SCS ENGINEERS







2012 Fourth Quarter and Annual Report

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

Prepared for:

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February 28, 2013
File No. 04213030.06/.18

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A complete copy of this report is provided on the attached CD.

1.0 INTRODUCTION

This 2012 fourth quarter and annual report presents the results of groundwater, stormwater, and landfill gas (LFG) compliance monitoring performed during 2012 at the closed Leichner Brothers Landfill (LBLF) located in Vancouver, Washington (Figure 1-1). The report also summarizes landfill maintenance and repairs activities performed during 2012. SCS Engineers (SCS) performed the monitoring, maintenance, and repair activities and prepared this report on behalf of Clark County Environmental Services (County) and the Leichner Landfill Oversight Committee (LLOC), whose members include the City of Vancouver and Leichner Brothers Land Reclamation Corporation (LBLRC).

Compliance monitoring of groundwater, stormwater (i.e., surface water), and LFG is performed at LBLF to fulfill certain requirements of the 1996 Consent Decree and associated Cleanup Action Plan (CAP), as well as to concurrently fulfill the requirements of LBLF's post-closure monitoring under Minimum Functional Standards (MFS), Chapter 173-304 of the Washington Administrative Code (WAC). Additionally, groundwater compliance standards were established in the CAP. Compliance monitoring methods and procedures were performed in accordance with LBLF's Compliance Monitoring Plan (CMP) (EMCON/OWT, Inc. [EMCON], 2005), and subsequent modifications to the groundwater and LFG monitoring programs approved by the Washington State Department of Ecology (Ecology) and Clark County Public Health (CCPH) in 2011. A complete synopsis of the approved modifications to the LBLF monitoring programs was presented in the 2011 fourth quarter and annual report (SCS, 2012a). A brief summary of the approved modifications to the LBLF monitoring programs includes the following:

- Modifying the schedule for performing LFG compliance monitoring of the perimeter LFG probes from monthly to quarterly, consistent with Ecology's letter to the County dated April 27, 2011 (Ecology, 2011a).

- Requiring only field measurement of specific conductivity (instead of field and laboratory measurement) in groundwater samples collected from the site monitoring wells, consistent with Ecology's approval (Ecology, 2011a).

- Performing laboratory testing for volatile organic compounds (VOCs) vinyl chloride (VC) and 1,1-dichloroethene (1,1-DCE) using a low-level U.S. Environmental Protection Agency (EPA) Method 8260B in order to meet the compliance level of 0.1 micrograms per liter (µg/L) for these two VOCs, consistent with Ecology's letter to the County dated April 27, 2011 (Ecology, 2011a). If after two years of testing (i.e., three additional monitoring events), the results show that VC and 1,1-DCE are not detected above the compliance level of 0.1 µg/L, then the testing for these two VOCs can be discontinued. Use of a low-level EPA Method 8260B analytical method was initiated during the first quarter (March) quarter 2011 groundwater monitoring event.

- Implementing low-flow purge sampling for collecting groundwater samples from the site monitoring wells, consistent with approval from both Ecology and CCPH in email correspondences dated July 19, 2011 (Ecology, 2011b, and CCPH, 2011a).

- Performing stormwater monitoring and reporting, consistent with LBLF's renewed Industrial Stormwater General Permit (General Permit) effective January 1, 2010 and updated stormwater pollution control plan (SWPPP) dated May 2011 prepared by SCS (SCS, 2011b) on behalf of the County.

- Performing greenhouse gas (GHG) monitoring and reporting because the GHG emissions at LBLF exceed the current threshold limit for the State of Washington, as summarized in a GHG applicability report dated June 29, 2011 (SCS, 2011c). Per the County's request, SCS continued routine monitoring of the LFG flare system in 2012 for evaluating the performance and efficiency of the LFG flare and blower.

An additional modification to the LFG compliance monitoring program that was implemented during the second quarter 2012 was the installation of new LFG compliance probe GP-8R on May 25, 2012 to replace former probe GP-8. Probe GP-8 was replaced because it is not located along the site's point of compliance (i.e., the property boundary). Instead, it was located along the western edge of the landfill in Module 2 and was believed to be screened either directly adjacent to or potentially in waste material. A report documenting the LFG monitoring probe replacement activities was submitted to the CCPH and Ecology (SCS, 2012d).

First, second, and third quarter progress reports for 2012 (SCS, 2012c; 2012e; and 2012f, respectively) were previously submitted to Ecology and CCPH. The quarterly progress reports (1) described groundwater, stormwater and LFG compliance monitoring activities, (2) presented field and analytical results of the compliance monitoring activities, if performed, (3) described monitoring and maintenance of the facility's gas collection and control system (GCCS), and (4) described other pertinent, non-routine activities performed during each quarterly monitoring period. The previously submitted 2012 progress reports included groundwater monitoring field sampling data sheets (FSDSs), laboratory analytical reports, and quality assurance/quality control (QA/QC) reviews of laboratory analytical data. Consequently, the previously submitted FSDSs, laboratory reports, and QA/QC reviews are not included with this annual report.[1]

This 2012 fourth quarter and annual report (1) summarizes first, second, and third quarter 2012 compliance monitoring results, (2) presents fourth quarter compliance monitoring data and results, and (3) provides a comprehensive evaluation of 2012 groundwater data, including statistical analyses of the groundwater data.

1.1 SITE DESCRIPTION

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

[1] Groundwater monitoring is not performed during the fourth quarter period at LBLF, consequently, this report does not include groundwater monitoring FSDSs, laboratory reports, or QA/QC reviews.

1.2 HYDROGEOLOGY

The geology beneath the landfill site includes about 70 to 100 feet of alluvium, underlain by the upper member of the Troutdale Formation. The site hydrogeology consists of an approximately 10- to 40-foot thick unsaturated (vadose) zone, and an unconfined alluvial water-bearing zone (WBZ) which ranges in thickness from 35 to 45 feet. The alluvium generally consists of sand, and gravelly to silty sand. Underlying the alluvial WBZ is the upper member of the Troutdale Formation aquifer. The Troutdale Formation aquifer generally consists of sandy to cobbly gravel with minor amounts of silt and clay. The alluvial WBZ and Troutdale Formation aquifer are separated by a silt aquitard (sandy silt and clayey silt) east and south of the landfill. Southwest of the landfill, the silt aquitard is absent and the two aquifers are locally in hydraulic communication. The Troutdale Formation aquifer and overlying aquitard have not been evaluated in the northern and western portions of the site.

1.3 REPORT ORGANIZATION

The remainder of this report is organized as follows:

- Section 2.0 summarizes 2012 compliance groundwater monitoring activities and results.
- Section 3.0 summarizes 2012 compliance stormwater monitoring activities and results.
- Section 4.0 summarizes 2012 compliance LFG probe monitoring activities and results.
- Section 5.0 summarizes maintenance and repair activities performed during 2012.

Supporting documentation is attached in the following:

- Appendix A: 2012 groundwater elevation data and groundwater elevation hydrographs.
- Appendix B: 2012 and historical groundwater analytical data summary tables.
- Appendix C: Summary of 2012 groundwater statistical calculations.
- Appendix D: Time-concentration diagrams for inorganic parameters and dissolved metal in groundwater collected from site monitoring wells.
- Appendix E: 2012 landfill gas monitoring probe data.

A complete copy of this report is provided on the CD attached to the report back cover page.

2.0 GROUNDWATER MONITORING

2.1 GROUNDWATER MONITORING NETWORK AND SCHEDULE

The groundwater monitoring network consists of 20 monitoring wells screened in the alluvial WBZ or the Troutdale Formation aquifer. The monitoring well locations are shown in Figure 2-1. The following describes the monitoring network components.

- Wells 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 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 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 site groundwater monitoring wells are sampled annually or semiannually in accordance with the schedule specified in the 2005 CMP (EMCON, 2005). Groundwater samples collected during the annual monitoring event in March 2012 included the following 20 monitoring wells: LB-1S, LB-1D, LB-3S, LB-3D, LB-4SR, LB-4D, LB-5S, LB-5D, LB-6S, LB-10SR, LB-10DR, LB-13I, LB-13D, LB-17I, LB-17D, LB-20S, LB-26I, LB-26D, LB-27I, and LB-27D. Groundwater samples collected during the semiannual monitoring event in September 2012 included the following seven monitoring wells: LB-1S, LB-5S, LB-6S, LB-10SR, LB-13I, LB-26I, and LB-27I.

The first quarter (March) and third quarter (September) 2012 groundwater monitoring activities were performed in accordance with the procedures and methods described in the April 2005 CMP (EMCON, 2005), and with the modifications approved by Ecology and CCHD, as described in Section 1. These modifications included using low-flow purge sampling for collecting groundwater samples from the site monitoring wells during the first and third quarter events in accordance with the methods described in SCS's letter dated July 14, 2011 (SCS, 2011d). Field water quality parameters (temperature, pH, specific conductance, dissolved oxygen) were monitored and recorded on FSDSs[2] during groundwater sampling; field parameter monitoring results are provided in Appendix B (see Table B-1).

Groundwater samples collected from the site monitoring wells in 2012 were analyzed for the following inorganic parameters and dissolved metals in accordance with the approved compliance monitoring program: nitrate as nitrogen (nitrate), total dissolved solids (TDS), chloride (Cl), dissolved iron (Fe), and dissolved manganese (Mn). The 2012 groundwater samples were also analyzed for VOCs using a low-level procedure for EPA Method 8260B to achieve MRLs that meet the compliance level of 0.1 µg/L for VC and 1,1-DCE. TestAmerica Laboratories, Inc., (TAL) in

[2] FSDSs were previously submitted in the first and third quarter 2012 progress reports (SCS, 2012b; 2012e), and consequently are not included in this annual report.

Beaverton, Oregon, analyzed the groundwater samples collected from the site monitoring wells in 2012.

2.2 RESURVEYING OF REFERENCE ELEVATIONS FOR SITE MONITORING WELLS

As reported in the 2011 annual report (SCS, 2012a) and the first quarter 2012 progress report (SCS, 2012c), there was a discrepancy between the monitoring well top-of-casing (TOC) reference elevations provided in the event-specific groundwater elevation tables historically presented in the first and third quarter monitoring reports for LBLF and in the historical summary table included in the annual reports. The difference in reference elevations did not affect the overall interpretation of groundwater flow as presented in previous reports. Consistent with the recommendation in the 2011 annual report (SCS 2012a), TOC reference elevations were resurveyed in May 2012 so that consistent survey data could be used for data interpretation and future reporting. The surveying was performed by a state of Washington registered land surveyor (from Olsen Engineering) and the elevations were referenced to the Clark County vertical datum. The resurveyed reference elevations are provided in Table 2-1 and were used to calculate groundwater elevations based on first and third quarter 2012 groundwater levels measured in the site monitoring wells on March 12 and September 10, 2012, respectively.

2.3 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

Static groundwater levels measured on March 12 and September 10, 2012, were converted to groundwater elevations and are presented in Appendix A. Groundwater potentiometric surface contours depicting horizontal groundwater flow in the alluvial WBZ and the Troutdale Formation aquifer were interpreted using groundwater level data collected in March and September 2012 (see Figures 2-2 through 2-5). Groundwater flow in the alluvial WBZ was generally towards the west to southwest (see 2-2 and 2-4). Groundwater flow in the Troutdale Formation aquifer was generally towards the south to southeast (see Figures 2-3 and 2-5). The 2012 groundwater flow directions are consistent with historical interpretations of groundwater flow conditions at LBLF.

Groundwater elevation hydrographs are provided in Appendix A. The 2012 groundwater elevation data is generally within the range of elevations measured since 2001 and before 1996, and continued to show minor seasonal variations in some site wells. Between 1996 and 1999, water levels measured in the site monitoring wells screened in both the alluvial WBZ and Troutdale Formation aquifer were significantly higher, likely in response to increased precipitation during this period.

Differences in groundwater elevations in adjacent well pairs screened in the upper-most alluvial WBZ and Troutdale Formation aquifer appear to be influenced by the presence of the silt aquitard (sandy silt and clayey silt). Where the silt aquitard is present east and south of the landfill, groundwater elevations are about 20 to 30 feet higher in the alluvial WBZ (e.g., at wells LB-4 and LB-5) indicating hydraulic separation exists between the two groundwater zones. Monitoring well pairs located southwest of the landfill (i.e., at wells LB-1, LB-13 and LB-26), where the silt aquitard is absent, exhibited much smaller differences in groundwater elevations (about 3 feet or less) indicating that some degree of hydraulic connection between the two groundwater zones may exist.

2.4 GROUNDWATER QUALITY RESULTS

2.4.1 Data Quality Review

Groundwater monitoring field QA/QC procedures included collecting field duplicate samples, field blanks, equipment blanks, and carrying trip blanks into the field. Laboratory QA/QC procedures included analyzing surrogate spikes, method blanks, matrix spikes, and matrix spike duplicates. The laboratory QA/QC results are included with the laboratory reports. TAL incorporated its laboratory data quality review comments in the QA/QC narrative of each laboratory report (previously submitted in the first and third quarter 2012 progress reports (SCS, 2012c, 2012f).

Field and laboratory data and QA/QC procedures were reviewed by SCS to evaluate whether the data met EPA quality control requirements. The results of QA/QC reviews of the laboratory results were previously provided in the first and third quarter 2012 progress reports (SCS, 2012c, 2012f). The QA/QC reviews indicated that the groundwater analytical data were acceptable for their intended use.

2.4.2 Volatile Organic Compounds

A summary table of historical VOC analytical results for groundwater samples collected from the site monitoring wells, including samples collected in 2012, is provided in Appendix B (see Table B-2). As previously mentioned, VOCs were analyzed in groundwater samples collected in 2012 using a low-level procedure for EPA Method 8260B so that the MRL could meet the compliance level of 0.1 µg/L specifically for VC and 1,1-DCE. The MRLs reported by TAL were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE. VOCs detected in the first quarter (March) 2012 groundwater samples included the following, as previously reported in the first quarter 2012 progress report (SCS, 2012c):

- 1,1-dichloroethane (1,1-DCA) detected slightly above the MRL of 0.1 µg/L at a concentration of 0.12 µg/L in the sample from well LB-10DR.
- 1,4-dichlorobenzene (1,4-DCB) detected at concentration of 0.20 µg/L (equivalent to the MRL) in the sample from well LB-20S.
- Chloroform, a common laboratory contaminant, was detected at a concentration of 0.34 µg/L in the equipment blank sample collected on March 12, 2012.

VOCs detected in the second quarter (September) 2012 groundwater samples included, as previously reported in the third quarter 2012 progress report (SCS, 2012f):

- Carbon tetrachloride detected at a concentration of 0.23 µg/L in the sample collected from well LB-26I.
- Acetone, a common laboratory contaminant, was detected at a concentration of 3.6 µg/L in the equipment blank sample collected on September 11, 2012.

The VOC concentrations in the 2012 groundwater samples are considered to be very low and are significantly below regulatory compliance or screening levels. Of the five VOCs for which compliance levels were established in the CAP (i.e., 1,4-DCB, 1,1-DCE, tetrachloroethene [PCE], trichloroethene [TCE], and VC), only 1,4-DCB was detected at or above their MRLs. The 1,4-DCB concentration of 0.2 µg/L in the sample collected from well LB-20S in March 2012 is substantially below the compliance level of 1.8 µg/L.

The concentrations of other detected VOCs in groundwater samples collected in 2012 (noted below) were also below available regulatory screening levels.

- The concentration of 1,1-DCA (0.12 µg/L) in March 2012 LB-10DR groundwater was below the (1) the Washington State groundwater quality criteria of 1.0 µg/L specified in WAC 173-200 and (2) the EPA Region 9 regional screening level of 2.4 µg/L for the ingestion exposure pathway, recently updated in April 2012.

- The concentration of carbon tetrachloride (0.23 µg/L) in September 2012 LB-26I groundwater was below (1) the Washington State groundwater quality criteria of 0.3 µg/L specified in WAC 173-200 and (2) federal maximum contaminant level of 5.0 µg/L.

The chloroform and acetone detected in the field QC equipment blank samples collected in March and September 2012, respectively, were not detected in any of groundwater samples collected in 2012. The low-level chloroform and acetone detections in the equipment blank samples are likely related to either unconfirmed laboratory contamination or inadvertent contamination from the field equipment (i.e., the non-dedicated bladder pump).

2.4.3 Inorganic Parameters and Dissolved Metals

A summary table of historical analytical results for the inorganic parameters (nitrate, Cl, and TDS) and dissolved metals (Mn and Fe) that comprise the current groundwater analytical program is provided in Appendix B (see Table B-3). Results of statistical analysis of laboratory data for these inorganic parameters and dissolved metals in groundwater samples collected from the site monitoring wells (including background [upgradient] monitoring wells LB-4SR and LB-4D) using the statistical methodology described below, is presented in Appendix C. Time-concentration diagrams for these parameters are provided in Appendix D.

In general, the 2012 groundwater analytical results for inorganic parameters and dissolved metals were consistent with historical data, as discussed in the sections below.

2.4.3.1 *Statistical Method for Evaluating Groundwater Analytical Data*

Statistical method used to analyze the LBLF groundwater quality data considered analyte concentrations from 2008 through 2012 to determine if the data showed 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 using the MTCA Stat 97 program[3]. For distributions that were non-parametric (i.e., data not distributed normally or lognormally), data

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

values were ranked and an estimate of the UCL-95 was determined using the Van der Parren method, as described in Statistical Guidance for Ecology Site Managers (Ecology, 1992). For non-parametric data, the Van der Parren method defaults to the highest reported value.

The MTCA Stat97 program utilizes the Land Method for calculating the UCL-95 of the mean for lognormally distributed data. The Land Method is known to be sensitive to deviations from lognormality. The formula may commonly yield estimated UCL-95 values substantially larger than anticipated when distributions are not truly lognormal, if variance or skewness is large (EPA, 2002). When sample sizes are small and the variance is large, the method can be impractical. This resulted in UCL-95 values that exceeded the range of concentrations for the following inorganic parameters and monitoring wells:

- Cl data for wells LB-17D and LB-20S.
- Fe data for well LB-20S.
- Mn data for wells LB-10DR and LB-17I.
- TDS data for wells LB-13D and LB-26D.

In these cases, the highest reported values from the last 5 monitoring years were selected (see Table 2-2). 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. Calculated UCL-95 values exceeded compliance levels in some monitoring wells for dissolved Fe and Mn, as discussed below.

2.4.3.2 *Dissolved Fe and Mn*

The UCL-95 values for dissolved Fe and/or Mn exceeded their respective compliance levels (0.3 and 0.05 mg/L, respectively) in groundwater samples collected from the following monitoring wells: LB-1S, LB-5S, LB-6S, LB-10SR, LB-10DR, LB-17I, LB-17D, LB-20S, LB-27I, and LB-27D (see Table 2-2). These UCL-95 exceedances are generally consistent with historical evaluations. Historical data indicate that Fe and Mn concentrations exhibit natural variability and fluctuate above and below the compliance levels at several well locations, including upgradient well LB-4SR and cross-gradient wells LB-3S and LB-5S. This suggests that dissolved Fe and Mn concentrations in some of the monitoring wells with UCL-95 values above compliance levels may be attributed to natural variations in groundwater chemistry, particularly for those wells located offsite (i.e., LB-10SR and LB-10DR) or near the LBLF property boundary (i.e., LB-1S, LB-5S, LB-6S, and LB-27I). It should be noted that the Fe and Mn concentrations detected in groundwater samples collected from these wells in 2012 did not exceed their respective compliance levels (see Appendix B, Table B-3), except for Mn in groundwater collected from well LB-27I (consistent with historical data).

Historical groundwater data (see Appendix B, Table B-3) indicates that Fe and/or Mn concentrations in groundwater from wells located downgradient and in close proximity to the landfill (i.e., LB-17I, LB-17D, and LB-20S) have exceeded the compliance levels in 2012 and within the last 5 years. However, exceedances of the compliance levels for Fe and/or Mn in groundwater collected from

these wells may be reflective, in part, of natural groundwater chemistry, as previously reported to Ecology, based on the following:

- Historical Fe and Mn concentrations in upgradient monitoring well LB-4SR and cross-gradient wells LB-3S, LB-5S, and LB-10SR screened in the shallow alluvium WBZ have shown sporadic exceedances above the compliance levels.

- Concentrations of Fe in groundwater from well LB-20S in 2012 were below the compliance level, and over the last 5 years have fluctuated above and below the compliance level. Generally, the Fe concentrations in groundwater collected from LB-20S have been below the compliance level of 0.3 mg/L since 2006.

As noted by SCS in our review comments (SCS, 2011a) of the December 2010 Draft Periodic Review document (Ecology, 2010), a more comprehensive evaluation of groundwater chemistry at and in the vicinity of LBLF is likely needed to assess whether observed Fe and Mn concentrations are related, in part, to naturally occurring groundwater conditions that reflect spatial variability in groundwater chemistry.

2.4.3.3 *Groundwater Concentration Trends*

In addition to the statistical evaluation, time-series concentration plots were generated for each of the inorganic parameters tested (see Appendix D)[4]. The time-concentration plots were evaluated visually to assess whether parameter concentrations have increased, decreased or remained stable. Inorganic parameter concentrations in groundwater collected from alluvial WBZ wells and Troutdale Formation wells show either stable or decreasing trends with the exception of nitrate in wells LB-4D and LB-27D and Cl in well LB-10SR which show recent increases in concentrations.

It is noteworthy that Cl, TDS, Fe, and Mn in groundwater collected from wells located downgradient and in close proximity to the landfill (i.e., LB-17I, LB-17D, and LB-20S) exhibit pronounced decreasing concentration trends starting around 1996 (see time-concentration plots in Appendix C) when institutional controls, including capping the landfill surface and stormwater control and collection, were implemented to mitigate leachate generation. The concentrations of these inorganic parameters in groundwater collected from these wells have remained relatively constant since about 2000.

[4] Time concentration plots for the LB-10 series wells (LB-10S and LB-10D) are included until 1999. These wells were not sampled after 1999 because the owner did not grant access. LB-10S and LB-10D were decommissioned in October 2004 and replaced by wells LB-10SR and LB-10DR, respectively.

2.5 EVALUATION OF GROUNDWATER QUALITY RESULTS

Laboratory analytical results of groundwater samples collected from site monitoring wells in 2012 indicate that groundwater quality is not being affected by the closed landfill as evidenced by the following:

- Analysis of VOC using a low-level procedure for EPA Method 8260B detected only five VOCs at very low concentrations substantially below their compliance levels in groundwater collected from several monitoring wells. VC and 1,1-DCE were not detected at concentrations above their compliance level of 0.1 µg/L using this low-level Method 8260B.

- The concentrations of most inorganic indicator parameters in groundwater samples collected from monitoring wells located downgradient of the former waste cells have either remained generally stable or show decreasing trends.

Pronounced decreases in the concentrations of Cl, TDS, Fe, and Mn in groundwater collected from wells located downgradient and in close proximity to the landfill (i.e., LB-17I, LB-17D, and LB-20S) starting in 1996 indicate that institutional controls, including capping the landfill surface and stormwater control and collection, implemented in the mid-1990s have been effective at mitigating leachate generation and improving groundwater quality.

2.6 MODIFICATIONS TO GROUNDWATER MONITORING PROGRAM

In the third quarter 2012 report,(SCS, 2012f), SCS recommended modifying the groundwater analytical testing program based on VOC testing results over the last two years. Consistent with Ecology's request, groundwater samples were analyzed for VOCs over the last 2 years (initiated March 2011) using a low-level procedure for EPA Method 8260B to meet the compliance level of 0.1 micrograms per liter (µg/L) for VC and 1,1-DCE, as requested by Ecology. The MRLs reported by TAL were 0.02 µg/L for VC and 0.1 µg/L for 1,1-DCE. Analytical data showed that concentrations of these two VOCs did not exceed their respective compliance levels. Consistent with Ecology's letter dated April 27, 2011 (Ecology, 2011a), SCS recommended discontinuing testing of these two VOCs. Analytical testing by the standard EPA Method 8260B for the other required VOCs will be performed consistent with the requirements in the 2005 CAP and Consent Decree.

The County formally requested approval of these modifications to the groundwater analytical program in a letter dated February 5, 2013 (Clark County, 2013). Ecology approved the modifications in an email correspondence to the County dated February 12, 2013 (Ecology, 2013). The approved modifications to the groundwater VOC analytical program will be implemented beginning with the first semiannual monitoring event to be performed in 2013.

3.0 STORMWATER MONITORING

In 2009, Ecology issued a renewed General Permit effective January 1, 2010, for industrial facilities. The General Permit (No. WAR005572B) allows LBLF to discharge stormwater from the facility to nearby Curtin Creek. In accordance with the General Permit, SCS (on behalf of the County) prepared an updated SWPPP (SCS, 2011b).

3.1 STORMWATER MONITORING NETWORK AND SCHEDULE

3.1.1 Quarterly Stormwater Monitoring Station

One stormwater discharge location has been identified for the LBLF and is designated as Outfall 1. Outfall 1 is located at the pump station at the northern end of the North Detention Pond (see Figure 3-1). Outfall 1 receives stormwater runoff from the landfill surface area. Stormwater samples were collected at Outfall 1 during 2012 the first, second, and fourth 2012 in accordance with the methods and schedule described in the General Permit and SWPPP (SCS, 2011b). It should be noted that no stormwater discharge was observed at Outfall 1 during the third quarter (July 1 through September 30) 2012. Consequently, a stormwater discharge sample could not be collected at Outfall 1 during the third quarter 2012, as allowed by the General Permit and SWPPP. The quarterly samples were collected on March 29, May 22, and October 22, 2012. Due to a TAL error, General Permit-parameter alpha-terpineol was not analyzed in the Outfall 1 sample collected on October 22, 2012. Consequently, a second stormwater discharge sample was collected for alpha-terpineol analysis during the fourth quarter (October 1 through December 31) 2012 on November 21, 2012.

The quarterly stormwater samples were analyzed by TAL for the General Permit-required parameters including turbidity, pH, total copper and zinc, biological oxygen demand, TDS, ammonia as nitrogen, and select semi-volatile organic compounds (alpha-terpineol, benzoic acid, p-cresol, and phenol).

3.1.2 Monthly Visual Inspection

SCS performed monthly visual inspections in 2012 during a storm event when site conditions could result in stormwater being potentially discharged at Outfall 1. The inspections included an examination of stormwater discharge at Outfall 1 (if observed), the stormwater conveyance system (drainage ditches and culverts), and areas with storage of materials. Observations were documented on a SWPPP monthly inspection form.

Stormwater discharge at the North Detention Pond pumps (i.e., Outfall 1) are water-level float activated or can be manually activated at the pump control box. If the Outfall 1 pumps are not activated by the water-level in the north detention basin during a monthly inspection, then SCS would manually turn on the pumps to create discharge at the facility. This procedure occurred in 2012 except during the third quarter (July 1 through September 30) 2012 when the water-level in the North Detention Pond was extremely low due to no storm events during the monitoring period. Because of the low water-level in the North Detention Pond and dry summer season, the Outfall 1 pumps were not water-level float activated nor manually turned on to create stormwater discharge from the facility during the third quarter 2012. Consequently, stormwater discharge was not

observed during the monthly inspections performed during third quarter (July 1 through September 30) 2012 monitoring period.

3.1.3 Stormwater Monitoring Results

Stormwater discharge monitoring reports (DMRs) describing the results of stormwater analytical results obtained in 2012 were previously submitted to Ecology on a quarterly basis in accordance with the 2009 General Permit, using the Ecology WebDMR submittal system. The first, second, and third quarter stormwater monitoring results were also summarized in the first, second, and third quarter progress reports (SCS, 2012c; 2012d; and 2012e, respectively) previously submitted to Ecology and CCPH. The fourth quarter 2012 DMR was submitted to Ecology electronically on December 17, 2012, using the Ecology WebDMR submittal system.

The analytical results of stormwater samples collected in 2012 indicated that stormwater quality benchmark concentrations specified in the General Permit were not exceeded.

4.0 LANDFILL GAS MONITORING

LFG monitoring at LBLF is performed to (1) fulfill compliance monitoring requirements for LFG monitoring probes, (2) evaluate and adjust (i.e., balance) the LFG extraction well network, and (3) assess the performance and efficiency of the LFG flare and blower.

4.1 COMPLIANCE LFG MONITORING PROBE NETWORK AND SCHEDULE

A GCCS was initially installed at the LBLF in 1978 in response to offsite migration of LFG. The system has been modified several times over the years, including installation of a single, smaller enclosed flare station in 2007 due to decreasing methane production. The current GCCS includes a LFG extraction well field with over 90 gas extraction wells, a condensate collection system, and a LFG blower and flare station. Additionally, there are 50 compliance LFG monitoring probes. The GCCS components and monitoring probes are show in Figure 4-1.

The compliance LFG monitoring probes are 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. 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.

As previously reported in the second quarter 2012 progress report (SCS, 2012e), the second quarter 2012 compliance LFG monitoring event included monitoring of new LFG monitoring probe GP-8R that was installed on May 25, 2012. LFG monitoring probe GP-8R was installed as a replacement for former probe GP-8 that was decommissioned on the same day. The LFG monitoring probe replacement activities were performed in accordance with a work plan (SCS, 2011e) submitted to and approved by CCPH (CCPH, 2011b). Former LFG monitoring probe GP-8 was replaced because it was installed either directly adjacent to or potentially in waste material, which resulted in methane levels that were periodically above the MFS compliance level. Replacement probe GP-8R was installed along the point of compliance (i.e., the property boundary) (see Figure 4-1). A report of the LFG monitoring probe replacement activities was submitted to the CCPH and Ecology (SCS, 2012d).

The compliance LFG monitoring was performed quarterly (modified from a monthly schedule), as approved by Ecology (Ecology, 2011a). Quarterly compliance monitoring of the LFG monitoring probes was performed on the following dates:

- First quarter 2012 completed on January 9, 2012.
- Second quarter 2012 completed on June 11, 2012.
- Third quarter 2012 completed on July 31 and August 1, 2012.
- Fourth quarter 2012 completed on October 19, 2012.

4.2 COMPLIANCE LFG MONITORING RESULTS

LFG monitoring probe data for 2012, including fourth quarter data that have not been previously reported, indicate methane concentrations were below the MFS (Chapter 173-304 WAC) regulatory limit of 5 percent methane by volume in probes located along the site property boundary (i.e., point of compliance). The 2012 LFG monitoring probe data are provided in Appendix E.

As reported in the 2010 annual report for LBLF (Shaw Environmental, Inc. [Shaw], 2011) and observed by SCS in 2011, minimal or no positive static pressures were measured at probe GP-8 or in nearby LFG extraction wells during instances when the methane concentrations exceeded 5 percent by volume. The lack of positive static gas pressures when higher methane concentrations are observed in probe GP-8 is indicative of a low rate of biological decomposition near this probe location, which is consistent with other municipal solid waste landfills of similar age as LBLF. This lack of positive pressure, combined with the apparent efficiency of the GCCS at capturing and collecting LFG, indicates that methane is likely not migrating laterally in the subsurface soils over any sizable distance from the edge of the waste limits.

4.3 LFG EXTRACTION WELLS

The LFG extraction wells (north and south LFG extraction wells; shown on Figure 4-1) were monitored and adjusted (balanced) semi-monthly (twice a month) during 2012 to maintain balanced and efficient LFG extraction rates. There were no problems or concerns noted during monitoring and adjustment of the LFG extraction wells during 2012.

4.4 LFG FLARE REPLACEMENT AND MONITORING

A landfill's rate of LFG generation typically peaks within 1 to 2 years following the stoppage of waste acceptance, and then continually decreases with time. A number of years ago, one of the two original enclosed flare systems installed during site closure was removed from service in response to a decrease in the volume and generation rate of LFG. All of the extracted LFG was then routed to the former south flare system. Due to the continued drop off in LFG generation, the remaining operating flare system had become oversized for the quantities of LFG being generated. In 2006, the LBLRC decided to replace the former flare with a smaller, enclosed flare system.

On March 12, 2007, the original south flare system was shut down in preparation for installation of the new flare. On March 16, 2007, the new, smaller-capacity enclosed flare was brought on-line. During initial start up, the LFG extraction well field was monitored and adjusted to achieve steady-state conditions for smooth and efficient flare operation.

SCS coordinated with the Southwest Clean Air Agency (SWCAA) to conduct a flare emission source test to satisfy requirements within SWCAA Air Discharge Permit (ADP) 07-2714, issued on February 15, 2007. The source test was performed by Horizon Engineering, LLC, on April 24, 2012. The results of the source testing determined that the flare was operating within the specified emission limits required under ADP 07-2714. A source evaluation report summarizing the test results was submitted to SWCAA on June 7, 2012 (SCS, 2012b).

The LFG flare systems were monitored regularly (i.e., at least weekly) in 2012. The monitored parameters include LFG composition, static pressure, flow rate, and temperature measured at the flare inlet. In addition, the flare operating temperature was also measured and recorded. The flare system is equipped with a continuous monitoring system which measures and records the flare operating temperature, inlet LFG flow rate, and inlet LFG oxygen concentration. The data are stored and periodically downloaded for permanent recordkeeping. In accordance with SWCAA requirements, an Annual Emissions Estimate report documenting the flare monitoring data will be submitted to the SWCAA under separate cover in accordance with the conditions under Appendix A, Section 3, Monitoring/Record Keeping Requirements, Item 3c, of Order of Approval SWCAA 94-1637.

