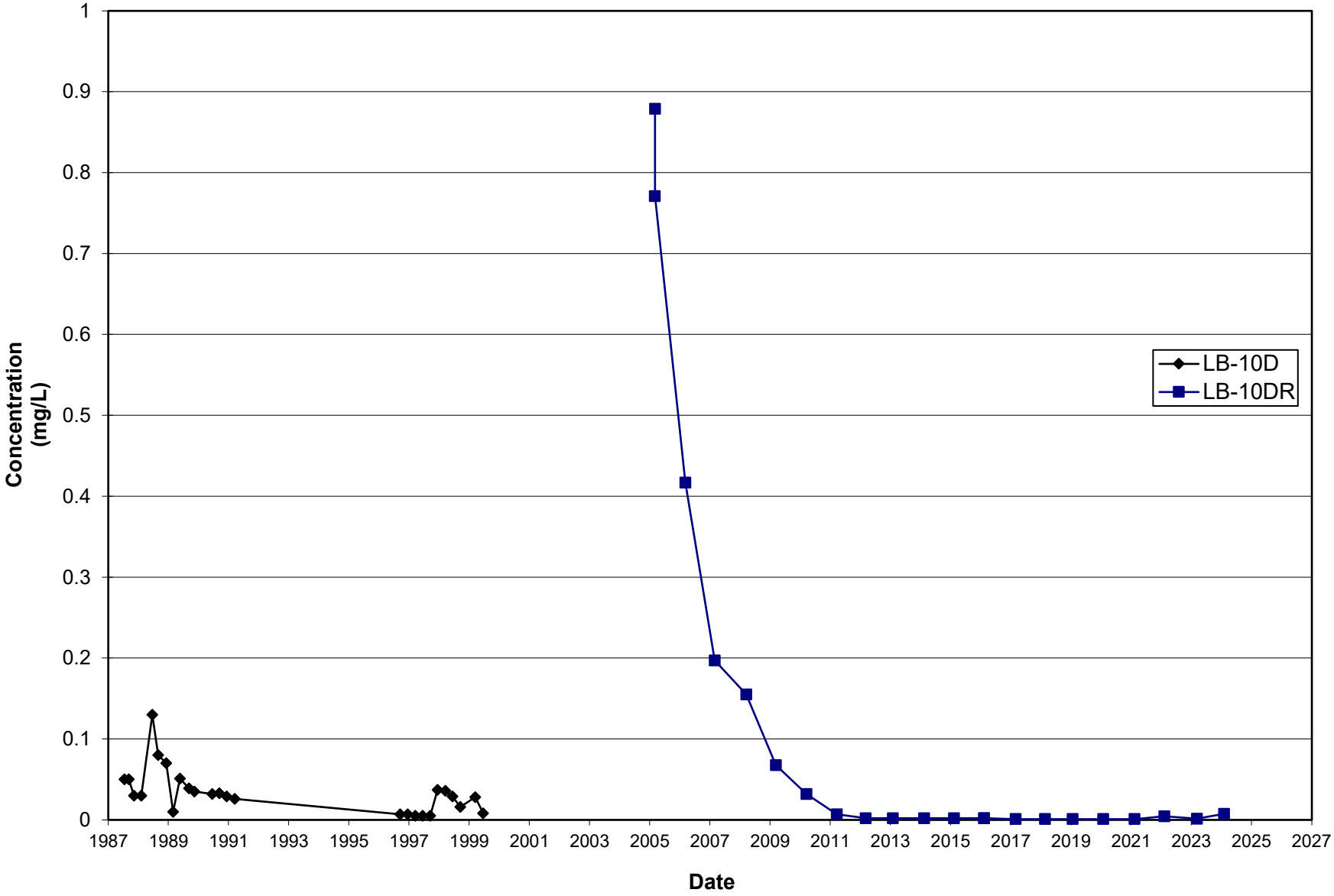


SCS Engineers, 1/29/2025

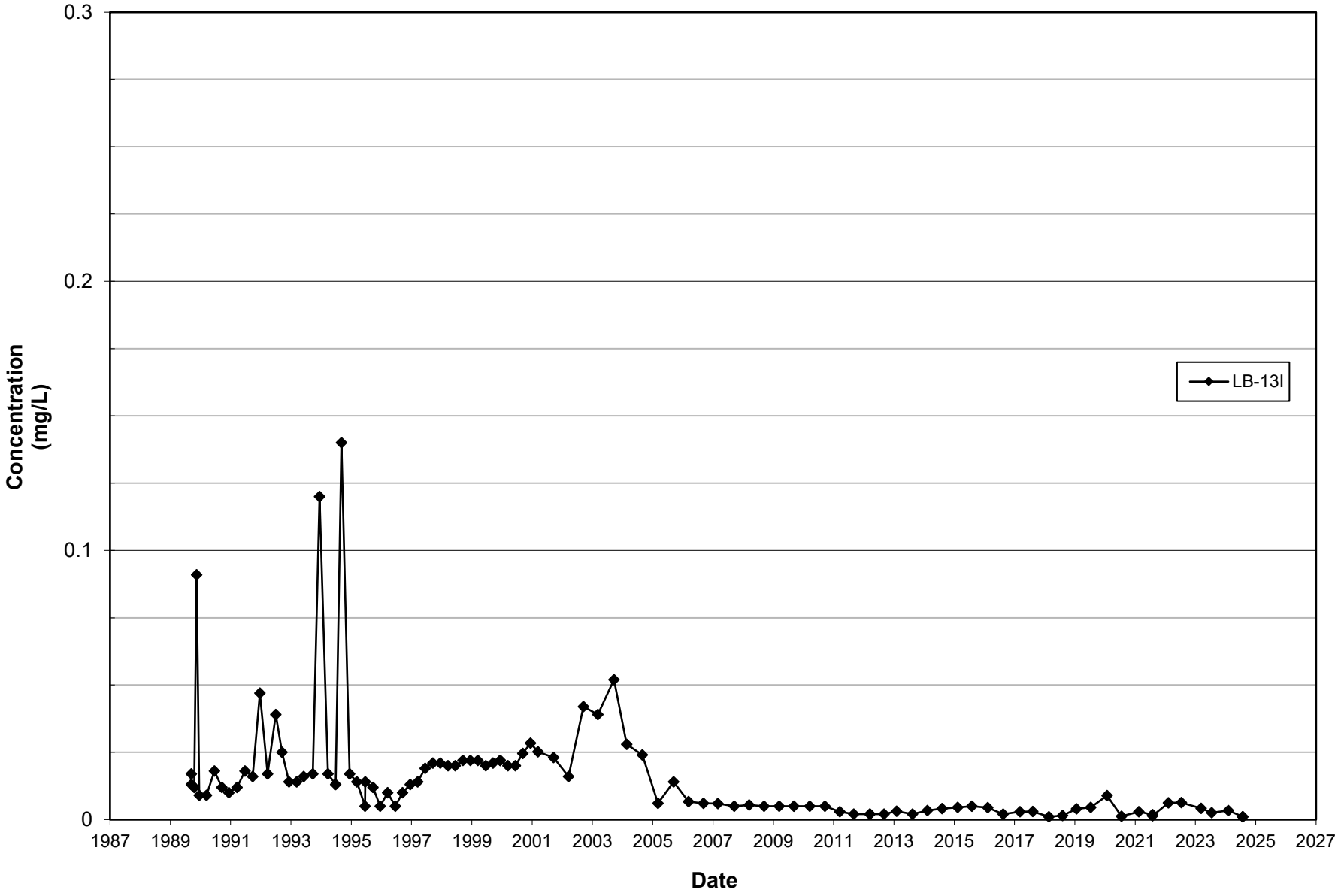
Leichner Landfill
Dissolved Manganese, LB-10S and LB-10SR
1987 - 2024



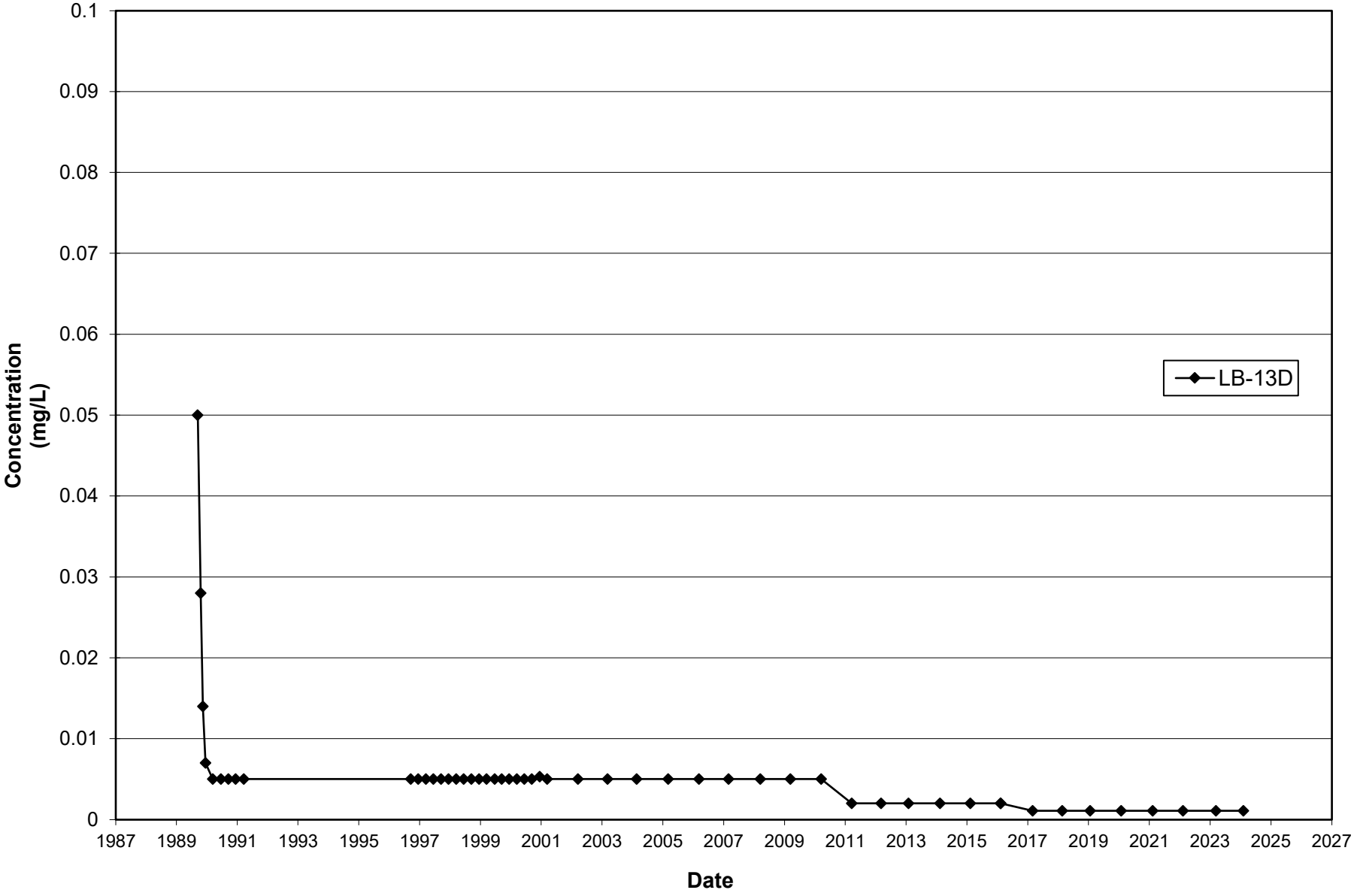
Leichner Landfill
Dissolved Manganese, LB-10D and LB-10DR
1987 - 2024



Leichner Landfill
Dissolved Manganese, LB-13I
1987 - 2024

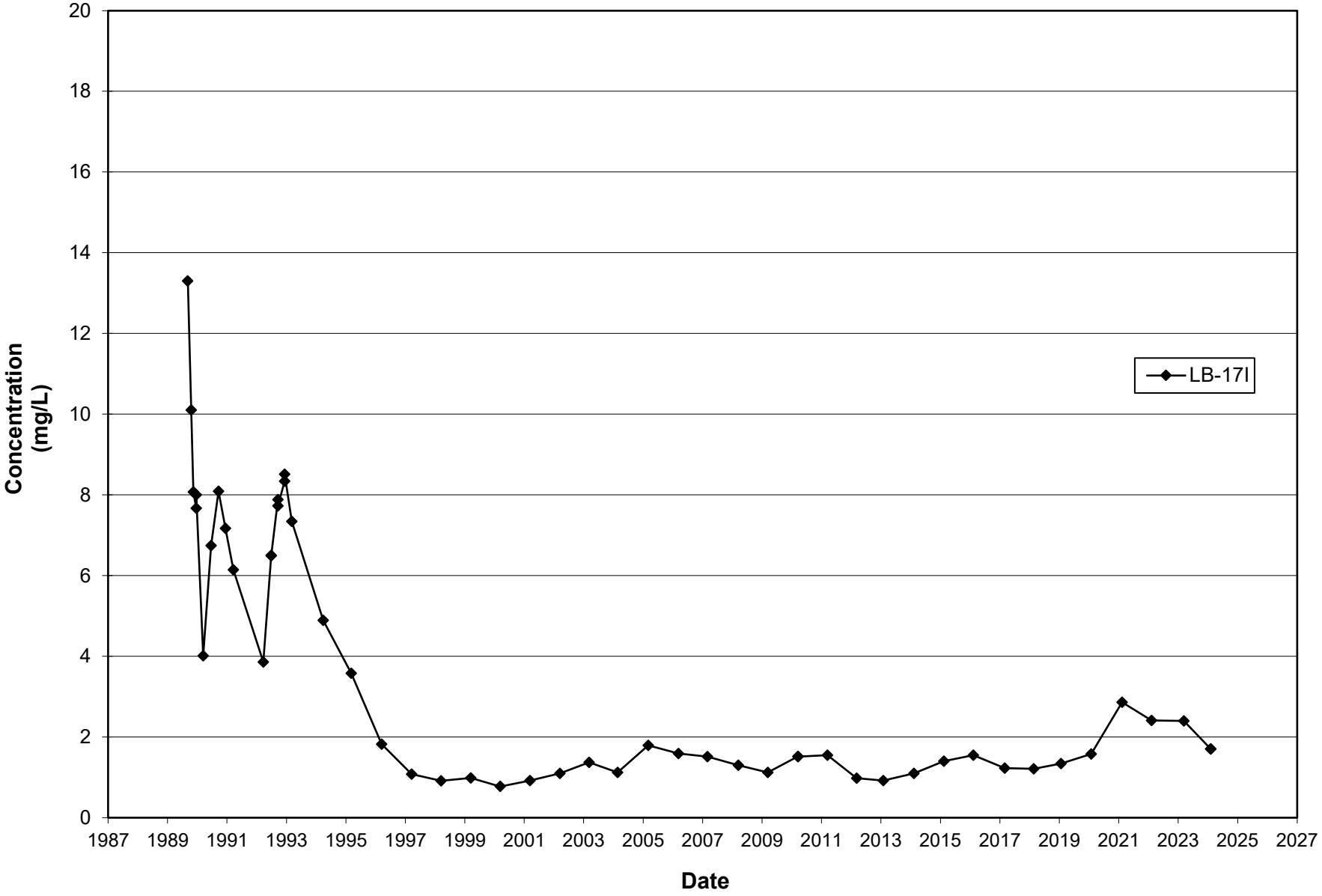


Leichner Landfill
Dissolved Manganese, LB-13D
1987 - 2024



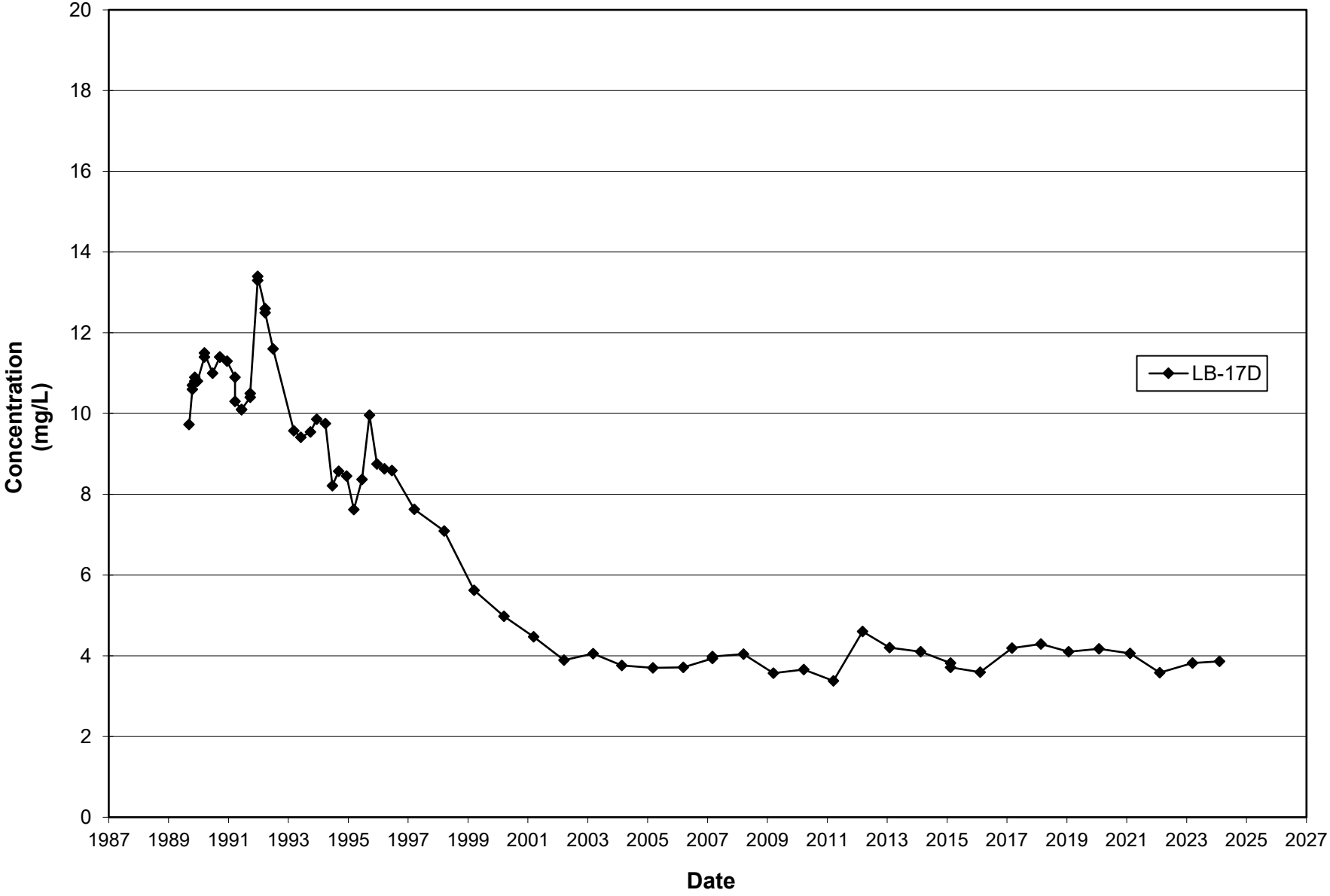
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-17I
1987 - 2024



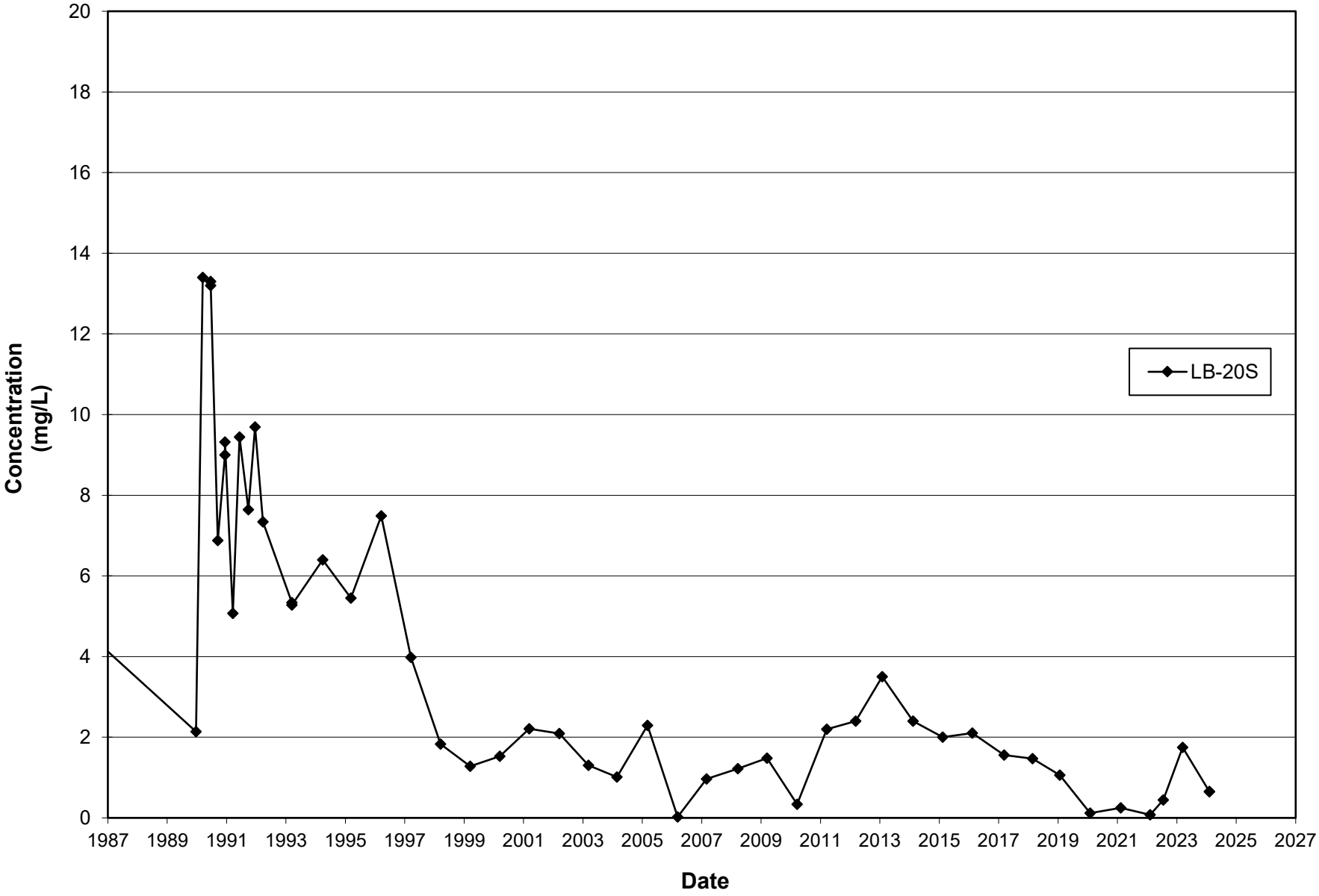
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-17D
1987 - 2024