5.0 LANDFILL MAINTENANCE AND REPAIR

Repair and maintenance activities for the first, second, and third quarters in 2012 were previously described in the first, second, and third quarter progress reports (SCS, 2012c; 2012e; and 2012f; respectively) previously submitted to Ecology and CCPH. The repair and maintenance activities performed in 2012, including the fourth quarter activities, are summarized in the following sections.

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

- Performed checks and adjustments to the operational settings of the LFG flare system.
- Performed maintenance and repairs (as needed) of the LFG flare system, condensate collection system, including the condensate sumps, airlines, discharge lines, and compressors.
- Performed minor maintenance and repairs (as needed) of the LFG extraction wells and conveyance piping (e.g., repair of hoses, fittings, and valves).
- Semi-monthly adjustments (i.e., balancing) to the north and south LFG extraction wells.
- Replacement of the compact flash card in the Yokogawa flare data recorder monthly and download of the monitoring data stored on the card.

Other noteworthy non-routine maintenance and repair activities performed during each month in 2012 are described below.

5.1 FIRST QUARTER 2012

5.1.1 January

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

5.1.2 February

- Repaired or replaced inlet piping and other appurtenances for the air compressor.
- Refilled the flare system propane tank and purchased a backup tank.
- Checked condensate tank levels.
- Repaired condensate sump CS-N2.
- Relabeled the flare station blowers.
- Performed minor repairs were made to the north detention basin pumps.
- Performed routine inspections and maintenance of the flare station blowers and air compressor (including adding oil to pumps and air compressor, and greasing the blowers).
- Completed minor repairs to the main entrance gate.
- Installed new QED controller-less pumps in condensate sumps CS-N4 and CS-N8, and incorporated the new pumps into the condensate removal system.
- Constructed road (by Nutter Corporation) to provide access to the south detention basin pumping station to accommodate removal/repair of pump.
- Cleaned out the drain line from sedimentation basin to north detention basin to prevent overflow of stormwater into the north field area.

5.1.3 March

- Greased LFG blower No. 1 and rotated LFG blower operation.
- Emptied the air compressor drain tank.
- Filled the flare ignition propane tank.
- Performed troubleshooting related to the Yokogawa data output with technical support representative (flow data output was not being read).
- Replaced blown fuses at the north detention basin pump control electrical box.
- Responded to a call from the County related to an alarm condition of the pumping system at the south detention basin. Coordinated and performed a site visit to observe water level conditions (observed to be normal) in the south detention basin and reset alarm.
- Removed and cleaned the flare tower's flame safeguard and combustion control system (manufactured by Fireye).

- Installed new quarter-inch airline valve on the air dryer effluent line.

- Evaluated and tested the south detention basin pumping system due to high water accumulation in the basin. Coordinated with Grundfos-CBS (contractor) to remove and inspect for possible repair the primary south detention basin large capacity, 6-inch submersible pump that was not operating. SCS rented and operated a temporary diesel-powered trash pump to supplement the other two pumps during the first quarter 2012. Grundfos-CBS repaired the pump and it was reinstalled on March 29, 2012.

5.2 SECOND QUARTER 2012

5.2.1 April

- Performed troubleshooting of problems with data recording onto the Yokogawa compact flash card.

- Added oil to the air compressor, and removed approximately 15 gallons of oil from the air compressor blow-down tank.

- Repaired the airline at the compressor shed.

- Installed a vapor meter on flare station propane line.

- Replaced the polyvinyl chloride (PVC) inlet piping to the condensate tank.

- Replaced or repaired flex hoses, couplings, or valves exhibiting air leaks at LFG extraction wells SE-10, SE-12, SE-13, SW-5, SW-6, SW-7, NW-24, NE-05, and NW-31.

- Removed and replaced the pump controller in condensate sumps N-4 and S-7.

- Repaired the leaking drip leg at condensate sump S-2.

- Exposed and inspected two valves servicing the northwest header (no repair needed).

- Shut off louver on the east end of the flare.

- Coordinated and oversaw removal of condensate from the condensate tank by Emerald Services, Inc. (for offsite disposal).

- Installed railing at the north detention basin pumping station.

5.2.2 May

- Performed reprogramming of the Yokogawa flare data recorded to allow installation of SCS's remote monitoring and control system (RMCS).

- Performed flare troubleshooting activities.

- Lubricated the north detection basin pumps and adjusted the pump oilers and needle valves.
- Obtained measurements and specifications of various GCCS components for preparation of an updated Master Operations Plan.
- Checked the condensate sump liquid levels.
- Repaired gas extraction wells SW-5 (replace hose connection), SW-20 (replace hose connection), and SW-22 (re-plumbed piping), and repaired header piping next to SW-5.
- Activated LFG flare blower No. 1 to enable blower No. 2 to be serviced. Belts on blower No. 2 were replaced.
- Refilled LFG flare propane tank.

5.2.3 June

- Removed eight flare manifold bolts to increase the number of open orifices. After these adjustments were made, the flare station appeared to operate more smoothly and consistently.
- Cleaned the flare flame arrestor.
- Turned off air to condensate pumps at sumps S-7, N-1, and S-2 to conserve compressor operation since the sumps were dry.
- Reconfigured the wellhead piping at gas extraction wells NW-26, NW-28, NW-30, and NW-31.
- Placed decommission tape at gas extraction wells NW-19, NW-27, NW-29, NW-32, and NW-39.
- Performed engineering services in June 2012 including preparation of cost estimates for (1) blower modifications to increase the operational life of the blowers, and (2) additional hardware required to be installed for the RMCS.
- Evaluated specifications for and coordinated installation of the RMCS to the Yokogawa flare data recorder. Work performed included (1) a site visit by SCS's field services specialist to evaluate the flare data recorder hardware and determine requirements for upgrading the equipment to accommodate installation and operation of the RMCS, and (2) reprogramming of the Yokogawa flare data recorder for remote access and operation.

5.3 THIRD QUARTER 2012

5.3.1 July

- Re-plumbed the wellhead at extraction well NE-20.

- Replaced 2-inch PVC gate valves with 1-inch valves at extraction wells SE-39 and SW-19.
- Replaced 3-inch flex hose at extraction well SW-12.
- Filled the oil to Pump No. 1 at the north detention basin.
- For safety purposes, re-graded (excavated) the east side of the utility vault at the south detection basin to lower existing grade down to the utility vault.
- Installed an air conditioning unit in the air compressor shed.
- Performed troubleshooting of the LFG RMCS and file transfer protocol (FTP) test due to file upload problem. An adaptive security appliance mounting bracket for the RMCS was also installed.
- Replaced a pressure gauge and refilled the propane tank for the blower flare system.
- Installed guard rails around the concrete platform for the north detention basin pumping system.

5.3.2 August

- Completed installation of the guard rail around the concrete platform for the north detention basin pumping system.
- Replaced damaged 6-inch flex hoses at extraction wells SW-20 and NE-15, and repaired leaking flex hoses at several LFG headers.
- Performed a video survey of a main LFG header pipe due to suspected damage of the pipe. The header is installed under the main access road between the northwest and northeast quadrants of the site. Liquid found in the pipe during the video survey was subsequently pumped out to allow for more efficient LFG flow through the header pipe. It is recommended that another video survey be performed during the 2012-2013 rainy season to assess whether the liquid is LFG condensate or associated with infiltrating stormwater.
- Replaced or retrofitted LFG header valves at 12 extraction wells.
- Removed a 4-inch corrugated stormwater drain line near the northwest quadrant that was conveying surface water to the adjacent Waste Connections, Inc. property.
- Measured liquid levels in the condensate sumps.
- Observed and evaluated drainage design features in the northwest quadrant due to surface water ponding and runoff to an adjacent property.

5.3.3 September

- Replaced the No. 1 thermal couple and conduit on the enclosed flare.
- Replaced a damaged lab-cock valve and PVC pipe section at the northwest-northeast quadrant gas composition connection.
- Repaired a separated 3-inch PVC pipe at LFG extraction well NW-35.
- Installed a kick board at the south detention basin sediment vault.
- Installed 1-inch gate valves at several additional LFG extraction wells.
- Performed minor repair to a LFG header pipe.
- Performed services related to repair, replacement, or renovation activities during the third quarter 2012 including (1) evaluating specifications and costs for LFG blower upgrades (including installing variable frequency drives on the blower motors) versus purchase of new blowers, and (2) evaluating costs for additional condensate pump retrofits.

5.4 FOURTH QUARTER 2012

5.4.1 October

- Removed floating debris from the north and south detention basins, and performed general site cleanup by picking up debris around the site.
- Repaired separated LFG line at extraction wells SE-22, SW-5, SW-7, and SW-19.
- Repaired damaged PVC tee at condensate traps S-2 and N-1, and at extraction well SE-22 header connection.
- Repaired damaged 2 9-inch gate valve at extraction well NE-19.
- Temporarily repaired hoses at extraction wells NW-30, NW-13, NW-31, and LFG line between extraction wells NE-7 and NE-9.
- Emptied the bypass tank for the air compressor. Approximately 25 gallons of liquid was removed.
- Refashioned the siding and facial boards for the LFG flare control panel shed. Also painted the facial boards.
- Checked the liquid level in the condensate traps.
- Drained the moisture separators at each condensate sump.

- Started the condensate collection system. Oil was added to the air compressor before start up. Four condensate traps were brought online and three condensate traps need repairs and are currently unable to operate.

- Filled the oilers for the north detention pond pumps.

- Performed engineering services including (1) cost estimating to replace monitoring well traffic bollards, (2) began preparing a memorandum regarding specifications and costs for LFG blower upgrades, and (3) conducted internal technical discussions regarding drainage modifications to address the stormwater control issues in the northwest quadrant of the closed landfill.

5.4.2 November

- Replaced damaged hoses at several extraction wells: NE-2, NE-3, NE-5, NE-7, NE-10, SE-2, SE-3, NW-13, NW-30, NW-27, NW-31, SW-12, SW-19, and SW-20.

- Replaced the extraction well components including: (1) 4-inch coupling at well SE-21, (2) PVC gate valves at wells SE-16 and SW-3, (3) PVC tee at well NE-7, and (4) clamp on 6-inch hose at well NW-10.

- Repaired or temporarily sealed oxygen leaks associated with GCCS components.

- Downsized the 3-inch gate valve at extraction well SW-20.

- Re-plumbed the lateral line connections for extraction wells NW-29 and NW-30 to the 4-inch header.

- Filled the condensate sump S-2 with water to prime the pump and seal oxygen leak.

- Replaced damaged pump controller in condensate sump S-8.

- Replaced fouled pump controller at condensate sump S-1.

- Rotated pumps at the sediment pond.

- Turned on condensate sump N-7.

- Scheduled and coordinated with Emerald Environmental Services to remove and dispose of condensate from the condensate tank (approximately 2,020 gallons was removed).

5.4.3 December

- Replaced damaged hoses and valves at several extraction wells and sampling ports: NW-31, NW-35, NW-36, SE-14, SE-25, SE-27, NWNE composition sampling port, NW composition sampling port.

- Replaced a damaged valve handle to the 8-inch butterfly valve at the NE west composition port.
- Adjusted the pumice block bracing near extraction well SE-14 and at the SW composition sampling port.
- Conducted oversight of the onsite inspection by the Washington Department of Labor and Industries of the air compressor. The air compressor system passed inspection.
- Repaired hole in the site boundary fence near gas probe GP-15.

6.0 REFERENCES

Clark County, 2013, Letter (Re: Request to discontinue analysis of groundwater samples for vinyl chloride and 1,1-dichloroethene: Leichner Brother Landfill, Clark County, Washington), to M. Kourehdar, Ecology, Toxics Cleanup Program, Olympia, Washington, from M. Davis, Clark County Environmental Services, Vancouver, Washington, February 5.

Clark County Public Health (CCPH), 2011a, Email (re: Request to Change Groundwater Sampling Method: Leichner Brothers Landfill – Facility ID No. 1017) to M. Davis, Clark County Environmental Services, and L. Caruso, SCS Engineers, from M. Sutton, Clark County Public Health, July 19.

Clark County Public Health (CCPH), 2011b, Letter (re: Leichner Landfill LFG Compliance Monitoring Probe GP-08), from Gary Bickett, CCPH, to Mr. Lamadrid and Mr. Caruso, SCS Engineers, Portland, Oregon, November 18.

EMCON/OWT, Inc., 2005, Compliance Monitoring Plan, Leichner Landfill, Clark County, Washington, prepared for Leichner Brothers Land Reclamation Corporation, by EMCON/OWT, Inc., Portland, Oregon, April.

SCS Engineers, 2011a, Technical Memorandum, Response Comments to the Draft Periodic Review Document Dated December 2010 for the Leichner Brothers Landfill (Facility ID No. 1017), Vancouver, Washington, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, March 30.

SCS Engineers, 2011b, Stormwater Pollution Prevention Plan, Plan Date: May 2011, State of Washington, Industrial Stormwater General Permit, Permit Number: WAR005572B, Leichner Brothers Landfill, Site Address: 9411 NE 94th Avenue, Vancouver, WA 98862, Clark County, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, May.

SCS Engineers, 2011c, Applicability Review and Greenhouse Gas Emissions Modeling for the Federal Mandatory Reporting Rule at the Leichner Brothers Landfill, Vancouver, Washington, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, June 29.

SCS Engineers, 2011d, Request for Approval to Use the Low-Flow Purge Method to Collect Groundwater Samples from Site Monitoring Wells at the Closed Leichner Brothers Landfill, Vancouver, Washington, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, July 14.

SCS Engineers, 2011e, Letter (Re: Work plan to replace landfill gas compliance monitoring probe GP-08, Closed Leichner Brothers Landfill, Vancouver, Washington), to G. Bickett, Clark County Public Health, Vancouver, Washington, from D. Lamadrid and L. Caruso, SCS Engineers, Portland, Oregon, November 3.

SCS Engineers, 2012a, 2011 Fourth Quarter and Annual Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, February 28.

SCS Engineers, 2012b, Source Evaluation Report, Landfill Gas Enclosed Flare, Leichner Brothers Landfill, SWCAA Air Discharge Permit 07-5714, prepared for Clark County and Leichner Brothers Land Reclamation Corporation, by SCS Engineers, Portland, Oregon, June 7.

SCS Engineers, 2012c, First Quarter 2012 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, June 15.

SCS Engineers, 2012d, Report Documenting Decommission and Replacement of Landfill Gas Compliance Monitoring Probe GP-08: Closed Leichner Brothers Landfill, Vancouver, Washington, prepared by SCS Engineers, Portland, Oregon, for Clark County Environmental Services, Vancouver, Washington, June 27.

SCS Engineers, 2012e, Second Quarter 2012 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, August 30.

SCS Engineers, 2012f, Third Quarter 2012 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, November 29.

Shaw Environmental, Inc., 2011, 2010 Fourth Quarter and Annual Report, Groundwater, Stormwater, and Landfill Gas Monitoring, Closed Leichner Brothers Landfill, Vancouver, Washington, prepared for Leichner Brothers Land Reclamation Corporation, by Shaw Environmental, Inc., Portland, Oregon, March.

Washington State Department of Ecology (Ecology), 1992, Statistical guidance for Ecology site managers, Publication No. 19-54, August.

Washington State Department of Ecology, 2010, Draft Periodic Review, Leichner Brothers Landfill, Facility Site ID#: 1017, 9411 Northeast 94th Avenue, Vancouver, Washington, 98666, prepared by Ecology, Southwest Region Office, Toxics Cleanup Program, December.

Washington State Department of Ecology, 2011a, Periodic Review under Model Toxics Control Act (MTCA), Leichner Brothers Landfill, prepared by Ecology, Southwest Region Office, Toxics Cleanup Program, April 27.

Washington State Department of Ecology, 2011b, Email (re: Request to Change Groundwater Sampling Method: Leichner Brothers Landfill – Facility ID No. 1017) to M. Davis, Clark County Environmental Services, and L. Caruso, SCS Engineers, from M. Kourehdar, Ecology, Toxics Cleanup Program, July 19.

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

U.S. Environmental Protection Agency (EPA), 2002, Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites, EPA, office of Emergency and Remedial Response, December.

TABLES

Table 2-1
Top-of-Casing Elevation Data
for Site Monitoring Wells
Leichner Brothers Landfill

Monitoring Well	Reference Elevation (feet, Clark County Datum) [a]
LB-R2	222.27
LB-1S	210.12
LB-1D	209.74
LB-3S	218.25
LB-3D	219.29
LB-4S(R)	226.46
LB-4C	228.08
LB-4D	228.00
LB-5S	206.89
LB-5C	206.70
LB-5D	207.56
LB-6S	202.80
LB-9S(R)	217.94
LB-10SR	204.04
LB-10CR	203.05
LB-10DR	203.36
LB-13I	202.36
LB-13C	202.68
LB-13D	202.96
LB-17S	208.18
LB-17I	213.14
LB-17C	206.55
LB-17D	213.17
LB-20S	221.22
LB-21S	223.35
LB-21C	223.32
LB-21D	223.63
LB-22S	208.42
LB-23S	229.19
LB-24S	235.13
LB-26I	200.22
LB-26D	200.75
LB-27I	205.35
LB-27D	204.63
MW-1 N	216.58
MW-1 S	216.13
MW-1 E	216.45
MW-NE	220.06

Notes:

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

Table 2-2

Statistical Summary of Groundwater Quality Data[a]

95 Percent Upper Confidence Limit of the Mean[b]

Leichner Brothers Landfill

Parameter	Compliance Level	Units	LB-1S	LB-1D	LB-3S	LB-3D	LB-4SR	LB-4D	LB-5S	LB-5D	LB-6S	LB-10SR	LB-10DR	LB-13I	LB-13D	LB-17I	LB-17D	LB-20S	LB-26I	LB-26D	LB-27I	LB-27D
Inorganic Parameters																						
Chloride	250	mg/L	M(14)	7.48	3.64	4.18	5.55	3.35	5.74	13.22	M(9.8)	20.61	28.86	M(12)	4.42	23.35	M(19)[c]	M(22.1)[c]	9.55	4.91	29.57	11.32
Nitrate	10	mg/L	6.04	6.08	3.75	5.48	5.60	6.96	5.03	1.48	2.46	3.66	1.73	4.76	5.42	All ND	All ND	M(0.1)	5.36	6.50	1.24	M(4.0)
Total Dissolved Solids	500	mg/L	209.61	193.73	181.81	192.39	188.42	152.10	174.91	241.39	212.88	267.58	324.08	203.74	M(193)[c]	269.93	222.36	341.80	214.94	M(196)[c]	381.48	M(364)
Metals																						
Iron (dissolved)	0.3	mg/L	**M(0.51)**	All ND	All ND	All ND	All ND	All ND	**M(0.707)**	All ND	**M(0.379)**	**M(1.15)**	M(0.047)	All ND	All ND	**8.76**	0.11	**M(0.368)[c]**	M(0.0392)	All ND	M(0.032)	M (0.033)
Manganese (dissolved)	0.05	mg/L	M(0.002)	All ND	All ND	All ND	All ND	All ND	M(0.0157)	All ND	0.031	M(0.0138)	**M(0.155)[c]**	0.0054	All ND	**M(1.55)[c]**	**4.37**	**2.31**	M(0.011)	M(0.0034)	**0.39**	**M(0.285)**
Volatile Organic Compounds																						
1,1-Dichloroethene	0.1	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND
1,4-Dichlorobenzene	1.8	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	M(0.26)	All ND	M(0.25)	All ND	All ND	All ND	All ND
Tetrachloroethene	5	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND
Trichloroethene	5	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	M(0.15)	All ND	All ND	All ND	M(0.81)	All ND	All ND	All ND	All ND	All ND	All ND
Vinyl Chloride	0.1	µg/L	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	All ND	M(0.044)	All ND	M(0.053)	All ND

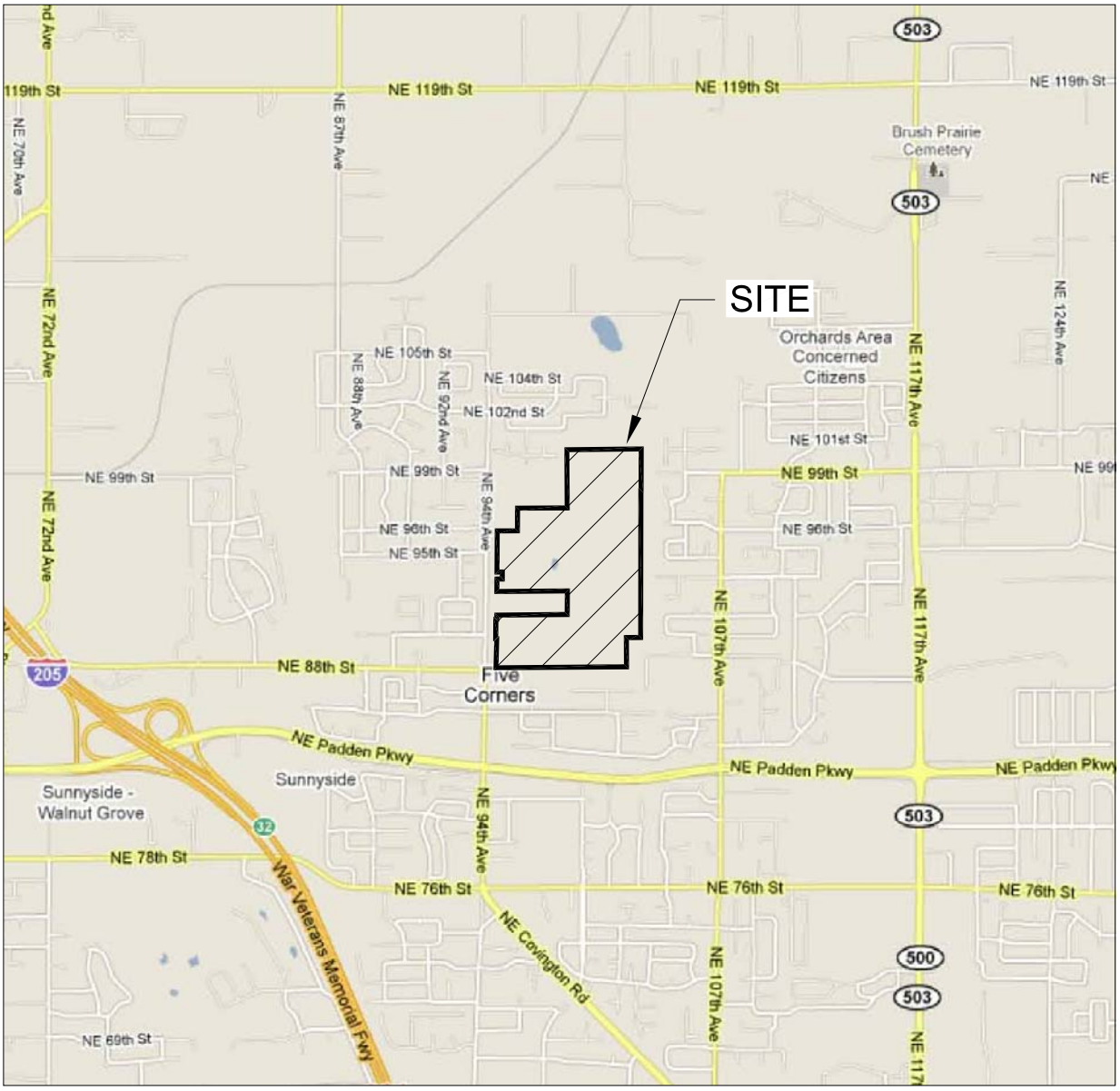
NOTE:
mg/L = milligrams per liter; µg/L = micrograms per liter; ND = indicates not detected at any sampling event; M = maximum value detected in last five years shown in parenthesis.
Values shown in **bold** are greater than the specified compliance level.

[a] Data evaluated for the last five years of monitoring (2008 through 2012).

[b] 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.

[c] Calculated UCL-95 value of lognormally distributed data exceeded the range of concentrations from 2008 to 2012 using Land's method; value shown represents the maximum value detected in the last five years.

FIGURES



NOT TO SCALE

WASHINGTON

SOURCE: GOOGLE MAPS

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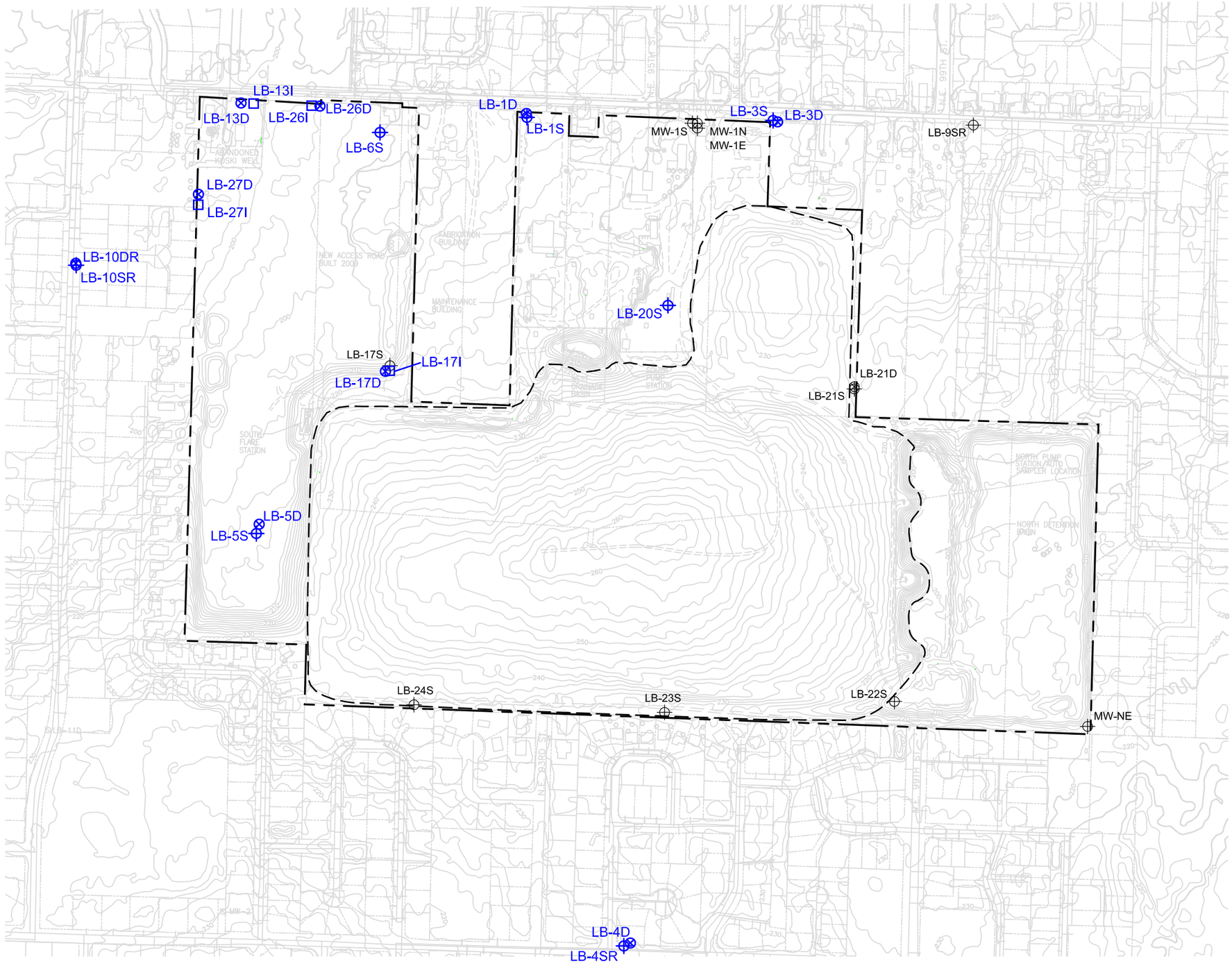
PROJECT NO.	DES BY
04213030.06/.18	J.D.
SCALE	CHK BY
AS SHOWN	J.D.
CAD FILE	APP BY
FIGURE 1-1	L.C.

SITE LOCATION MAP

LEICHNER BROTHERS LANDFILL
CLARK COUNTY, WASHINGTON

DATE
FEBRUARY 2013

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 2008.

SCALE
0 400 800 FEET

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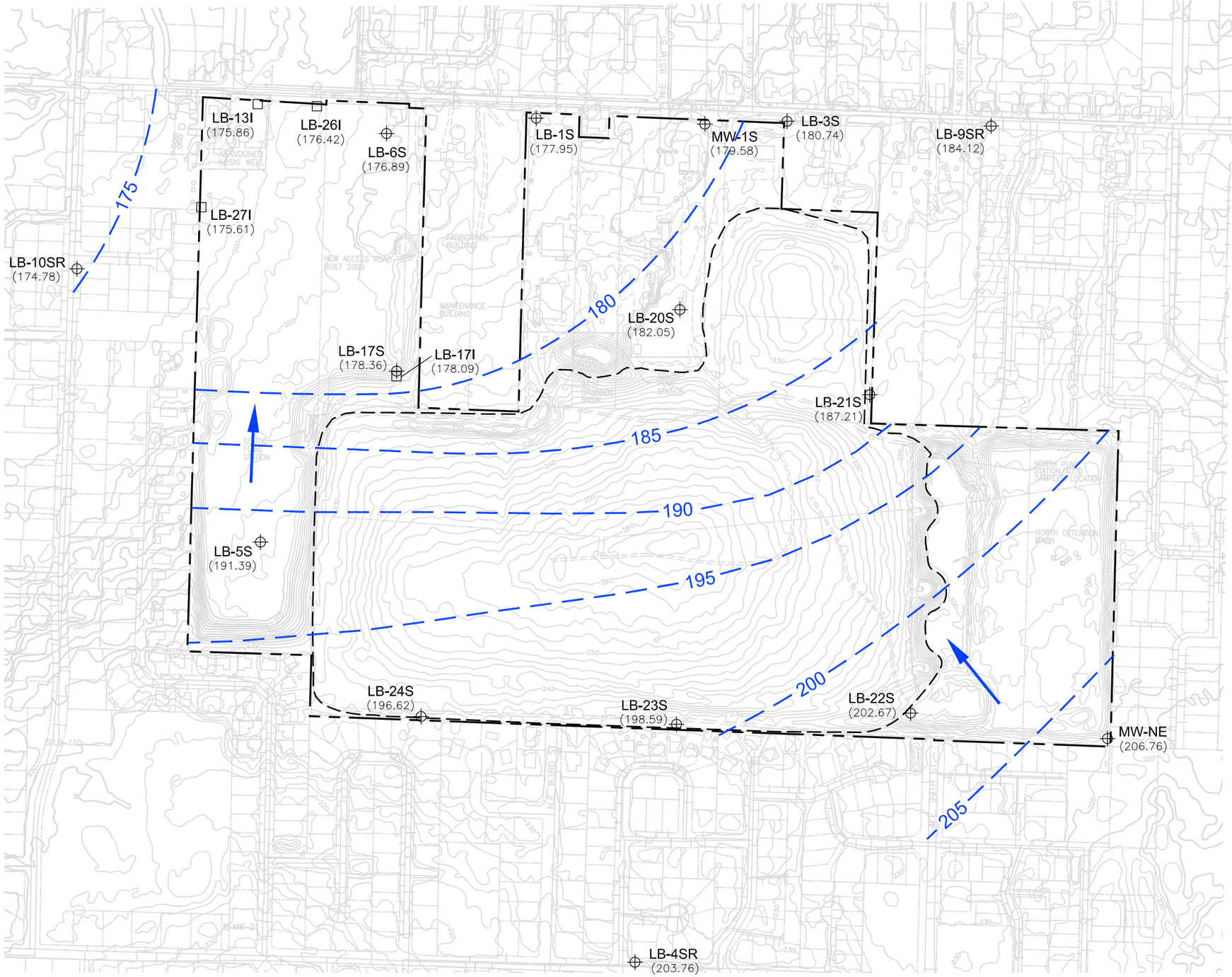
PROJECT NO.	04213030.06/.18
DES BY	D.L.
SCALE	AS SHOWN
CHK BY	J.D.
CAD FILE	FIGURE 2-1
APP BY	L.C.

GROUNDWATER MONITORING LOCATIONS

LEICHNER BROTHERS LANDFILL
VANCOUVER, WASHINGTON

DATE: FEBRUARY 2013
FIGURE: 2-1



LEGEND:

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

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
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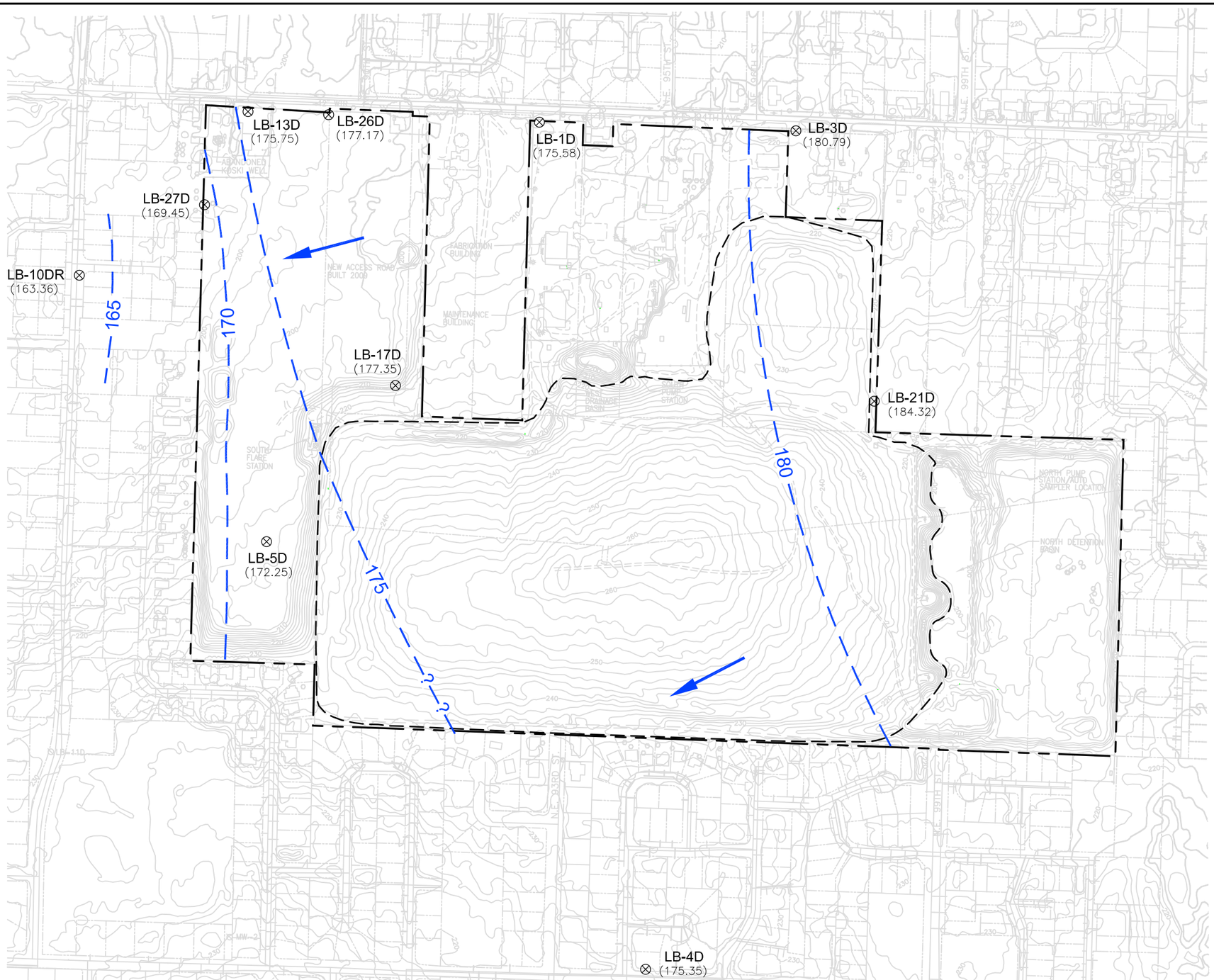
PROJECT NO. 04213030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE MARCH 12, 2012 LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE FEBRUARY 2013
SCALE AS SHOWN	CHK BY J.D.		FIGURE 2-2
CAD FILE FIGURE 2-2	APP BY L.C.		



LEGEND:

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

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

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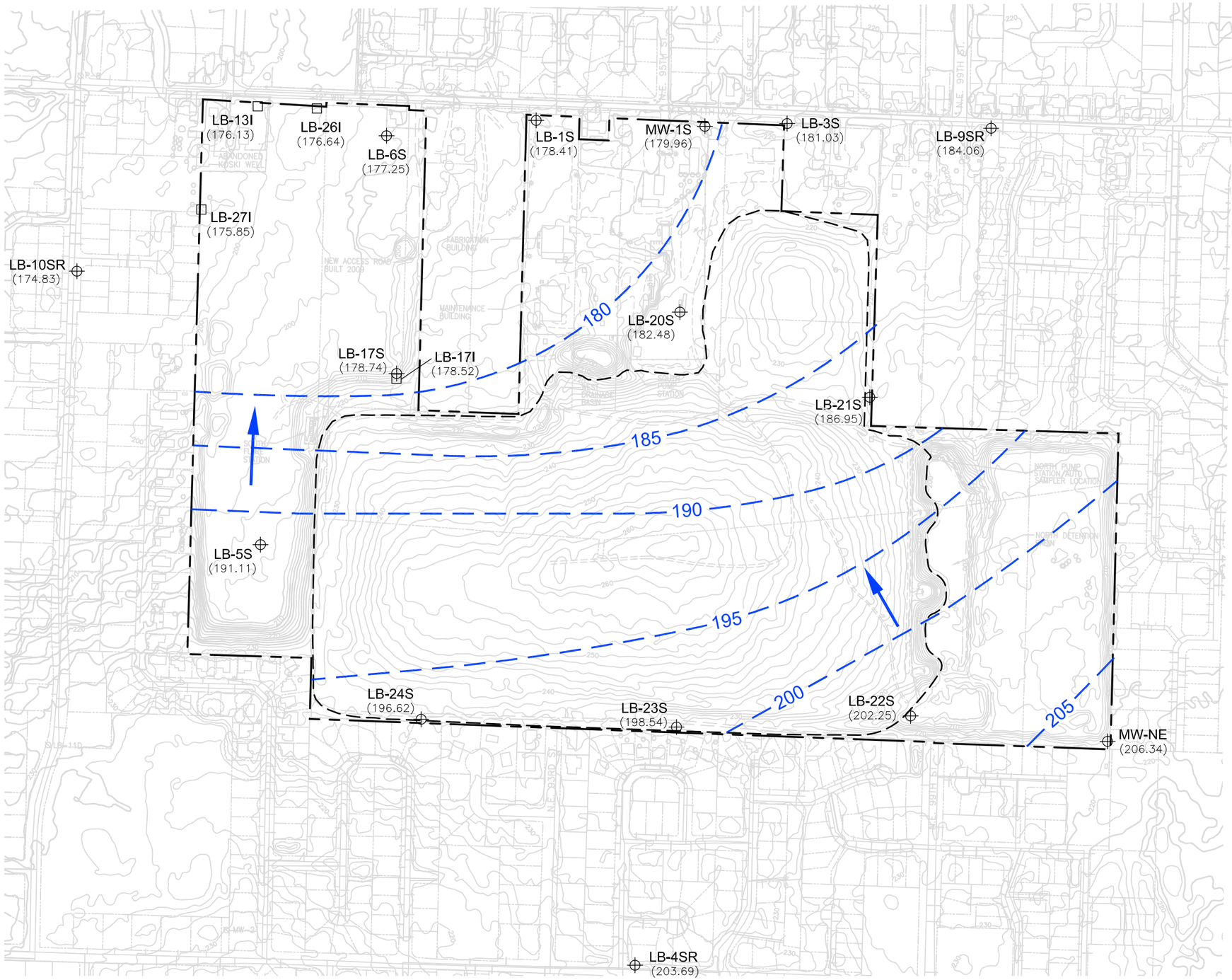
PROJECT NO. 04213030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER MARCH 12, 2012 LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE FEBRUARY 2013
SCALE AS SHOWN	CHK BY J.D.		FIGURE 2-3
CAD FILE FIGURE 2-3	APP BY L.C.		



LEGEND:

LB-5S ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-17I □	Monitoring Well Location, Middle of Alluvial Water–Bearing Zone
— — —	Property Boundary
— — —	Limit of Landfill Cover and Approximate Edge of Waste
— —205— —	Groundwater Potentiometric Surface Contour
(206.34)	Groundwater Elevation Measured on September 10, 2012
→	Inferred Groundwater Flow Direction

NOTE:
Topography Taken From Clark County GIS, December 2008

SCALE
0 400 800 FEET

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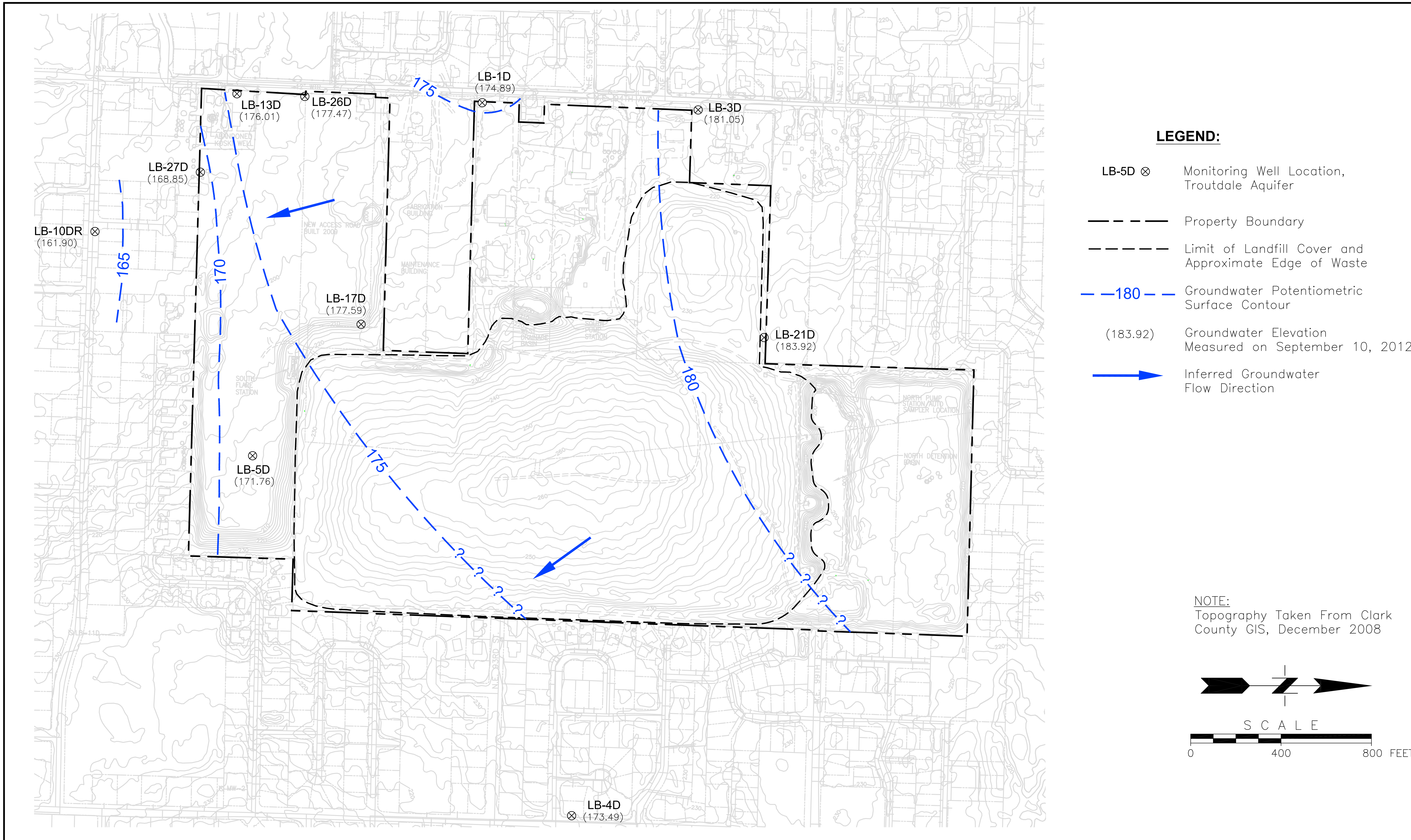
PROJECT NO. 04213030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS ALLUVIAL WATER BEARING ZONE SEPTEMBER 10, 2012	DATE FEBRUARY 2013
SCALE AS SHOWN	CHK BY J.D.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 2-4
CAD FILE FIGURE 2-4	APP BY L.C.		



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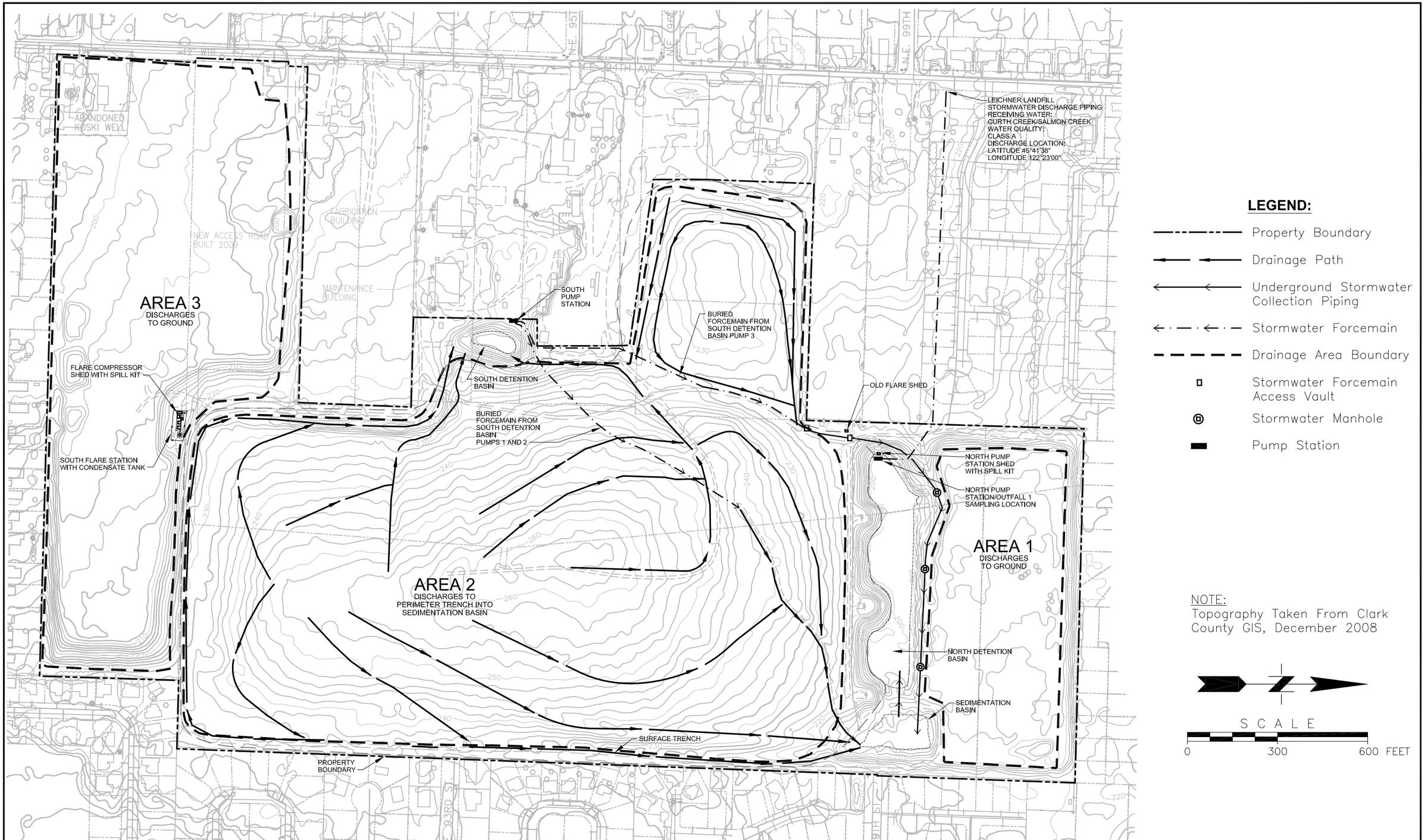
PROJECT NO. 04213030.06/.18	DES BY D.L.	GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS TROUTDALE FORMATION AQUIFER SEPTEMBER 10, 2012 LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	DATE FEBRUARY 2013
SCALE AS SHOWN	CHK BY J.D.		FIGURE 2-5
CAD FILE FIGURE 2-5	APP BY L.C.		



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Portland, Oregon 97224
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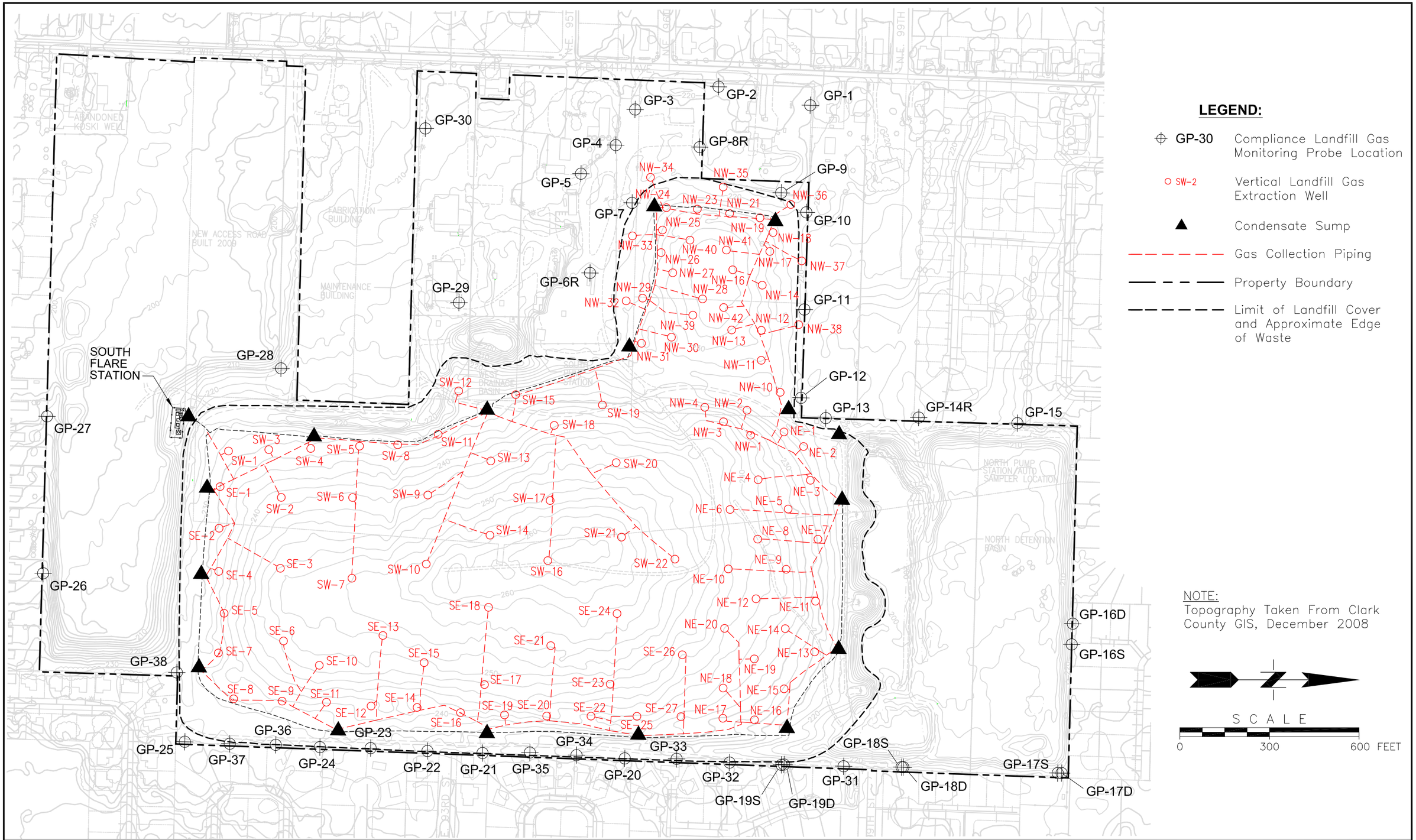
PROJECT NO. 04213030.06/.18	DES BY J.D.	SITE MAP AND STORMWATER SYSTEM	DATE FEBRUARY 2013
SCALE AS SHOWN	CHK BY J.D.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 3-1
CAD FILE FIGURE 3-1	APP BY L.C.		



SCS ENGINEERS Environmental Consultants and Contractors 14945 SW Sequoia Parkway, Suite 180 Portland, Oregon 97224 (503) 639-9201 FAX: (503) 684-6948		PROJECT NO. 04213030.06/.18	DES BY D.L.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON
		SCALE AS SHOWN	CHK BY J.D.	DATE FEBRUARY 2013
		CAD FILE FIGURE 4-1	APP BY L.C.	FIGURE 4-1

APPENDIX A

2012 Groundwater Elevation Data and Groundwater Elevation Hydrographs

2012 Groundwater Elevation Data

Table A-1
2012 Groundwater Elevation Data
Leichner Brothers Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-R2	3/12/2012	222.27	44.05	178.22
LB-R2	9/10/2012	222.27	43.70	178.57
LB-1S	3/12/2012	210.12	32.17	177.95
LB-1S	9/10/2012	210.12	31.71	178.41
LB-1D	3/12/2012	209.74	34.16	175.58
LB-1D	9/10/2012	209.74	34.85	174.89
LB-3S	3/12/2012	218.25	37.51	180.74
LB-3S	9/10/2012	218.25	37.22	181.03
LB-3D	3/12/2012	219.29	38.50	180.79
LB-3D	9/10/2012	219.29	38.24	181.05
LB-4S(R)	3/12/2012	226.46	22.70	203.76
LB-4S(R)	9/10/2012	226.46	22.77	203.69
LB-4C	3/12/2012	228.08	45.12	182.96
LB-4C	9/10/2012	228.08	45.42	182.66
LB-4D	3/12/2012	228.00	52.65	175.35
LB-4D	9/10/2012	228.00	54.51	173.49
LB-5S	3/12/2012	206.89	15.50	191.39
LB-5S	9/10/2012	206.89	15.78	191.11
LB-5C	3/12/2012	206.70	30.83	175.87
LB-5C	9/10/2012	206.70	37.05	169.65
LB-5D	3/12/2012	207.56	35.31	172.25
LB-5D	9/10/2012	207.56	35.80	171.76
LB-6S	3/12/2012	202.80	25.91	176.89
LB-6S	9/10/2012	202.80	25.55	177.25
LB-9S(R)	3/12/2012	217.94	33.82	184.12
LB-9S(R)	9/10/2012	217.94	33.88	184.06
LB-10SR	3/12/2012	204.04	29.26	174.78
LB-10SR	9/10/2012	204.04	29.21	174.83
LB-10CR	3/12/2012	203.05	28.20	174.85
LB-10CR	9/10/2012	203.05	28.12	174.93
LB-10DR	3/12/2012	203.36	40.00	163.36
LB-10DR	9/10/2012	203.36	40.46	162.90

Table A-1
2012 Groundwater Elevation Data
Leichner Brothers Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-13I	3/12/2012	202.36	26.50	175.86
LB-13I	9/10/2012	202.36	26.23	176.13
LB-13C	3/12/2012	202.68	26.91	175.77
LB-13C	9/10/2012	202.68	26.64	176.04
LB-13D	3/12/2012	202.96	27.21	175.75
LB-13D	9/10/2012	202.96	26.95	176.01
LB-17S	3/12/2012	208.18	29.82	178.36
LB-17S	9/10/2012	208.18	29.48	178.70
LB-17I	3/12/2012	213.14	35.05	178.09
LB-17I	9/10/2012	213.14	34.62	178.52
LB-17C	3/12/2012	206.55	28.61	177.94
LB-17C	9/10/2012	206.55	28.31	178.24
LB-17D	3/12/2012	213.17	35.82	177.35
LB-17D	9/10/2012	213.17	35.55	177.62
LB-20S	3/12/2012	221.22	39.17	182.05
LB-20S	9/10/2012	221.22	38.74	182.48
LB-21S	3/12/2012	223.35	36.14	187.21
LB-21S	9/10/2012	223.35	36.40	186.95
LB-21C	3/12/2012	223.32	36.60	186.72
LB-21C	9/10/2012	223.32	36.79	186.53
LB-21D	3/12/2012	223.63	39.31	184.32
LB-21D	9/10/2012	223.63	39.71	183.92
LB-22S	3/12/2012	208.42	5.75	202.67
LB-22S	9/10/2012	208.42	6.17	202.25
LB-23S	3/12/2012	229.19	30.60	198.59
LB-23S	9/10/2012	229.19	30.65	198.54
LB-24S	3/12/2012	235.13	38.51	196.62
LB-24S	9/10/2012	235.13	38.51	196.62
LB-26I	3/12/2012	200.22	23.80	176.42
LB-26I	9/10/2012	200.22	23.55	176.67
LB-26D	3/12/2012	200.75	23.58	177.17
LB-26D	9/10/2012	200.75	23.28	177.47

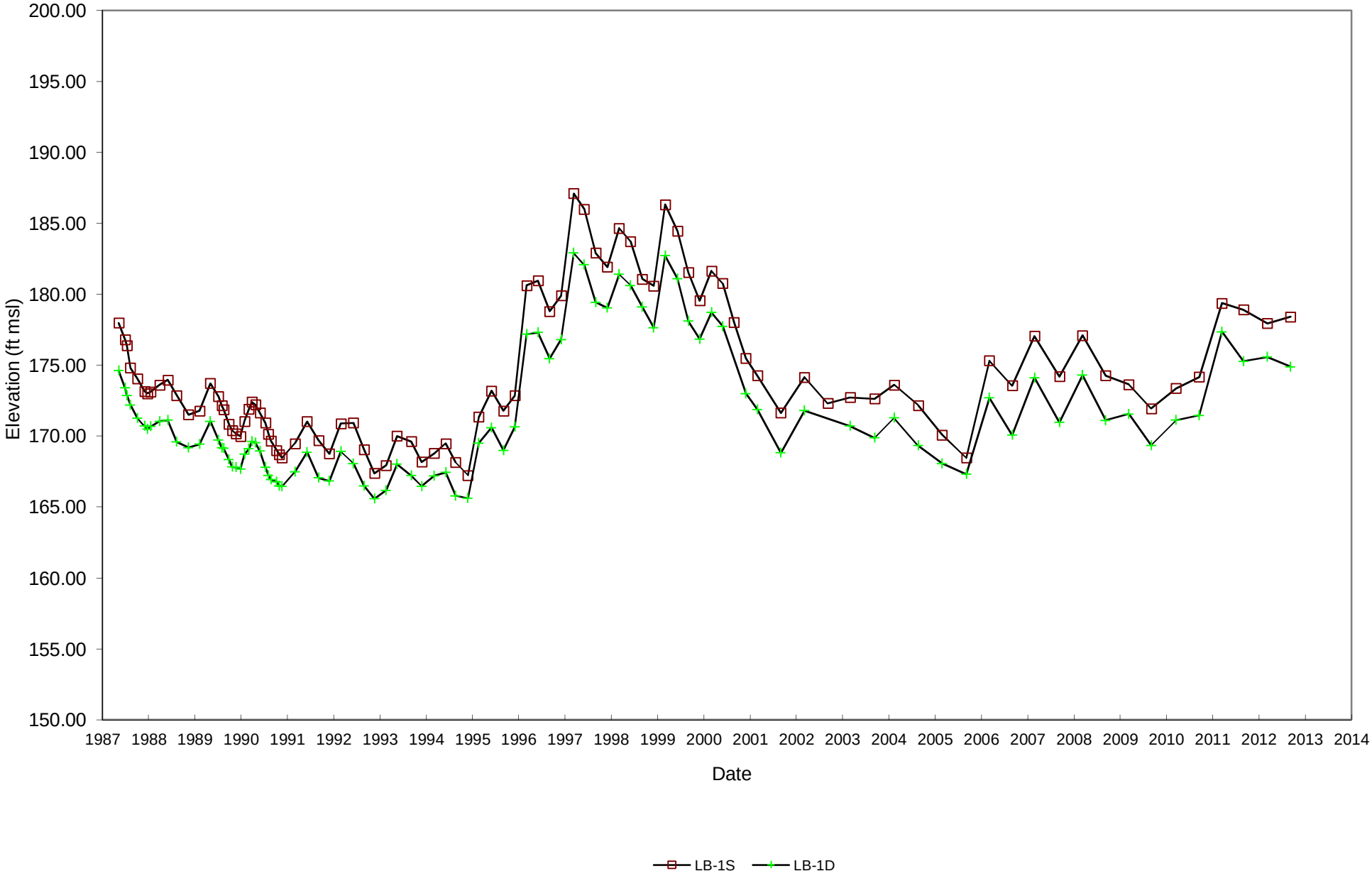
Table A-1
2012 Groundwater Elevation Data
Leichner Brothers Landfill

Monitoring Well	Date	Reference Elevation (feet, AMSL)	Depth to Groundwater (feet, BTOC)	Groundwater Elevation (feet, AMSL)
LB-27I	3/12/2012	205.35	29.74	175.61
LB-27I	9/10/2012	205.35	29.50	175.85
LB-27D	3/12/2012	204.63	35.18	169.45
LB-27D	9/10/2012	204.63	35.78	168.85
MW-1 N	3/12/2012	216.58	Dry	NA
MW-1 N	9/10/2012	216.58	Dry	NA
MW-1 S	3/12/2012	216.13	36.55	179.58
MW-1 S	9/10/2012	216.13	36.17	179.96
MW-1 E	3/12/2012	216.45	Dry	NA
MW-1 E	9/10/2012	216.45	Dry	NA
MW-NE	3/12/2012	220.06	13.30	206.76
MW-NE	9/10/2012	220.06	13.72	206.34

Notes:
AMSL = above mean sea level; BTOC = below top of casing; NA = not applicable.