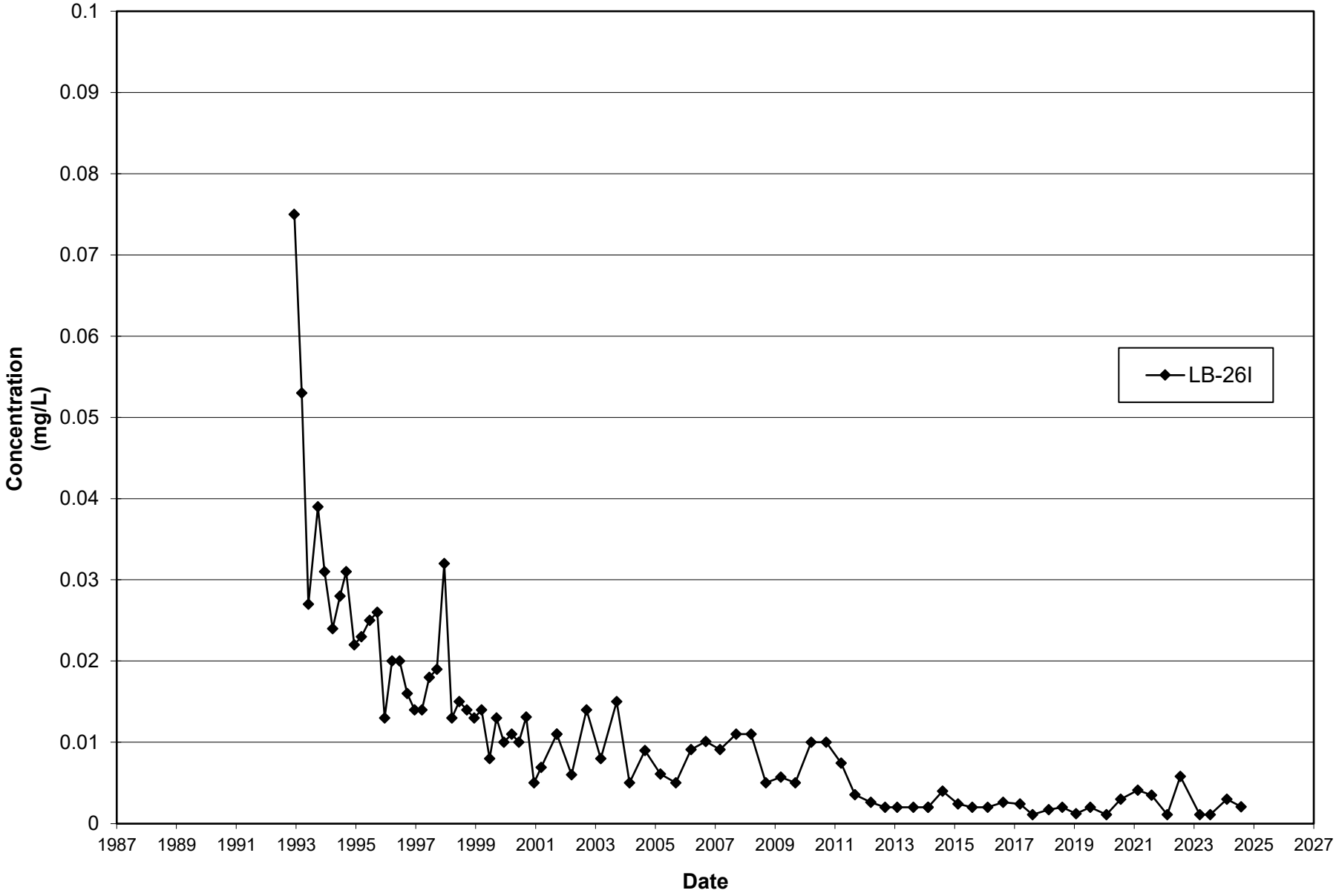
SCS Engineers, 1/29/2025

Leichner Landfill
Dissolved Manganese, LB-20S
1987 - 2024

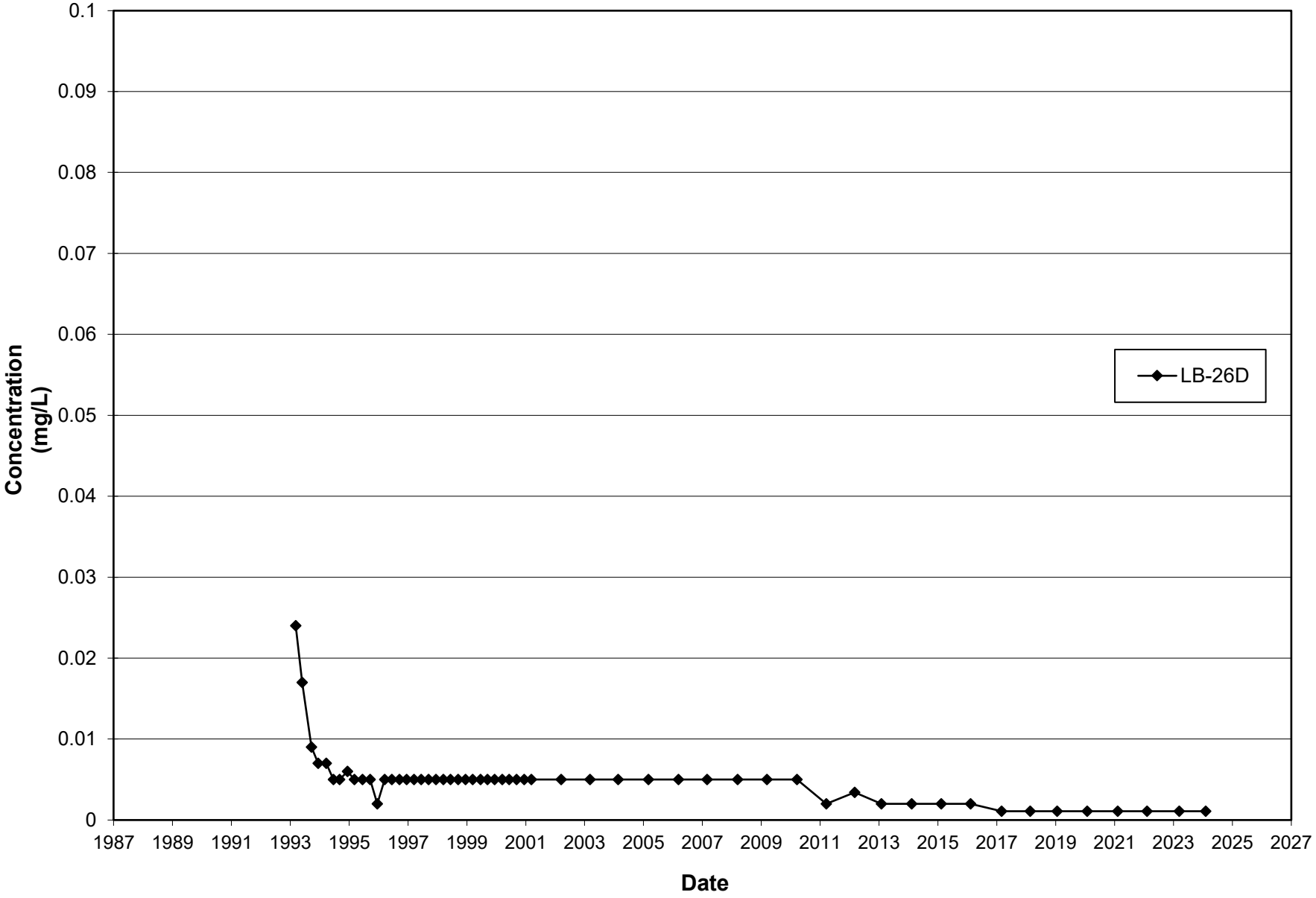


SCS Engineers, 1/29/2025

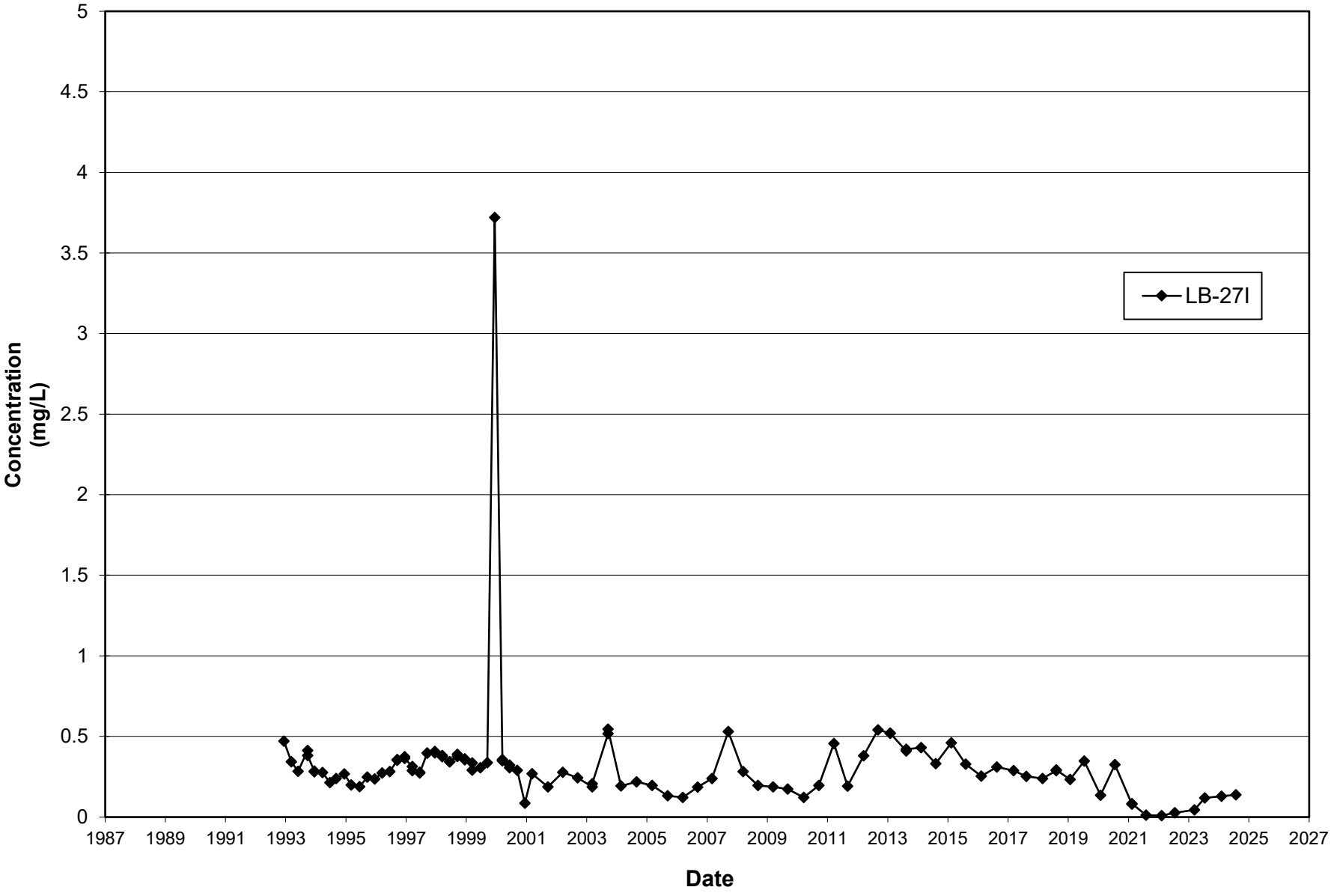
Leichner Landfill
Dissolved Manganese, LB-26I
1987 - 2024



Leichner Landfill
Dissolved Manganese, LB-26D
1987 - 2024

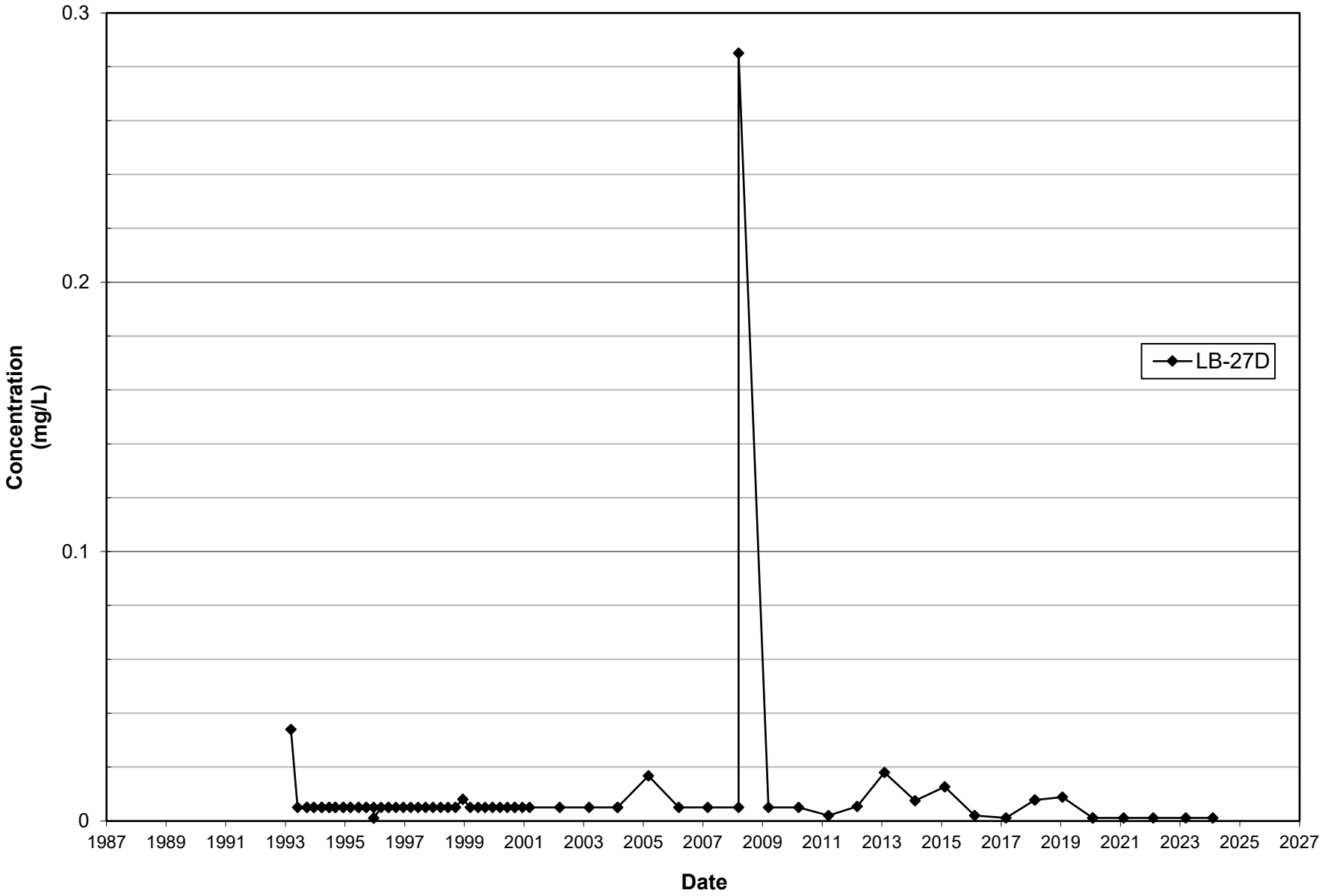


Leichner Landfill
Dissolved Manganese, LB-27I
1987 - 2024



SCS Engineers, 1/29/2025

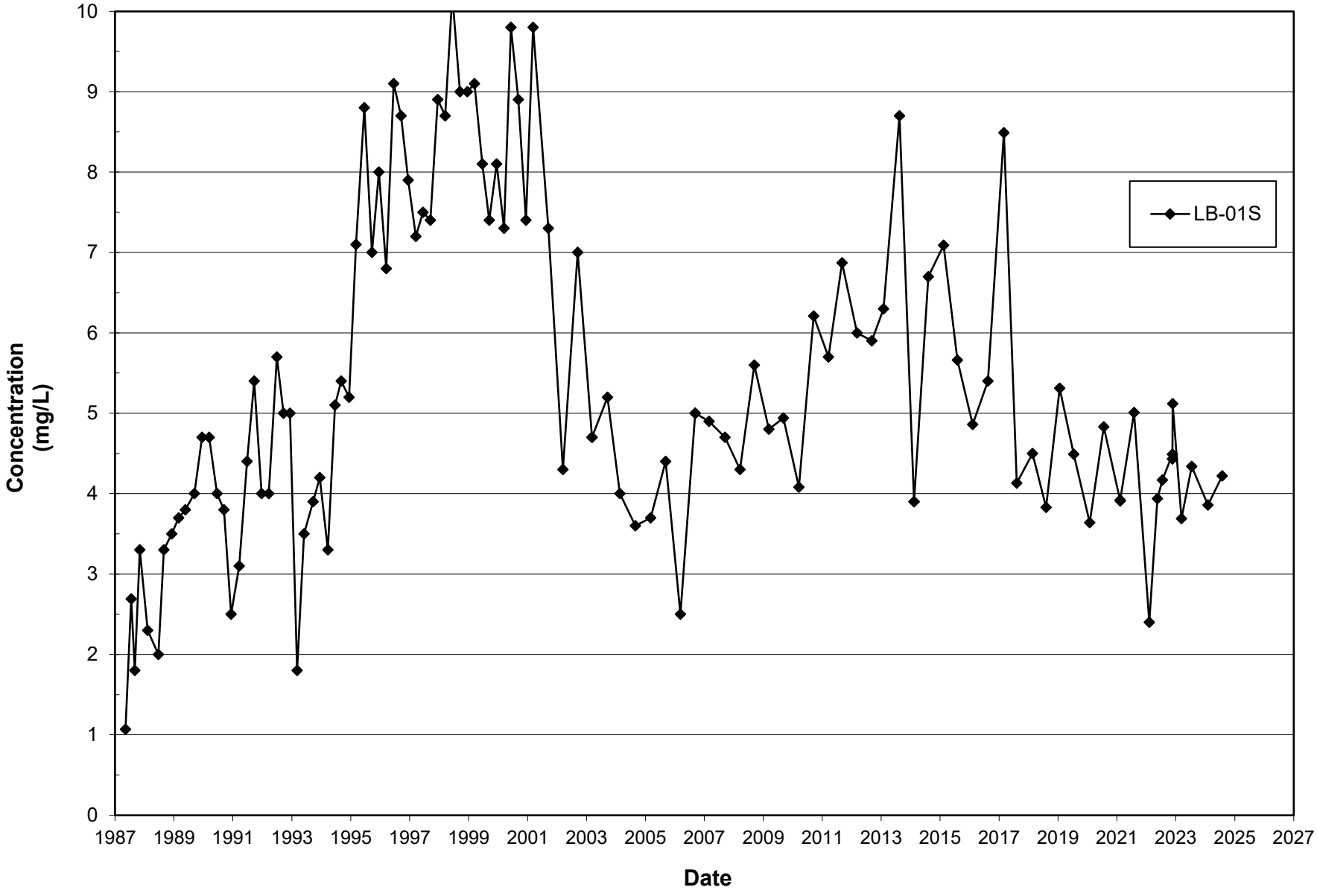
Leichner Landfill
Dissolved Manganese, LB-27D
1987 - 2024