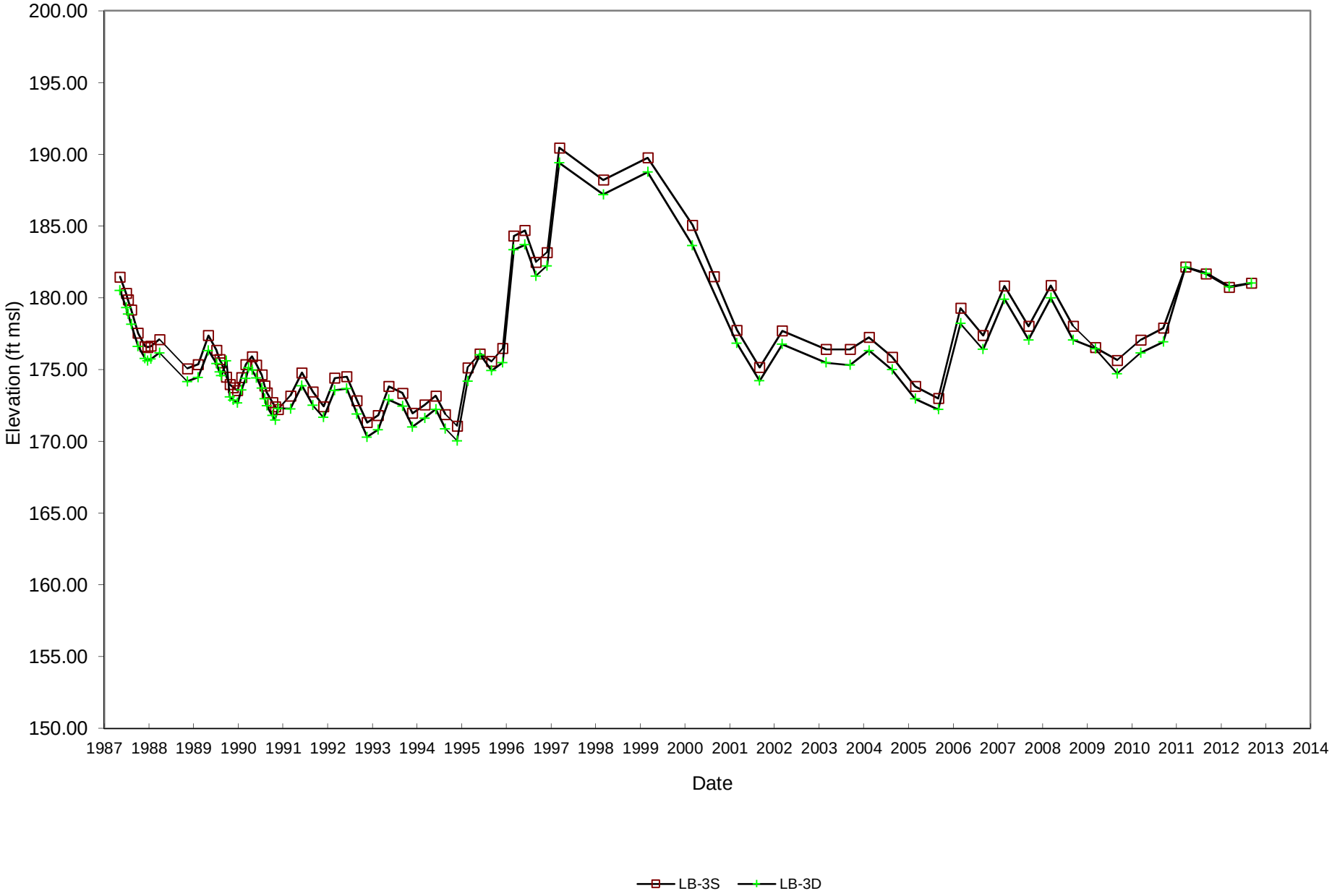
Groundwater Elevation Hydrographs

Leichner Landfill
Water Levels

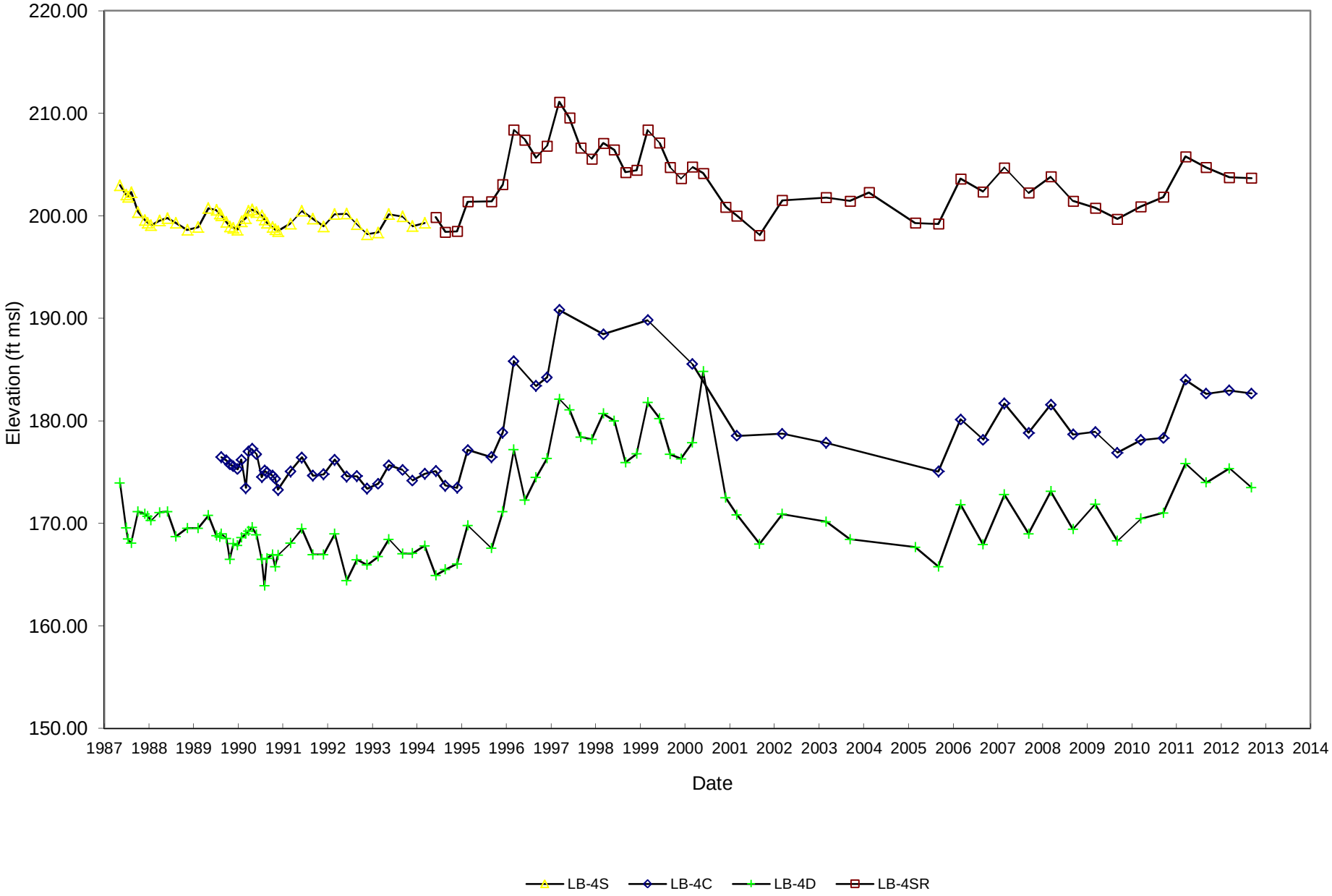


Leichner Landfill
Water Levels

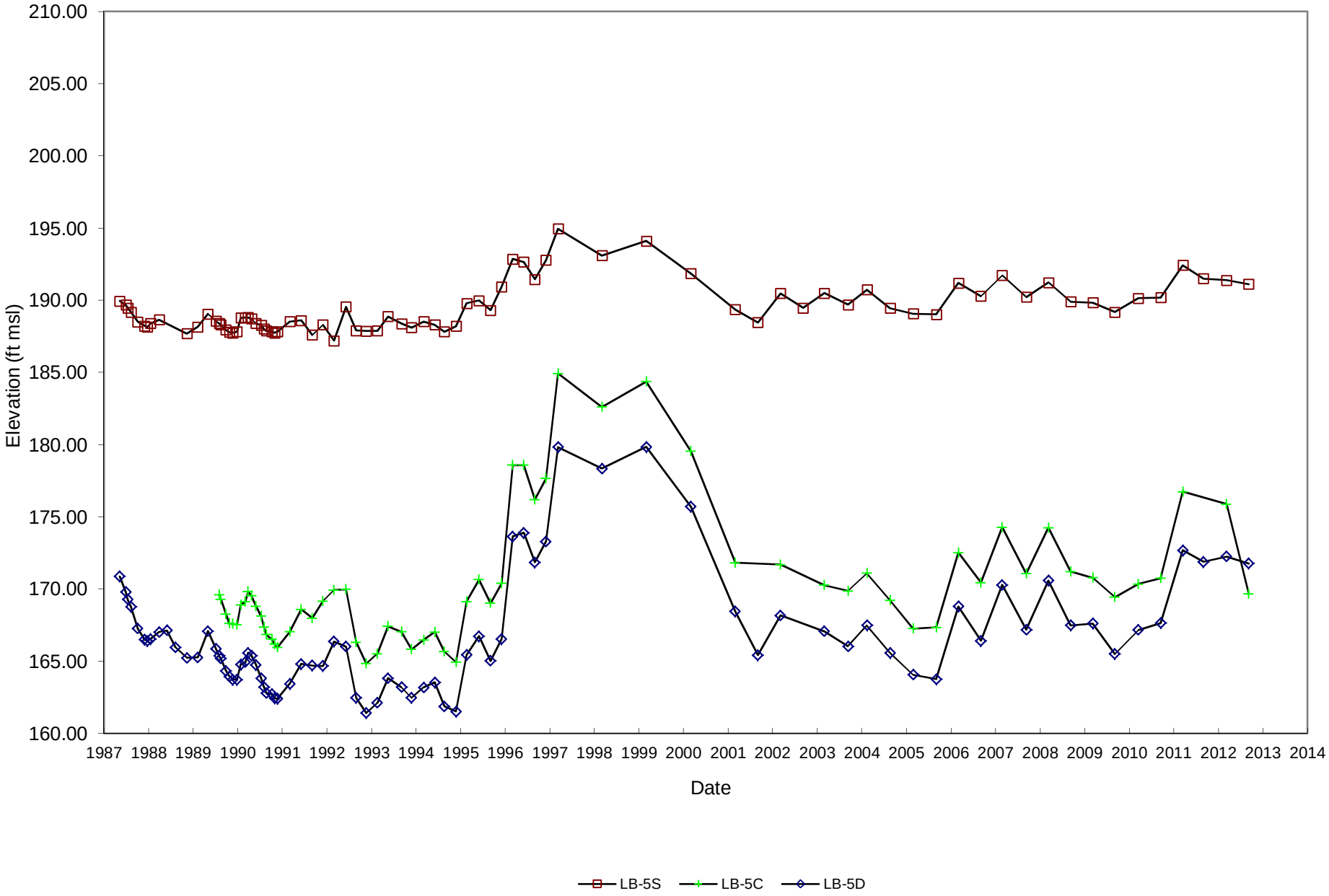
Leichner Landfill
Water Levels



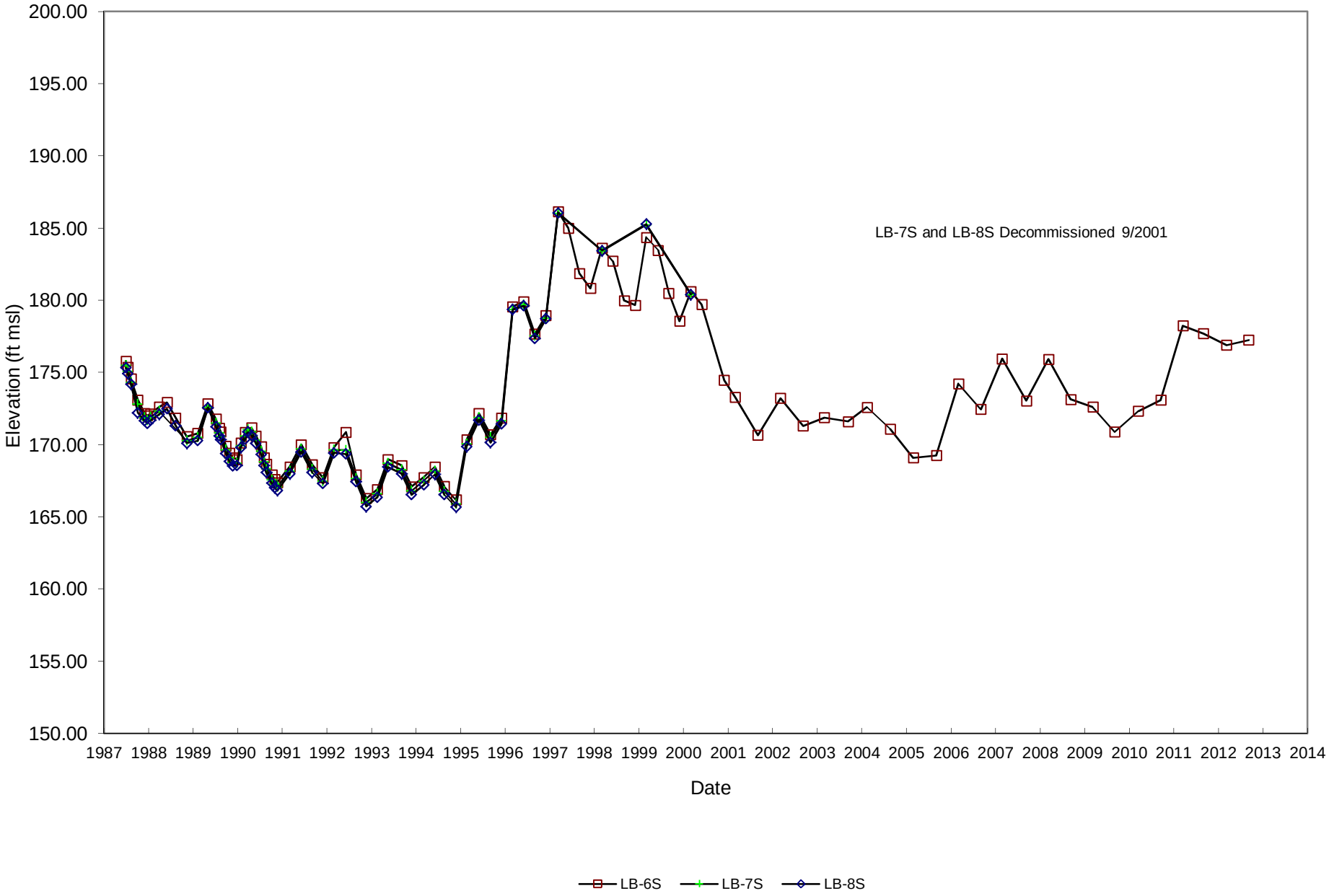
Leichner Landfill
Water Levels



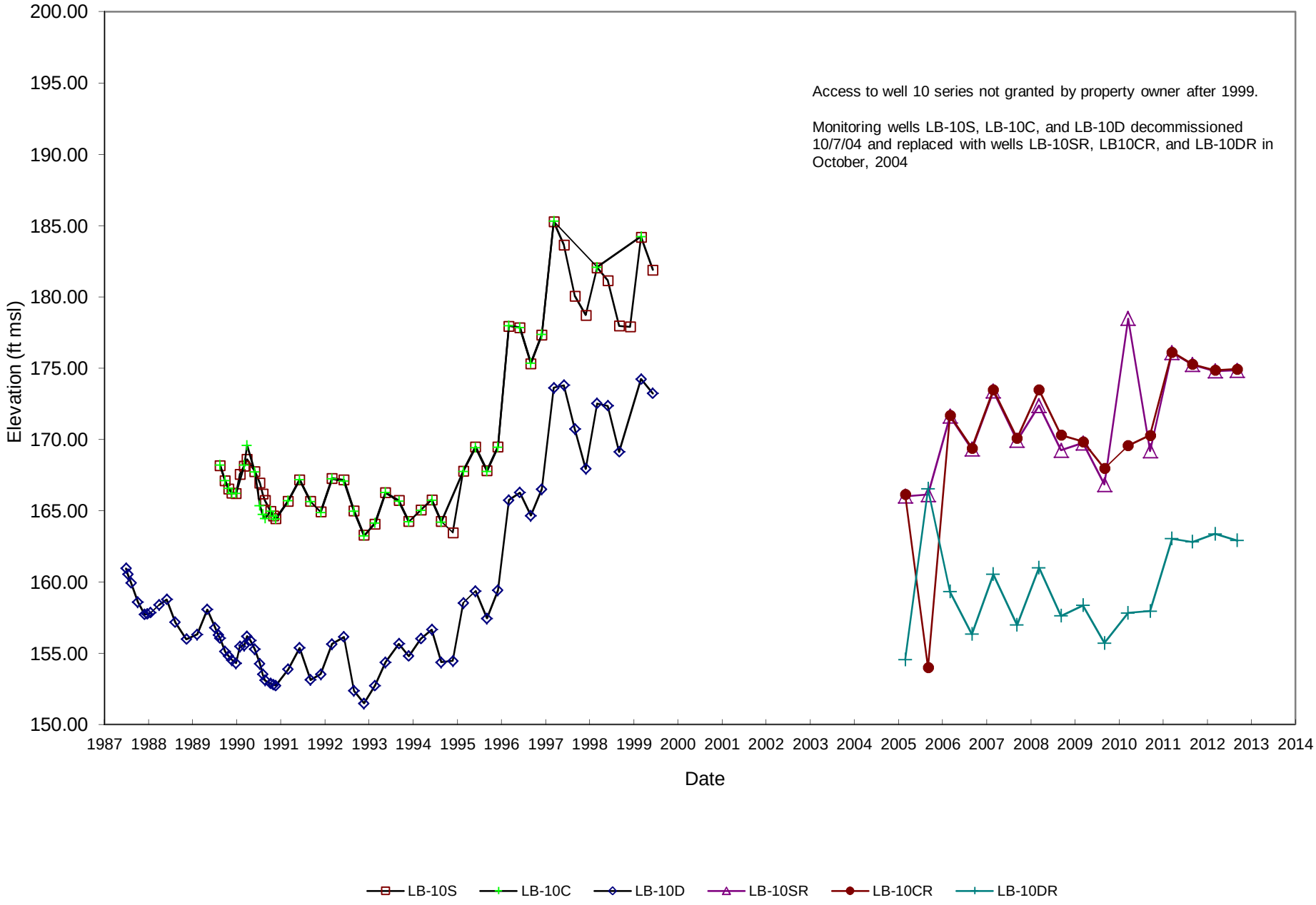
Leichner Landfill
Water Levels



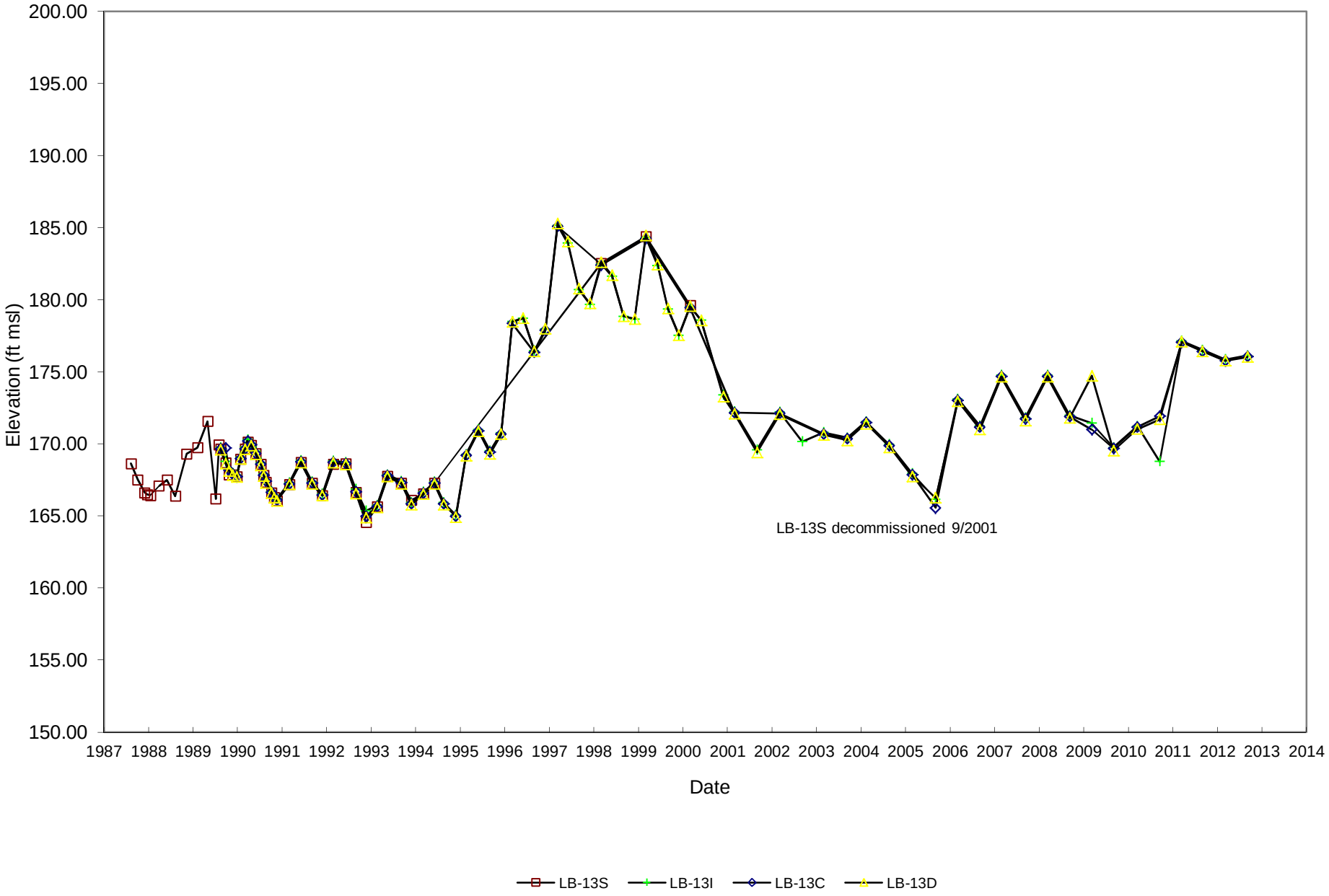
Leichner Landfill
Water Levels



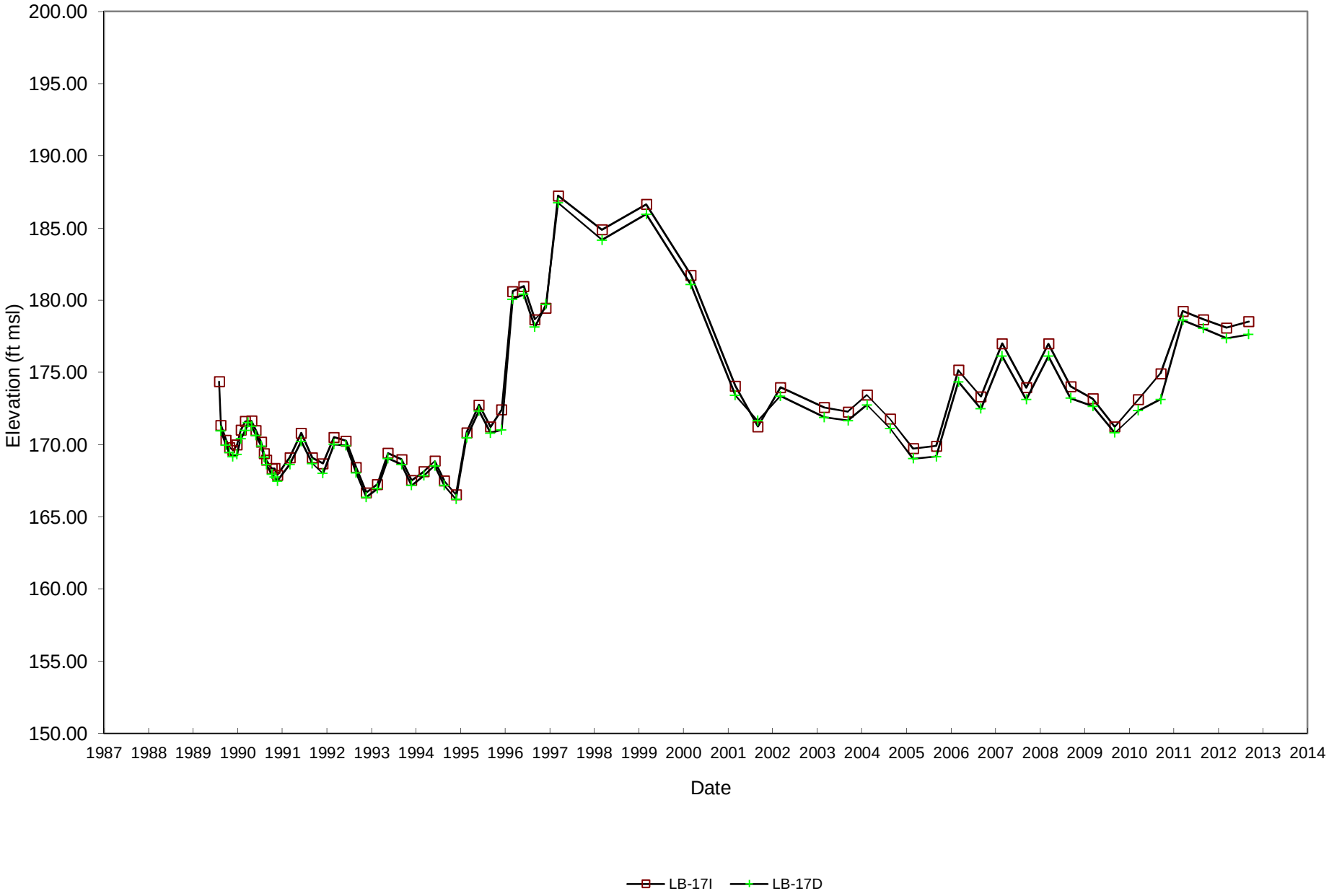
Leichner Landfill
Water Levels



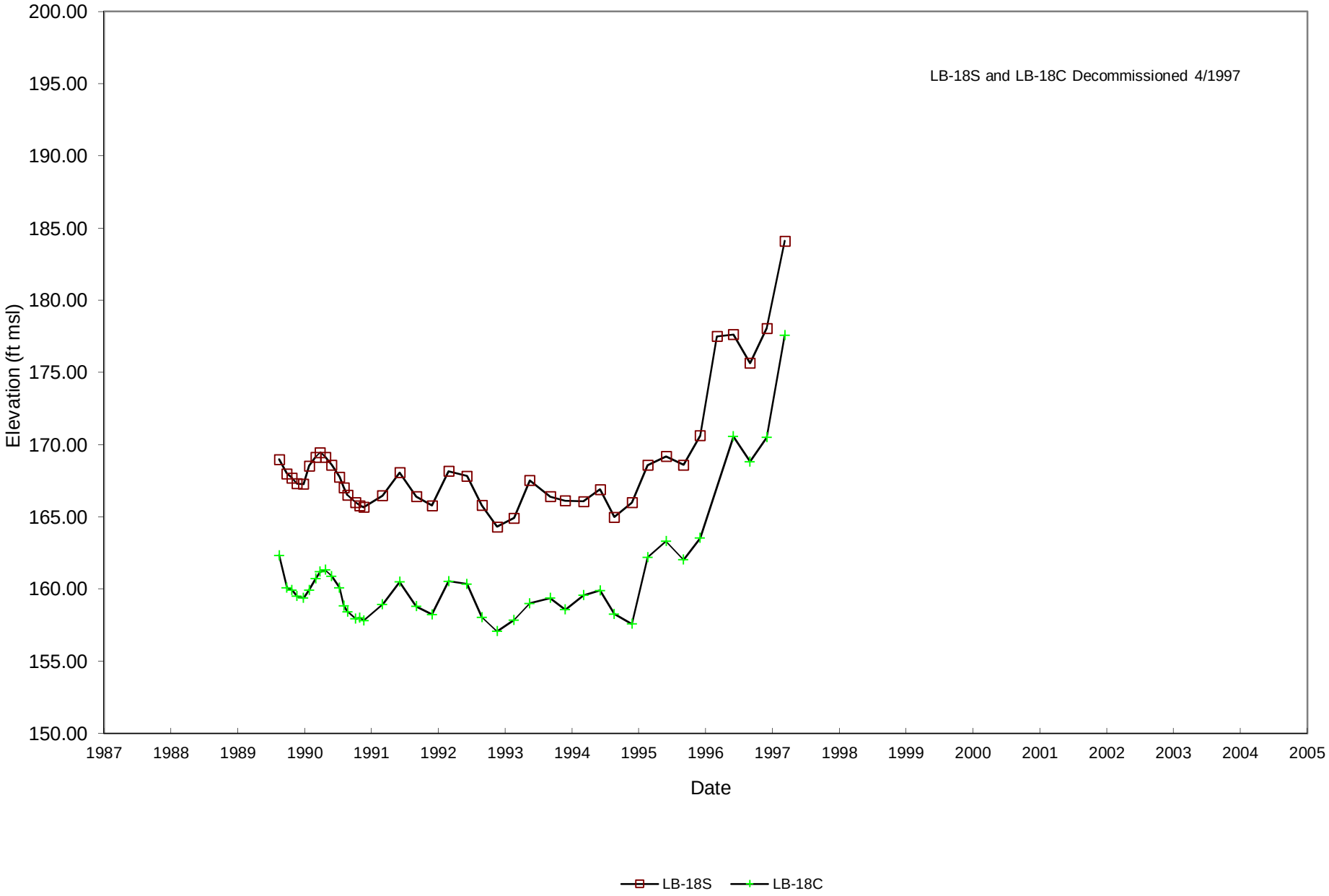
Leichner Landfill
Water Levels



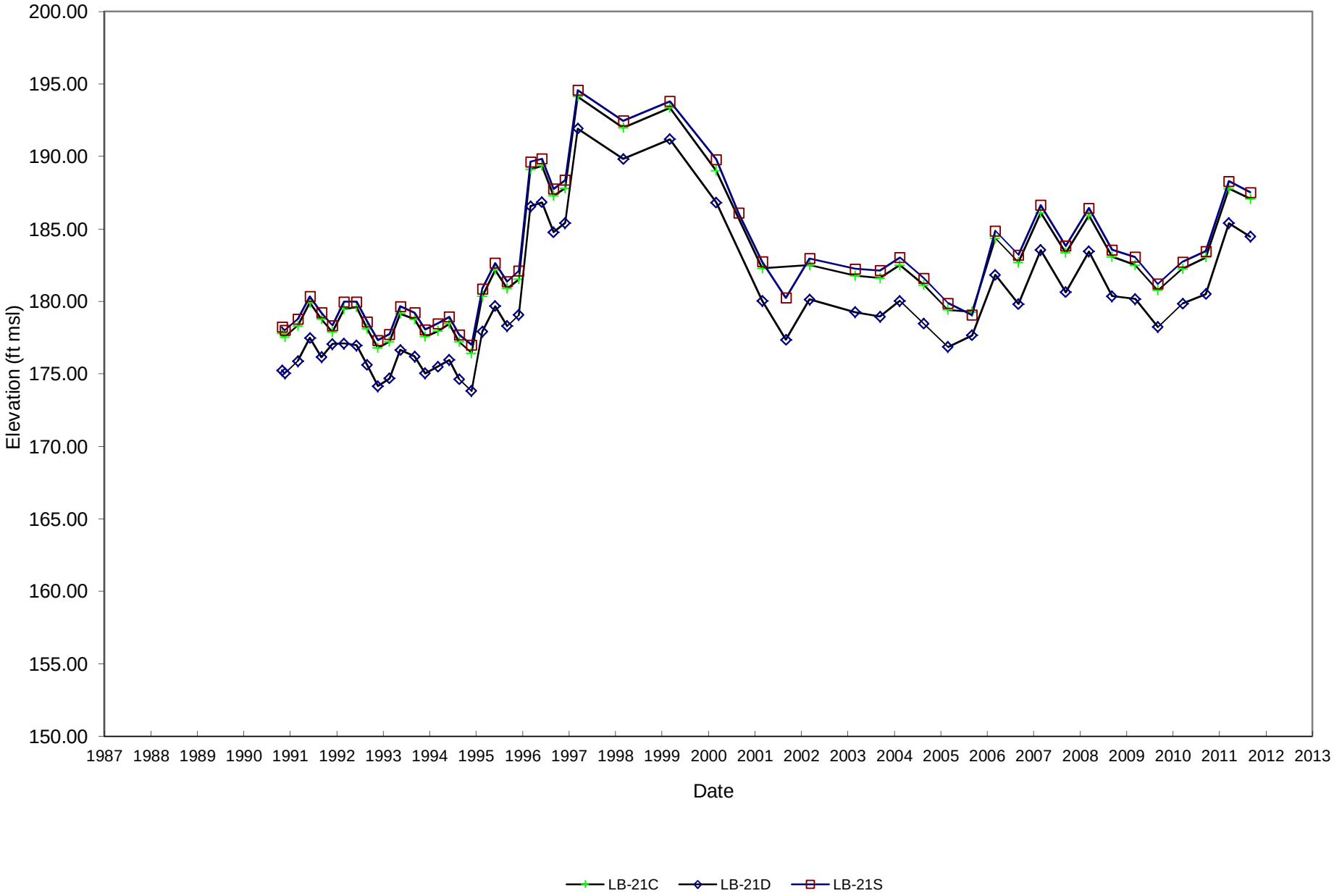
Leichner Landfill
Water Levels



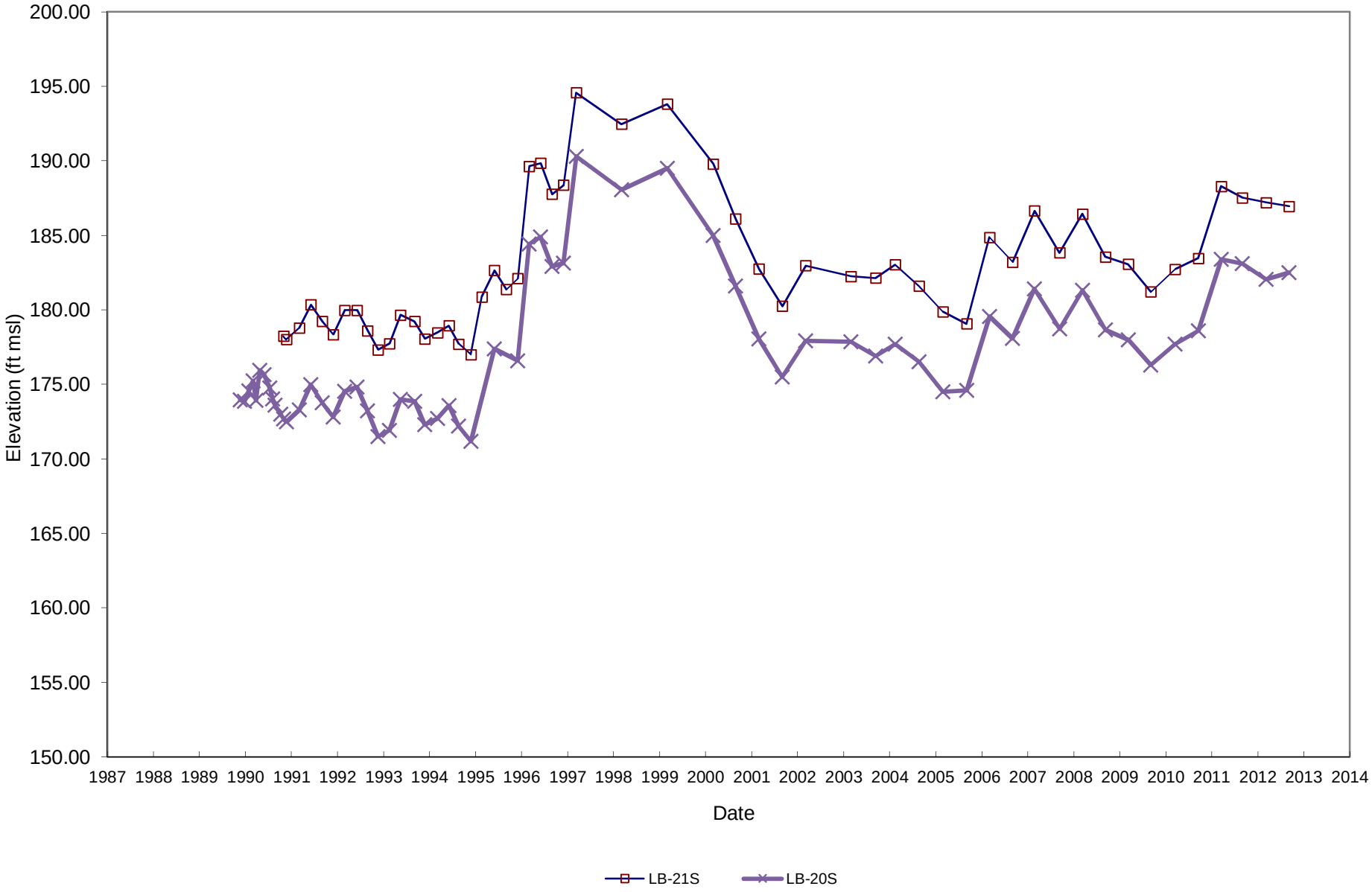
Leichner Landfill
Water Levels



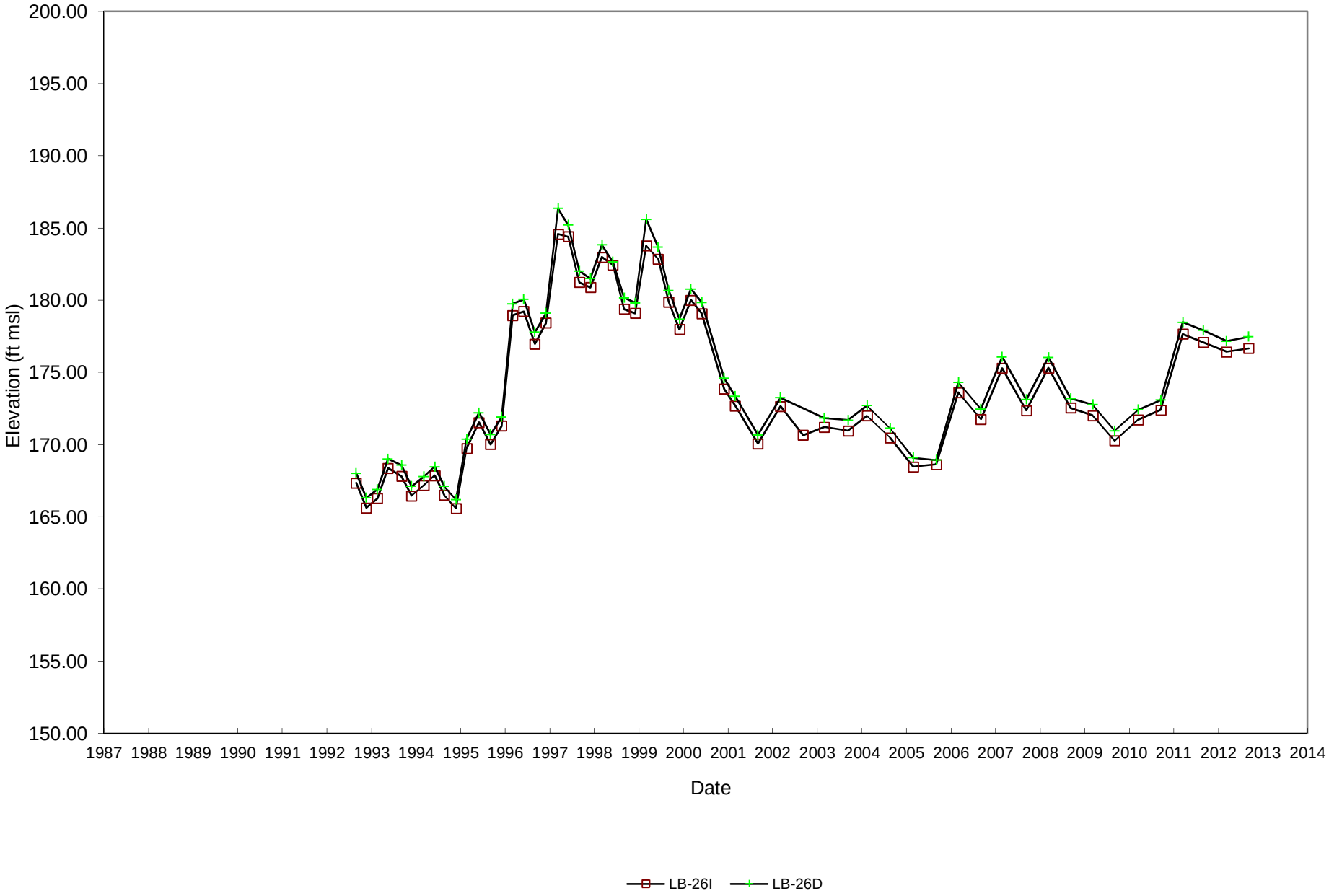
Leichner Landfill
Water Levels



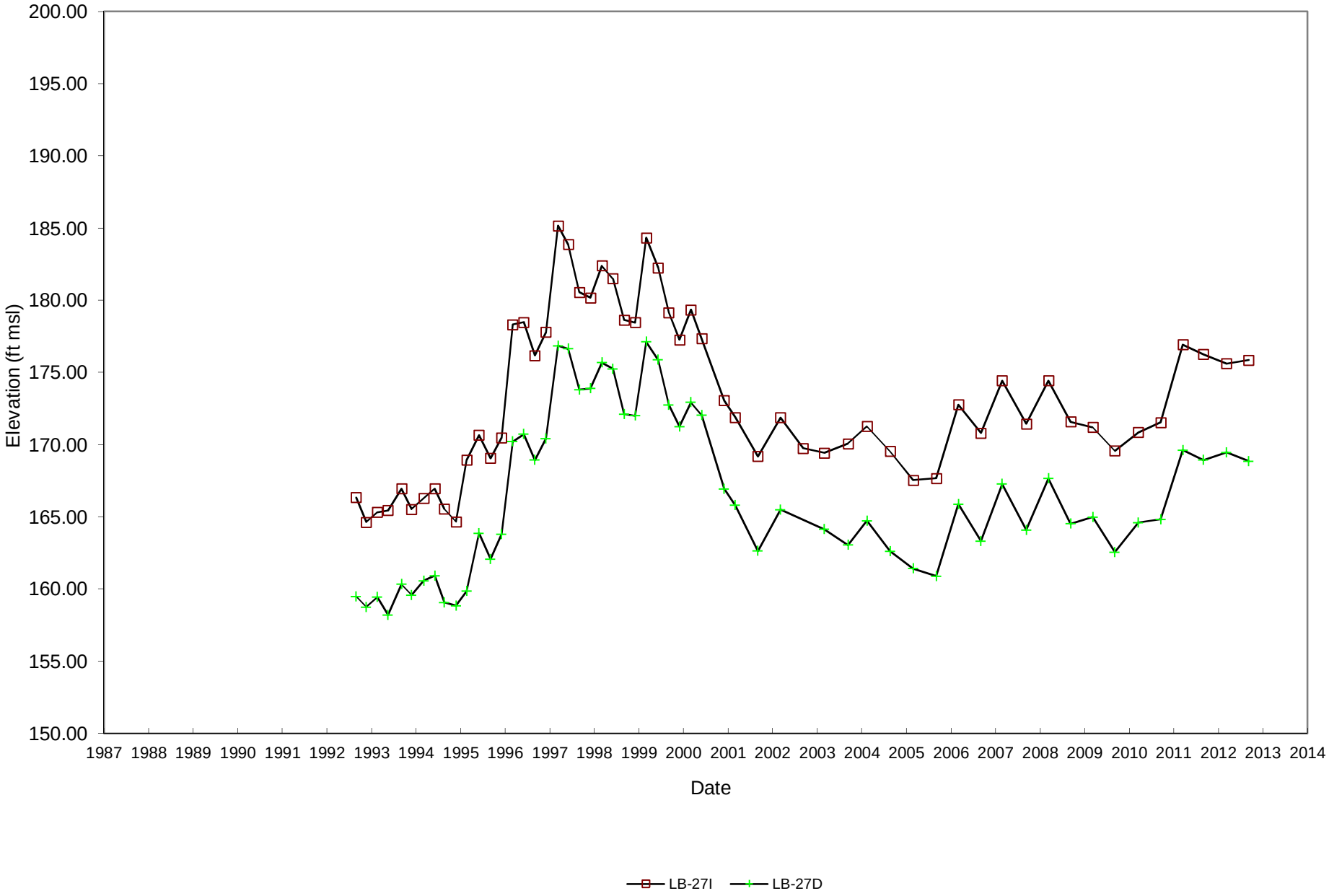
Leichner Landfill
Water Levels



Leichner Landfill
Water Levels



Leichner Landfill
Water Levels



APPENDIX B

2012 and Historical Groundwater Analytical Data (Summary Tables)

Field Parameters

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-1D	LB-289-W04	2/28/89	6.18	225	10.0	
LB-1D	LB-589-W03	5/23/89	7.01	220	11.5	
LB-1D	LB-1089-W01	10/17/89	6.60	213	10.5	
LB-1D	LB-1189-W04	11/14/89	7.25	191	10.5	
LB-1D	LB-1289-W22	12/19/89	7.01	190	9.0	
LB-1D	LB-390-W09	3/14/90	6.92	188	11.0	
LB-1D	LB-690-W11	6/20/90	7.11	188	13.0	
LB-1D	LB-990-W08	9/14/90	6.79	223	12.5	
LB-1D	LB-1290-W06	12/11/90	6.90	199	10.7	
LB-1D	LB-391-W11	3/20/91	6.95	171	13.2	
LB-1D	LB-691-W06	6/25/91	7.05	226	11.7	
LB-1D	LB-991-06	9/24/91	7.05	184	10.7	
LB-1D	LB-1291-14	12/23/91	7.26	202	10.3	
LB-1D	LB-392-14	3/23/92	7.17	200	13.0	
LB-1D	LB-63092-2	6/30/92	6.73	217	13.0	
LB-1D	LB-92292-3	9/22/92	7.09	202	12.0	
LB-1D	LB-121192-16	12/11/92	7.03	205	12.0	
LB-1D	LB-031093-4	3/10/93	7.06	202	12.0	
LB-1D	LB-060293-6	6/2/93	7.00	196	13.5	
LB-1D	LB-092393-8	9/23/93	7.21	195	13.0	8.00
LB-1D	LB-121593-2	12/15/93	7.00	206	10.0	7.40
LB-1D	LB-032494-2	3/24/94	7.11	203	14.0	7.60
LB-1D	LB-062194-1	6/21/94	7.02	206	16.0	7.70
LB-1D	LB-090694-2	9/6/94	7.01	201	14.5	
LB-1D	LB-121494-12	12/14/94	7.29	259	11.0	9.90
LB-1D	LB-030995-2	3/9/95	7.01	219	13.5	7.70
LB-1D	LB-062095-13	6/20/95	7.11	227	13.0	7.20
LB-1D	LB-092295-14	9/22/95	6.97	211	12.6	
LB-1D	LB-12995-6	12/19/95	7.21	196	8.4	
LB-1D	LB-032096-18	3/20/96	6.98	233	14.5	
LB-1D	LB-061896-10	6/18/96	7.25	188	14.0	
LB-1D	LB-091796-6	9/17/96	7.13	181	13.4	
LB-1D	LB121796-2	12/17/96	7.48	207	10.6	
LB-1D	LB-031997-4	3/19/97	6.90	228	12.0	
LB-1D	LB-061797-4	6/17/97	7.21	211	13.7	
LB-1D	LB-091697-1	9/16/97	6.80	118	12.3	
LB-1D	LB-121697-4	12/16/97	7.03	223	11.9	8.30
LB-1D	LB-031998-4	3/19/98	6.71	220	12.2	
LB-1D	LB-061698-6	6/16/98	7.10	198	12.5	
LB-1D	LB-091798-3	9/17/98	8.12	134.6	12.6	
LB-1D	LB-121898-10	12/18/98	7.18	231	11.3	
LB-1D	LB-031799-04	3/17/99	7.18	184	13.2	
LB-1D	LB-062399-15	6/23/99	7.08	157	13.3	
LB-1D	LB-091799-11	9/17/99	6.91	222	12.2	
LB-1D	LB-121699-12	12/16/99	7.02	170	12.2	
LB-1D	LB-091100-2	9/11/00	7.02	221	13.0	
LB-1D	LB-121500-10	12/15/00	7.06	188	11.8	
LB-1D	LB-031501-15	3/15/01	6.92	220	11.5	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-1D (Dup)	LB-031501-16	3/15/01	6.92	220	11.5	
LB-1D	LB-031902-2	3/19/02	7.17	216	11.8	
LB-1D	LB-031303-12	3/13/03	6.77	200	12.0	
LB-1D	LB-022404-1	2/24/04	7.54	158	52.5	
LB-1D	LB-030905-13	3/9/05	6.69	215	12.0	8.39
LB-1D	LB-031406-1	3/14/06	6.90	162	11.5	8.55
LB-1D (Dup)	LB-031406-2	3/14/06	6.90	162	11.5	8.55
LB-1D	LB-030507-2	3/5/07	6.24	170	12.6	8.90
LB-1D	LB-032408-15	3/24/08	6.97	300	10.8	
LB-1D	LB-1D	3/17/09	6.89	221	11.4	10.18
LB-1D	LB-1D032310	3/23/10	7.15	266	11.6	
LB-1D	LB-1D	3/28/11	7.45	355	11.9	6.54
LB-1D	LB-031312-13	3/13/12	6.67	249	11.5	7.55
LB-1S	LB-589-W04	5/23/89	6.61	572	12.5	
LB-1S	LB-1289-W12	12/15/89	6.56	352	9.5	
LB-1S	LB-390-W10	3/14/90	6.26	367	11.5	
LB-1S	LB-690-W10	6/20/90	6.58	446	12.0	
LB-1S	LB-990-W06	9/14/90	6.40	416	13.0	
LB-1S	LB-1290-W05	12/11/90	6.38	554	11.2	
LB-1S	LB-391-W10	3/20/91	6.30	565	13.1	
LB-1S	LB-691-W05	6/25/91	6.63	546	12.5	
LB-1S	LB-991-05	9/24/91	6.67	316	11.7	
LB-1S	LB-1291-13	12/23/91	6.94	377	11.1	
LB-1S	LB-392-15	3/23/92	6.64	416	14.0	
LB-1S	LB-63092-1	6/30/92	6.71	414	14.0	
LB-1S	LB-92292-2	9/22/92	6.47	358	12.5	
LB-1S	LB-121192-15	12/11/92	6.51	353	12.0	
LB-1S	LB-031093-3	3/10/93	6.46	630	12.0	
LB-1S	LB-060293-5	6/2/93	6.20	565	14.5	
LB-1S	LB-092393-09	9/23/93	6.62	475	15.0	4.90
LB-1S	LB-121593-1	12/15/93	6.41	456	12.5	3.80
LB-1S	LB-032494-1	3/24/94	6.29	567	15.0	
LB-1S	LB-062194-4	6/21/94	6.30	554	16.5	4.70
LB-1S	LB-090694-1	9/6/94	6.36	516	14.5	
LB-1S	LB-121494-11	12/14/94	7.49	589	10.0	6.20
LB-1S	LB-030995-1	3/9/95	6.61	455	13.5	
LB-1S	LB-062095-12	6/20/95	6.74	553	13.5	7.30
LB-1S	LB-092295-13	9/22/95	6.98	448	13.1	
LB-1S	LB-121995-5	12/19/95	6.74	390	10.2	
LB-1S	LB-032096-17	3/20/96	6.71	496	18.0	
LB-1S	LB-061896-9	6/18/96	6.82	361	14.0	
LB-1S	LB-091796-5	9/17/96	6.73	401	12.6	
LB-1S	LB121796-1	12/17/96	7.40	398	11.5	
LB-1S	LB-031997-3	3/19/97	6.61	517	12.8	
LB-1S	LB-061797-3	6/17/97	6.55	350	14.7	
LB-1S	LB-091697-2	9/16/97	6.50	323	13.1	
LB-1S	LB-121697-5	12/16/97	6.52	465	13.1	6.30
LB-1S	LB-031998-3	3/19/98	6.78	538	13.0	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-1S	LB-061698-5	6/16/98	6.49	329	13.5	
LB-1S	LB-091798-4	9/17/98	6.76	281	13.8	
LB-1S	LB-121898-9	12/18/98	6.69	344	12.4	
LB-1S	LB-031799-3	3/17/99	6.85	327	14.6	
LB-1S	LB-062399-14	6/23/99	6.72	266	14.4	
LB-1S	LB-091799-9	9/17/99	6.57	442	13.3	
LB-1S	LB-121699-13	12/16/99	6.64	310	13.6	
LB-1S	LB-091100-1	9/11/00	6.59	371	13.9	
LB-1S	LB-121500-9	12/15/00	6.69	305	13.0	
LB-1S	LB-031401-14	3/14/01	6.58	276	13.3	
LB-1S	LB-092001-6	9/20/01	6.63	305	13.2	
LB-1S	LB-031902-1	3/19/02	7.45	288	12.7	6.89
LB-1S	LB-091802-1	9/18/02	7.20	240	14.0	5.50
LB-1S	LB-031303-10	3/13/03	6.97	230	12.0	
LB-1S (Dup)	LB-031303-11	3/13/03	6.97	230	12.0	
LB-1S	LB-092203-6	9/22/03	6.50	170	14.0	6.17
LB-1S	LB-022404-2	2/24/04	6.68	173	53.9	
LB-1S	LB-090104-1	9/1/04	6.50	225	13.2	
LB-1S (Dup)	LB-090104-30	9/1/04	6.50	225	13.2	
LB-1S	LB-030905-14	3/9/05	6.59	227	13.0	6.52
LB-1S	LB-091405-1	9/14/05	6.86	190	13.5	5.12
LB-1S	LB-031406-3	3/14/06	6.68	239	12.1	8.03
LB-1S	LB-091306-5	9/13/06	6.58	242	12.7	4.90
LB-1S (Dup)	LB-091306-6	9/13/06	6.58	242	12.7	4.90
LB-1S	LB-030507-1	3/5/07	6.18	187	12.4	8.24
LB-1S	LB-091907-1	9/19/07	6.66	246	12.6	6.36
LB-1S (Dup)	LB-091907-2	9/19/07	6.66	246	12.6	6.36
LB-1S	LB-032408-14	3/24/08	6.60	381	10.1	
LB-1S	LB-091608-1	9/16/08	6.79	267	12.4	
LB-1S	LB-1S	3/17/09	6.75	265	12.0	8.45
LB-1S	LBLF1S091109	9/11/09	7.10	261	13.1	5.86
LB-1S	LB-1S032310	3/23/10	6.89	345	12.1	
LB-1S	LB1S092310	9/23/10	7.20	170	11.7	
LB-1S	LB-1S	3/24/11	6.75	271	12.3	5.66
LB-1S	LB-090811-07	9/8/11	6.61	296	14.2	5.35
LB-1S	LB-031312-14	3/13/12	6.50	335	12.5	4.44
LB-1S	LB-091212-08	9/12/12	6.70	177	13.0	2.91
LB-3D	LB-1189-W01	11/13/89	6.77	240	10.0	
LB-3D	LB-1289-W20	12/18/89	6.71	225	9.5	
LB-3D	LB-032097-14	3/20/97	6.79	271	12.1	
LB-3D	LB-032098-21	3/20/98	6.70	242	12.1	
LB-3D	LB-031899-15	3/18/99	6.75	198	13.5	
LB-3D	LB-031501-17	3/15/01	6.68	220	11.3	
LB-3D	LB-032002-18	3/20/02	6.78	216	11.5	7.82
LB-3D	LB-031303-14	3/13/03	6.43	170	12.0	
LB-3D	LB-022404-5	2/24/04	6.74	129	51.9	
LB-3D	LB-030905-15	3/9/05	6.56	176	11.9	7.20
LB-3D	LB031606-21	3/16/06	6.73	158	11.0	8.84

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-3D	LB-030507-4	3/5/07	5.94	138	12.0	7.43
LB-3D (Dup)	LB-030507-5	3/5/07	5.94	138	12.0	7.43
LB-3D	LB-032408-17	3/24/08	6.74	292	12.1	
LB-3D	LB-3D	3/18/09	6.68	204	12.9	8.52
LB-3D	LB-3D032410	3/24/10	6.66	233	14.3	
LB-3D	LB-3D	3/28/11	7.37	336	11.8	5.46
LB-3D	LB-031312-09	3/13/12	6.48	231	10.3	5.38
LB-3S	LB-1089-W02	10/17/89	7.36	241	11.0	
LB-3S	LB-1189-W02	11/13/89	6.63	224	10.5	
LB-3S	LB-1289-W11	12/15/89	6.14	220	10.0	
LB-3S	LB-390-W11	3/14/90	6.57	216	11.0	
LB-3S	LB-690-W06	6/19/90		208	13.0	
LB-3S	LB-990-W10	9/14/90	6.93	211	11.5	
LB-3S	LB-1290-W08	12/12/90	6.72	209	11.1	
LB-3S	LB-391-W07	3/20/91	6.36	214	11.3	
LB-3S	LB-691-W10	6/26/91	6.04	222	11.9	
LB-3S	LB-991-16	9/24/91	6.38	222	11.1	
LB-3S	LB-1291-06	12/20/91	6.65	239	10.7	
LB-3S	LB-392-10	3/20/92	6.74	227	13.5	
LB-3S	LB-62692-8	6/26/92	7.22	243	13.0	
LB-3S	LB-91792-3	9/17/92	7.90	262	12.0	
LB-3S	LB-121092-14	12/10/92	6.41	274	12.0	
LB-3S	LB-031593-25	3/15/93	6.61	303	11.5	
LB-3S	LB-060393-14	6/3/93	6.87	281	13.5	
LB-3S	LB-092393-01	9/23/93	6.18	266	14.0	1.50
LB-3S	LB-121593-5	12/15/93	9.51	277	10.5	3.00
LB-3S	LB-032594-11	3/25/94	6.83	284	13.0	5.80
LB-3S	LB-062394-13	6/23/94	6.64	290	14.5	5.40
LB-3S	LB-090794-8	9/7/94	6.95	286	14.0	
LB-3S	LB-121494-13	12/14/94	6.62	356	11.5	3.30
LB-3S	LB-031395-20	3/13/95	6.48	348	13.0	6.10
LB-3S	LB-052095-14	6/20/95	6.58	352	13.0	4.80
LB-3S	LB-092195-11	9/21/95	6.77	280	12.2	
LB-3S	LB-121995-4	12/19/95	6.89	170	10.0	
LB-3S	LB-032096-21	3/20/96	6.70	312	11.4	
LB-3S	LB-061996-11	6/19/96	6.54	261	13.5	
LB-3S	LB-032097-13	3/20/97	6.73	274	11.6	
LB-3S	LB-032098-20	3/20/98	6.70	242	12.8	
LB-3S	LB-031899-14	3/18/99	6.72	173	13.3	
LB-3S	LB-031501-18	3/15/01	6.67	173	11.2	
LB-3S	LB-032002-17	3/20/02	6.89	182	11.4	7.48
LB-3S	LB-031303-13	3/13/03	6.53	150	11.7	
LB-3S	LB-022404-6	2/24/04	6.62	121	52.2	
LB-3S	LB-030905-16	3/9/05	6.50	164	11.9	6.12
LB-3S	LB-031606-22	3/16/06	6.71	142	11.1	8.30
LB-3S	LB-030507-3	3/5/07	5.93	134	12.0	7.44
LB-3S	LB-032408-18	3/24/08	6.62	302	11.6	
LB-3S	LB-3S	3/18/09	6.61	223	12.2	7.39

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-3S	LB-3S032410	3/24/10	6.76	239	13.9	
LB-3S	LB-3S	3/28/11	7.29	352	11.6	5.73
LB-3S	LB-031312-10	3/13/12	6.44	239	11.1	4.57
LB-4D	LB-289-W02	2/27/89	7.15	177	9.5	
LB-4D	LB-589-W02	5/22/89	7.33	162	12.0	
LB-4D	LB-1289-W06	12/14/89	7.50	147	9.0	
LB-4D	LB-390-W01	3/13/90	7.50	154	12.0	
LB-4D	LB-690-W01	6/19/90		153	12.0	
LB-4D	LB-990-W02	9/13/90	7.50	152	13.0	
LB-4D	LB-1290-W01	12/11/90	7.59	152	10.1	
LB-4D	LB-391-W27	3/21/91	7.07	156	10.0	
LB-4D	LB-691-W02	6/25/91	7.10	172.3	11.4	
LB-4D	LB-991-01	9/24/91	7.40	146	10.5	
LB-4D	LB-1291-02	12/19/91	7.74	157	9.7	
LB-4D	LB-392-02	3/19/92	7.77	150	13.0	
LB-4D	LB-62692-2	6/26/92	7.50	146	12.0	
LB-4D	LB-91792-5	9/17/92	7.72	151	11.0	
LB-4D	LB-12992-3	12/9/92	7.80	165	11.0	
LB-4D	LB-030993-2	3/9/93	7.72	151	12.0	
LB-4D	LB-060493-17	6/4/93	6.03	144	13.0	
LB-4D	LB-092393-03	9/23/93	7.60	159	12.5	7.50
LB-4D	LB-121693-11	12/16/93	7.88	150	11.0	7.60
LB-4D	LB-032594-10	3/25/94	7.72	155	14.0	6.70
LB-4D	LB-062794-18	6/27/94	7.79	169	16.0	6.20
LB-4D	LB-090994-20	9/9/94	6.63	496	14.5	
LB-4D	LB-121494-15	12/14/94	7.88	169	11.0	6.80
LB-4D	LB-031395-22	3/13/95	7.84	158	12.5	
LB-4D	LB-092295-21	9/22/95	7.91	117.4	12.6	
LB-4D	LB-122795-21	12/27/95	7.80	122.3	11.2	
LB-4D	LB-032796-22	3/27/96	7.83	123.1	13.1	
LB-4D	LB-070996-2	7/9/96	7.28	129.8	13.8	
LB-4D	LB-091896-15	9/18/96	7.69	125	13.0	
LB-4D	LB-121896-15	12/18/96	7.19	158	10.1	
LB-4D	LB-031797-2	3/17/97	7.59	166	10.8	
LB-4D	LB-061697-2	6/16/97	7.74	119.1	12.6	
LB-4D	LB-091697-9	9/16/97	7.00	100	11.5	
LB-4D	LB-121597-2	12/15/97	7.51	113	10.4	8.20
LB-4D	LB-031898-1	3/18/98	7.24	173	11.3	
LB-4D	LB-061598-2	6/15/98	7.10	122	11.3	
LB-4D	LB-091698-2	9/16/98	6.79	95.6	12.3	
LB-4D	LB-121898-14	12/18/98	7.79	170	10.5	
LB-4D	LB-031999-21	3/19/99	7.36	146	13.7	
LB-4D	LB-062299-2	6/22/99	7.95	126	11.9	
LB-4D	LB-091699-8	9/16/99	7.57	159	11.1	
LB-4D	LB-121499-1	12/14/99	7.69	156	10.8	
LB-4D	LB-091200-7	9/12/00	7.10	147	12.0	
LB-4D	LB-121300-4	12/13/00	7.70	135	10.7	
LB-4D	LB-031301-1	3/13/01	7.51	154	11.0	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-4D	LB-031902-4	3/19/02	6.94	160	11.0	7.23
LB-4D (Dup)	LB-031902-5	3/19/02	6.94	160	11.0	7.23
LB-4D	LB-031303-18	3/13/03	7.10	150	11.0	
LB-4D	LB-031005-23	3/10/05	7.23	166	11.6	8.24
LB-4D	LB-031506-11	3/15/06	7.41	151	11.0	6.98
LB-4D	LB-030607-22	3/6/07	6.59	132	12.0	9.96
LB-4D	LB-032408-19	3/24/08	7.61	281	11.9	
LB-4D	LB-4D	3/18/09	7.68	188	11.7	8.19
LB-4D	LB-4D032310	3/23/10	7.79	222	11.5	
LB-4D	LB-4D	3/22/11	8.46	173	11.2	4.70
LB-4D	LB-031312-11	3/13/12	7.33	211	10.9	4.89
LB-4S(R)	LB-091294-21	9/12/94	6.81	232	14.0	
LB-4S(R)	LB-121494-14	12/14/94	6.81	158	12.0	11.00
LB-4S(R)	LB-031395-21	3/13/95	7.29	156	13.5	3.10
LB-4S(R)	LB-092295-19	9/22/95	7.62	226	13.5	
LB-4S(R)	LB-122795-20	12/27/95	6.82	87.4	11.1	
LB-4S(R)	LB-032796-23	3/27/96	6.88	80.5	13.4	
LB-4S(R)	LB-070996-20	7/9/96	6.61	219	12.5	
LB-4S(R)	LB-091896-14	9/18/96	6.75	172	13.0	
LB-4S(R)	LB-121896-14	12/18/96	6.80	219	10.8	
LB-4S(R)	LB-031797-1	3/17/97	6.67	222	11.7	1.60
LB-4S(R)	LB-061697-1	6/16/97	6.61	145.6	18.0	4.20
LB-4S(R)	LB-091697-10	9/16/97	6.96	120.1	11.9	
LB-4S(R)	LB-121597-1	12/15/97	6.51	137	11.7	10.20
LB-4S(R)	LB-031898-2	3/18/98	6.60	243	12.3	
LB-4S(R)	LB-061598-1	6/15/98	6.08	213	12.5	
LB-4S(R)	LB-091698-1	9/16/98	6.57	104.8	12.7	
LB-4S(R)	LB-121898-13	12/18/98	6.84	202	12.1	
LB-4S(R)	LB-031999-20	3/19/99	6.81	199	14.3	
LB-4S(R)	LB-062299-1	6/22/99	7.71	175	24.0	8.90
LB-4S(R)	LB-091699-7	9/16/99	6.63	220	12.3	
LB-4S(R)	LB-121499-2	12/14/99	6.76	193	11.7	
LB-4S(R)	LB-091200-6	9/12/00	6.85	187	12.6	
LB-4S(R)	LB-121300-3	12/13/00	6.74	168	11.3	
LB-4S(R)	LB-031301-2	3/13/01	6.67	200	12.1	
LB-4S(R)	LB-031902-3	3/19/02	6.97	176	12.0	8.32
LB-4S(R)	LB-031303-17	3/13/03	6.33	187	12.3	
LB-4S(R)	LB-031005-22	3/10/05	6.51	210	13.0	9.18
LB-4S(R)	LB-031506-12	3/15/06	6.53	172	11.9	9.53
LB-4S(R)	LB-030607-21	3/6/07	6.41	212	11.9	11.11
LB-4S(R)	LB-032408-20	3/24/08	6.63	326	13.1	
LB-4S(R)	LB-4S	3/18/09	6.43	232	11.8	10.20
LB-4S(R)	LB-4SR032310	3/23/10	6.57	216	12.4	
LB-4S(R)	LB-4SR	3/22/11	6.82	220	12.1	8.58
LB-4S(R)	LB-031312-12	3/13/12	6.21	204	12.0	8.96
LB-5D	LB-289-W13	3/1/89	6.36	635	10.0	
LB-5D	LB-589-W13	5/24/89	6.71	534	13.0	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-5D	LB-1289-W24	12/19/89	6.62	559	10.5	
LB-5D	LB-690-W14	6/20/90	6.69	531	13.0	
LB-5D	LB-990-W15	9/18/90	6.43	554	13.0	
LB-5D	LB-1290-W24	12/14/90	6.75	550	10.2	
LB-5D	LB-391-W18	3/21/91	6.50	546	12.0	
LB-5D	LB-691-W17	6/26/91	6.73	513	13.2	
LB-5D	LB-991-06	9/25/91	6.44	547	12.1	
LB-5D	LB-1291-11	12/20/91	6.83	569	10.7	
LB-5D	LB-392-03	3/19/92	6.73	526	13.0	
LB-5D	LB-63092-4	6/30/92	6.77	576	13.5	
LB-5D	LB-91892-2	9/18/92	6.99	566	11.0	
LB-5D	LB-121092-11	12/10/92	6.76	550	13.0	
LB-5D	LB-031193-12	3/11/93	6.71	547	13.0	
LB-5D	LB-060293-8	6/2/93	6.42	515	14.0	
LB-5D	LB-092793-19	9/27/93	6.72	544	14.0	7.00
LB-5D	LB-121593-4	12/15/93	6.73	523	12.5	1.20
LB-5D	LB-032894-13	3/28/94	6.71	610	14.0	2.40
LB-5D	LB-062194-3	6/21/94	6.76	538	15.0	3.00
LB-5D	LB-090694-4	9/6/94	6.83	537	16.0	
LB-5D	LB-121394-8	12/13/94	6.84	577	13.5	2.20
LB-5D	LB-030995-4	3/9/95	6.98	563	14.0	2.90
LB-5D	LB-061995-7	6/19/95	6.87	600	13.0	4.70
LB-5D	LB-092195-9	9/21/95	6.50	582	13.3	
LB-5D	LB-121895-2	12/18/95	6.72	591	12.3	
LB-5D	LB-031996-9	3/19/96	6.65	519	13.0	
LB-5D	LB-061896-8	6/18/96	7.01	511	13.5	
LB-5D	LB-031997-9	3/19/97	6.81	509	12.3	
LB-5D	LB-031998-6	3/19/98	6.71	539	14.4	
LB-5D	LB-031899-11	3/18/99	6.76	343	15.2	
LB-5D	LB-031401-11	3/14/01	6.73	409	13.5	
LB-5D	LB-031902-13	3/19/02	6.85	430	12.7	4.29
LB-5D	LB-031303-9	3/13/03	6.53	410	12.0	
LB-5D	LB-022504-7	2/25/04	6.80	307	52.7	
LB-5D (Dup)	LB-022504-8	2/25/04	6.80	307	52.7	
LB-5D	LB-030805-1	3/8/05	6.82	400	15.2	3.91
LB-5D	LB-031606-14	3/16/06	6.75	339	12.3	7.38
LB-5D (Dup)	LB-031606-15	3/16/06	6.75	339	12.3	7.38
LB-5D	LB-030507-7	3/5/07	6.34	275	13.4	4.40
LB-5D	LB-031908-2	3/19/08	6.88	0.566	11.8	
LB-5D(Dup)	LB-031908-3	3/19/08	6.88	0.566	11.8	
LB-5D	LB-5D	3/17/09	6.88	351	13.1	4.22
LB-5D	LB-5D032410	3/24/10	7.00	365	15.0	
LB-5D	LB-5D	3/23/11	7.69	338	12.8	2.43
LB-5D	LB-031212-03	3/12/12	6.63	363	11.4	0.33
LB-5S	LB-390-W17	3/15/90	6.41	135	10.0	
LB-5S	LB-690-W13	6/20/90	6.84	161	12.0	
LB-5S	LB-990-W14	9/18/90	6.59	186	11.5	
LB-5S	LB-1290-W25	12/14/90	6.61	187	10.6	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-5S	LB-391-W17	3/21/91	6.31	162	11.1	
LB-5S	LB-691-W16	6/26/91	7.16	162.3	12.0	
LB-5S	LB-991-09	9/25/91	6.61	206	10.8	
LB-5S	LB-1291-10	12/20/91	6.86	124	10.8	
LB-5S	LB-392-04	3/19/92	6.66	168	12.0	
LB-5S	LB-63092-3	6/30/92	6.19	206	13.0	
LB-5S	LB-91892-1	9/18/92	6.57	208	11.5	
LB-5S	LB-121092-10	12/10/92	6.70	182	12.5	
LB-5S	LB-031193-11	3/11/93	6.63	179	12.0	
LB-5S	LB-060293-7	6/2/93	6.33	198	13.0	
LB-5S	LB-092793-18	9/27/93	6.72	180	14.5	9.60
LB-5S	LB-121593-3	12/15/93	6.78	161	12.0	11.00
LB-5S	LB-032894-12	3/28/94	6.28	200	13.0	11.00
LB-5S	LB-062194-2	6/21/94	6.59	219	15.0	10.50
LB-5S	LB-090694-3	9/6/94	6.50	178	15.5	
LB-5S	LB-121394-9	12/13/94	6.61	142	13.5	11.00
LB-5S	LB-030995-3	3/9/95	6.94	158	13.5	10.40
LB-5S	LB-051995-6	6/19/95	6.54	275	12.0	7.70
LB-5S	LB-092195-8	9/20/95	6.50	229	12.3	
LB-5S	LB-121895-1	12/18/95	7.49	89	11.7	
LB-5S	LB-031996-7	3/19/96	6.45	217	12.5	
LB-5S	LB-061896-7	6/18/96	6.65	238	12.5	
LB-5S	LB-031997-8	3/19/97	6.93	226	11.3	
LB-5S	LB-031998-5	3/19/98	6.39	226	12.1	
LB-5S	LB-031899-10	3/18/99	6.89	180	13.6	
LB-5S	LB-031401-12	3/14/01	6.53	177	11.9	
LB-5S	LB-092001-1	9/20/01	6.38	218	12.7	
LB-5S	LB-031902-12	3/19/02	6.76	185	11.6	8.89
LB-5S	LB-091802-6	9/18/02	6.90	220	14.0	
LB-5S	LB-031303-8	3/13/03	6.67	167	12.0	
LB-5S	LB-092203-1	9/22/03	6.08	190	13.5	7.00
LB-5S	LB-022504-9	2/25/04	6.45	146	54.3	
LB-5S	LB-090104-5	9/1/04	6.36	200	14.5	
LB-5S	LB-030805-2	3/8/05	6.19	200	12.8	9.26
LB-5S	LB-091405-4	9/14/05	6.37	180	13.3	8.16
LB-5S	LB-031606-16	3/16/06	6.60	203	11.4	11.18
LB-5S	LB-091206-1	9/12/06	6.27	264	13.6	7.18
LB-5S	LB-030507-6	3/5/07	5.82	175	12.4	9.72
LB-5S	LB-091907-3	9/19/07	6.27	223	13.0	9.42
LB-5S	LB-031908-1	3/19/08	6.45	0.457	10.7	
LB-5S	LB-091608-2	9/16/08	6.42	204	12.9	
LB-5S (Dup)	LB-091608-8	9/16/08	6.79	267	12.4	
LB-5S	LB-5S	3/17/09	6.55	213	11.9	9.21
LB-5S	LBLF5S091109	9/11/09	6.70	197	13.3	9.74
LB-5S	LB-5S032410	3/24/10	6.54	190	13.4	
LB-5S (Dup)	LB-DUP2032410	3/24/10	6.54	190	13.4	
LB-5S	LB-5S092310	9/23/10	6.70	174	12.4	
LB-5S	LB-5S	3/23/11	6.89	228	11.8	7.82