SCS Engineers, 1/29/2025

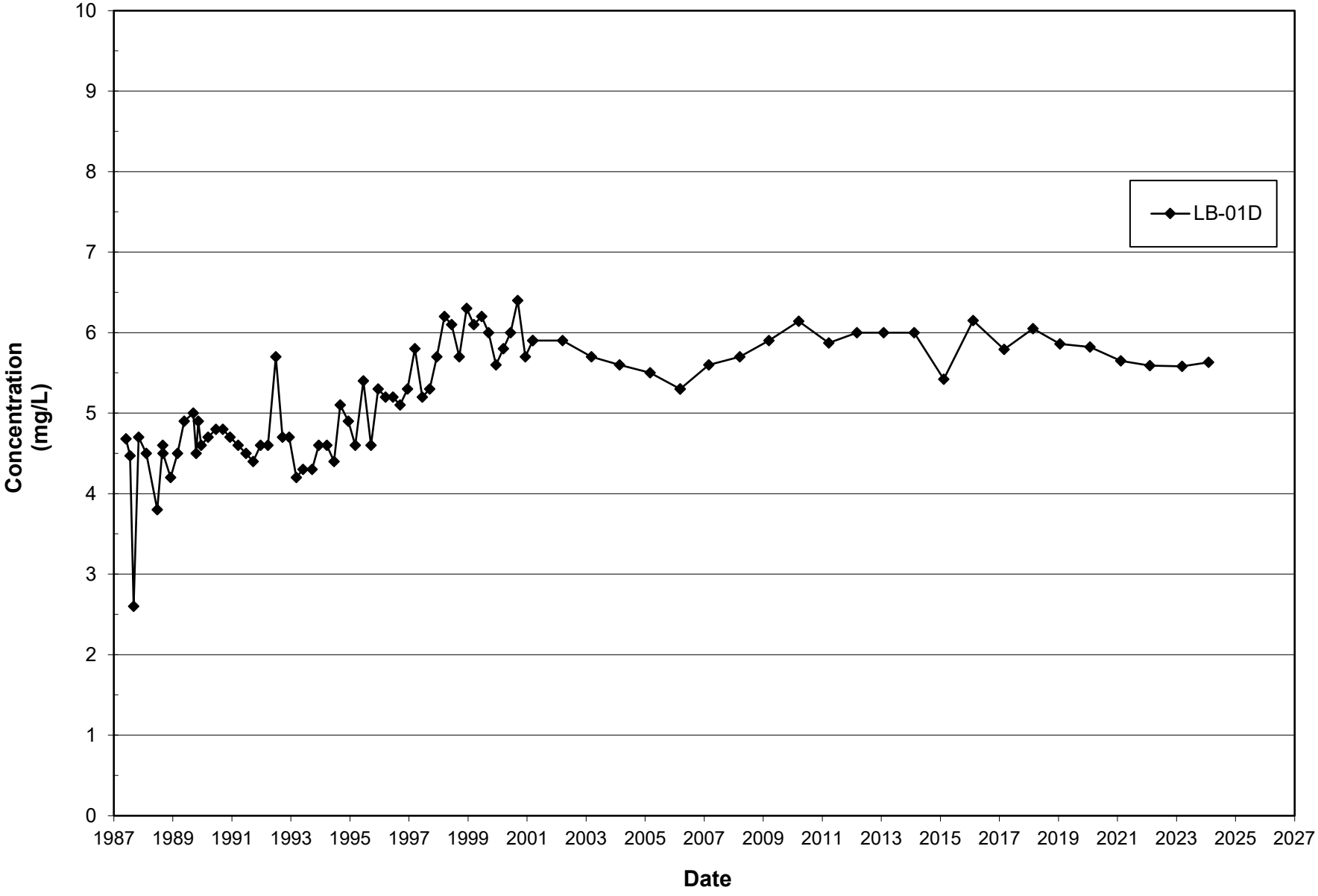
Nitrate

Leichner Landfill
Nitrate, LB-01S
1987 - 2024



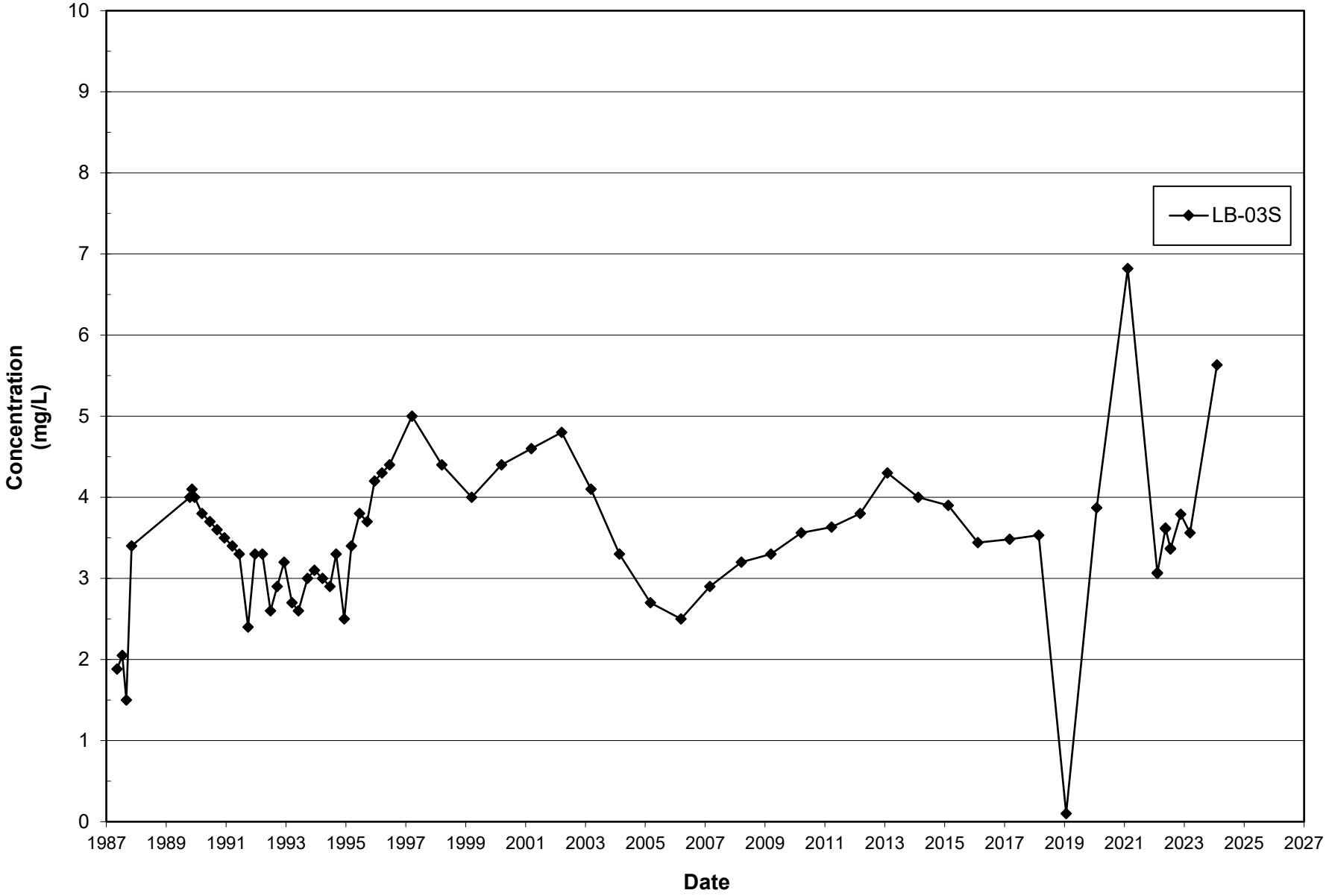
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-01D
1987 - 2024



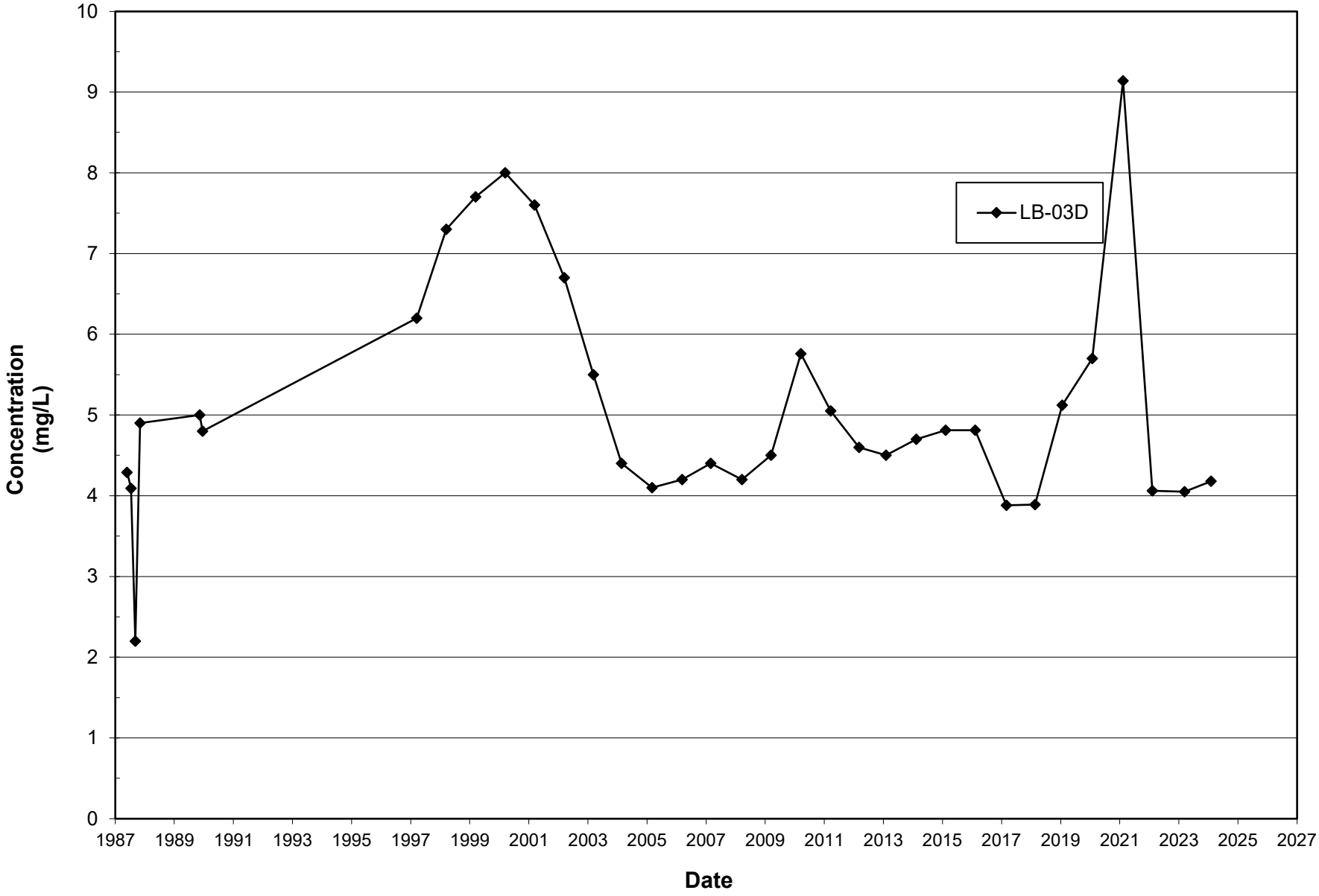
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-03S
1987 - 2024



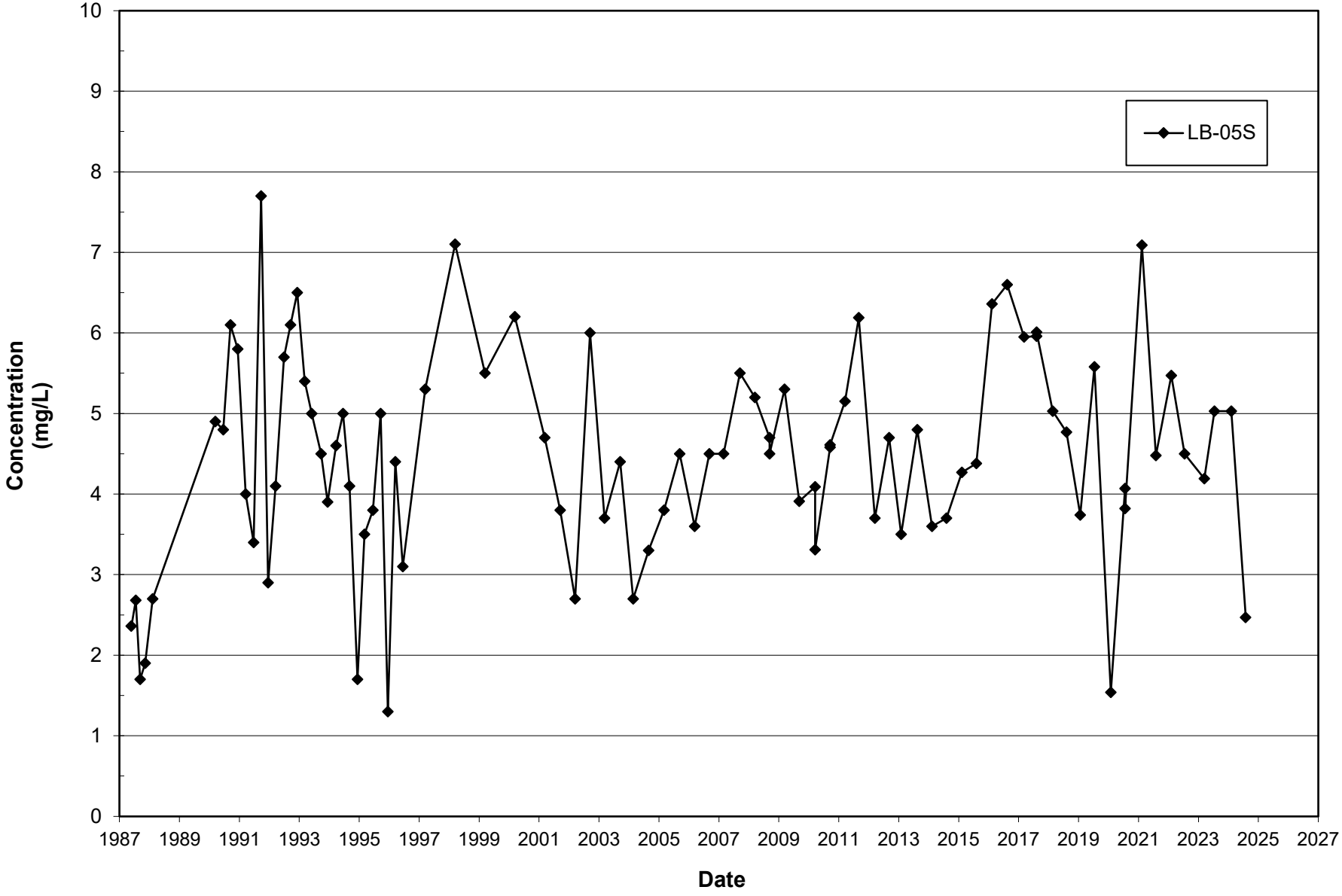
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-03D
1987 - 2024



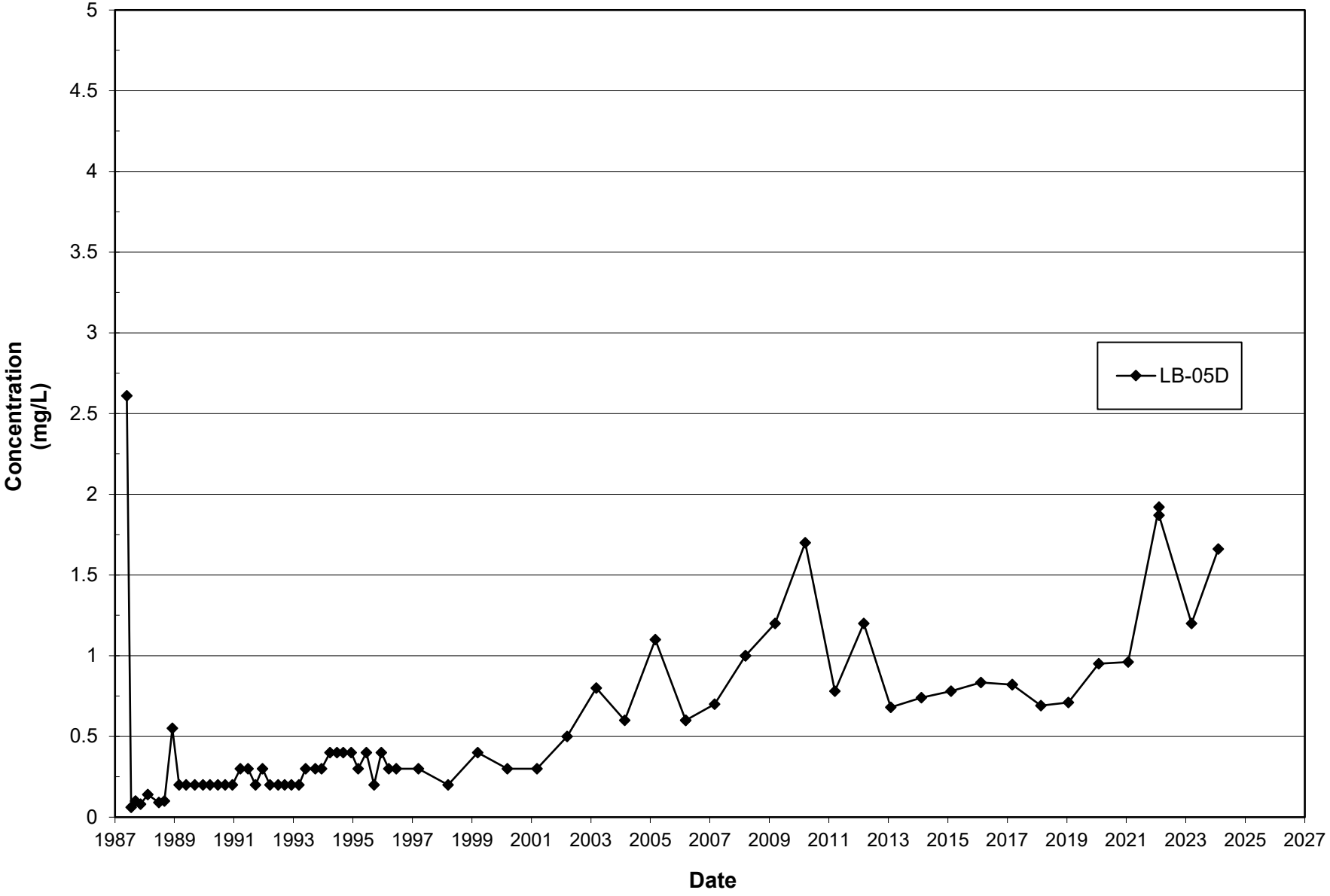
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-05S
1987 - 2024



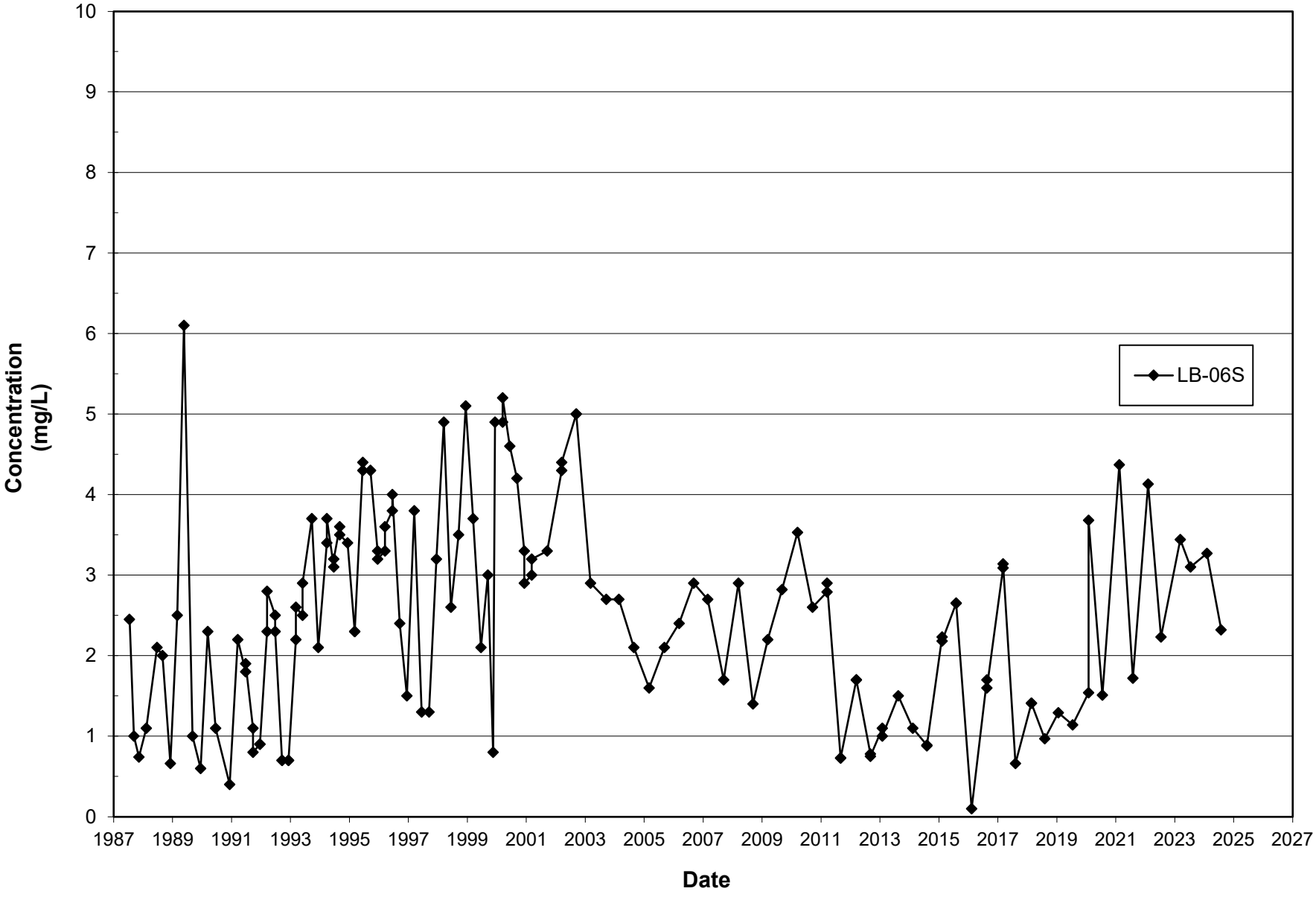
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-05D
1987 - 2024



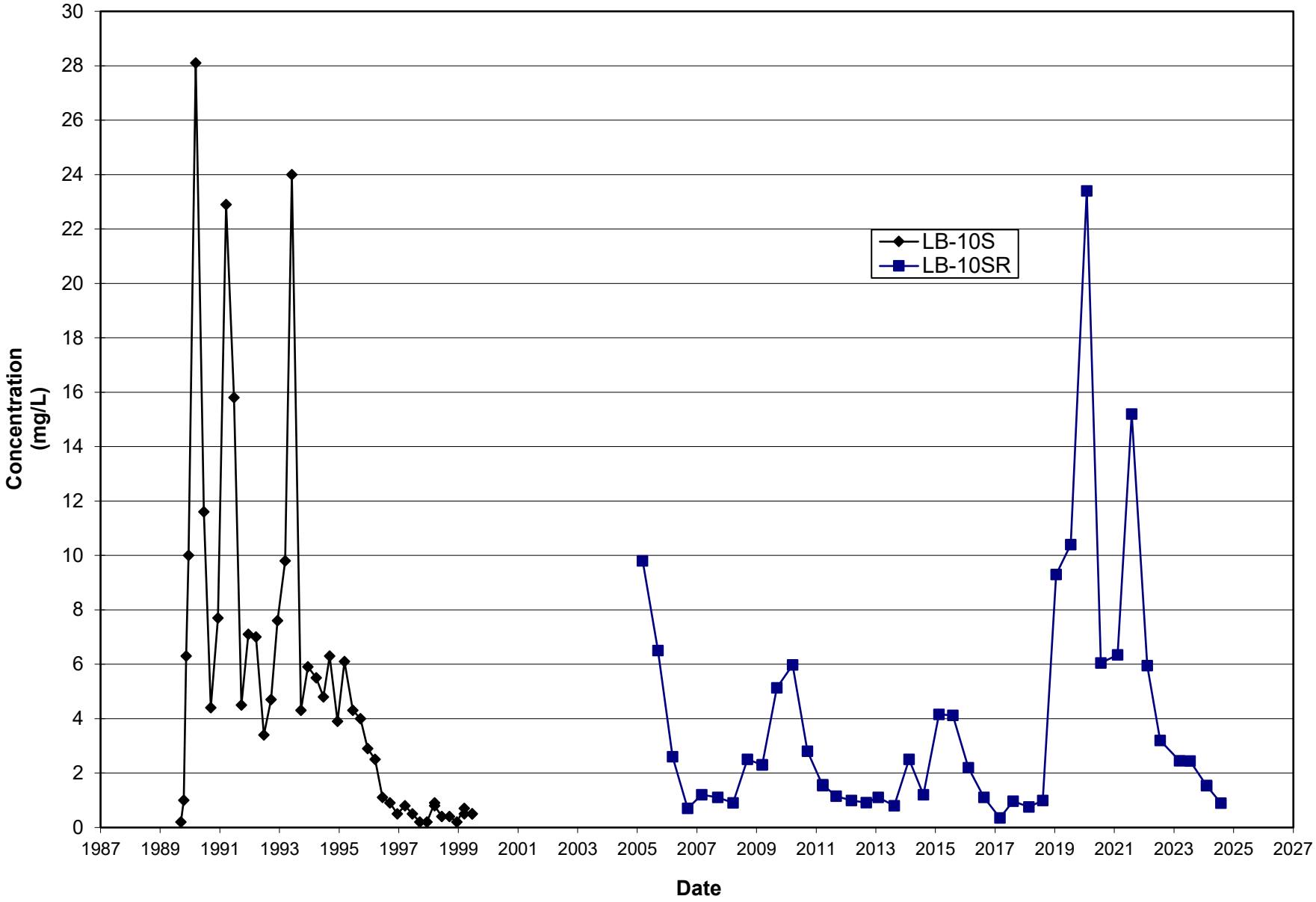
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-06S
1987 - 2024

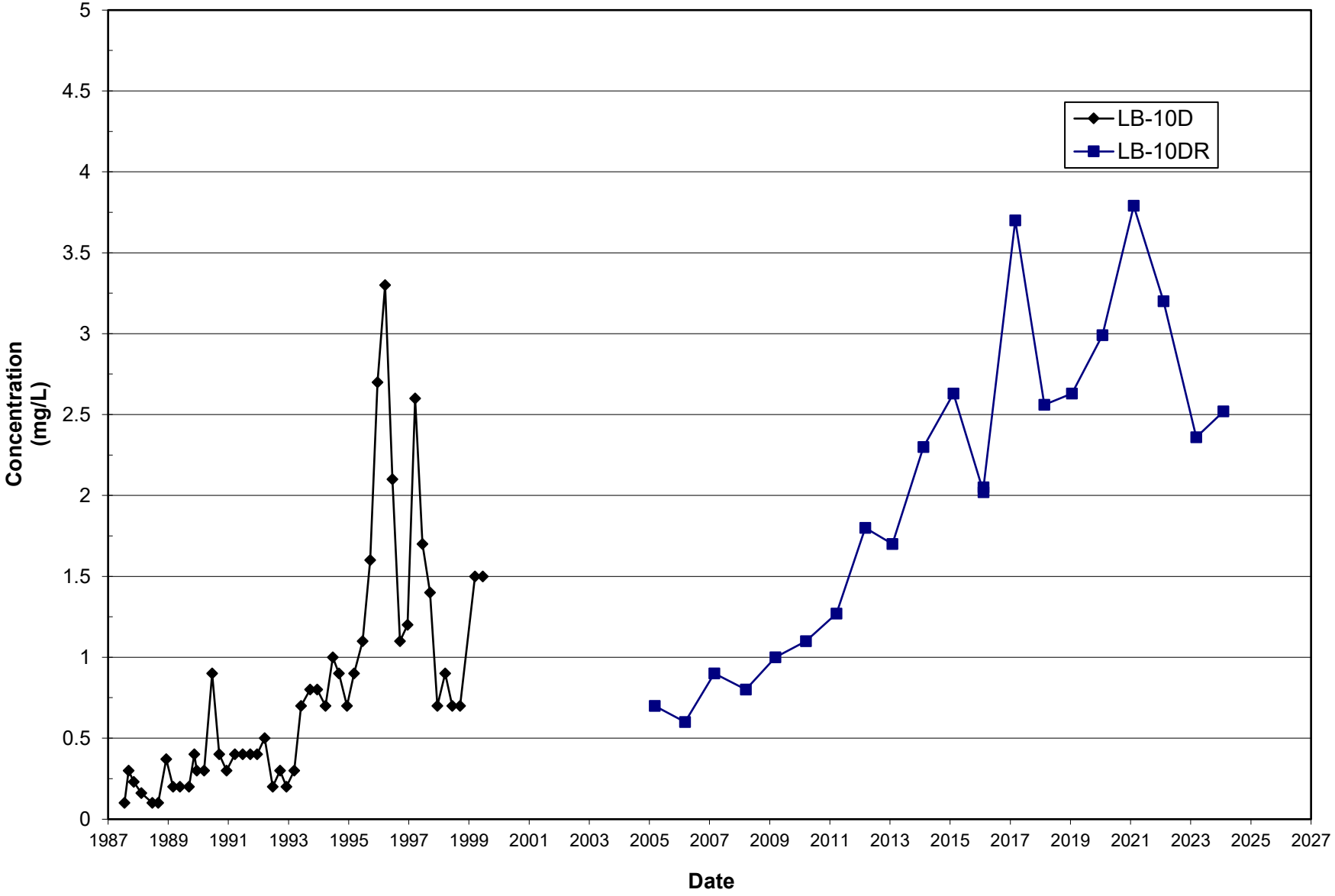


SCS Engineers, 1/29/2025

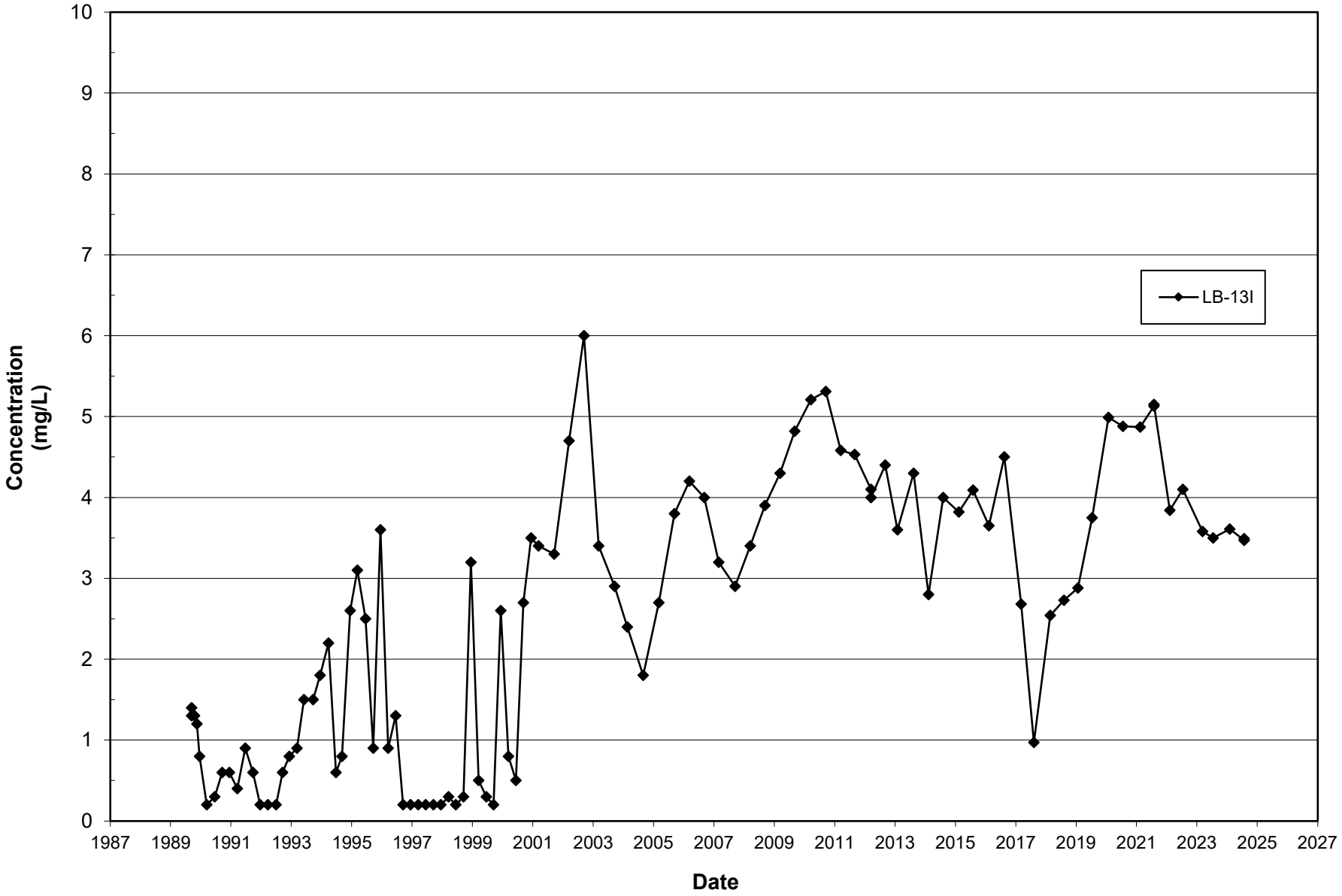
Leichner Landfill
Nitrate, LB-10S and LB-10SR
1987 - 2024



Leichner Landfill
Nitrate, LB-10D and LB-10DR
1987 - 2024

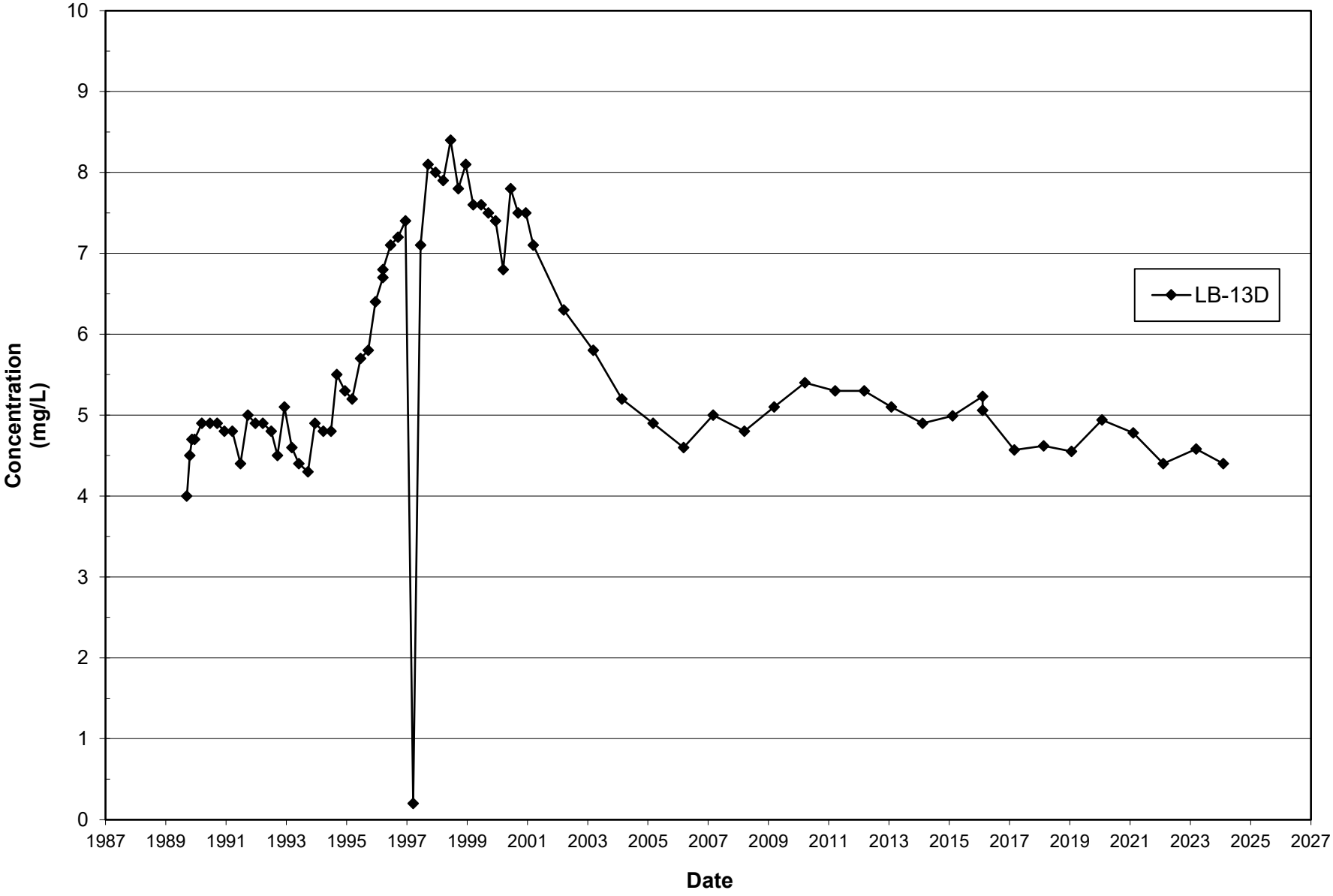


Leichner Landfill
Nitrate, LB-13I
1987 - 2024



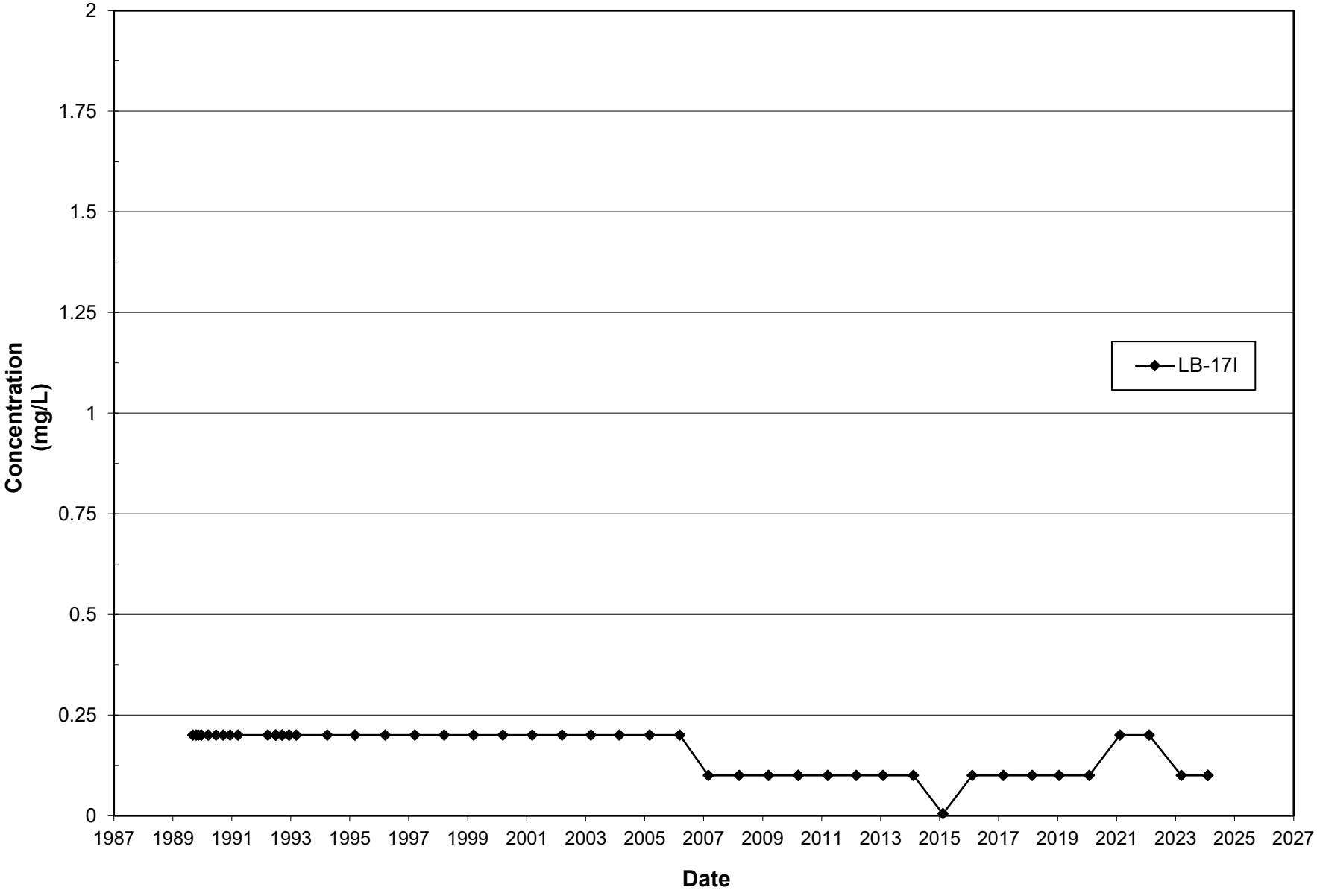
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-13D
1987 - 2024



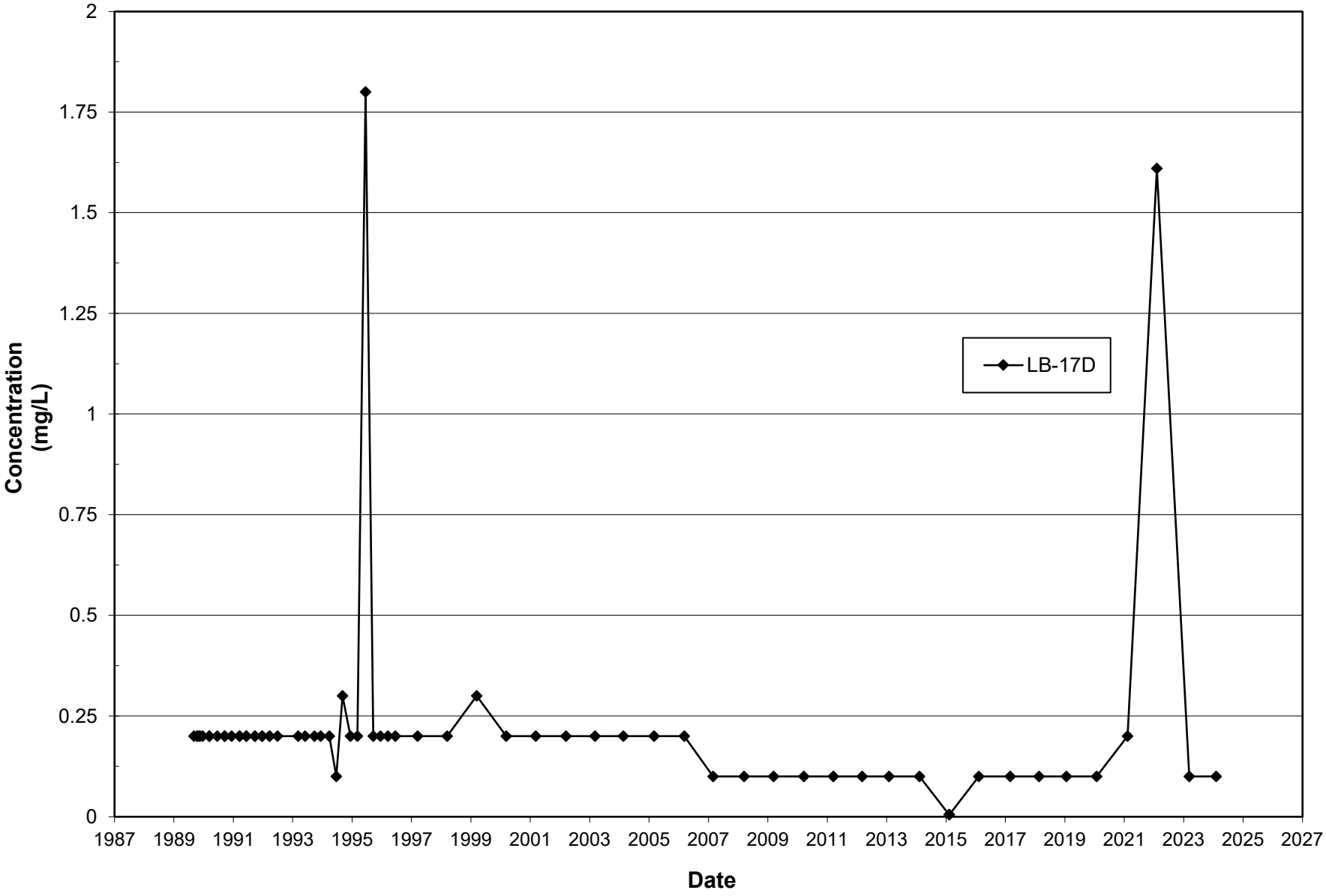
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-17I
1987 - 2024