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-5S	LB-090811-06	9/8/11	5.92	273	13.3	8.10
LB-5S	LB-032212-17	3/22/12	6.16	204	10.9	9.22
LB-5S	LB-091112-01	9/11/12	6.11	188	13.4	8.13
LB-6S	LB-289-W17	3/1/89	6.43	801	10.0	
LB-6S	LB-589-W17	5/24/89	6.80	630	13.5	
LB-6S	LB-1289-W13	12/15/89	6.89	835	10.5	
LB-6S	LB-390-W24	3/15/90	6.54	667	13.5	
LB-6S	LB-690-W22	6/21/90	6.99	567	13.0	
LB-6S	LB-990-W11	9/14/90	6.49	741	13.0	
LB-6S	LB-1290-W13	12/12/90	6.83	765	10.4	
LB-6S	LB-391-W16	3/21/91	6.44	522	12.4	
LB-6S	LB-691-W19	6/27/91	6.10	640	13.3	
LB-6S	LB-991-14	9/25/91	6.84	665	12.9	
LB-6S	LB-1291-08	12/20/91	6.69	694	11.9	
LB-6S	LB-392-07	3/20/92	6.69	520	14.0	
LB-6S	LB-62692-5	6/26/92	7.02	649	13.5	
LB-6S	LB-92192-4	9/21/92	6.76	676	12.0	
LB-6S	LB-12992-4	12/9/92	6.77	727	13.0	
LB-6S	LB-031093-7	3/10/93	6.90	614	12.5	
LB-6S	LB-060393-11	6/3/93	6.64	410	14.0	
LB-6S	LB-092493-13	9/24/93	6.64	470	14.0	5.20
LB-6S	LB-121593-6	12/15/93	6.68	579	13.0	3.40
LB-6S	LB-032994-18	3/29/94	6.37	390	14.5	7.40
LB-6S	LB-062394-11	6/23/94	6.62	505	13.5	5.90
LB-6S	LB-090694-5	9/6/94	6.69	531	18.0	
LB-6S	LB-121394-6	12/13/94	6.61	524	13.0	3.00
LB-6S	LB-031095-10	3/10/95	6.81	320	12.0	8.90
LB-6S	LB-062095-9	6/20/95	6.50	487	12.0	5.60
LB-6S	LB-092095-6	9/20/95	6.74	495	15.0	
LB-6S	LB-122095-12	12/20/95	6.21	386	12.1	
LB-6S	LB-031996-5	3/19/96	6.29	336	13.5	
LB-6S	LB-061996-12	6/19/96	6.54	367	13.0	
LB-6S	LB-091896-12	9/18/96	6.31	362	12.8	
LB-6S	LB121796-3	12/17/96	7.01	431	12.2	
LB-6S	LB-031997-7	3/19/97	6.89	430	12.5	
LB-6S	LB-061797-6	6/17/97	6.45	456	13.4	
LB-6S	LB-091697-3	9/16/97	6.50	351	12.1	
LB-6S	LB-121797-14	12/17/97	6.43	584	12.5	0.60
LB-6S	LB-031998-7	3/19/98	6.46	633	13.4	
LB-6S	LB-061698-7	6/16/98	6.54	384	13.1	
LB-6S	LB-091798-5	9/17/98	6.54	292	13.5	
LB-6S	LB-121798-01	12/17/98	6.74	398	12.5	
LB-6S	LB-031799-2	3/17/99	6.75	352	14.5	
LB-6S	LB-062399-11	6/23/99	6.77	298	13.7	
LB-6S	LB-091699-5	9/16/99	6.56	554	13.2	
LB-6S	LB-121599-10	12/14/99	6.66	440	12.5	
LB-6S	LB-091200-3	9/12/00	6.42	413	13.2	
LB-6S	LB-121200-1	12/12/00	6.61	467	13.0	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-6S	LB-031301-7	3/13/01	6.58	531	13.2	
LB-6S	LB-092001-5	9/20/01	6.69	405	13.6	
LB-6S (Dup)	LB-031301-8	3/13/01	6.58	531	13.2	
LB-6S	LB-032002-15	3/20/02	6.82	468	13.2	4.54
LB-6S	LB-091802-2	9/18/02	7.00	430	14.5	
LB-6S (Dup)	LB-091802-3	9/18/02	7.00	430	14.5	
LB-6S	LB-031303-21	3/13/03	6.70	497	13.0	
LB-6S	LB-092203-5	9/22/03	6.50	310	13.5	5.70
LB-6S	LB-022604-18	2/26/04	6.79	279	54.4	
LB-6S	LB-090104-6	9/1/04	6.69	335	13.3	
LB-6S	LB-030805-9	3/8/05	6.84	432	14.5	3.13
LB-6S	LB-091405-6	9/14/05	6.67	302	13.4	2.34
LB-6S	LB-0301506-13	3/15/06	6.67	287	12.1	8.38
LB-6S	LB-091206-4	9/12/06	6.66	344	13.1	5.80
LB-6S	LB-030507-12	3/5/07	6.20	249	13.0	9.40
LB-6S	LB-091907-6	9/19/07	6.72	349	12.6	3.59
LB-6S	LB-031908-9	3/19/08	6.69	418	13.0	
LB-6S	LB-091608-3	9/16/08	6.47	334	14.5	
LB-6S	LB-6S	3/18/09	6.63	304	12.4	4.61
LB-6S	LBLF6S091109	9/11/09	7.16	292	12.4	2.28
LB-6S	LB-6S032310	3/23/10	6.79	322	6.2	
LB-6S	LB6S092310	9/23/10	7.00	192	11.6	
LB-6S (Dup)	LB51S092310	9/23/10	6.70	174	12.4	
LB-6S	LB-6S	3/22/11	7.58	241	12.2	7.52
LB-6S (Dup)	DUP1	3/22/11	7.58	241	12.2	7.52
LB-6S	LB-090711-05	9/7/11	6.76	219	15.0	7.01
LB-6S (Dup)	LB-090711-04	9/7/11	6.76	219	15.0	7.01
LB-6S	LB-032212-23	3/22/12	6.54	240	11.7	6.65
LB-6S (Dup)	LB-032212-22	3/22/12	6.54	240	11.7	6.65
LB-6S	LB-091212-06	9/12/12	6.40	214	12.7	4.02
LB-6S (Dup)	LB-091212-07	9/12/12	6.40	214	12.7	4.02
LB-10DR	LB-031005-19	3/10/05	7.15	523	13.6	1.61
LB10-DR	LB-031406-5	3/14/06	6.83	389	12.3	2.98
LB10-DR	LB-030607-20	3/6/07	6.39	375	13.3	6.33
LB10-DR	LB-032408-22	3/24/08	6.92	535	12.6	
LB10-DR	LB-10DR	3/17/09	6.86	495	12.4	5.12
LB-10DR	LB-10DR032310	3/23/10	6.95	525	12.2	
LB-10DR	LB-10DR	3/29/11	6.33	491	11.8	2.81
LB-10DR	LB-0313012-07	3/13/12	6.70	463	11.7	1.42
LB-10S	LB-1089-W05	10/17/89	7.03	797	12.0	
LB-10S	LB-1189-W07	11/14/89	6.89	721	11.0	
LB-10S	LB-1289-W09	12/14/89	6.69	432	9.0	
LB-10S	LB-390-W05	3/13/90	7.24	416	10.5	
LB-10S	LB-690-W03	6/19/90		262	13.0	
LB-10S	LB-990-W04	9/13/90	6.57	396	13.5	
LB-10S	LB-1290-W03	12/11/90	6.86	435	11.3	
LB-10S	LB-391-W22	3/21/91	7.32	422	12.1	
LB-10S	LB-691-W03	6/25/91	6.72	457	12.7	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-10S	LB-991-03	9/24/91	6.96	472	12.3	
LB-10S	LB-1291-03	12/19/91	6.97	467	11.4	
LB-10S	LB-392-06	3/20/92	6.96	313	14.0	
LB-10S	LB-62692-3	6/26/92	7.26	376	14.0	
LB-10S	LB-92192-1	9/21/92	6.84	259	13.0	
LB-10S	LB-12992-6	12/9/92	7.03	258	13.0	
LB-10S	LB-031293-17	3/12/93	6.71	262	12.0	
LB-10S	LB-060493-18	6/4/93	6.61	295	14.5	
LB-10S	LB-092393-5	9/23/93	7.60	186	14.0	2.60
LB-10S	LB-121693-8	12/16/93	6.75	264	13.0	3.10
LB-10S	LB-032894-14	3/28/94	6.93	190	16.0	5.30
LB-10S	LB-062494-17	6/24/94	7.15	170	16.0	8.70
LB-10S	LB-090894-17	9/8/94	7.03	189	16.0	
LB-10S	LB-121594-17	12/15/94	6.94	192	12.5	3.30
LB-10S	LB-031095-15	3/10/95	7.04	231	13.0	9.70
LB-10S	LB-062195-15	6/21/95	6.92	215	13.5	5.60
LB-10S	LB-092295-17	9/22/95	7.15	169	13.4	
LB-10S	LB-121995-9	12/19/95	6.82	154	11.1	
LB-10S	LB-032096-12	3/20/96	6.25	152	11.6	
LB-10S	LB-061996-18	6/19/96	6.52	400	13.0	
LB-10S	LB-091796-1	9/17/96	6.62	463	13.9	
LB-10S	LB-121896-12	12/18/96	6.83	626	12.3	
LB-10S	LB-032097-21	3/20/97	6.68	609	12.4	
LB-10S	LB-061897-13	6/18/97	6.68	457	14.4	
LB-10S	LB-091897-15	9/18/97	7.09	650	12.0	
LB-10S	LB-121597-3	12/15/97	6.69	476	11.3	0.10
LB-10S	LB-032098-15	3/20/98	6.73	674	13.0	
LB-10S	LB-061598-3	6/15/98	6.66	438	13.6	
LB-10S	LB-091898-11	9/18/98	6.83	275	13.4	
LB-10S	LB-121798-7	12/17/98	6.91	395	13.3	
LB-10S	LB-031999-17	3/19/99	6.51	415	15.1	
LB-10S	LB-062299-4	6/22/99	6.94	346	14.0	
LB-10SR	LB-031005-21	3/10/05	6.86	319	13.4	2.64
LB-10SR	LB-091505-7	9/14/05	6.89	150	13.1	3.40
LB10-SR	LB-031406-6	3/14/06	6.79	160	12.6	9.40
LB10-SR	LB-091306-9	9/13/06	6.57	431	13.4	6.94
LB10-SR	LB-030607-19	3/6/07	5.97	119	13.1	10.60
LB10-SR	LB-091907-7	9/19/07	6.57	435	13.3	4.99
LB10-SR	LB-032408-21	3/24/08	6.40	291	12.3	
LB10-SR	LB-091608-4	9/16/08	6.54	278	14.1	
LB10-SR	LB-10SR	3/17/09	6.84	358	12.1	7.87
LB10-SR	LBLF10S091109	9/11/09	7.11	252	13.4	2.32
LB10-SR	LB-10S032310	3/23/10	6.87	286	12.9	
LB10-SR	LB10R092310	9/23/10	6.60	123	12.3	
LB-10SR	LB-10SR	3/29/11	6.01	360	12.5	2.05
LB-10SR (Dup)	DUP2	3/29/11	6.01	360	12.5	2.05
LB-10SR	LB-090811-08	9/8/11	6.52	410	14.8	0.80

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-10SR	LB-031312-08	3/13/12	6.62	550	11.8	0.26
LB-10SR	LB-091212-09	9/12/12	6.78	480	14.5	0.59
LB-13D	LB-1089-W15	10/19/89	6.90	237	11.0	
LB-13D	LB-1189-W20	11/16/89	6.56	249	11.0	
LB-13D	LB-1289-W18	12/18/89	6.62	229	9.5	
LB-13D	LB-390-W18	3/15/90	6.79	232	12.0	
LB-13D	LB-690-W20	6/21/90	7.27	277	12.0	
LB-13D	LB-990-W17	9/18/90	6.64	236	13.0	
LB-13D	LB-1290-W20	12/13/90	6.64	234	10.7	
LB-13D	LB-391-W15	3/20/91	6.76	232	11.8	
LB-13D	LB-691-W22	6/27/91	6.91	235	13.1	
LB-13D	LB-991-13	9/25/91	7.15	240	12.0	
LB-13D	LB-1291-19	12/23/91	6.97	249	10.7	
LB-13D	LB-392-19	3/24/92	6.88	247	13.0	
LB-13D	LB-7292-2	7/2/92	7.40	250	13.0	
LB-13D	LB-91792-2	9/17/92	7.40	246	12.0	
LB-13D	LB-121092-9	12/9/92	6.82	251	12.0	
LB-13D	LB-031293-20	3/12/93	6.92	264	11.0	
LB-13D	LB-060493-21	6/4/93	6.99	231	13.5	
LB-13D	LB-092393-07	9/23/93	6.75	251	13.0	6.10
LB-13D	LB-121693-12	12/16/93	6.78	252	11.0	6.90
LB-13D	LB-032894-17	3/28/94	6.73	290	15.0	8.20
LB-13D	LB-062894-20	6/28/94	6.77	274	14.0	6.80
LB-13D	LB-090794-10	9/7/94	6.94	265	13.0	
LB-13D	LB-121594-21	12/15/94	6.68	304	11.0	6.90
LB-13D	LB-031395-18	3/13/95	6.80	296	12.5	7.10
LB-13D	LB-062195-19	6/21/95	6.73	353	12.0	7.10
LB-13D	LB-092295-16	9/22/95	6.99	256	12.6	
LB-13D	LB-121995-8	12/19/95	7.02	234	10.2	
LB-13D	LB-132096-15	3/20/96	6.58	271	13.2	
LB-13D	LB-061996-16	6/19/96	6.78	258	13.0	
LB-13D	LB-091796-4	9/17/96	6.81	257	13.9	
LB-13D	LB121796-9	12/17/96	7.25	300	11.0	
LB-13D	LB-032097-18	3/20/97	6.96	323	11.8	
LB-13D	LB-061897-15	6/18/97	6.88	291	12.9	
LB-13D	LB-091897-11	9/18/97	6.46	310	12.0	
LB-13D	LB-121797-9	12/17/97	6.60	301	11.8	11.00
LB-13D	LB-032098-19	3/20/98	7.11	296	12.9	
LB-13D	LB-061798-14	6/17/98	6.69	238	13.2	
LB-13D	LB-091898-15	9/18/98	7.42	218	12.9	
LB-13D	LB-121898-12	12/18/98	6.76	270	11.7	
LB-13D	LB-031999-23	3/19/99	6.78	222	14.2	
LB-13D	LB-062399-12	6/23/99	6.81	195	12.7	
LB-13D	LB-091799-13	9/17/99	6.69	256	12.6	
LB-13D	LB-121499-3	12/14/99	6.75	252	12.1	
LB-13D	LB-091300-11	9/13/00	6.95	225	13.0	
LB-13D	LB-121500-12	12/15/00	6.80	198	12.1	
LB-13D	LB-031501-19	3/15/01	6.67	229	12.2	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-13D	LB-032002-20	3/20/02	6.87	223	12.3	6.53
LB-13D	LB-031303-16	3/13/03	6.93	197	13.0	
LB-13D	LB-022404-3	2/24/04	6.73	150	54.4	
LB-13D	LB-031005-17	3/10/05	6.62	194	12.3	7.65
LB-13D	LB-031506-9	3/15/06	6.75	175	11.8	8.09
LB-13D	LB-030607-18	3/6/07	6.26	143	12.2	11.33
LB-13D	LB-032008-13	3/20/08	6.76	263	11.7	
LB-13D	LB-13D	3/17/09	6.71	271	11.6	7.86
LB-13D	LB-13D032410	3/24/10	6.78	227	12.0	
LB-13D	LB-13D	3/25/11	6.99	216	11.6	6.18
LB-13D	LB-031212-01	3/12/12	6.27	235	11.5	5.32
LB-13I	LB-1089-W17	10/18/89	6.91	693	13.0	
LB-13I	LB-1189-W17	11/16/89	6.78	721	11.0	
LB-13I	LB-1289-W16	12/18/89	6.72	692	10.5	
LB-13I	LB-390-W19	3/15/90	6.61	676	12.5	
LB-13I	LB-690-W19	6/21/90	6.82	654	13.0	
LB-13I	LB-990-W16	9/18/90	6.83	706	13.0	
LB-13I	LB-1290-W21	12/13/90	6.82	744	11.5	
LB-13I	LB-391-W14	3/20/91	6.80	742	12.4	
LB-13I	LB-691-W21	6/27/91	6.74	619	13.2	
LB-13I	LB-991-12	9/25/91	7.05	757	11.8	
LB-13I	LB-1291-18	12/23/91	7.02	707	11.2	
LB-13I	LB-392-20	3/24/92	6.60	663	12.0	
LB-13I	LB-7292-1	7/2/92	6.88	679	13.0	
LB-13I	LB-91792-1	9/17/92	6.84	631	13.0	
LB-13I	LB-12992-8	12/9/92	6.92	671	12.0	
LB-13I	LB-031293-19	3/12/93	6.93	689	12.0	
LB-13I	LB-060493-20	6/4/93	6.80	640	15.0	
LB-13I	LB-092393-06	9/23/93	6.88	570	14.0	3.10
LB-13I	LB-121693-14	12/16/93	6.82	537	11.0	0.50
LB-13I	LB-032894-16	3/28/94	6.82	680	15.0	3.00
LB-13I	LB-062894-19	6/28/94	7.00	495	15.0	1.90
LB-13I	LB-090794-9	9/7/94	7.09	503	14.0	
LB-13I	LB-121994-20	12/15/94	6.84	543	12.5	4.40
LB-13I	LB-031395-17	3/13/95	6.93	486	13.5	4.50
LB-13I	LB-052195-18	6/21/95	6.80	509	12.5	3.50
LB-13I	LB-092295-15	9/22/95	6.87	408	14.5	
LB-13I	LB-121995-7	12/19/95	6.78	357	10.9	
LB-13I	LB-032096-14	3/20/96	6.84	504	13.2	
LB-13I	LB-061996-15	6/19/96	6.91	547	14.0	
LB-13I	LB-091796-3	9/17/96	6.63	501	14.0	
LB-13I	LB121796-10	12/17/96	7.24	630	12.2	
LB-13I	LB-032097-19	3/20/97	6.76	706	13.1	
LB-13I	LB-061897-14	6/18/97	6.87	540	13.8	
LB-13I	LB-091897-12	9/18/97	6.88	890	14.0	
LB-13I	LB-121797-8	12/17/97	6.88	624	12.4	
LB-13I	LB-032098-18	3/20/98	6.90	752	14.4	
LB-13I	LB-061798-15	6/17/98	6.88	447	14.7	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-13I	LB-091898-14	9/18/98	7.11	294	13.7	
LB-13I	LB-121898-11	12/18/98	6.82	425	12.6	
LB-13I	LB-031999-22	3/19/99	6.93	422	15.0	
LB-13I	LB-062399-13	6/23/99	7.05	348	14.3	
LB-13I	LB-091799-12	9/17/99	6.91	648	13.9	
LB-13I	LB-121499-4	12/14/99	7.03	657	13.3	
LB-13I	LB-091300-12	9/13/00	6.97	634	13.7	
LB-13I	LB-121500-11	12/15/00	6.89	496	13.0	
LB-13I	LB-031501-20	3/15/01	6.75	509	13.1	
LB-13I	LB-092001-8	9/20/01	6.71	360	13.4	
LB-13I	LB-032002-19	3/20/02	6.81	325	13.0	4.14
LB-13I	LB-091802-7	9/18/02	7.00	460	14.0	
LB-13I	LB-031303-15	3/13/03	6.80	306	12.0	
LB-13I	LB-092203-7	9/22/03	6.52	330	14.0	4.37
LB-13I	LB-022404-4	2/24/04	6.70	240	54.7	
LB-13I	LB-090104-13	9/1/04	6.60	315	14.0	
LB-13I	LB-031005-18	3/10/05	6.68	286	12.8	2.04
LB-13I	LB-091505-9	9/15/05	6.80	202	12.9	3.65
LB-13I	LB-031506-10	3/15/06	6.75	228	12.0	3.90
LB-13I	LB-091306-8	9/13/06	6.74	263	12.8	3.80
LB-13I	LB-030607-17	3/6/07	6.42	203	12.5	9.15
LB-13I	LB-091907-8	9/19/07	6.70	352	12.5	6.65
LB-13I	LB-032008-12	3/20/08	7.15	329	11.4	
LB-13I	LB-091608/5	9/16/08	6.91	290	14.6	
LB-13I	LB-13I	3/17/09	6.88	285	11.7	5.64
LB-13I	LBLF13i091109	9/11/09	7.70	301	12.8	4.76
LB-13I	LB-13I032410	3/24/10	7.09	297	12.2	
LB-13I	LB-13I092310	9/23/10	7.10	204	11.6	
LB-13I	LB-13I	3/23/11	7.91	276	12.1	2.96
LB-13I	LB-090711-02	9/7/11	6.85	252	13.9	1.38
LB-13I	LB-032212-19	3/22/12	6.58	255	11.7	2.40
LB-13I (Dup)	LB-032212-20	3/22/12	6.58	255	11.7	2.40
LB-13I	LB-091112-03	9/11/12	6.47	266	14.1	2.40
LB-17D	LB-1089-W10	10/18/89	6.95	830	13.0	
LB-17D	LB-1189-W12	11/15/89	6.82	890	13.0	
LB-17D	LB-1289-W28	12/20/89	6.76	930	13.0	
LB-17D	LB-390-W21	3/15/90	6.83	905	13.5	
LB-17D	LB-690-W18	6/21/90	6.91	882	15.5	
LB-17D	LB-990-W19	9/19/90	6.92	864	14.5	
LB-17D	LB-1290-W23	12/13/90	6.82	867	13.5	
LB-17D	LB-391-W19	3/21/91	6.74	829	14.2	
LB-17D	LB-691-W14	6/26/91	6.85	744	15.4	
LB-17D	LB-991-10	9/25/91	6.95	818	14.3	
LB-17D	LB-1291-16	12/23/91	7.09	1030	13.1	
LB-17D	LB-392-11	3/23/92	6.86	906	16.0	
LB-17D	LB-63092-5	6/30/92	6.72	919	16.5	
LB-17D	LB-031093-6	3/10/93	6.92	715	15.0	
LB-17D	LB-060493-22	6/4/93	6.65	637	15.5	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-17D	LB-092793-21	9/27/93	6.92	723	16.0	3.20
LB-17D	LB-121593-7	12/15/93	6.71	768	14.0	1.30
LB-17D	LB-032994-20	3/29/94	7.13	780	17.5	2.00
LB-17D	LB-052394-14	6/23/94	7.09	669	16.0	5.20
LB-17D	LB-090794-7	9/7/94	7.06	657	17.0	
LB-17D	LB-121494-10	12/14/94	6.98	657	13.0	
LB-17D	LB-030995-5	3/9/95	7.01	593	14.0	1.00
LB-17D	LB-062095-11	6/20/95	6.90	681	14.5	6.00
LB-17D	LB-092195-10	9/21/95	6.50	732	16.3	
LB-17D	LB-121895-3	12/18/95	7.21	542	12.0	
LB-17D	LB-031996-10	3/19/96	5.84	586	14.1	
LB-17D	LB-061996-14	6/19/96	6.98	587	12.0	
LB-17D	LB-032097-16	3/20/97	7.08	571	15.1	
LB-17D	LB-031998-14	3/19/98	6.97	573	15.5	
LB-17D	LB-031899-13	3/18/99	6.98	352	16.6	
LB-17D	LB-031401-9	3/14/01	6.98	333	15.1	
LB-17D	LB-031902-7	3/19/02	7.17	335	15.0	2.22
LB-17D	LB-031203-7	3/12/03	7.33	337	14.7	3.60
LB-17D	LB-022504-10	2/25/04	6.97	257	57.6	
LB-17D	LB-030905-10	3/9/05	7.06	313	15.4	0.74
LB-17D	LB-031506-7	3/15/06	7.06	301	13.7	3.45
LB-17D	LB-030607-14	3/6/07	6.39	258	15.1	9.31
LB-17D	LB-032008-11	3/20/08	7.07	353	12.9	
LB-17D	LB-17D	3/18/09	7.14	295	14.2	3.53
LB-17D	LB-17D032410	3/24/10	7.00	299	15.2	
LN-17D	LB-17D	3/22/11	7.45	278	13.8	2.42
LN-17D	LB-031212-04	3/12/12	6.68	388	13.1	0.20
LB-17I	LB-1089-W14	10/19/89	6.83	1231	14.0	
LB-17I	LB-1189-W14	11/15/89	6.65	1192	14.0	
LB-17I	LB-1289-W29	12/20/89	6.57	1167	13.5	
LB-17I	LB-390-W20	3/15/90	6.59	807	13.0	
LB-17I	LB-690-W17	6/21/90	6.48	1202	16.0	
LB-17I	LB-990-W18	9/19/90	6.47	1200	15.0	
LB-17I	LB-1290-W22	12/13/90	6.62	1125	13.4	
LB-17I	LB-391-W20	3/21/91	6.40	1069	14.2	
LB-17I	LB-392-13	3/23/92	6.71	1036	16.0	
LB-17I	LB-63092-6	6/30/92	6.57	1337	16.0	
LB-17I	LB-91892-3	9/18/92	6.72	1300	14.0	
LB-17I	LB-121192-18	12/11/92	6.85	992	15.0	
LB-17I	LB-031093-5	3/10/93	6.79	930	15.0	
LB-17I	LB-032994-21	3/29/94	6.85	960	18.0	2.80
LB-17I	LB-030995-6	3/9/95	6.93	695	14.0	2.60
LB-17I	LB-031996-11	3/19/96	6.87	782	13.2	
LB-17I	LB-032097-17	3/20/97	6.99	674	15.9	
LB-17I	LB-031998-13	3/19/98	6.87	567	17.2	
LB-17I	LB-031899-12	3/18/99	6.86	410	17.5	
LB-17I	LB-031401-10	3/14/01	6.80	359	16.4	
LB-17I	LB-031902-6	3/19/02	7.03	478	15.9	2.23

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-17I	LB-031203-6	3/12/03	6.93	510	16.0	1.00
LB-17I	LB-022504-11	2/25/04	6.90	362	59.9	
LB-17I	LB-030905-11	3/9/05	7.08	507	15.8	1.68
LB-17I	LB-031506-8	3/15/06	6.80	538	14.5	2.03
LB-17I	LB-030607-13	3/6/07	6.36	458	15.4	12.80
LB-17I	LB-032008-10	3/20/08	7.04	483	13.0	
LB-17I	LB-17I	3/18/09	6.95	343	14.8	3.85
LB-17I	LB-171032410	3/24/10	7.13	476	4.1	
LB-17I (Dup)	LB-DUP1032410	3/24/10	7.13	476	4.1	
LB-17I	LB-17I	3/22/11	7.74	528	14.0	2.35
LB-17I	LB-031312-16	3/13/12	6.85	414	12.9	0.15
LB-20S	LB-1289-W36	12/21/89	6.69	817	11.5	
LB-20S	LB-390-W12	3/14/90	6.32	1255	13.0	
LB-20S	LB-690-W08	6/19/90		1312	13.5	
LB-20S	LB-990-W09	9/14/90	6.68	881	14.0	
LB-20S	LB-1290-W10	12/12/90	6.62	1164	13.2	
LB-20S	LB-391-W08	3/20/91	6.62	716	13.1	
LB-20S	LB-691-W11	6/26/91	6.44	869	13.8	
LB-20S	LB-991-19	9/26/91	6.68	942	13.2	
LB-20S	LB-1291-05	12/19/91	6.08	1130	12.7	
LB-20S	LB-392-18	3/24/92	6.62	770	15.0	
LB-20S	LB-031593-26	3/15/93	6.75	686	14.0	
LB-20S	LB-032994-23	3/29/94	6.77	890	17.0	4.90
LB-20S	LB-031395-19	3/13/95	6.86	1020	16.0	8.30
LB-20S	LB-032096-20	3/20/96	6.91	796	15.0	
LB-20S	LB-032097-15	3/20/97	6.94	798	13.7	
LB-20S	LB-032098-23	3/20/98	6.93	542	14.6	
LB-20S	LB-031899-16	3/18/99	6.89	287	15.4	
LB-20S	LB-031401-13	3/14/01	6.65	424	13.6	
LB-20S	LB-032002-14	3/20/02	6.63	481	12.8	2.21
LB-20S	LB-031203-20	3/12/03	6.47	377	13.0	
LB-20S	LB-022604-19	2/26/04	6.87	281	53.7	
LB-20S	LB-030905-12	3/9/05	6.85	517	12.6	12.06
LB-20S	LB-031406-4	3/14/06	6.41	246	12.5	3.94
LB-20S	LB-030607-16	3/6/07	6.17	300	13.0	9.53
LB-20S	LB-032408-16	3/24/08	6.83	504	12.1	
LB-20S	LB-20S	3/18/09	7.02	457	13.3	4.93
LB-20S	LB-20S032410	3/24/10	6.83	405	12.9	
LB-20S	LB-20S	3/24/11	6.81	586	12.1	2.09
LB-20S	LB-031312-15	3/13/12	6.78	385	11.6	0.17
LB-26D	LB-0892-2	8/27/92	6.51	364	13.5	
LB-26D	LB-92192-7	9/21/92	6.60	370	13.0	
LB-26D	LB-121092-13	12/10/92	6.72	326	11.5	
LB-26D	LB-031193-14	3/11/93	7.16	302	11.5	
LB-26D	LB-060193-3	6/1/93	6.36	280	13.0	
LB-26D	LB-092493-12	9/24/93	6.55	295	13.5	6.60
LB-26D	LB-121693-16	12/16/93	6.76	295	13.0	6.50