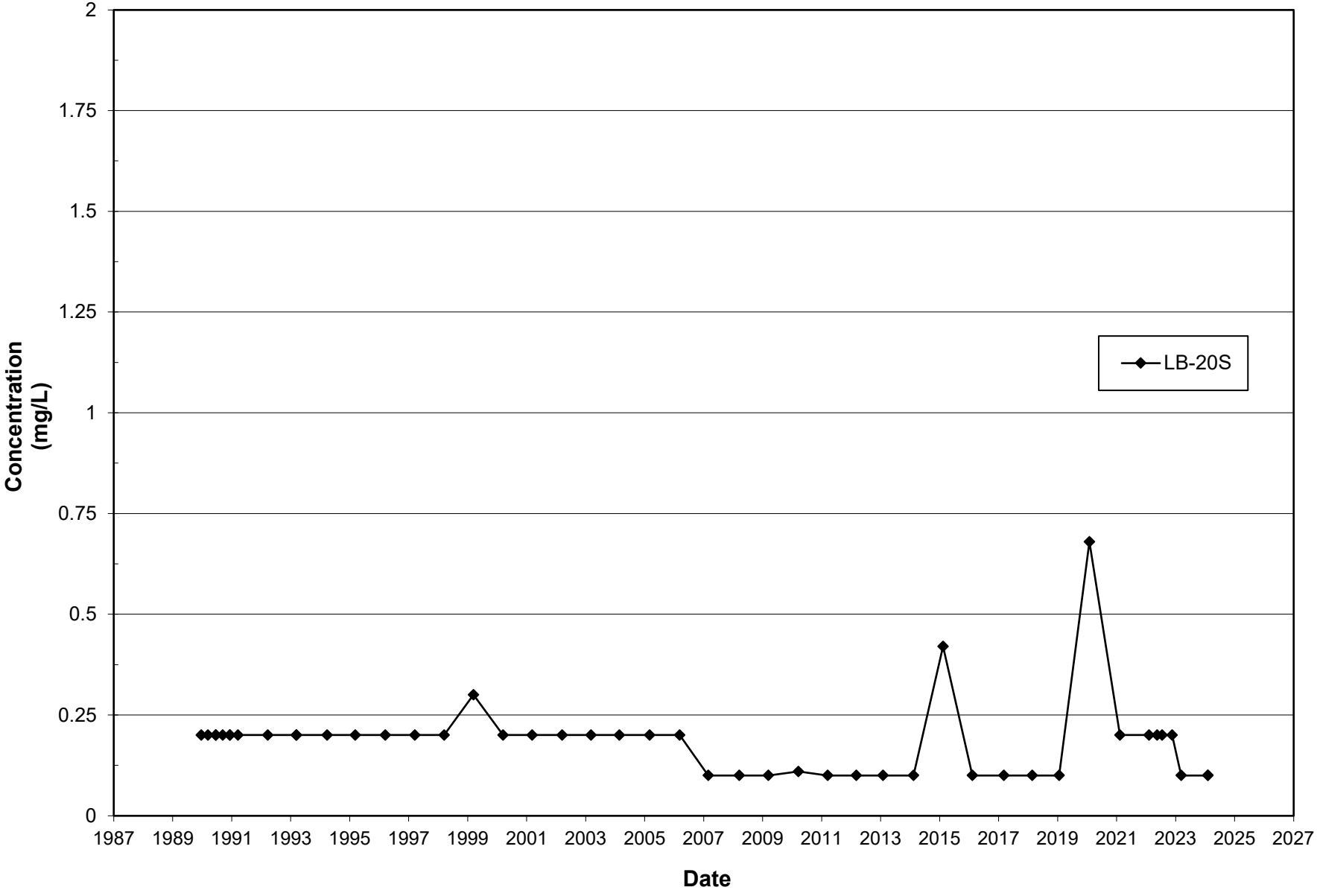


SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-17D
1987 - 2024

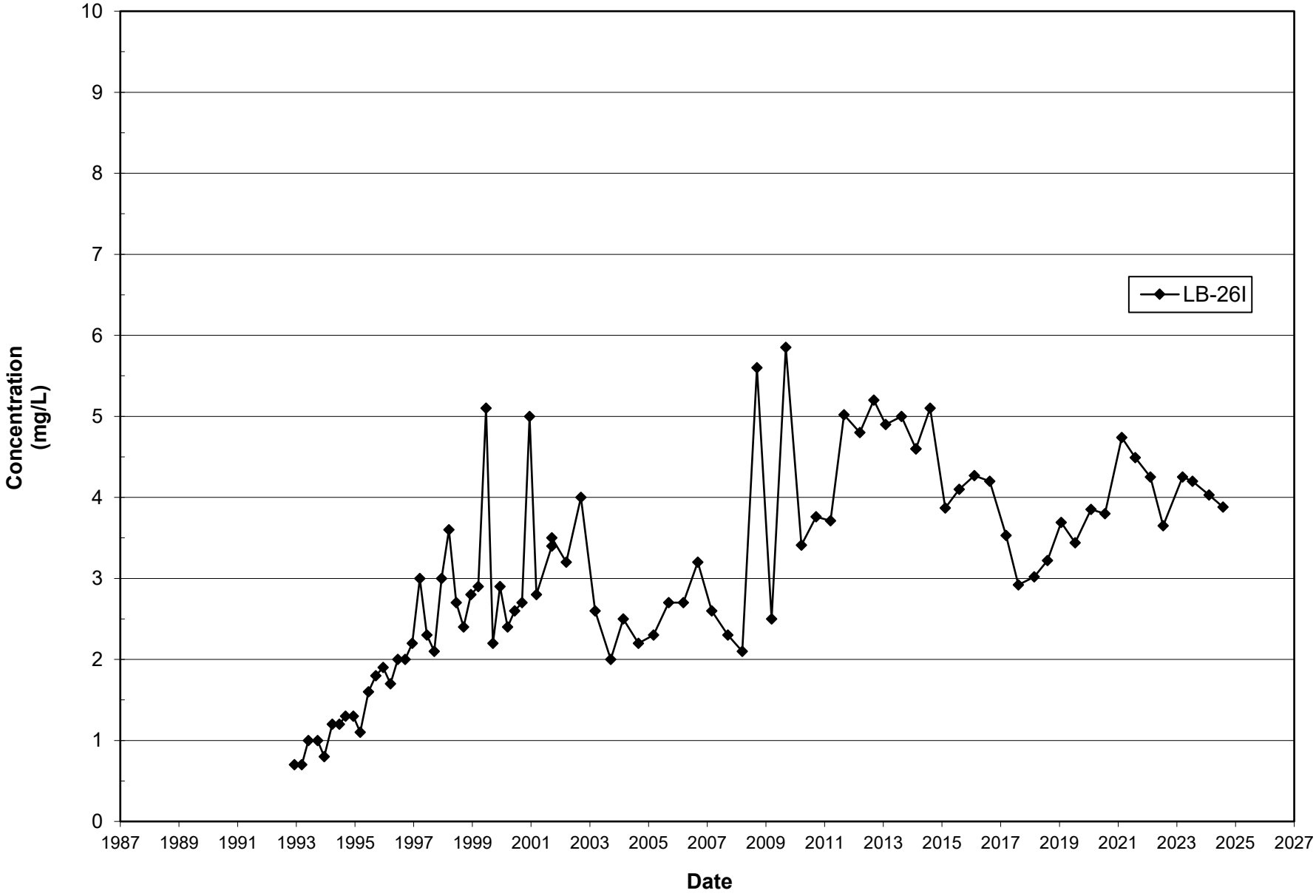


Leichner Landfill
Nitrate, LB-20S
1987 - 2024



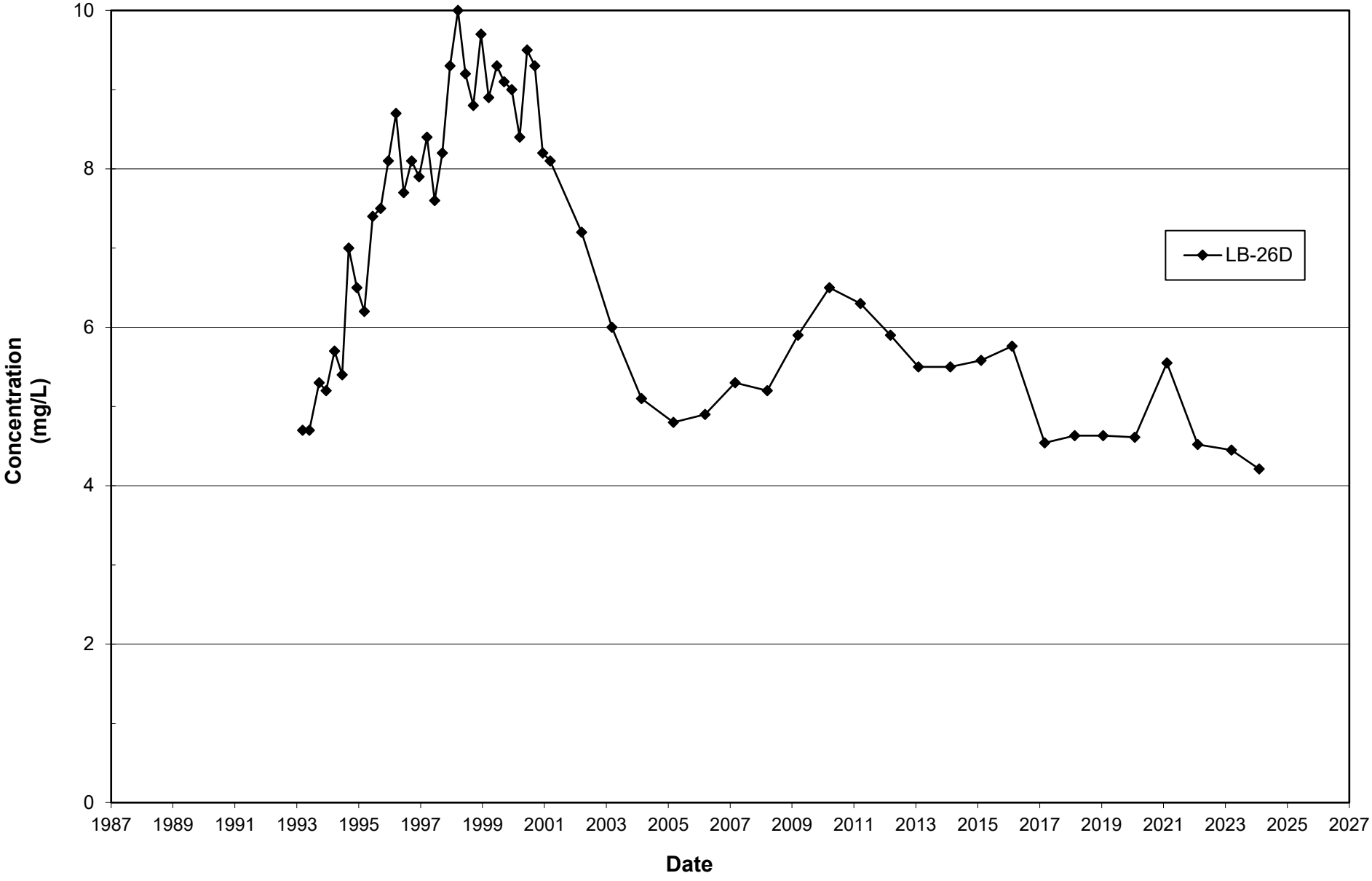
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-26I
1987 - 2024



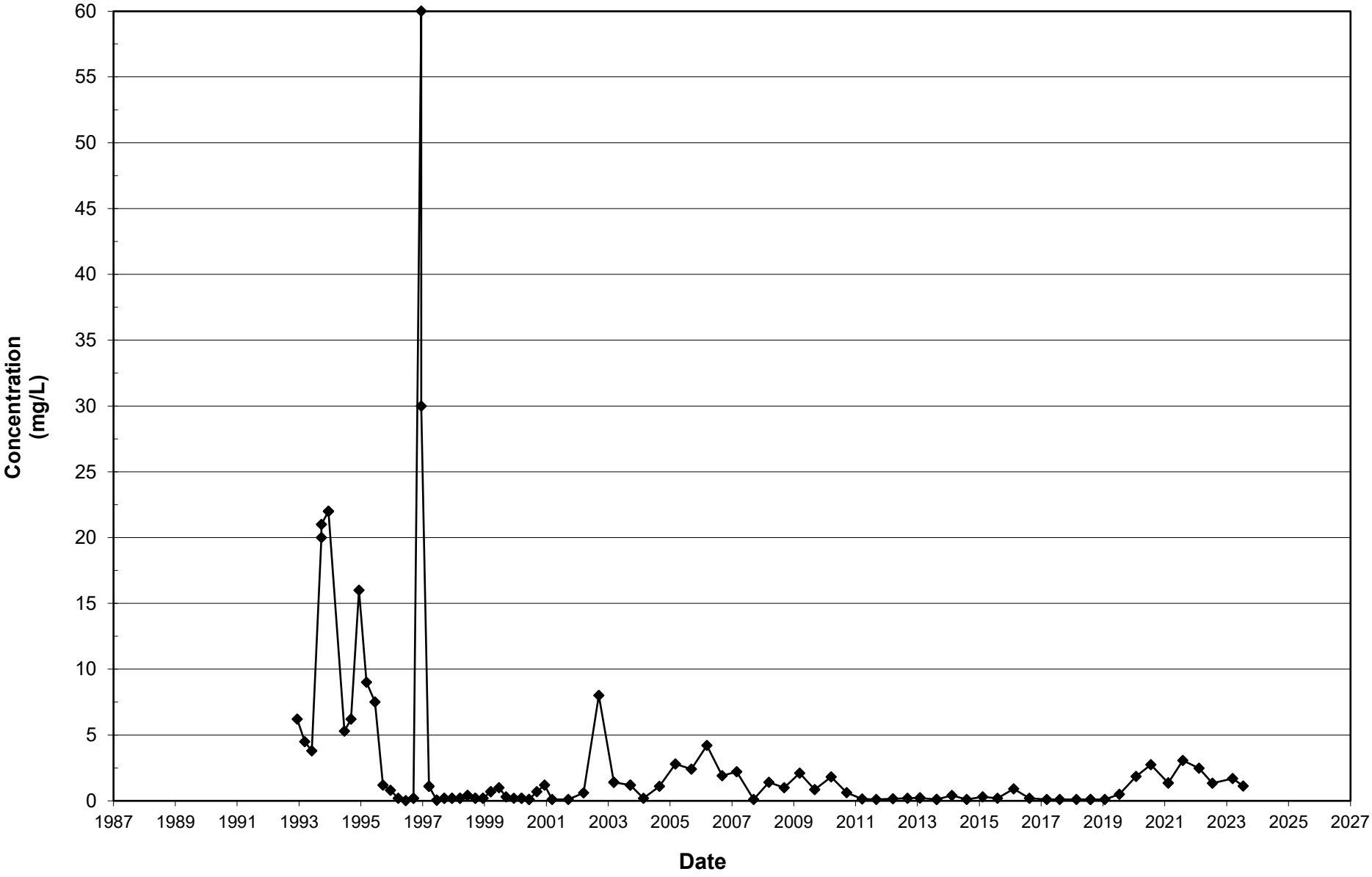
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-26D
1987 - 2024



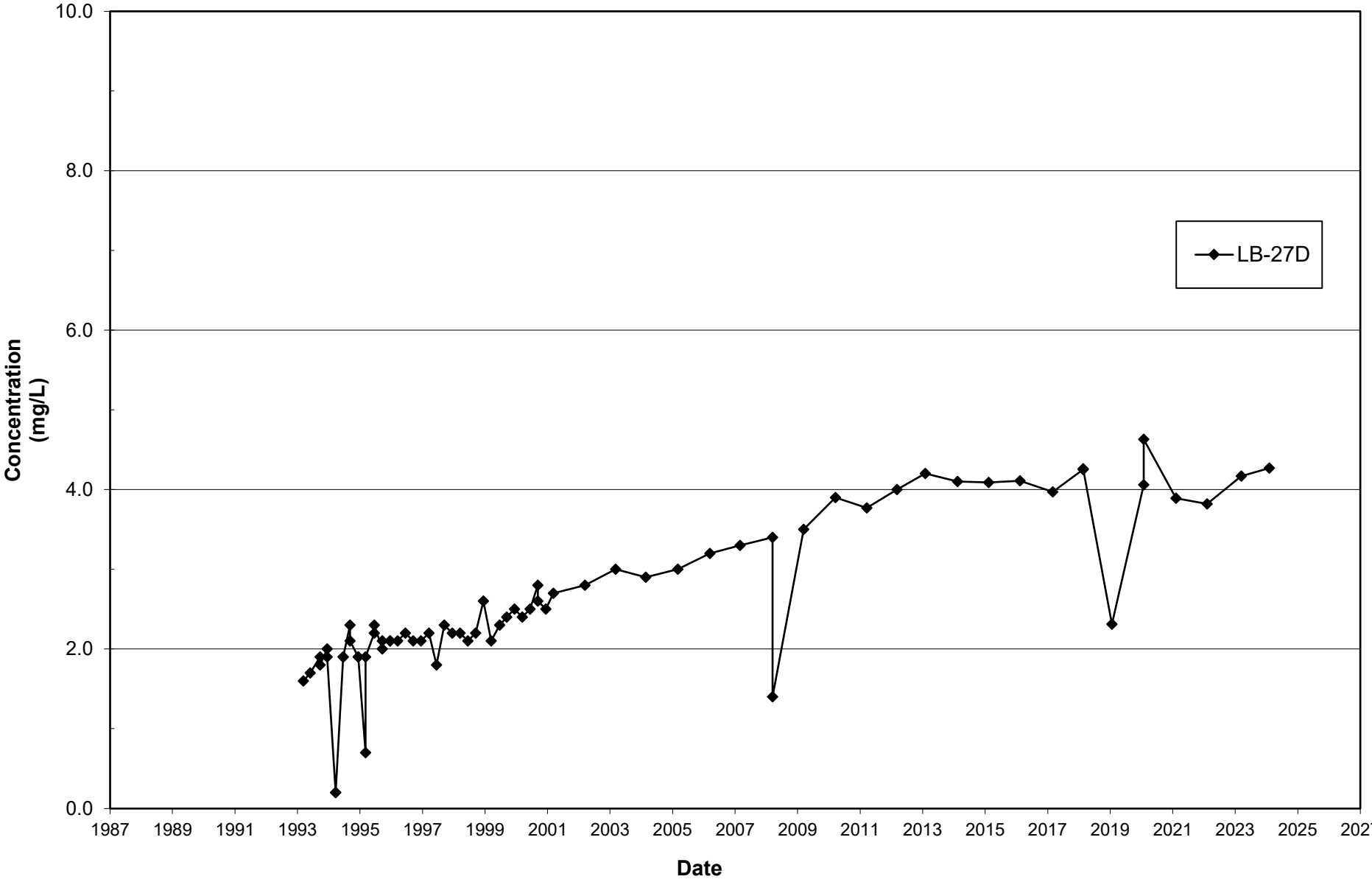
SCS Engineers, 1/29/2025

Leichner Landfill
Nitrate, LB-27I
1987 - 2024



SCS Engineers, 1/29/2025

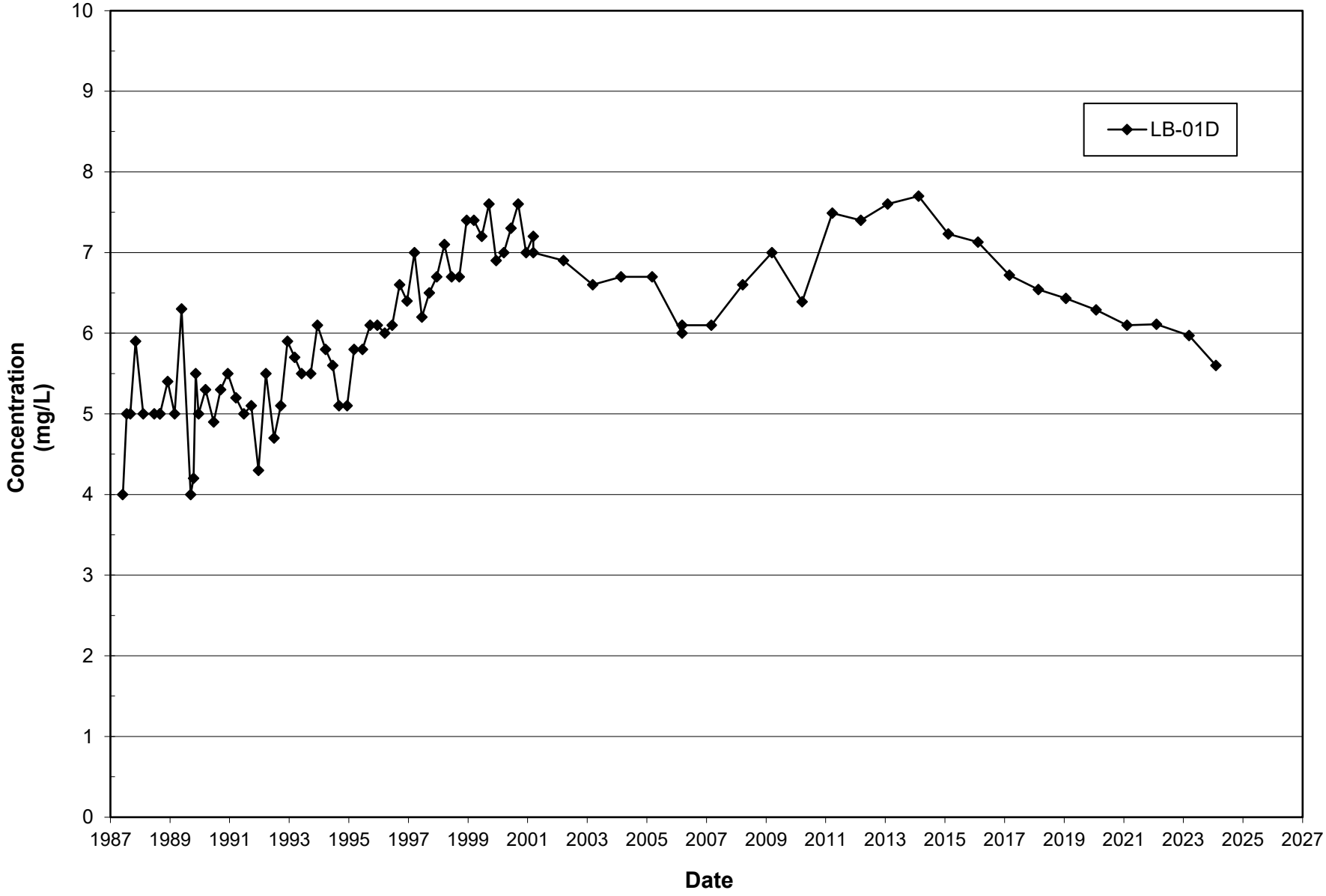
Leichner Landfill
Nitrate, LB-27D
1987 - 2024