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-26D	LB-032494-7	3/24/94	6.70	307	14.0	6.90
LB-26D	LB-062294-6	6/22/94	6.66	325	15.0	6.50
LB-26D	LB-090894-15	9/8/94	6.70	309	14.0	
LB-26D	LB-121394-5	12/13/94	6.59	343	13.0	5.90
LB-26D	LB-031095-14	3/10/95	6.66	302	13.0	8.00
LB-26D	LB-061995-2	6/19/95	6.72	343	13.0	4.30
LB-26D	LB-092095-4	9/20/95	6.68	324	15.0	
LB-26D	LB-122095-15	12/20/95	6.76	291	10.2	
LB-26D	LB-031996-2	3/19/96	6.06	330	12.5	
LB-26D	LB-061896-2	6/18/96	6.60	335	12.0	
LB-26D	LB-091896-11	9/18/96	6.71	320	12.1	
LB-26D	LB-121796-4	12/17/96	7.09	352	11.5	
LB-26D	LB-031997-6	3/19/97	6.67	366	11.8	
LB-26D	LB-061797-8	6/17/97	6.58	329	12.7	
LB-26D	LB-091697-4	9/16/97	6.84	285	11.7	
LB-26D	LB-121697-6	12/16/97	6.61	350	12.0	5.00
LB-26D	LB-031998-9	3/19/98	6.93	355	13.2	
LB-26D	LB-061698-9	6/16/98	6.62	281	12.9	
LB-26D	LB-091798-6	9/17/98	6.81	230	13.0	
LB-26D	LB-121798-3	12/17/98	6.98	279	11.9	
LB-26D	LB-031899-6	3/18/99	6.60	287	14.5	
LB-26D	LB-062399-9	6/23/99	6.79	214	13.0	
LB-26D	LB-091699-3	9/16/99	6.54	290	12.2	
LB-26D	LB-121599-9	12/15/99	6.90	285	12.0	
LB-26D	LB-091200-4	9/12/00	6.69	252	12.3	
LB-26D	LB-121500-7	12/15/00	6.72	222	11.7	
LB-26D	LB-031301-5	3/13/01	6.72	247	11.9	
LB-26D	LB-031902-8	3/19/02	6.87	226	11.9	5.92
LB-26D	LB-031203-5	3/12/03	7.43	210	12.0	
LB-26D	LB-022504-12	2/25/04	6.56	149	52.4	
LB-26D	LB-030805-7	3/8/05	6.62	199	12.3	7.22
LB-26D	LB-031606-19	3/16/06	6.81	183	11.4	8.60
LB-26D	LB-030507-11	3/5/07	6.38	156	12.1	8.93
LB-26D	LB-031908-8	3/19/08	6.79	319	12.5	
LB-26D	LB-26D	3/17/09	6.83	230	11.5	8.02
LB-26D	LB-26D032410	3/24/10	6.86	237	11.7	
LB-26D	LB-26D	3/23/11	7.60	230	12.3	6.13
LB-26D	LB-031212-05	3/12/12	6.39	234	11.6	4.92
LB-26I	LB-0892-1	8/27/92	6.64	571	14.0	
LB-26I	LB-92192-6	9/21/92	6.88	576	13.0	
LB-26I	LB-121092-12	12/10/92	6.89	616	12.0	
LB-26I	LB-031193-13	3/11/93	6.89	626	13.0	
LB-26I	LB-060193-1	6/1/93	6.78	544	13.5	
LB-26I	LB-092493-11	9/24/93	6.76	525	14.0	4.20
LB-26I	LB-121693-15	12/16/93	6.96	547	13.0	1.90
LB-26I	LB-032494-6	3/24/94	6.90	508	14.0	2.90
LB-26I	LB-062294-5	6/22/94	6.89	550	16.0	1.90
LB-26I	LB-09894-16	9/8/94	6.96	492	15.0	

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-26I	LB-121394-4	12/13/94	6.78	536	13.5	4.40
LB-26I	LB-031095-12	3/10/95	6.98	499	13.0	0.80
LB-26I	LB-061995-1	6/19/95	6.81	503	13.5	3.20
LB-26I	LB-092095-5	9/20/95	6.91	437	15.0	
LB-26I	LB-122095-14	12/20/95	7.05	395	10.4	
LB-26I	LB-031996-1	3/19/96	6.25	428	12.0	
LB-26I	LB-061896-1	6/18/96	6.93	412	12.0	
LB-26I	LB-091896-10	9/18/96	6.96	426	12.6	
LB-26I	LB121796-5	12/17/96	7.18	437	12.1	
LB-26I	LB-031997-5	3/19/97	6.75	468	12.2	
LB-26I	LB-061797-7	6/17/97	6.75	415	14.0	
LB-26I	LB-091697-5	9/16/97	6.82	359	12.0	
LB-26I	LB-121697-7	12/16/97	6.86	607	12.9	0.80
LB-26I	LB-031998-8	3/19/98	6.81	590	13.3	
LB-26I	LB-061698-8	6/16/98	6.88	391	13.1	
LB-26I	LB-091798-7	9/17/98	6.67	287	13.4	
LB-26I	LB-121798-2	12/17/98	7.13	369	12.6	
LB-26I	LB-031799-1	3/17/99	7.29	328	14.8	
LB-26I	LB-062399-10	6/23/99	6.96	281	13.6	
LB-26I	LB-091699-4	9/16/99	6.78	541	13.0	
LB-26I	LB-121599-8	12/15/99	7.01	510	12.6	
LB-26I	LB-091200-5	9/12/00	6.93	448	13.1	
LB-26I	LB-121500-8	12/15/00	7.01	385	12.5	
LB-26I	LB-031301-6	3/13/01	6.94	407	12.5	
LB-26I	LB-092001-3	9/20/01	6.87	384	13.6	
LB-26I (Dup)	LB-092001-4	9/20/01	6.87	384	13.6	
LB-26I	LB-031902-9	3/19/02	6.96	353	12.4	4.11
LB-26I	LB-091802-4	9/18/02	7.10	350	13.0	
LB-26I	LB-031203-4	3/12/03	6.68	293	13.0	
LB-26I	LB-092203-4	9/22/03	7.30	250	15.0	5.37
LB-26I	LB-022504-13	2/25/04	6.80	200	53.5	
LB-26I	LB-090104-26	9/1/04	6.77	288	13.5	
LB-26I	LB-030805-8	3/8/05	6.80	306	12.7	3.23
LB-26I	LB-091405-5	9/14/05	6.76	239	13.7	3.69
LB-26I	LB-031606-20	3/16/06	6.90	267	11.7	7.18
LB-26I	LB-091206-3	9/12/06	7.00	297	13.3	3.02
LB-26I	LB-030507-10	3/5/07	6.37	223	12.6	5.78
LB-26I	LB-091907-5	9/19/07	6.94	315	12.3	4.67
LB-26I	LB-031908-7	3/19/08	7.00	385	13.2	
LB-26I	LB-091608-6	9/16/08	6.40	220	17.8	
LB-26I	LB-26I	3/17/09	6.92	328	11.6	7.05
LB-26I	LBLF26I091109	9/11/09	7.39	234	12.9	7.06
LB-26I	LB-23I032410	3/24/10	7.07	331	12.0	
LB-26I	LB26I092310	9/23/10	7.10	229	11.6	
LB-26I	LB-26I	3/23/11	7.75	300	12.1	4.41
LB-26I	LB-090711-03	9/7/11	6.77	230	15.1	4.41
LB-26I	LB-032212-21	3/22/12	6.57	274	11.5	4.96
LB-26I	LB-091112-04	9/11/12	6.31	253	13.1	5.07

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-27D	LB-0892-4	8/27/92	6.85	289	14.0	
LB-27D	LB-92292-5	9/22/92	7.34	258	13.0	
LB-27D	LB-121192-21	12/11/92	7.12	321	13.0	
LB-27D	LB-031193-16	3/11/93	6.50	311	11.5	
LB-27D	LB-060193-4	6/1/93	7.28	305	13.5	
LB-27D	LB-092493-16	9/24/93	7.24	273	14.0	4.60
LB-27D	LB-121693-17	12/16/93	7.24	315	13.0	5.00
LB-27D	LB-032494-4	3/24/94	7.25	306	13.0	5.10
LB-27D	LB-062294-9	6/22/94	7.19	321	15.5	5.30
LB-27D	LB-090894-12	9/8/94	7.09	319	13.5	
LB-27D	LB-121394-2	12/12/94	7.48	337	11.5	6.60
LB-27D	LB-031095-8	3/10/95	7.18	339	13.5	7.60
LB-27D	LB-051995.4	6/19/95	7.20	343	14.0	5.60
LB-27D	LB-092095-1	9/20/95	7.16	301	16.0	
LB-27D	LB-122095-17	12/20/95	7.05	270	11.2	
LB-27D	LB-031996-3	3/19/96	7.26	295	13.0	
LB-27D	LB-061896-4	6/18/96	7.16	280	14.0	
LB-27D	LB-091796-9	9/17/96	7.02	290	14.2	
LB-27D	LB121796-8	12/17/96	7.61	290	13.1	
LB-27D	LB-031997-12	3/19/97	7.01	302	12.3	
LB-27D	LB-061797-11	6/17/97	7.00	260	15.3	
LB-27D	LB-091697-8	9/16/97	7.24	258	12.5	
LB-27D	LB-121797-13	12/17/97	6.97	300	12.0	4.20
LB-27D	LB-031998-12	3/19/98	6.97	292	13.6	
LB-27D	LB-061798-10	6/17/98	6.92	254	13.0	
LB-27D	LB-091798-8	9/17/98	7.07	224	14.9	
LB-27D	LB-121798-6	12/17/98	7.19	276	12.8	
LB-27D	LB-031899-9	3/18/99	7.04	238	14.5	
LB-27D	LB-062399-7	6/23/99	6.99	199	13.7	
LB-27D	LB-091599-1	9/15/99	6.85	270	12.9	
LB-27D	LB-121599-7	12/15/99	7.13	282	12.6	
LB-27D	LB-091300-8	9/13/00	6.95	268	13.2	
LB-27D	LB-091300-9	9/13/00	6.95	268	13.2	
LB-27D	LB-121500-5	12/15/00	7.03	254	12.5	
LB-27D	LB-031301-3	3/13/01	6.97	288	12.9	
LB-27D	LB-031902-11	3/19/02	6.99	308	12.9	5.02
LB-27D	LB-031203-3	3/12/03	6.96	293	13.0	
LB-27D	LB-022604-15	2/26/04	6.88	237	54.7	
LB-27D (Dup)	LB-022604-16	2/26/04	6.88	237	54.7	
LB-27D	LB-030805	3/8/05	6.82	322	13.0	4.20
LB-27D	LB-031606-17	3/16/06	6.90	298	12.4	6.81
LB-27D	LB-030507-9	3/5/07	6.20	270	13.5	9.54
LB-27D	LB-031908-5	3/19/08	7.00	0.489	12.4	
LB-27D	LB-27D	3/18/09	6.98	315	13.3	7.65
LB-27D	LB-27D032410	3/24/10	7.01	331	13.0	
LB-27D	LB-27D	3/25/11	7.43	317	11.3	4.47
LB-27D	LB-031212-02	3/12/12	6.60	338	12.1	3.32

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-27I	LB-0892-3	8/27/92	6.60	811	14.0	
LB-27I	LB-92292-4	9/22/92	7.36	836	14.0	
LB-27I	LB-121192-20	12/11/92	6.62	783	13.5	
LB-27I	LB-031293-21	3/12/93	7.24	756	13.0	
LB-27I	LB-060193-2	6/1/93	6.77	664	14.0	
LB-27I	LB-092493-14	9/24/93	6.97	769	14.0	7.20
LB-27I	LB-121693-14	12/16/93	6.81	707	13.0	2.30
LB-27I	LB-032494-3	3/24/94	6.67	718	15.5	6.00
LB-27I	LB-062294-8	6/22/94	6.73	649	17.0	2.40
LB-27I	LB-090894-11	9/8/94	6.84	568	14.0	
LB-27I	LB-121394-1	12/13/94	8.12	671	12.0	11.00
LB-27I	LB-031095-7	3/10/95	6.77	661	13.5	4.20
LB-27I	LB-061995-3	6/19/95	6.83	673	14.0	3.20
LB-27I	LB-092095-3	9/20/95	6.85	585	14.5	
LB-27I	LB-122095-16	12/20/95	6.89	482	11.6	
LB-27I	LB-031996-4	3/19/96	7.05	640	14.7	
LB-27I	LB-061896-3	6/18/96	6.94	609	14.0	
LB-27I	LB-091796-7	9/17/96	6.99	752	14.3	
LB-27I	LB121796-6	12/17/96	7.31	947	12.9	
LB-27I	LB-031997-10	3/19/97	6.87	771	12.8	
LB-27I	LB-061797-9	6/17/97	6.98	548	14.1	
LB-27I	LB-091697-6	9/16/97	6.93	544	12.6	
LB-27I	LB-121797-11	12/17/97	6.86	750	12.8	0.80
LB-27I	LB-031998-10	3/19/98	6.80	917	15.7	
LB-27I	LB-061798-11	6/17/98	6.85	494	14.1	
LB-27I	LB-091798-9	9/17/98	6.82	327	15.6	
LB-27I	LB-121798-4	12/17/98	6.96	446	13.8	
LB-27I	LB-031899-7	3/18/99	6.83	476	15.5	
LB-27I	LB-062399-8	6/23/99	7.00	396	14.5	
LB-27I	LB-091599-2	9/15/99	6.76	914	14.3	
LB-27I	LB-121599-6	12/15/99	7.02	940	12.8	
LB-27I	LB-091300-10	9/13/00	6.86	741	14.4	
LB-27I	LB-121500-6	12/15/00	6.85	778	13.3	
LB-27I	LB-031301-4	3/13/01	6.81	665	13.8	
LB-27I	LB-092001-2	9/20/01	6.68	612	14.1	
LB-27I	LB-031902-10	3/19/02	6.82	685	13.5	2.62
LB-27I	LB-091802-5	9/18/02	7.30	590	15.0	
LB-27I	LB-031203-1	3/12/03	6.88	563	14.0	
LB-27I (Dup)	LB-031203-2	3/12/03	6.88	563	14.0	
LB-27I	LB-092203-2	9/22/03	6.10	540	14.5	2.40
LB-27I (Dup)	LB-092203-3	9/22/03	6.10	540	14.5	2.40
LB-27I	LB-022604-17	2/26/04	6.82	382	55.7	
LB-27I	LB-090104-27	9/1/04	6.76	554	14.2	
LB-27I	LB-030805-5	3/8/05	6.85	525	13.7	2.81
LB-27I	LB-091405-3	9/14/05	6.91	353	14.0	2.80
LB-27I	LB-031606-18	3/16/06	6.98	376	12.6	6.90
LB-27I	LB-091206-2	9/12/06	6.78	564	13.8	1.50
LB-27I	LB-030507-8	3/5/07	6.05	445	13.7	3.88

Table B-1
Groundwater Chemistry, Field Parameters
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Field pH (S.U.)	Field Conductivity (umhos/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/L)
LB-27I	LB-091907-4	9/19/07	6.78	486	13.2	2.30
LB-27I	LB-031908-4	3/19/08	6.91	0.786	12.9	
LB-27I(Dup)	LB-031908-6	3/19/08	6.91	0.786	12.9	
LB-27I	LB-091608-7	9/16/08	7.00	531	14.3	
LB-27I	LB-27I	3/18/09	6.94	557	13.4	4.44
LB-27I	LBLF27i091109	9/11/09	7.01	538	14.5	3.07
LB-27I	LB-27I032410	3/24/10	6.97	419	12.7	
LB-27I	LB27I092310	9/23/10	7.00	401	12.3	
LB-27I	LB-27I	3/25/11	7.39	523	11.6	3.20
LB-27I	LB-090711-01	9/7/11	6.46	707	14.2	1.11
LB-27I	LB-032212-18	3/22/12	6.82	643	11.7	0.32
LB-27I	LB-091112-02	9/11/12	6.72	706	14.0	1.02
FIELDQC	LB-031212-06	3/12/12	N/A	N/A	N/A	N/A
FIELDQC	LB-091112-05	9/11/12	N/A	N/A	N/A	N/A

Volatile Organic Compounds

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1D	LB-01D	6/2/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-1D	LB-01D	7/21/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-1D	LB-01D	9/4/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1D	LB-01D	11/6/87	0.6	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1D	LB-01D	6/22/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1D	LB-01D	8/30/88	1.0 L	1.0 L	1.0 L	3.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-1D	LB-01D	9/1/88	1.0 L	1.0 L	1.0 L	3.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-1D	LB-01D	12/5/88	1.0 L	1.0 L	1.0 L	10.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1D	LB-289-W04	2/28/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-589-W03	5/23/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-989-W16	9/12/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1089-W01	10/17/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1189-W04	11/14/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1289-W22	12/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-390-W09	3/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-690-W11	6/20/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-990-W08	9/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1290-W06	12/11/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-391-W11	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-691-W06	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-991-06	9/24/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-1291-14	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-392-14	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1D	LB-63092-2	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-92292-3	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-121192-16	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-031093-4	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-060293-6	6/2/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-092393-8	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.0 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-092393-8	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.3 L	0.2 L	
LB-1D	LB-121593-2	12/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-032494-2	3/24/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1D	LB-062194-1	6/21/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1D	LB-090694-2	9/6/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

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

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1D	LB-032408-15	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1D	LB-1D	3/24/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.28	0.25 L	0.1 L	0.1 L
LB-1D	LB-031312-13	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-01S	5/11/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-1S	LB-01S	7/21/87	2.0 L	2.0 L	5.0 L	4.0 L		1.0 L	2.0 L	5.0 L		2.0 L
LB-1S	LB-01S	9/4/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1S	LB-01S	11/6/87	0.9	1.1	1.0 L	1.0	1.0 L	1.8	1.0 L	1.0 L		1.0 L
LB-1S	LB-01S	2/11/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1S	LB-01S	6/22/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1S	LB-01S	8/30/88	1.0 L	1.0 L	1.0 L	3.0 L	1.0 L	1.0 L	1.0 L	2.0 L	5.0	1.0 L
LB-1S	LB-01S	12/5/88	1.0 L	1.0 L	1.0 L	10.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-1S	LB-289-W05	2/28/89	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0	1.0 L	1.0 L	4.5	1.0 L
LB-1S	LB-589-W04	5/23/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	8.3	1.0 L
LB-1S	LB-989-W15	9/12/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	8.0	1.0 L
LB-1S	LB-1289-W12	12/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	8.5	1.0 L
LB-1S	LB-390-W10	3/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.1	1.0 L	1.0 L	9.1	1.0 L
LB-1S	LB-690-W10	6/20/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.3	1.0 L	1.0 L	5.5	1.0 L
LB-1S	LB-990-W06	9/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.5	1.0 L	1.8	3.1	1.0 L
LB-1S	LB-1290-W05	12/11/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	3.7	1.0 L	1.0 L	2.6	1.0 L
LB-1S	LB-391-W10	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.2	1.0 L	1.0 L	3.7	1.0 L
LB-1S	LB-691-W05	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.4	1.0 L
LB-1S	LB-991-05	9/24/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L
LB-1S	LB-1291-13	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0	1.0 L
LB-1S	LB-392-15	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-1S	LB-63092-1	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.8 B	0.2 L
LB-1S	LB-92292-2	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-1S	LB-121192-15	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.5 L	0.3 L	0.3	0.2 L
LB-1S	LB-031093-3	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.8	0.5 L	0.3 L	0.9	0.2 L
LB-1S	LB-060293-5	6/2/93	0.2 L	0.2	0.2 L	0.2 L	0.2 L	0.7	0.5 L	0.3 L	0.6	0.2 L
LB-1S	LB-092393-9	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.5 L	0.3 L	0.2	0.2 L
LB-1S	LB-092393-9	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L			0.3 L		
LB-1S	LB-121593-1	12/15/93	0.2 L	0.2 L	0.3	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1S	LB-032494-1	3/24/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2	0.2 L
LB-1S	LB-062194-4	6/21/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-090694-1	9/6/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.3	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-121494-11	12/14/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-1S	LB-121995-5	2/19/95	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030995-1	3/9/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-062095-12	6/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-092295-13	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-121995-5	12/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-032096-17	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-1S	LB-061896-9	6/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-091796-5	9/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB121796-1	12/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-031997-3	3/19/97	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061797-3	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091697-2	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-121697-5	12/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031998-3	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.1 B	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061698-5	6/16/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-1S	LB-091798-4	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-121898-9	12/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-031799-3	3/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-062399-14	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-1S	LB-091799-10	9/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.3 J			0.2 L		0.2 L
LB-1S	LB-091799-9	9/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.3 J			0.2 L		0.2 L
LB-1S	LB-121699-13	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L			0.2 L		0.2 L
LB-1S	LB-031700-15	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-061300-7	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091100-1	9/11/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-121500-9	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031401-14	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031902-1	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091802-1	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031303-10	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-1S	LB-031303-11	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-092203-6	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-022404-2	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-090104-1	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-090104-30	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030905-14	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091405-1	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091405-2	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-031406-3	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091306-5	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091306-6	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-030507-1	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091907-1	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S (Dup)	LB-091907-2	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-032408-14	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-091608-1	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LBLF1S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB1S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-1S	LB-1S	3/24/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-090811-07	9/8/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-031312-14	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-1S	LB-091212-08	9/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3D	LB-03D	5/28/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-3D	LB-1189-W01	11/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3D	LB-1289-W20	12/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3D	LB-032097-14	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032098-21	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031899-15	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-3D	LB-031600-9	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031501-17	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032002-18	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031303-14	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-3D	LB-022404-5	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030905-15	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-031606-21	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030507-4	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-030507-5	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-032408-17	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3D	LB-3D	3/28/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3D	LB-031312-09	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3S	LB-03S	5/12/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-3S	LB-03S	7/16/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-3S	LB-1089-W02	10/17/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3S	LB-1189-W02	11/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3S	LB-1289-W11	12/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-3S	LB-032594-11	3/25/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-3S	LB-032097-13	3/20/97	0.6	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032098-20	3/20/98	0.5	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031899-14	3/18/99	0.4	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-3S	LB-031600-8	3/16/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031501-18	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032002-17	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031303-13	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-022404-6	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB030905-16	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-031606-22	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-030507-3	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-032408-18	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-3S	LB-3S	3/28/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-3S	LB-031312-10	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-4D	LB-04D	5/29/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-4D	LB-04D	6/22/87	1.0 L	1.0 L	5.0 L	4.0 L		2.0 L	2.0 L	4.0 L		1.0 L
LB-4D	LB-04D	7/17/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-4D	LB-04D	9/8/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-4D	LB-04D	11/9/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-4D	LB-04D	2/9/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-4D	LB-04D	6/21/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-4D	LB-04D	8/29/88	1.0 L	1.0 L	1.0 L	3.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-4D	LB-04D	12/5/88	1.0 L	1.0 L	1.0 L	10.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-4D	LB-289-W02	2/27/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-589-W02	5/23/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-989-W27	9/14/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-1289-W06	12/14/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-390-W01	3/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-690-W01	6/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-990-W02	9/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-1290-W01	12/11/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-391-W27	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-691-W02	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-991-01	9/24/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-1291-02	12/19/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-392-02	3/19/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-4D	LB-62692-2	6/26/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-91792-5	9/17/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-12992-3	12/9/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-030993-2	3/9/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-060493-17	6/4/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-092393-3	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-121693-11	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-032594-10	3/25/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-4D	LB-062797-18	6/27/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-4D	LB-090994-20	9/9/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-4D	LB-121494-15	12/14/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-4D	LB-031395-22	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-4D	LB-092295-21	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4D	LB-122795-21	12/27/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4D	LB-032796-22	3/27/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4D	LB-070996-21	7/9/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4D	LB-091896-15	9/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4D	LB121896-15	12/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4D	LB-031797-2	3/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-061697-2	6/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-091697-9	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-121597-2	12/15/97	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
LB-4D	LB-031898-1	3/18/98	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	0.5 L
LB-4D	LB-061598-2	6/15/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4D	LB-091698-2	9/16/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4D	LB-121898-14	12/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4D	LB-031999-21	3/19/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4D	LB-062299-2	6/22/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4D	LB-121699-1	12/14/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-4D	LB-031700-20	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-061400-12	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-091200-7	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-121300-4	12/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031301-1	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031902-4	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031902-5	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031303-18	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031005-23	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-031506-11	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-030607-22	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-032408-19	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-4D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D (Dup)	Dup-2	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-4D032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4D	LB-4D	3/22/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-4D	LB-031312-11	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-4S(R)	LB-091294-21	9/12/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-4S(R)	LB-121494-14	12/14/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-4S(R)	LB-031395-21	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4S(R)	LB-092295-19	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4S(R)	LB-122795-20	12/27/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4S(R)	LB-032796-23	3/27/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-4S(R)	LB-070996-20	7/9/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4S(R)	LB-091896-14	9/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4S(R)	LB121896-14	12/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-4S(R)	LB-031797-1	3/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-061697-1	6/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-091697-10	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-121597-1	12/15/97	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031898-2	3/18/98	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	0.5 L
LB-4S(R)	LB-061598-1	6/15/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4S(R)	LB-091698-1	9/16/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4S(R)	LB-121898-13	12/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4S(R)	LB-031999-20	3/19/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4S(R)	LB-062299-1	6/22/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-4S(R)	LB-121699-2	12/14/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-4S(R)	LB-031700-19	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-061400-11	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-091200-6	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-121300-3	12/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031301-2	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031902-3	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031303-17	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031005-22	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-031506-12	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-030607-21	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-032408-20	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-4S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-4S(R)	LB-4SR032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-4S(R)	LB-4SR	3/22/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-4S(R)	LB-031312-12	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5D	LB-05D	5/27/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-5D	LB-05D	7/20/87	1.0 L	1.0 L	5.0 L	4.0 L		1.0 L	2.0 L	4.0 L		1.0 L
LB-5D	LB-05D	2/11/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-5D	LB-05D	8/30/88	1.0 L	1.0 L	1.0 L	3.0 L	1.0 L	1.0 L	1.0 L	2.0 L	1.0 L	1.0 L
LB-5D	LB-1289-W24	12/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-5D	LB-032894-13	3/28/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-5D	LB-031997-9	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031998-6	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2	0.5 L	0.2	0.5 L	0.5 L
LB-5D	LB-031899-11	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-5D	LB-031600-5	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031401-11	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031902-13	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031303-9	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-022504-7	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-022504-8	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-030805-1	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031606-14	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-031606-15	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-030507-7	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-031908-2	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D (Dup)	LB-031908-3	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5D	LB-5D	3/23/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5D	LB-031212-03	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-05S	5/29/87	2.0 L	2.0 L	5.0 L	4.0 L		2.0 L	2.0 L	5.0 L		2.0 L
LB-5S	LB-05S	7/19/87	1.0 L	1.0 L	5.0 L	4.0 L		2.0 L	2.0 L	4.0 L		1.0 L
LB-5S	LB-05S	9/10/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-5S	LB-05S	11/11/87	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-5S	LB-05S	2/10/88	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L		1.0 L
LB-5S	LB-032894-12	3/28/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-5S	LB-031997-8	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031998-5	3/19/98	2.4	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031899-10	3/18/99	2.6	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-5S	LB-031600-4	3/16/00	1.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031401-12	3/14/01	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031902-12	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091802-6	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031303-8	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-092203-1	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-022504-9	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-090104-5	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB030805-2	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB030805-3	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091405-4	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031606-16	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091206-1	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-030507-6	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091907-3	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-031908-1	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-091608-2	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-091608-8	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LBLF5S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB-DUP2032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB5S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S (Dup)	LB51S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-5S	LB-5S	3/23/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-090811-06	9/8/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-032212-17	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-5S	LB-091112-01	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-06S	7/17/87	1.0 L	1.0 L	5.0 L	4.0 L		3.0	2.0	4.0 L		1.0 L
LB-6S	LB-06S	9/10/87	1.0 L	1.1	1.0 L	1.0 L	1.0 L	1.0 L	8.0	1.0 L		1.0 L
LB-6S	LB-06S	11/11/87	1.0 L	2.6	3.8	2.3	1.0 L	4.2	7.1	1.0 L		1.0 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-06S	2/11/88	1.0 L	1.5	1.2	1.0 L	1.0 L	1.4	1.0 L	1.0 L		1.0 L
LB-6S	LB-06S	6/22/88	1.0 L	4.0	3.4	4.2	1.0 L	6.0	1.0 L	1.0 L		1.0 L
LB-6S	LB-06S	8/31/88	1.0 L	1.0	1.0 L	4.0	1.0 L	3.0	1.0 L	2.0 L	40.0	1.0 L
LB-6S	LB-06S	12/6/88	1.0 L	1.0 L	1.0 L	10.0 L	1.0 L	6.0	1.0 L	2.0		1.0 L
LB-6S	LB-289-W17	3/1/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	6.9	1.0 L	2.6	24.1	1.0 L
LB-6S	LB-589-W17	5/24/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.2	1.0	1.0 L	21.0	1.0 L
LB-6S	LB-989-W07	9/7/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.6	1.0 L	1.5	20.0	1.0 L
LB-6S	LB-1289-W13	12/15/89	1.0	2.0	1.0 L	5.1	1.0 L	13.0	1.0 L	1.7	51.0	1.0 L
LB-6S	LB-390-W24	3/15/90	1.0 L	1.5	1.0 L	2.6	1.0 L	11.0	1.0 L	1.0 L	37.0	1.0 L
LB-6S	LB-690-W22	6/21/90	1.0 L	1.0 L	1.0 L	2.7	1.0 L	9.7	1.0 L	1.0 L	31.0	1.0 L
LB-6S	LB-990-W11	9/14/90	1.1	1.7	1.0 L	6.0	1.0 L	12.0	1.0 L	6.2	37.0	1.0 L
LB-6S	LB-1290-W13	12/12/90	1.0 L	1.0 L	1.0 L	4.1	1.0 L	10.0	1.0 L	4.5	34.0	1.0 L
LB-6S	LB-391-W16	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.3	1.0 L	1.0 L	14.0	1.0 L
LB-6S	LB-691-W19	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	3.7	1.0 L	1.0 L	13.0	1.0 L
LB-6S	LB-691-W20	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.1	1.0 L	1.0 L	15.0	1.0 L
LB-6S	LB-991-14	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.0	1.0 L	1.0 L	18.0	1.0 L
LB-6S	LB-991-15	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.0	1.0 L	1.0	15.0	1.0 L
LB-6S	LB-1291-08	12/20/91	1.0 L	1.0 L	5.0	1.0 L	1.0 L	5.0	1.0 L	1.0 L	29.0	1.0 L
LB-6S	LB-1291-09	12/20/91	1.0 L	1.0 L	4.0	1.0 L	1.0 L	4.0	1.0 L	1.0 L	28.0	1.0 L
LB-6S	LB-392-07	3/20/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0	1.0 L	1.0 L	4.0	1.0 L
LB-6S	LB-392-08	3/20/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.0	1.0 L	1.0 L	4.0	1.0 L
LB-6S	LB-62692-5	6/26/92	0.4		0.2 L	0.3	0.2 L		0.5 L			0.2 L
LB-6S	LB-62692-5	6/26/92		0.4 B	0.2 L		0.2 L	2.6		0.9	6.1 B	
LB-6S	LB-62692-6	6/26/92			0.2 L	0.2 L	0.2 L		0.5 L	0.8	5.2 B	0.2 L
LB-6S	LB-62692-6	6/26/92	0.4	0.4 B	0.2 L	0.2 L	0.2 L	2.6				
LB-6S	LB-92192-4	9/21/92	0.5	0.4	0.2 L	0.2 L	0.2 L		0.5 L	2.1	5.9	0.2 L
LB-6S	LB-92192-4	9/21/92			0.2 L	0.2 L	0.2 L	3.0				
LB-6S	LB-92192-5	9/21/92			0.2 L	0.2 L	0.2 L		0.5 L			0.2 L
LB-6S	LB-92192-5	9/21/92	0.5	0.4	0.2 L	0.2 L	0.2 L	3.0		1.9	5.6	
LB-6S	LB-12992-4	12/9/92	0.6 B		0.2 L	0.2 L	0.2		7.8 B	0.3 L		0.2 L
LB-6S	LB-12992-4	12/9/92		0.2	0.2 L	0.2 L		3.6		0.3 L	5.8	
LB-6S	LB-12992-5	12/9/92		0.2 L	0.2 L	0.2 L		3.9	3.1 B	0.3 L	6.6	0.2
LB-6S	LB-12992-5	12/9/92	0.4 B	0.2 L	0.2 L	0.2 L	0.2			0.3 L		
LB-6S	LB-031093-7	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.5 L	0.9	2.3	0.2 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-031093-7	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	2.6				
LB-6S	LB-031093-8	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.5 L	0.3 L	2.1	0.2 L
LB-6S	LB-031093-8	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	2.4		0.3 L		
LB-6S	LB-060393-11	6/3/93	0.4		0.2 L	0.2 L	0.2 L	1.3	0.5 L		1.2	0.2 L
LB-6S	LB-060393-11	6/3/93		0.3	0.2 L	0.2 L	0.2 L			0.6		
LB-6S	LB-060393-12	6/3/93	0.4		0.2 L	0.2 L	0.2 L		0.5 L			0.2 L
LB-6S	LB-060393-12	6/3/93		0.3	0.2 L	0.2 L	0.2 L	1.1		0.4	1.0	
LB-6S	LB-092493-13	9/24/93	0.2 L	0.2 L	0.2 L	0.2	0.2 L	1.8	0.5 L	2.9	1.4	0.2 L
LB-6S	LB-092493-13	9/24/93	0.2 L	0.2 L	0.2 L		0.2 L					
LB-6S	LB-121593-6	12/15/93	0.2 L	0.2 L	1.6	0.2 L	0.2 L	1.6	0.5 L	1.3	1.8	0.2 L
LB-6S	LB-032994-18	3/29/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.6	0.5	0.2 L
LB-6S	LB-032994-19	3/29/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.5	0.5	0.2 L
LB-6S	LB-062394-11	6/23/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.5	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-062394-12	6/23/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.6	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-090694-5	9/6/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.8	0.3 L	0.8	0.4	0.3 L
LB-6S	LB-090694-6	9/6/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.8	0.3 L	0.8	0.4	0.3 L
LB-6S	LB-121394-6	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-121394-7	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-6S	LB-031095-10	3/10/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-031095-11	3/10/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1	0.2 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-062095-10	6/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.3 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-062095-9	6/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.3 B	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-092095-6	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.3	0.1 L	0.1	0.2	0.1 L
LB-6S	LB-092095-7	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.3	0.1 L	0.1	0.2	0.1 L
LB-6S	LB-122095-12	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-6S	LB-122095-13	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1	0.1 L
LB-6S	LB-031996-5	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1	0.1 L
LB-6S	LB-031996-6	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.1 L	0.1 L
LB-6S	LB-061996-12	6/19/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.2	0.1 L
LB-6S	LB-061996-13	6/19/96	0.1	0.1 L	0.3 L	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB-091896-12	9/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.4	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB121796-3	12/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.4	0.1 L	0.1	0.2	0.1 L
LB-6S	LB-031997-7	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-061797-6	6/17/97	0.2	0.1	0.5 L	0.5 L	0.0	0.5	0.5 L	0.5 L	0.9	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LB-091697-3	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.6	0.5 L
LB-6S	LB-121797-14	12/17/97	0.4	0.2	0.5 L	0.5 L	0.5 L	1.0	0.5 L	0.5 L	1.7	0.5 L
LB-6S	LB-031998-7	3/19/98	0.3	0.2	0.5 L	0.5 L	0.1	0.5	0.5 L	0.2	0.5 L	0.5 L
LB-6S	LB-061698-7	6/16/98	0.1	0.1	0.3 L	0.1 L	0.1	0.2	0.1 L	0.1 L	0.3	0.1 L
LB-6S	LB-091798-5	9/17/98	0.2	0.3 L	0.2 L	0.3 L	0.2 B	0.5	0.3 L	0.2 L	0.6	0.2 L
LB-6S	LB-121798-1	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2	0.3 L	0.2 L	0.3 L	0.2 L
LB-6S	LB-031799-2	3/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.4	0.3 L	0.2 L	0.4	0.2 L
LB-6S	LB-062399-11	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-6S	LB-121599-10	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-6S	LB-031700-10	3/17/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031700-11	3/17/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-061300-6	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091200-3	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-121200-1	12/12/00	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.3 J	0.5 L
LB-6S	LB-121200-2	12/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.2 J	0.5 L
LB-6S	LB-031301-7	3/13/01	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031301-8	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-032002-15	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-032002-16	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091802-2	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091802-3	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031303-21	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-092203-5	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-022604-18	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-090104-6	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-030805-9	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091405-6	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031506-13	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091206-4	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-030507-12	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091907-6	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-031908-9	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-091608-3	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-6S	LBLF6S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S (Dup)	LBLFDUP1091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB6S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-6S	LB-6S	3/22/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	DUP1	3/22/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-090711-05	9/7/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-090711-04	9/7/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-032212-23	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-032212-22	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S	LB-091212-06	9/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-6S (Dup)	LB-091212-07	9/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB10-DR	LB-031005-19	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR (Dup)	LB-031005-20	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-031406-5	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-030607-20	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-032408-22	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-10D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB10-DR	LB-10D032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10DR	LB-10DR	3/29/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.18	0.1 L	0.25 L	0.1 L	0.1 L
LB-10DR	LB-0313012-07	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	**0.12**	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-031005-21	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091505-7	9/15/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-031406-6	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091306-9	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-030607-19	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091907-7	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-032408-21	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR (Re)	MW10SR-043008	4/30/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-091608-4	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-10S	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR (Dup)	Dup-1	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LBLF10S091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-10SR	LB-10SR032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB10S092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-10SR	LB-10SR	3/29/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR (Dup)	DUP2	3/29/11	0.1 L	0.15	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-090811-08	9/8/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-031312-08	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-10SR	LB-091212-09	9/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13D	LB-989-W20	9/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1089-W15	10/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1189-W20	11/16/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1289-W18	12/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-390-W18	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-690-W20	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-990-W17	9/18/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0 L
LB-13D	LB-1290-W20	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-391-W15	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-691-W22	6/26/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-991-13	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-1291-19	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-392-19	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-13D	LB-7292-2	7/2/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-91792-2	9/17/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-121092-9	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-031293-20	3/12/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-060493-21	6/4/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-092393-7	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-092393-7	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.3 L	0.2 L	
LB-13D	LB-121693-12	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-032894-17	3/28/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13D	LB-062394-20	6/28/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-090794-10	9/7/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-121594-21	12/15/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-13D	LB-031395-18	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-062195-19	6/21/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13D	LB-092295-16	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-121995-8	12/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-032096-15	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-032096-16	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13D	LB-061996-16	6/19/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-091796-4	9/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB121796-9	12/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-032097-18	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061897-15	6/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-091897-11	9/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-121797-9	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.8 L	0.5 L	0.5 L
LB-13D	LB-032098-19	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061798-14	6/17/98	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-13D	LB-091898-15	9/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-121898-12	12/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-031999-23	3/19/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-062399-12	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13D	LB-091799-13	9/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.3 J					
LB-13D	LB-121699-3	12/14/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-13D	LB-031700-18	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-061400-10	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-091300-11	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-121500-12	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031501-19	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-032002-20	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031303-16	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-022404-3	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031005-17	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-031506-9	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-030607-18	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-032008-13	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-13D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13D	LB-13D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13D	LB-13D	3/25/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13D	LB-031212-01	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-989-W22	9/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	6.5	1.0 L	1.8	13.0	1.0 L
LB-13I	LB-989-W23	9/13/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.6	1.0 L	1.3	11.0	1.0 L
LB-13I	LB-1089-W17	10/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	6.0	1.0 L	2.3	10.0	1.0 L
LB-13I	LB-1189-W17	11/16/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.9	1.0 L	2.3	1.0 L	1.0 L
LB-13I	LB-1289-W16	12/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.7	1.0 L	1.9	10.0	1.0 L
LB-13I	LB-390-W19	3/15/90	1.0 L	1.0 L	2.0	1.0 L	1.0 L	2.0	1.0 L	3.7	2.2	1.0 L
LB-13I	LB-690-W19	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	3.6	1.0 L	1.4	8.1	1.0 L
LB-13I	LB-990-W16	9/18/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.1	1.0 L	2.4	8.3	1.0 L
LB-13I	LB-1290-W21	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.6	1.0 L	2.9	7.9	1.0 L
LB-13I	LB-391-W14	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	3.1	1.0 L	1.0 L	7.1	1.0 L
LB-13I	LB-691-W21	6/26/91	1.0 L	2.1	1.0 L	1.0 L	1.0 L	2.4	1.0 L	1.2	4.1	1.0 L
LB-13I	LB-991-12	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	3.0	1.0 L	1.0	9.0	1.0 L
LB-13I	LB-1291-18	12/23/91	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0	1.0 L	1.0 L	9.0	1.0 L
LB-13I	LB-392-20	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L
LB-13I	LB-7292-1	7/2/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.4	0.5 L	1.4	0.2 L	0.2 L
LB-13I	LB-91792-1	9/17/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.6	0.5 L	6.6	2.5	0.2 L
LB-13I	LB-121092-8	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.6	0.5 L	0.3 L	1.9	0.2 L
LB-13I	LB-031293-19	3/12/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	1.3	0.5 L	1.2	1.7	0.2 L
LB-13I	LB-060493-20	6/4/93	0.2 L	0.2	0.2 L	0.2 L	0.2 L	0.8	0.5 L	0.5	0.9	0.2 L
LB-13I	LB-092393-6	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.8	0.5 L	1.6	0.6	0.2 L
LB-13I	LB-092393-6	9/23/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L					
LB-13I	LB-121693-14	12/16/93	0.2 L	0.2 L	0.4	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-13I	LB-032894-16	3/28/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.3 L	0.5	0.2 L
LB-13I	LB-0624894-19	6/28/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.6	0.3 L	0.3 L
LB-13I	LB-090794-9	9/7/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2	0.3 L	0.6	0.3 L	0.3 L
LB-13I	LB-121594-20	12/15/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.3	0.3 L	0.3 L	0.3 L	0.3 L
LB-13I	LB-031395-17	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2 B	0.1 L	0.2	0.1 L	0.1 L
LB-13I	LB-062195-18	6/21/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.2 B	0.1 L	0.1 L	0.1	0.1 L
LB-13I	LB-092295-15	9/22/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.2	0.1 L	0.1 L
LB-13I	LB-121995-7	12/19/95	0.3 L	0.1	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-13I	LB-032096-14	3/20/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.2 B	0.1 L
LB-13I	LB-061996-15	6/19/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0	0.6	0.1 L	1.1	0.2	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13I	LB-091796-3	9/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.2	0.1 L	0.8	0.2 L	0.1 L
LB-13I	LB121796-10	12/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0	0.1 L	0.1 L	1.1	0.2 L	0.1 L
LB-13I	LB-032097-19	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5	0.5 L	0.5 L
LB-13I	LB-061897-14	6/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.1	0.5 L	0.9	0.5 L	0.5 L
LB-13I	LB-091897-12	9/18/97	0.5 L	0.5 L	0.5 L	0.5 L	0.2	0.2	0.5 L	0.9	0.5 L	0.5 L
LB-13I	LB-121797-8	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.1	0.5 L	0.8	0.5 L	0.5 L
LB-13I	LB-032098-18	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.7	0.5 L	0.5 L
LB-13I	LB-061798-15	6/17/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.6	0.2 L	0.1 L
LB-13I	LB-091898-14	9/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.7	0.3 L	0.2 L
LB-13I	LB-121898-11	12/18/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-13I	LB-031999-22	3/19/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.4	0.3 L	0.2 L
LB-13I	LB-062399-13	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-13I	LB-091799-12	9/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.3 J			0.4 J		
LB-13I	LB-121699-4	12/14/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-13I	LB-031700-17	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-061400-9	6/14/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091300-12	9/13/00	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-121500-11	12/15/00	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031501-20	3/15/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-032002-19	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091802-7	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031303-15	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-092203-7	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-022404-4	2/24/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-090104-13	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031005-18	3/10/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091505-9	9/15/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-031506-10	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091306-8	9/13/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-030607-17	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091907-8	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-032008-12	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-091608-5	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-13I	LBLF13i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-13I	LB-13I	3/23/11	0.1 L	0.1 L	0.1 L	0.2 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-090711-02	9/7/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-032212-19	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I (Dup)	LB-032212-20	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-13I	LB-091112-03	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-17D	LB-989-W08	9/7/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1089-W10	10/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1089-W11	10/18/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1189-W12	11/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1189-W13	11/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1289-W28	12/20/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-390-W21	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-390-W22	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-690-W18	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-990-W19	9/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-990-W20	9/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1290-W23	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-391-W19	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-391-W21	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-691-W14	6/11/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-691-W15	6/11/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-991-10	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-991-11	9/25/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1291-16	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-1291-17	12/23/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-392-11	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-392-12	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17D	LB-63092-5	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.2 L	0.5 L	0.9	0.2 L	0.2 L
LB-17D	LB-031093-6	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-17D	LB-060493-22	6/4/93	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.4	0.2 L	0.2 L
LB-17D	LB-092793-21	9/27/93	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.2 L	0.5 L	2.3	0.2 L	0.2 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17D	LB-092793-21	9/27/93	0.2 L	0.2 L	0.2 L	0.2 L		0.2 L			0.2 L	
LB-17D	LB-121593-7	12/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.2 L	0.5 L	0.7	0.2 L	0.2 L
LB-17D	LB-032994-20	3/29/94	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.5 L	0.5 L	0.8	0.2 L	0.2 L
LB-17D	LB-062394-14	6/23/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-17D	LB-090794-7	9/7/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.7	0.3 L	0.3 L
LB-17D	LB-121494-10	12/14/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.4	0.3 L	0.3 L
LB-17D	LB-030995-5	3/9/95	0.3 L	0.4	0.1 L	0.1 L	0.2	0.1 L	0.1 L	0.4	0.2	0.1 L
LB-17D	LB-062095-11	6/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.3	0.1 L	0.1 L	0.3	0.1 L	0.1 L
LB-17D	LB-092095-10	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1	0.1 L
LB-17D	LB-121895-3	12/18/95	0.5 L	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.4	0.5 L	0.5 L
LB-17D	LB-121895-3	12/18/95	0.3 L	0.2 L	0.1 L	0.1 L		0.1 L	0.1 L		0.1 L	0.1 L
LB-17D	LB-031996-11	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.3 B	0.1 L	0.1 L	0.4	0.1 L	0.1 L
LB-17D	LB-061996-14	6/19/96	0.1 L	0.1 L	0.3 L	0.1 L	0.3	0.1 L	0.1 L	0.6	0.2 L	0.1
LB-17D	LB-032097-16	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031998-14	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031899-13	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-17D	LB-031600-7	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031401-9	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.1 J	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031902-7	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031203-7	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-022504-10	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-030905-10	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-031506-7	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-030607-14	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D (Dup)	LB-030607-15	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-032008-11	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17D	LB-17D	3/22/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LN-17D	LB-031212-04	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-17I	LB-989-W04	9/6/89	1.0 L	1.0 L	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-1089-W14	10/19/89	1.0 L	1.0 L	1.0 L	1.0 L	1.6	1.0 L	1.0 L	1.0 L	1.0 L	1.4
LB-17I	LB-1189-W14	11/15/89	1.0 L	1.0 L	1.0 L	1.0 L	1.3	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-1289-W29	12/20/89	1.0 L	1.0 L	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.1