SCS Engineers, 1/29/2025

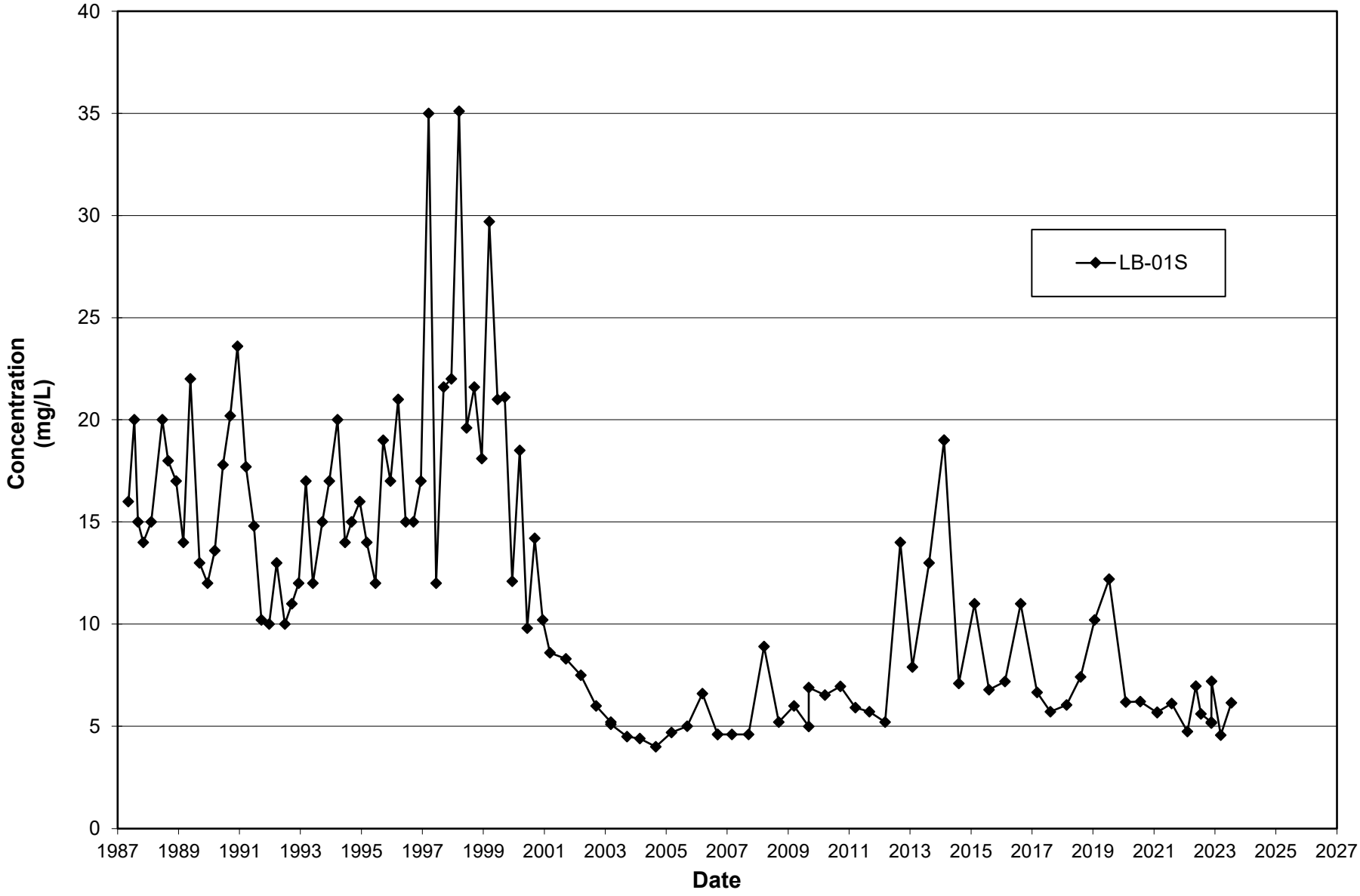
Chloride

Leichner Landfill
Chloride, LB-01D
1987 - 2024



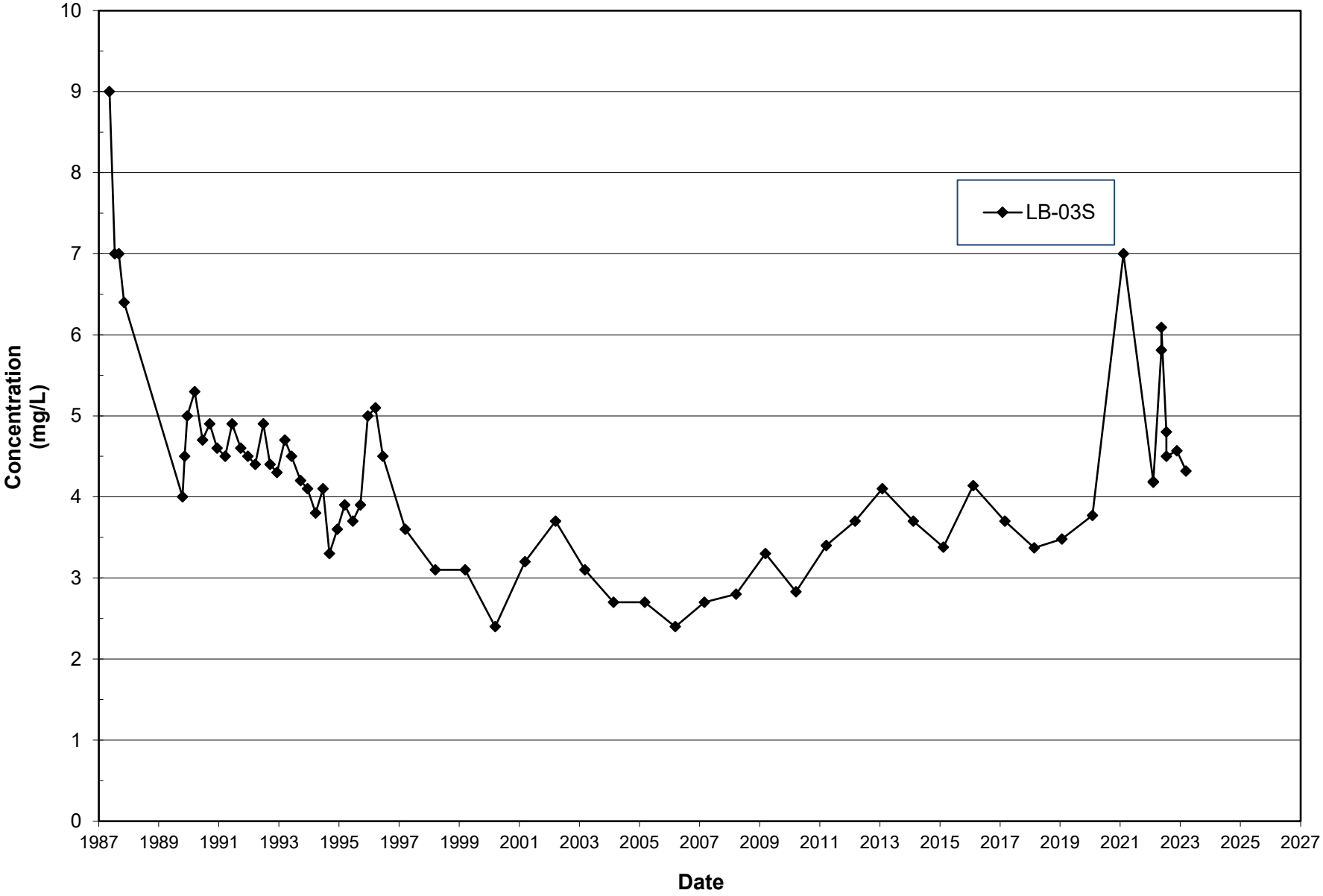
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-01S
1987 - 2024

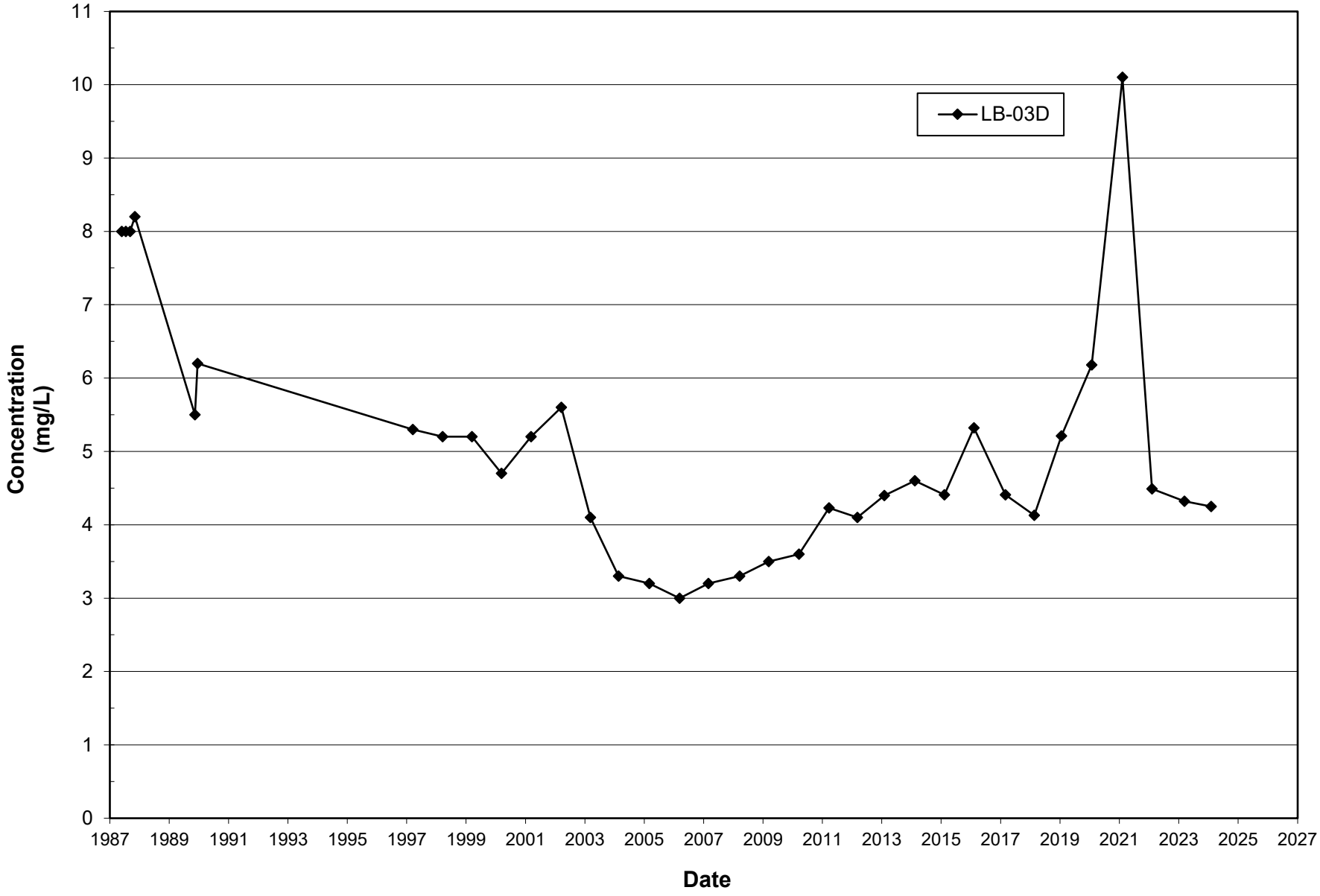


SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-03S
1987 - 2024

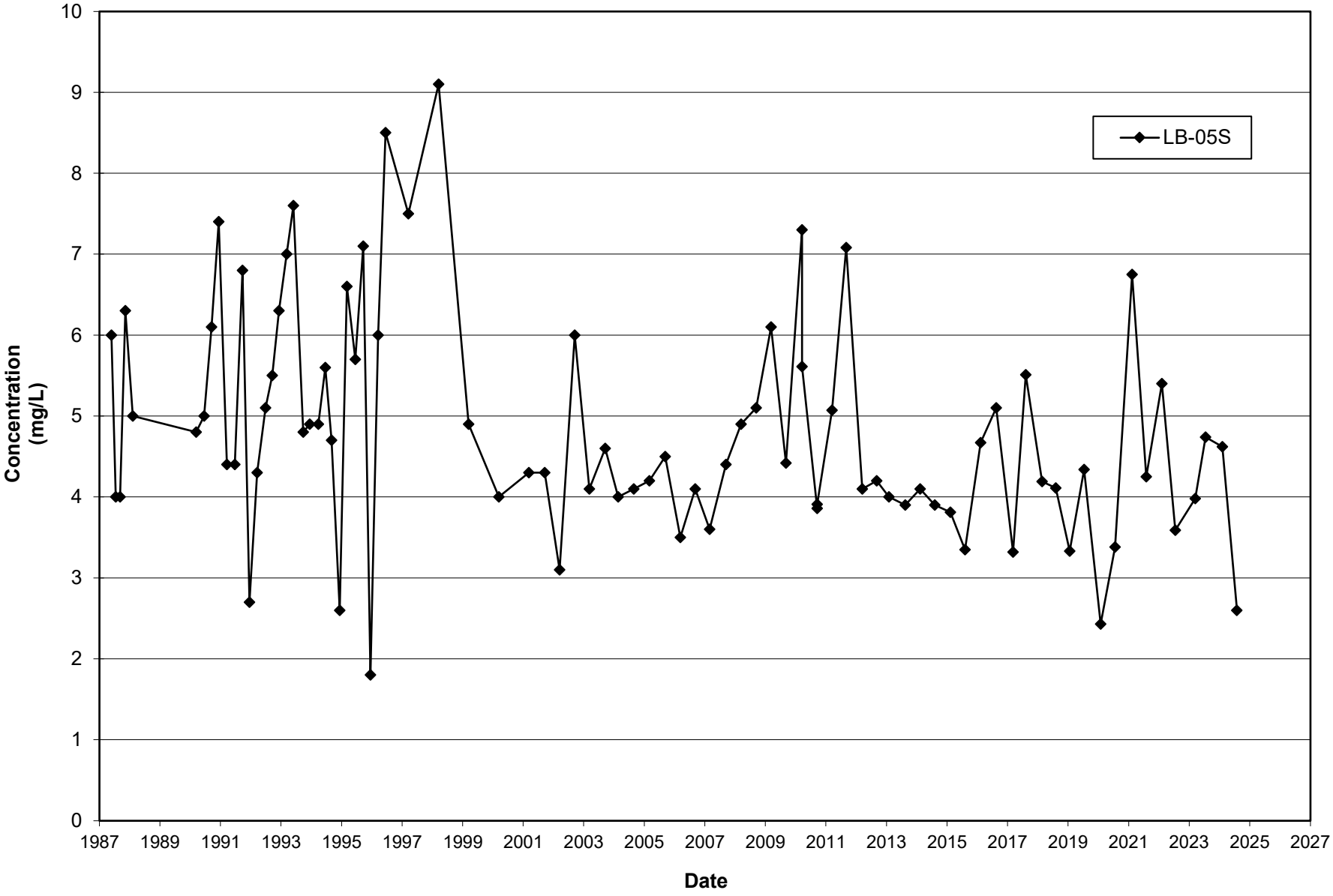


Leichner Landfill
Chloride, LB-03D
1987 - 2024



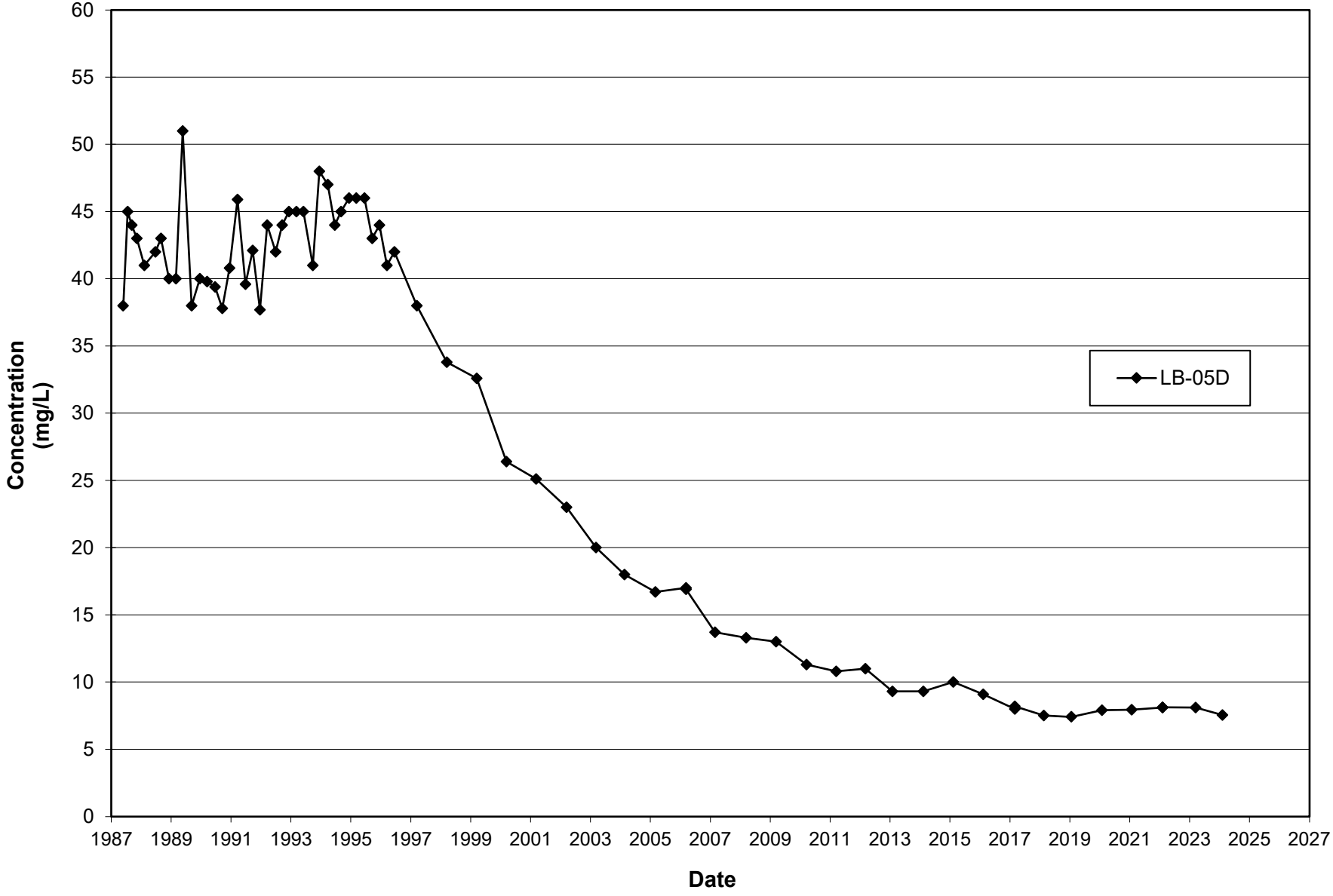
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-05S
1987 - 2024



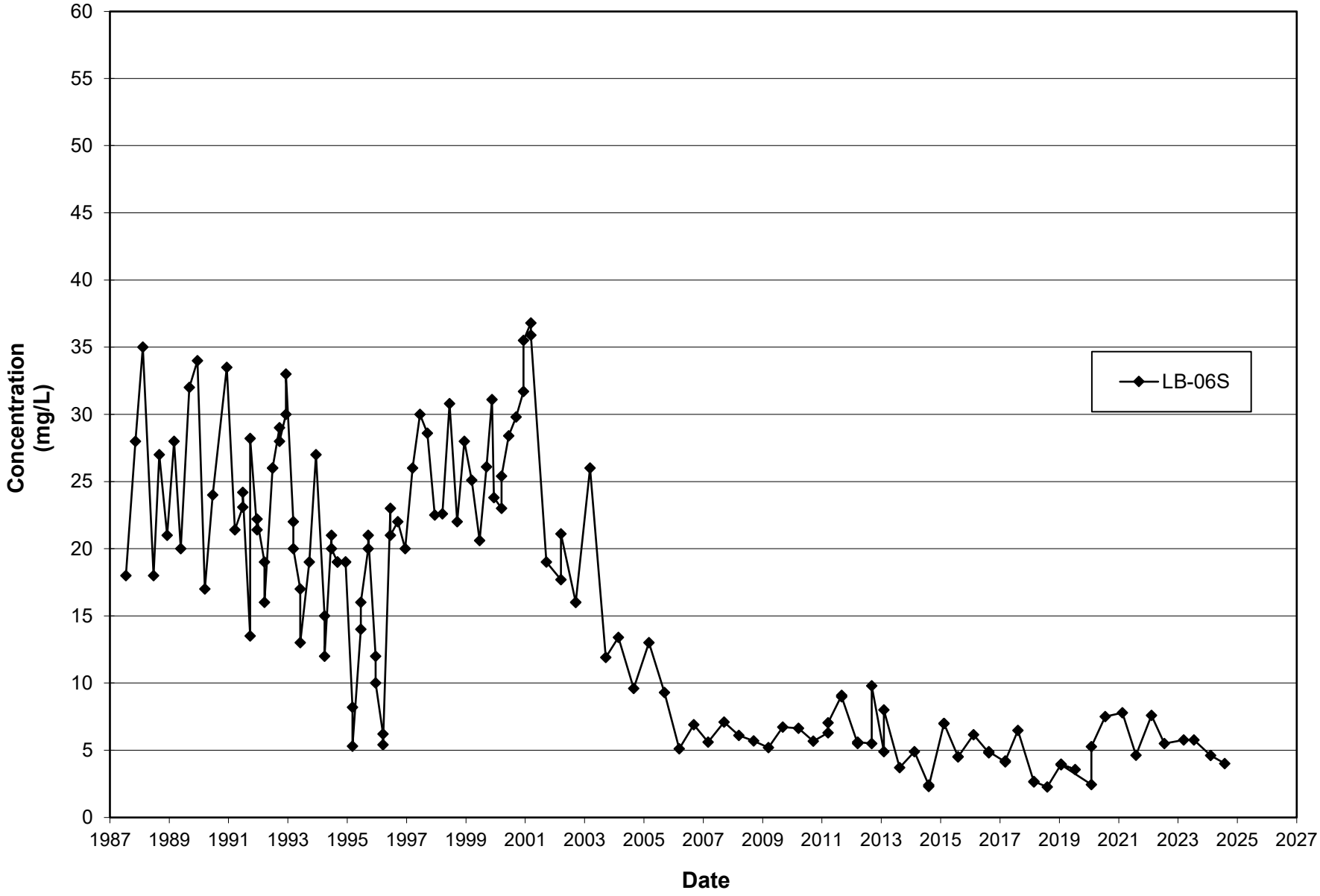
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-05D
1987 - 2024



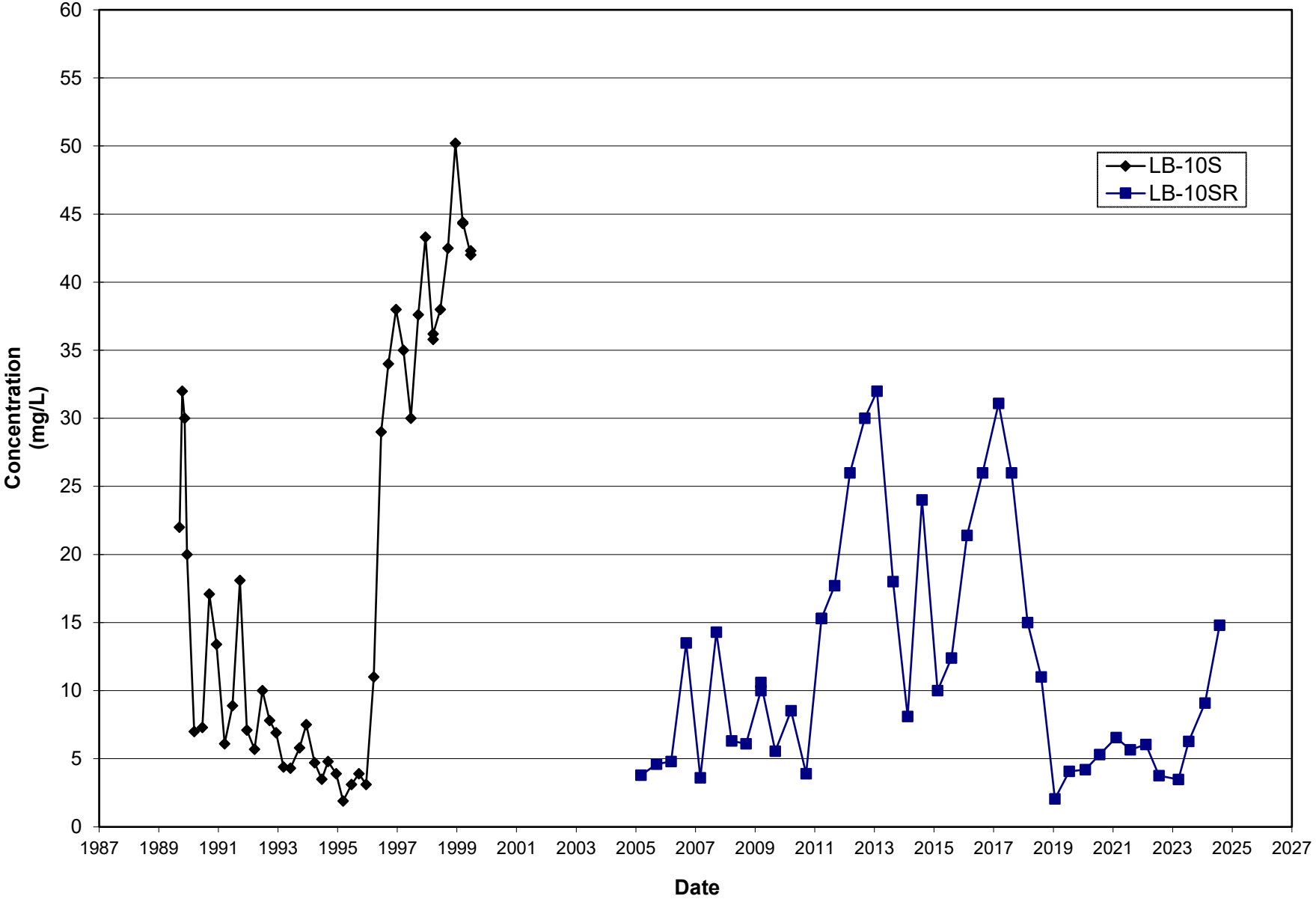
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-06S
1987 - 2024

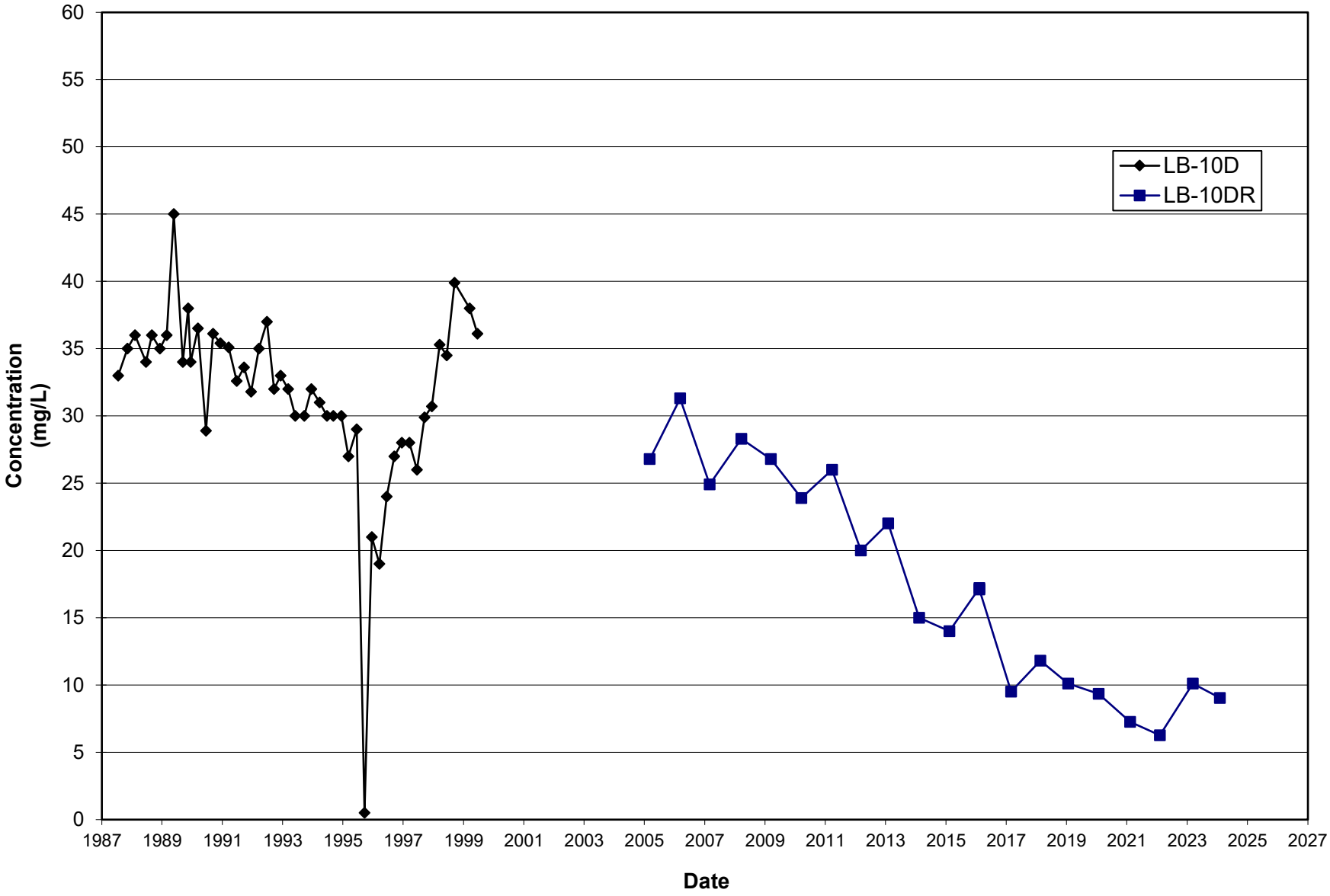


SCS Engineers, 1/29/2025

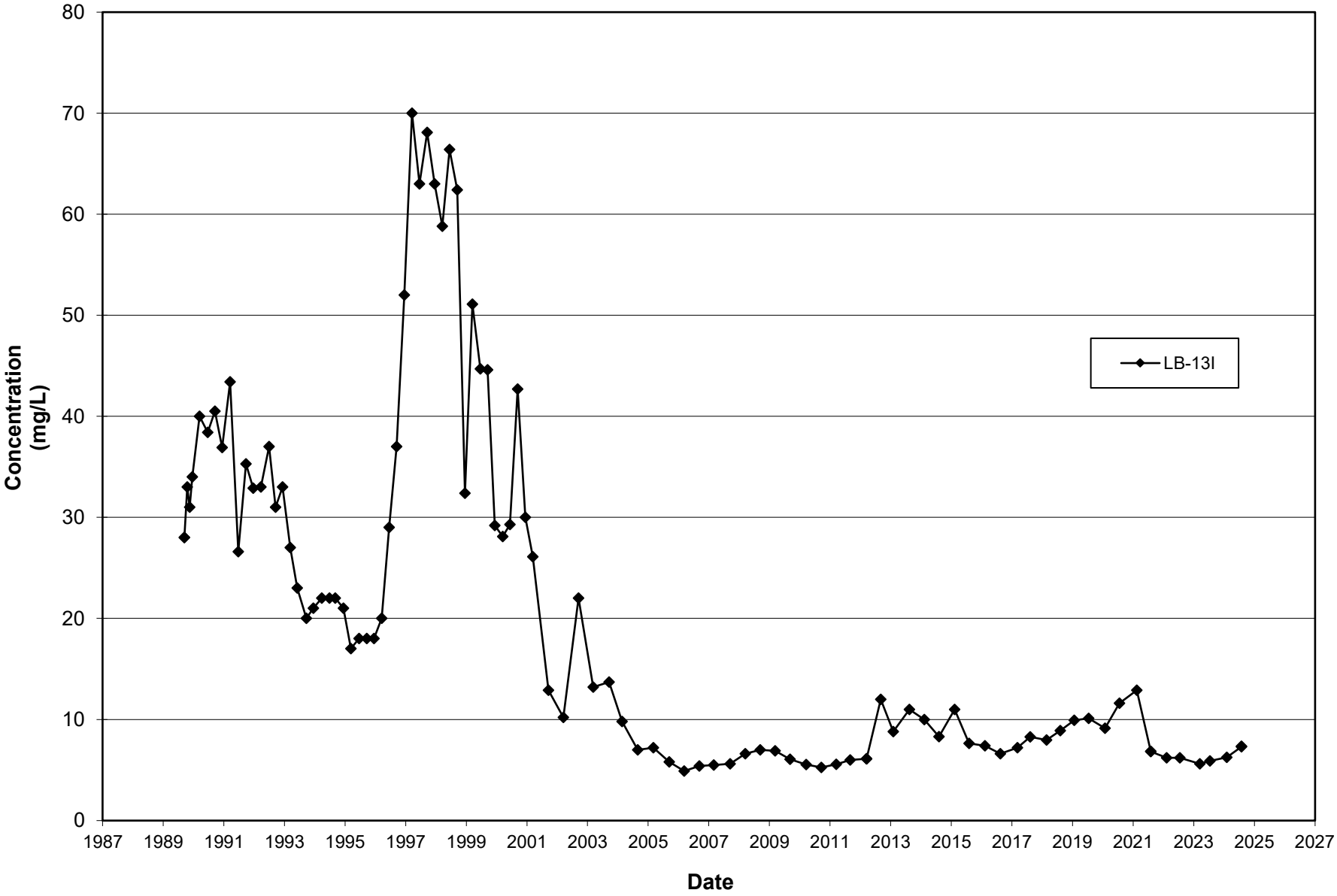
Leichner Landfill
Chloride, LB-10S and LB-10SR
1987 - 2024



Leichner Landfill
Chloride, LB-10D and LB-10DR
1987 - 2024

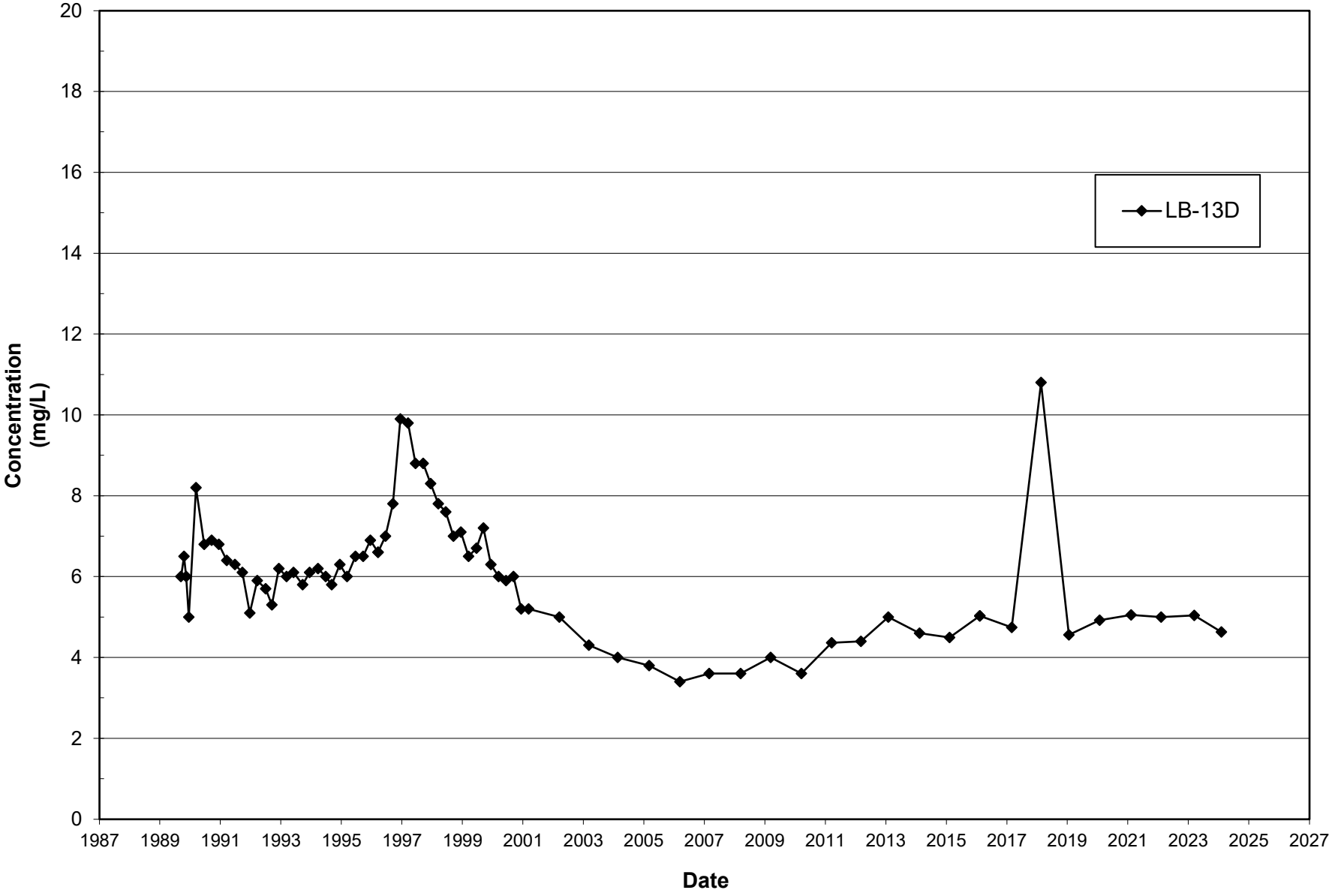


Leichner Landfill
Chloride, LB-13I
1987 - 2024



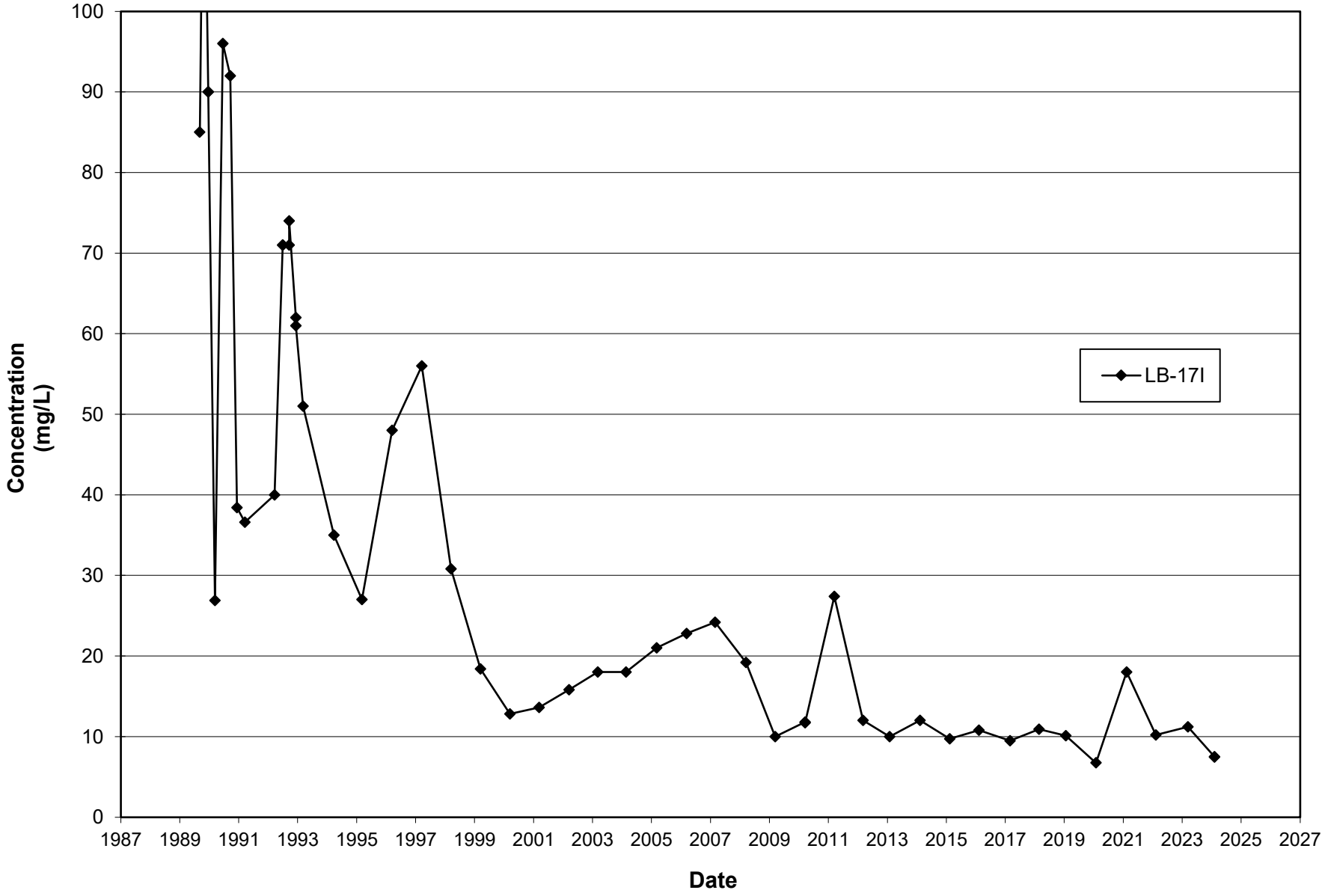
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-13D
1987 - 2024



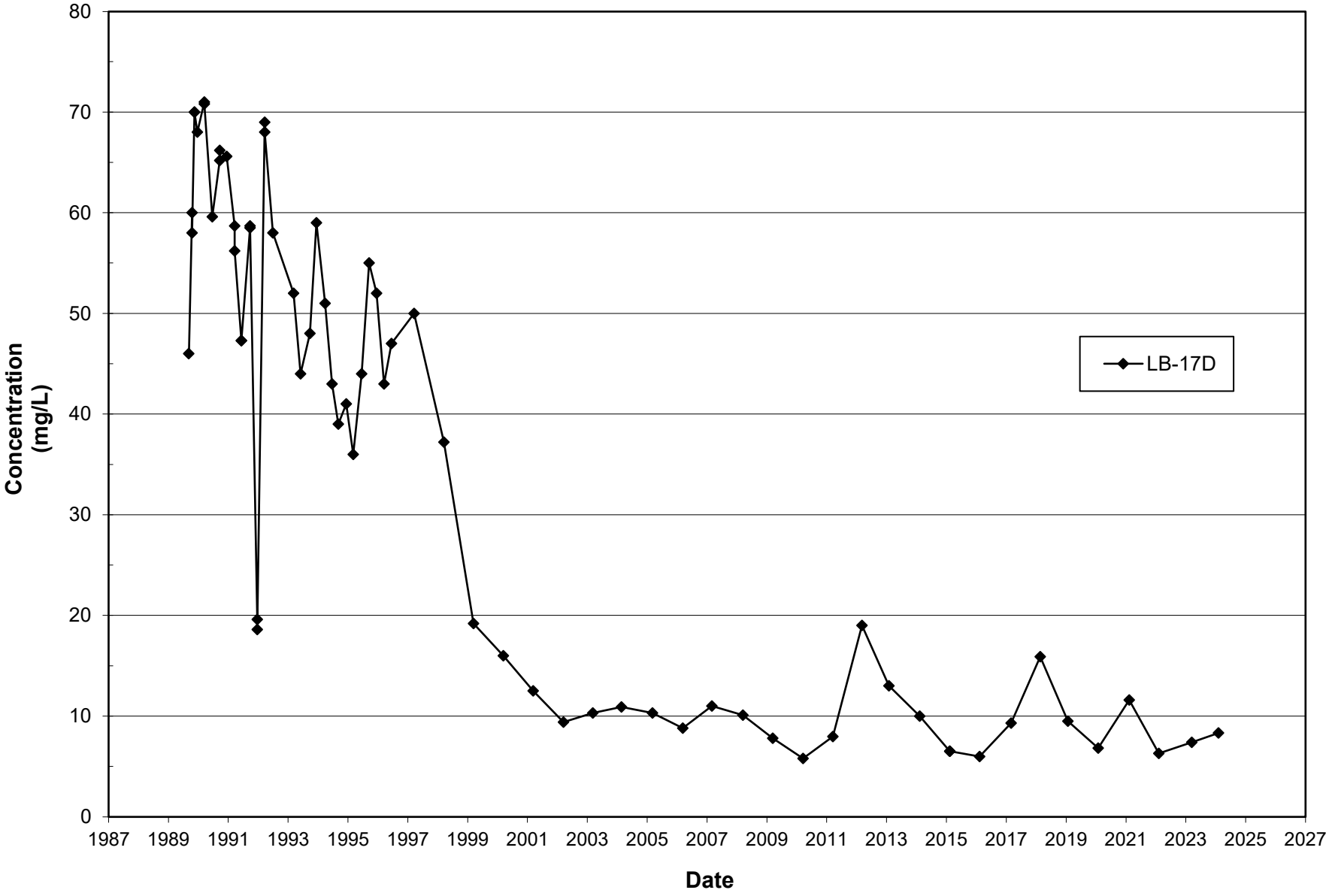
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-17I
1987 - 2024



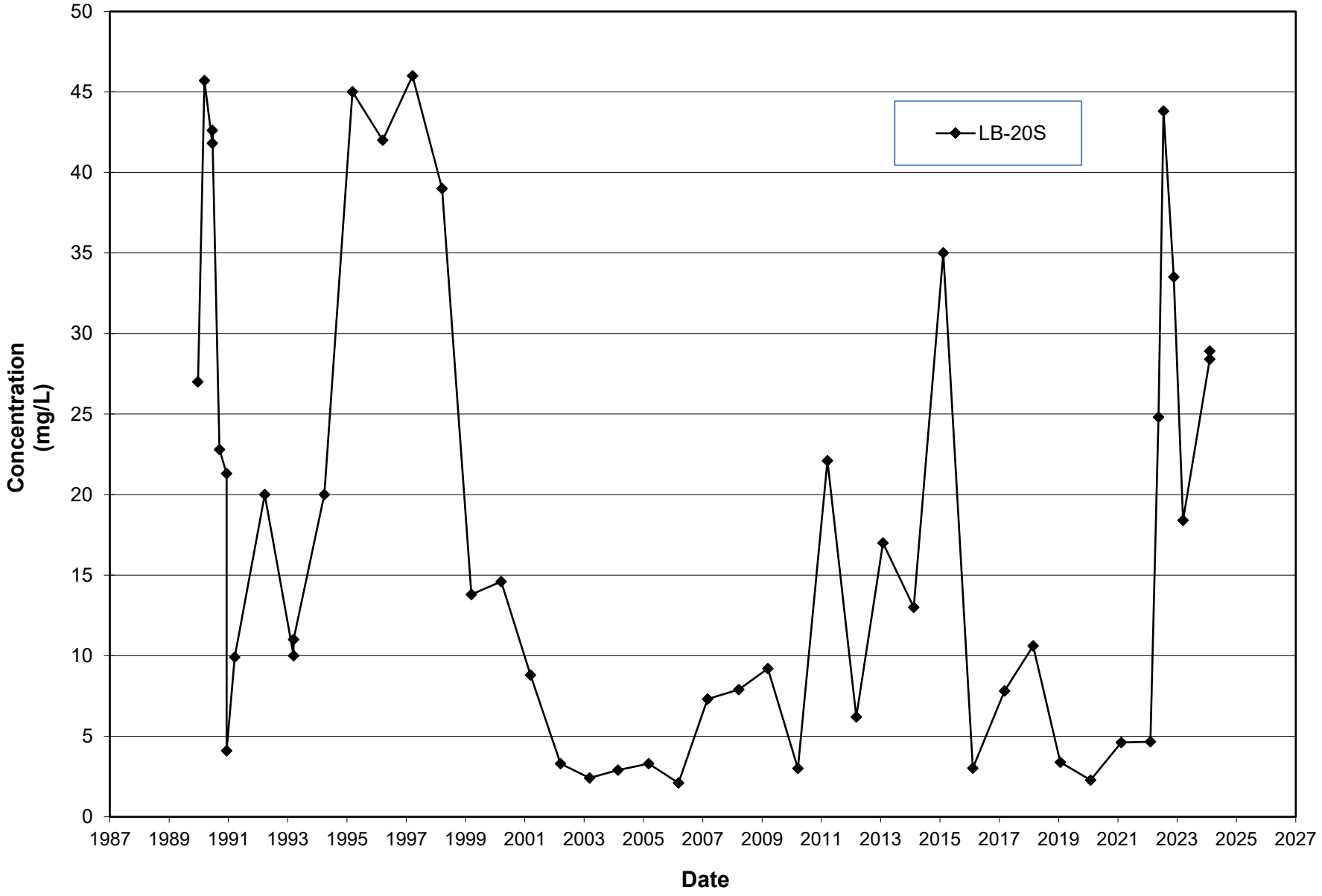
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-17D
1987 - 2024



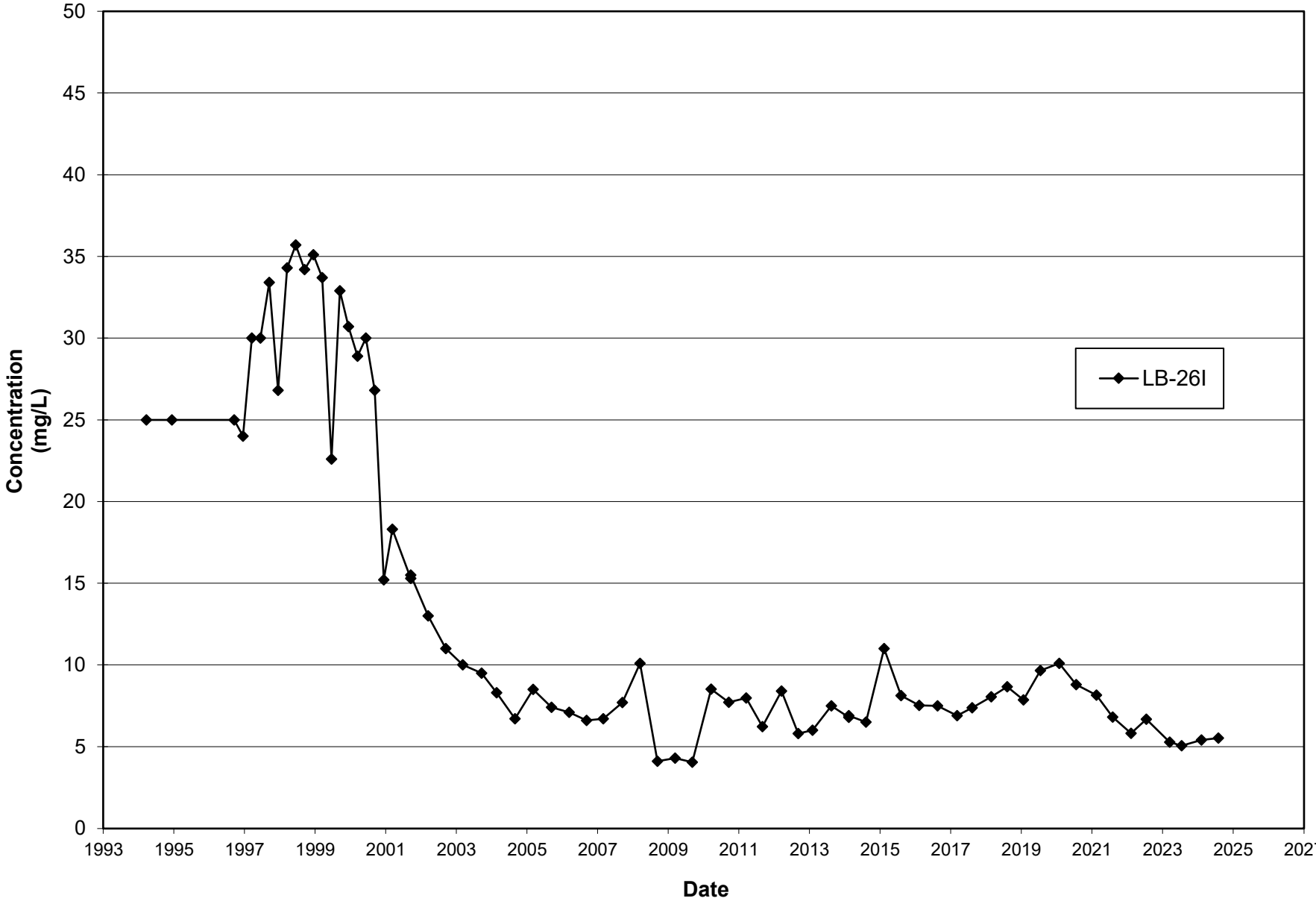
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-20S
1987 - 2024



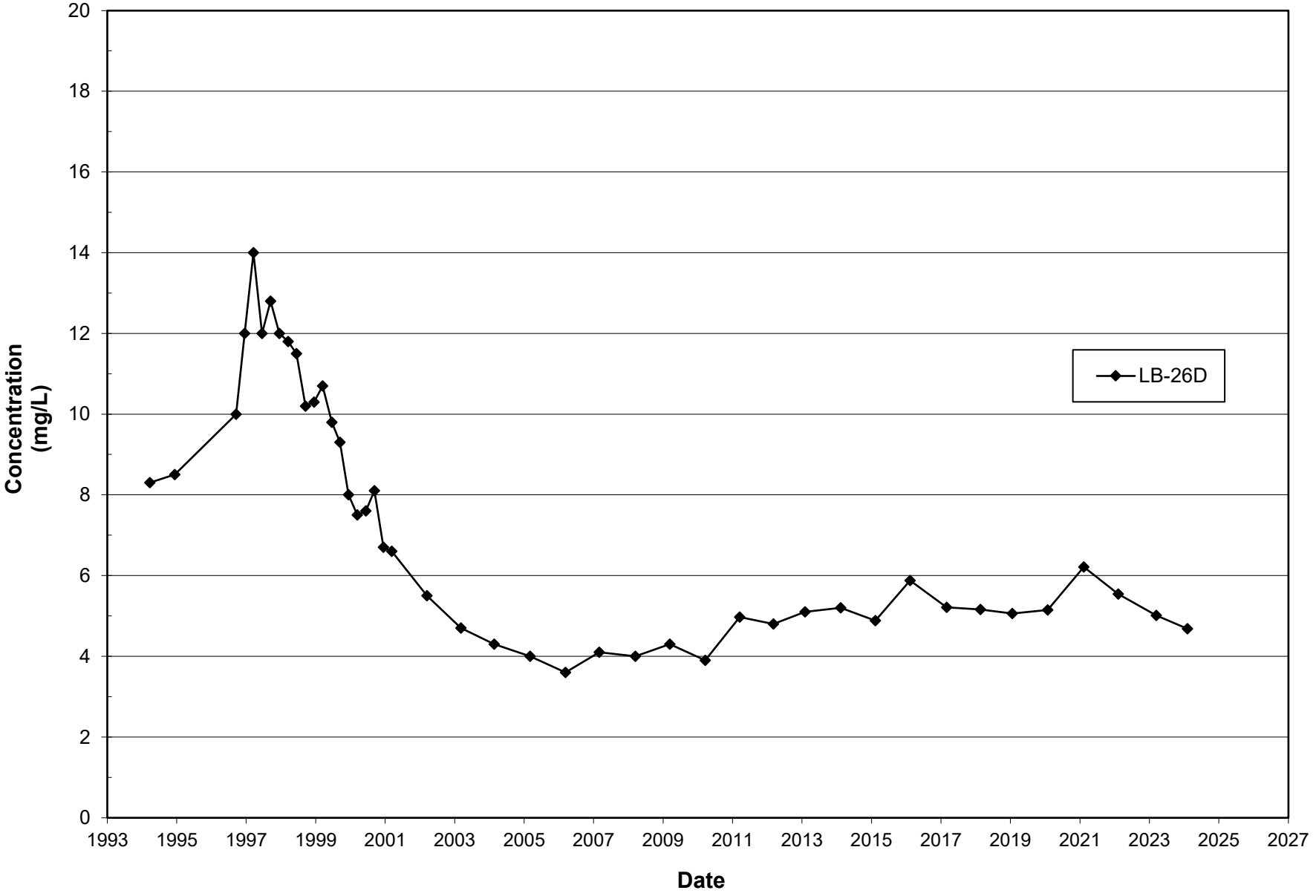
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-26I
1987 - 2024



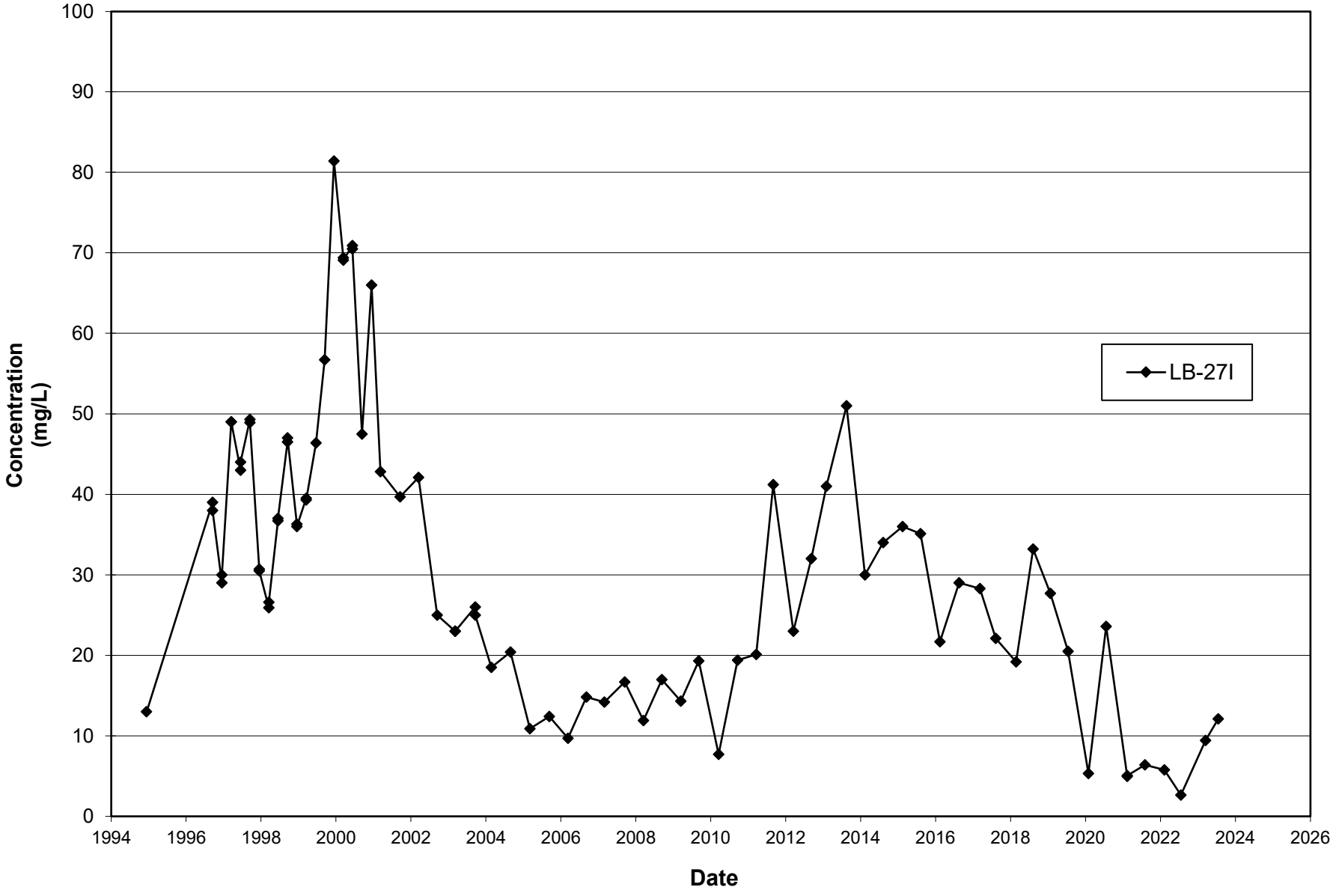
SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-26D
1987 - 2024



SCS Engineers, 1/29/2025

Leichner Landfill
Chloride, LB-27I
1987 - 2024



SCS Engineers, 1/29/2025

APPENDIX G

Summary of 2024 Groundwater Statistical Calculations

Table G-1
Groundwater Statistics - 2020 through 2024 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)	12	12	Lognormal	5.72	6.11	5	5	Non	6.01	M(6.29)
Nitrate (mg/L)	12	12	Non	3.99	M(5.01)	5	5	Non	5.65	M(5.82)
TDS (mg/L)	11	11	Lognormal	187	193	5	5	Non	168.80	M(174)
Metals (mg/L)										
Iron (dissolved)	11	2	NC	NC	NC	5	1	NC	NC	NC
Manganese (dissolved)	11	2	NC	NC	NC	5	2	NC	NC	NC
VOCs (µg/L)										
1,4-Dichlorobenzene	16	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	16	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	16	0	NC	NC	All ND	5	0	NC	NC	All ND

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)	10	10	Lognormal	4.97	5.63	5	5	Non	5.87	M(10.1)
Nitrate (mg/L)	10	10	Non	4.00	M(6.82)	5	5	Non	5.43	M(9.14)
TDS (mg/L)	8	8	Non	160	M(186)	5	5	Non	171.00	M(180)
Metals (mg/L)										
Iron (dissolved)	8	0	NC	NC	All ND	5	1	NC	NC	NC
Manganese (dissolved)	8	0	NC	NC	All ND	5	1	NC	NC	NC
VOCs (µg/L)										
1,4-Dichlorobenzene	13	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	13	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	13	0	NC	NC	All ND	5	0	NC	NC	All ND

Table G-1
Groundwater Statistics - 2020 through 2024 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)	11	11	Lognormal	4.60	5.91	6	6	Non	7.96	M(8.12)
Nitrate (mg/L)	11	11	Normal	4.34	5.14	6	6	Non	1.43	M(1.92)
TDS (mg/L)	10	10	Lognormal	157	171	6	5	Non	210	M(217)
Metals (mg/L)										
Iron (dissolved)	11	2	NC	NC	NC	6	2	NC	NC	NC
Manganese (dissolved)	11	2	NC	NC	NC	6	6	Lognormal	0.003	0.0058
VOCs (µg/L)										
1,4-Dichlorobenzene	11	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	6	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)	11	11	Normal	5.53	6.43	8	8	Normal	19.48	29.37
Nitrate (mg/L)	11	11	Lognormal	2.85	3.71	8	1	NC	NC	NC
TDS (mg/L)	11	11	NON	165	M(187)	7	7	Lognormal	268.43	295.94
Metals (mg/L)										
Iron (dissolved)	11	2	NC	NC	NC	7	5	Non	0.34	M(1.46)
Manganese (dissolved)	11	3	NC	0.001	NC	7	7	Lognormal	0.56	3.58
VOCs (µg/L)										
1,4-Dichlorobenzene	11	0	NC	NC	All ND	8	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	8	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	8	0	NC	NC	All ND

Table G-1
Groundwater Statistics - 2020 through 2024 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)	13	13	Lognormal	6.48	8.29	5	5	Lognormal	8.40	10.49
Nitrate (mg/L)	13	13	Lognormal	5.68	11.73	5	5	Lognormal	2.97	3.66
TDS (mg/L)	13	13	Lognormal	193	223	5	5	Lognormal	211	235
Metals (mg/L)										
Iron (dissolved)	13	6	Non	0.03	M(0.064)	5	3	NC	0.09	NC
Manganese (dissolved)	13	3	NC	0.002	NC	5	3	NC	0.004	NC
VOCs (µg/L)										
1,4-Dichlorobenzene	13	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	13	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	13	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)	12	12	NON	7.68	M(12.9)	5	5	NC	4.93	NC
Nitrate (mg/L)	12	12	NON	4.22	M(5.15)	5	5	Lognormal	4.62	4.86
TDS (mg/L)	12	12	NON	195	M(224)	5	5	Lognormal	171	177
Metals (mg/L)										
Iron (dissolved)	12	4	NC	0.018	NC	5	1	NC	NC	NC
Manganese (dissolved)	12	12	Lognormal	0.003	0.0060	5	0	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

Table G-1
Groundwater Statistics - 2020 through 2024 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	10.19	M(18)	5	5	Lognormal	8.08	10.68
Nitrate (mg/L)	6	0	NC	NC	All ND	5	1	NC	NC	NC
TDS (mg/L)	6	6	Lognormal	227	267	5	5	Lognormal	184	195
Metals (mg/L)										
Iron (dissolved)	6	6	Non	9.95	M(14.5)	5	5	Non	0.199	M(0.32)
Manganese (dissolved)	6	6	Lognormal	2.05	2.56	5	5	Lognormal	3.90	4.13
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

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	6.76	7.90	5	5	Lognormal	5.32	5.95
Nitrate (mg/L)	10	10	Lognormal	4.11	4.32	5	5	Non	4.67	M(5.55)
TDS (mg/L)	10	10	Lognormal	188	194	5	5	Non	179	M(197)
Metals (mg/L)										
Iron (dissolved)	10	2	NC	NC	NC	5	1	NC	NC	NC
Manganese (dissolved)	10	6	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 - 2020 through 2024 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)	12	12	Lognormal	8.77	13.02	6	6	Non	6.87	M(7.48)
Nitrate (mg/L)	12	11	Lognormal	1.91	6.63	6	6	Lognormal	4.14	4.39
TDS (mg/L)	12	12	Lognormal	216	236	6	6	Non	196	M(207)
Metals (mg/L)										
Iron (dissolved)	12	4	Non	0.03	M(0.044)	6	1	NC	NC	NC
Manganese (dissolved)	12	12	Lognormal	0.095	0.306	6	1	NC	NC	NC
VOCs (µg/L)										
1,4-Dichlorobenzene	12	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	12	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	12	0	NC	NC	All ND	6	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.