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17I	LB-1289-W30	12/20/89	1.0 L	1.0 L	1.0 L	1.0 L	1.4	1.0 L	1.0 L	1.0 L	1.0 L	1.1
LB-17I	LB-390-W20	3/15/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-690-W17	6/21/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-990-W18	9/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.2	1.0 L	1.0 L	1.0 L	1.0 L	1.1
LB-17I	LB-1290-W22	12/13/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-391-W20	3/21/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-392-13	3/23/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-17I	LB-63092-6	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	0.7		0.5 L		0.2 L	0.8
LB-17I	LB-63092-6	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L		0.2		1.0	0.2 L	
LB-17I	LB-63092-7	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L	0.7	0.3	0.5 L	1.0		0.9
LB-17I	LB-63092-7	6/30/92	0.2 L	0.2 L	0.2 L	0.2 L					0.3 B	
LB-17I	LB-91892-3	9/18/92	0.2 L	0.2 L	0.2 L	0.2 L	1.0	0.2	0.5 L	4.1	0.2 L	1.3
LB-17I	LB-91892-3	9/18/92	0.2 L	0.2 L	0.2 L	0.2 L					0.2 L	
LB-17I	LB-91892-4	9/18/92	0.2 L	0.2 L	0.2 L	0.2 L	0.9		0.5 L		0.2 L	1.2
LB-17I	LB-91892-4	9/18/92	0.2 L	0.2 L	0.2 L	0.2 L		0.2		4.1	0.2 L	
LB-17I	LB-121192-18	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L		0.2 L	0.5 L	1.0	0.2 L	1.5
LB-17I	LB-121192-18	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L	1.3	0.2 L			0.2 L	
LB-17I	LB-121192-19	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L	1.3	0.2 L	0.5 L		0.2 L	1.6
LB-17I	LB-121192-19	12/11/92	0.2 L	0.2 L	0.2 L	0.2 L		0.2 L		1.1	0.2 L	
LB-17I	LB-031093-5	3/10/93	0.2 L	0.2 L	0.2 L	0.2 L	1.5	0.2 L	0.5 L	0.8	0.2 L	1.9
LB-17I	LB-032994-21	3/29/94	0.2 L	0.2 L	0.2 L	0.2 L	0.9	0.5 L	0.5 L	0.4	0.2 L	0.8
LB-17I	LB-030995-6	3/9/95	0.3 L	0.2 L	0.1 L	0.1 L	0.8	0.1 L	0.1 L	0.2	0.1 L	1.0
LB-17I	LB-031996-10	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.7	0.1 L	0.1 L	0.4	0.1 L	0.9
LB-17I	LB-032097-17	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	1.3	0.5 L	0.5 L	0.5 L	0.5 L	1.5
LB-17I	LB-031998-13	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.8 J	0.5 L	0.5 L	0.1 J	0.5 L	1.1 J
LB-17I	LB-031899-12	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.6	0.2 L	0.3 L	0.2 L	0.3 L	0.8
LB-17I	LB-031600-6	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J
LB-17I	LB-031401-10	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J
LB-17I	LB-031902-6	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-031203-6	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-022504-11	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB030905-11	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-031506-8	3/15/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-030607-13	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-17I	LB-032008-10	3/20/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I032310	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I (Dup)	LB-DUP1032410	3/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-17I	LB-17I	3/22/11	0.1 L	0.81	0.1 L	0.02 L	0.26	0.1 L	0.1 L	0.25 L	0.27	0.1 L
LB-17I	LB-031312-16	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-20S	LB-1289-W36	12/21/89	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0	22.0	2.6	1.3	1.0 L
LB-20S	LB-390-W12	3/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.5	1.0 L	10.0	2.0	1.1
LB-20S	LB-690-W08	6/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.8	1.0 L	12.0	1.1	2.2
LB-20S	LB-690-W09	6/19/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	2.2	1.0 L	14.0	1.8	2.4
LB-20S	LB-990-W09	9/14/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	4.9	1.0 L	1.3
LB-20S	LB-1290-W10	12/12/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	5.8	1.0 L	1.7
LB-20S	LB-1290-W11	12/12/90	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.5
LB-20S	LB-391-W08	3/20/91	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-20S	LB-392-18	3/24/92	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L	1.0 L
LB-20S	LB-031593-26	3/15/93	0.2 L	0.2 L	0.2 L	0.2 L			0.5 L	1.3	0.2 L	1.3
LB-20S	LB-031593-26	3/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.4	0.2			0.2 L	
LB-20S	LB-031593-27	3/15/93	0.2 L	0.2 L	0.2 L	0.2 L	0.4		0.5 L		0.2 L	1.5
LB-20S	LB-031593-27	3/15/93	0.2 L	0.2 L	0.2 L	0.2 L		0.2		1.6	0.2 L	
LB-20S	LB-032994-23	3/29/94	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.3	0.5 L	1.6	0.2 L	1.1
LB-20S	LB-031395-19	3/13/95	0.3 L	0.2 L	0.1 L	0.1 L	0.3	0.2 B	0.1 L	1.2	0.2	1.4
LB-20S	LB-032096-20	3/20/96	0.3 L	0.3	0.1 L	0.1 L	1.0	0.2	0.1 L	1.9	0.1 B	1.9
LB-20S	LB-032097-15	3/20/97	0.5 L	0.5 L	0.5 L	0.5 L	1.6	0.5 L	0.5 L	2.0	0.5 L	2.3
LB-20S	LB-032098-23	3/20/98	0.5 L	0.5 L	0.5 L	0.5 L	0.8	0.5 L	0.5 L	0.5	0.5 L	1.0
LB-20S	LB-031899-16	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.5	0.2 L	0.3 L	0.9	0.3 L	0.6
LB-20S	LB-031700-14	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5	0.5 L	0.5 L	0.8	0.5 L	0.8
LB-20S	LB-031401-13	3/14/01	0.5 L	0.5 L	0.5 L	0.5 L	0.4 J	0.5 L	0.5 L	0.5 L	0.5 L	0.6
LB-20S	LB-032002-14	3/20/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-031303-20	3/13/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-022604-19	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB030905-12	3/9/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-031406-4	3/14/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-030607-16	3/6/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5
LB-20S	LB-032408-16	3/24/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-20S	LB-20S	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-20S032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-20S	LB-20S	3/24/11	0.1 L	0.1 L	0.1 L	0.02 L	0.25	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-20S	LB-031312-15	3/13/12	0.1 L	0.1 L	0.1 L	0.02 L	**0.2**	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26D	LB-0892-2	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.5 L J	0.3 L J	0.3 J	0.2 L J
LB-26D	LB-92192-7	9/21/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-121092-13	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-031193-14	3/11/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-060193-3	6/1/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-092493-12	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-092493-12	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.3 L	0.2 L	
LB-26D	LB-121693-16	12/16/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-032594-7	3/25/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-26D	LB-062294-6	6/22/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-090894-15	9/8/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-121394-5	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26D	LB-031095-14	3/10/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-061995-2	6/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-092095-4	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-122095-15	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-031996-2	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26D	LB-061896-2	6/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.2	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-091896-10	9/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	4.0 B	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB121796-4	12/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-031997-6	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061797-8	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.1	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-091697-4	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-121697-5	12/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031998-9	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061698-9	6/16/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26D	LB-091798-6	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-121798-3	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-031899-6	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26D	LB-062399-9	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26D	LB-121599-9	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-26D	LB-031700-13	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-061300-5	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-091200-4	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-121500-7	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031301-5	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031902-8	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031203-5	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-022504-12	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-030805-7	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031606-19	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-030507-11	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-031908-8	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26D	LB-26D	3/23/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26D	LB-031212-05	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-0892-1	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.5 J	0.5 L J	1.3 J	0.2 L J	0.2 L J
LB-26I	LB-92192-6	9/21/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.6	0.5 L	2.1	0.2 L	0.2 L
LB-26I	LB-121092-12	12/10/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-26I	LB-031193-13	3/11/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.6	0.5 L	1.1	0.2 L	0.2 L
LB-26I	LB-060193-1	6/1/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.5 L	1.6	0.2 L	0.2 L
LB-26I	LB-092493-11	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.3	0.5 L	3.0	0.2 L	0.2 L
LB-26I	LB-092493-11	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L				0.2 L	
LB-26I	LB-121693-15	12/16/93	0.2 L	0.2 L	0.3	0.2 L	0.2 L	0.2 L	0.5 L	0.8	0.2 L	0.2 L
LB-26I	LB-032594-6	3/25/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	0.5 L	0.8	0.2 L	0.2 L
LB-26I	LB-062294-5	6/22/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.3 L	0.3 L	0.3 L
LB-26I	LB-090894-16	9/8/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	1.0	0.3 L	0.3 L
LB-26I	LB-121394-4	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.2 L	0.3 L	0.6	0.3 L	0.3 L
LB-26I	LB-031095-13	3/10/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 B	0.1 L	0.5	0.1 L	0.1 L
LB-26I	LB-061995-1	6/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 B	0.1 L	0.5	0.1 L	0.1 L
LB-26I	LB-092095-5	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.3	0.1 L	0.1 L
LB-26I	LB-122095-14	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L
LB-26I	LB-031996-1	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.7	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26I	LB-061896-1	6/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.2	0.1 L	0.5	0.2 L	0.1 L
LB-26I	LB-091896-10	9/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.2	0.1 L	0.8	0.2 L	0.1 L
LB-26I	LB-121796-5	12/17/96	0.1 L	0.1 L	0.2 L	0.1 L	0.0 L	0.2	0.1 L	0.1 L	0.2 L	0.1 L
LB-26I	LB-031997-4	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-061797-7	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.1	0.5 L	0.4	0.5 L	0.5 L
LB-26I	LB-091697-5	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-121697-7	12/16/97	0.1	0.1	0.5 L	0.5 L	0.1	0.5	0.5 L	0.5 L	0.6	0.5 L
LB-26I	LB-031998-8	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.1	0.5 L	0.4	0.5 L	0.5 L
LB-26I	LB-061698-8	6/16/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-26I	LB-091798-7	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.3 B	0.2 L	0.3 L	0.3	0.3 L	0.2 L
LB-26I	LB-121798-2	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26I	LB-031799-1	3/17/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.4	0.3 L	0.2 L
LB-26I	LB-062399-10	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-26I	LB-121599-8	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-26I	LB-031700-12	3/17/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-061300-4	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-26I	LB-091200-5	9/12/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-121500-8	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031301-6	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031902-9	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091802-4	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031203-4	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-092203-4	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-022504-13	2/25/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-090104-26	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-030805-8	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091405-5	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031606-20	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091206	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-030507-10	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091907-5	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-031908-7	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-091608-6	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26I	3/17/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-26I	LBLF26i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB26I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-26I	LB-26I	3/23/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-090711-03	9/7/11	0.1 L	0.1 L	0.1 L	0.044	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-032212-21	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-26I	LB-091112-04	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27D	LB-0892-4	8/27/92	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.2 L J	0.4 J	0.5 L J	0.3 L J	0.2 L J	0.2 L J
LB-27D	LB-92202-5	9/22/92	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5 L	1.6 J	0.2 L	0.2 L
LB-27D	LB-121192-21	12/11/92	0.2 L	0.2	0.2 L	0.2 L	0.2 L	0.7	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-031193-16	3/11/93	0.2 L	0.2 L	0.6	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-060193-4	6/1/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.4	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-16	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-16	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.4		0.3 L	0.2 L	
LB-27D	LB-092493-17	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L		0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-092493-17	9/24/93	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.4		0.3 L	0.2 L	
LB-27D	LB-121693-17	12/16/93	0.2 L	0.2 L	0.4	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-121693-18	12/16/93	0.2 L	0.2 L	0.4	0.2 L	0.2 L	0.2 L	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-032494-4	3/24/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.4	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-032494-5	3/24/94	0.2 L	0.2 L	0.2 L	0.2 L	0.2 L	0.5	0.5 L	0.3 L	0.2 L	0.2 L
LB-27D	LB-062294-10	6/22/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-062294-9	6/22/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-090894-12	9/8/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-090894-13	9/8/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-121394-2	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-121394-3	12/13/94	0.2 L	0.3 L	0.1 L	0.3 L	0.4 L	0.4	0.3 L	0.3 L	0.3 L	0.3 L
LB-27D	LB-031095-8	3/10/95	0.3 L	0.2 L	0.4 B	0.1 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-031095-9	3/10/95	0.3	0.2 L	0.1 L	0.1 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-061995-4	6/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.4 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-061995-5	6/19/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	3.6 B	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-092095-1	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-092095-2	9/20/95	0.3 L	0.3 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-122095-17	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-122095-18	12/20/95	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27D	LB-031996-3	3/19/96	0.3 L	0.2 L	0.1 L	0.1 L	0.1 L	0.4	0.1 L	0.1 L	0.1 L	0.1 L
LB-27D	LB-061896-4	6/18/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-061896-5	6/18/96	0.1 L	0.1	0.3 L	0.1 L	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-091796-9	9/17/96	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.5	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB121796-8	12/17/96	0.1 L	0.1	0.3 L	0.1 L	0.0 L	0.6	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-031997-12	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061797-11	6/17/97	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091697-8	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.4	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-121797-13	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031998-12	3/19/98	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.3	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061798-10	6/17/98	0.1 L	0.1 L	0.3 L	0.1 L	0.0 L	0.3	0.1 L	0.1 L	0.2 L	0.1 L
LB-27D	LB-091798-8	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-121798-6	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-031899-9	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.3	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-062399-7	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27D	LB-091599-1	9/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-27D	LB-121599-7	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-27D	LB-031600-3	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-061300-3	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091300-8	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-091300-9	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-121500-5	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031301-3	3/13/01	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031902-11	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031203-3	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-022604-15	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D (Dup)	LB-022604-16	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-030805-6	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031606-17	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-030507-9	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-031908-5	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D (Dup)	LB-031908-6	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-27D	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27D	LB-27D032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27D	LB-27D	3/25/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27D	LB-031212-02	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-0892-3	8/27/92	0.8 J	0.5 J	0.2 L J	0.2 L J	0.2 L J	2.1 J	0.5 L J	1.6 J	0.9 J	0.2 J
LB-27I	LB-92292-4	9/22/92	1.1	0.6	1.0 L	0.2 L	0.2 L	1.9	0.5 L	1.5	1.2	0.2 L
LB-27I	LB-121192-20	12/11/92	0.9	0.5	0.2 L	0.2 L	0.2 L	2.4	0.5 L	0.3 L	1.6	0.2
LB-27I	LB-031293-21	3/12/93	0.9	0.5	0.2 L	0.2 L	0.2 L	1.3	0.5 L	0.8	1.7	0.2 L
LB-27I	LB-060193-2	6/1/93	0.7	0.4	0.2 L	0.2 L	0.2 L	1.0	0.5 L	1.3	1.0	0.2 L
LB-27I	LB-092493-14	9/24/93			0.2 L	0.2 L	0.2 L	0.7	0.5 L		0.4	0.2 L
LB-27I	LB-092493-14	9/24/93	0.5	0.2	0.2 L	0.2 L	0.2 L			1.2		
LB-27I	LB-092493-15	9/24/93		0.2	0.2 L	0.2 L	0.2 L	0.7	0.5 L	1.2	0.4	0.2 L
LB-27I	LB-092493-15	9/24/93	0.6		0.2 L	0.2 L	0.2 L					
LB-27I	LB-121693-19	12/16/93	0.5	0.2 L	0.6	0.2 L	0.2 L	0.2 L	0.5 L	0.6	0.5	0.2 L
LB-27I	LB-121693-20	12/16/93	0.5	0.2	0.7	0.2 L	0.2 L	0.2 L	0.5 L	0.6	0.5	0.2 L
LB-27I	LB-032494-3	3/24/94	0.6	0.3	0.2 L	0.2 L	0.2 L	1.0	0.5 L	0.3 L	1.2	0.2 L
LB-27I	LB-062294-8	6/22/94	0.5	0.3 L	0.1 L	0.3 L	0.4 L	0.9	0.3 L	0.3 L	1.0	0.3 L
LB-27I	LB-090894-11	9/8/94	0.5	0.3 L	0.1 L	0.3 L	0.4 L	1.0	0.3 L	0.5	1.0	0.3 L
LB-27I	LB-121394-1	12/13/94	0.6	0.3 L	0.1 L	0.3 L	0.4 L	0.6	0.3 L	0.3 L	0.6	0.3 L
LB-27I	LB-031095-7	3/10/95	0.7	0.3	0.1 L	0.1 L	0.1	0.6 B	0.1 B	0.3	0.5	0.1 L
LB-27I	LB-061995-3	6/19/95	0.7	0.2	0.1 L	0.1 L	0.1	0.6 B	0.1 L	0.5	0.2	0.1 L
LB-27I	LB-092095-3	9/20/95	0.3	0.3 L	0.1 L	0.1 L	0.1	0.3	0.1 L	0.7	0.2	0.1 L
LB-27I	LB-122095-16	12/20/95	0.3	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.8	0.1 L	0.1 L
LB-27I	LB-031996-4	3/19/96	0.4	0.2 L	0.1 L	0.1 L	0.1 B	0.3	0.1 L	1.4	0.1 L	0.1 L
LB-27I	LB-061896-3	6/18/96	0.2	0.1 L	0.3 L	0.1	0.2	0.1 L	0.1 L	2.0	0.3	0.1 L
LB-27I	LB-091796-7	9/17/96	0.4	0.2	0.3 L	0.1 L	0.1	1.1	0.1 L	2.6	0.3	0.2
LB-27I	LB-091796-8	9/17/96	0.1 L	0.1	0.3 L	0.1 L	0.1	1.2	0.1 L	2.9	0.3	0.4
LB-27I	LB121796-6	12/17/96	0.2	0.1	0.3 L	0.1 L	0.2	0.7	0.1 L	1.7	0.2 L	0.1
LB-27I	LB121796-7	12/17/96	0.2	0.1	0.3 L	0.1 L	0.2	0.6	0.1 L	1.6	0.2 L	0.1
LB-27I	LB-031997-10	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.2	0.2	0.5 L	0.8	0.5 L	0.5 L
LB-27I	LB-031997-11	3/19/97	0.5 L	0.5 L	0.5 L	0.5 L	0.2	0.2	0.5 L	0.8	0.5 L	0.5 L
LB-27I	LB-061797-9	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.2	0.5 L	1.0	0.5 L	0.5 L
LB-27I	LB-061797-9	6/17/97	0.5 L	0.5 L	0.5 L	0.5 L			0.5 L	1.1	0.5 L	0.5 L
LB-27I	LB-091697-6	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091697-7	9/16/97	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-121797-11	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.2	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27I	LB-121797-12	12/17/97	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.4	0.5 L	0.5 L
LB-27I	LB-031998-10	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.3	0.5 L	0.5 L
LB-27I	LB-031998-11	3/19/98	0.5 L	0.5 L	0.5 L	0.5 L	0.1	0.5 L	0.5 L	0.3	0.5 L	0.5 L
LB-27I	LB-061798-11	6/17/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-27I	LB-061798-12	6/17/98	0.1 L	0.1 L	0.3 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.2 L	0.1 L
LB-27I	LB-091798-10	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-091798-9	9/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 B	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-121798-4	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-121798-5	12/17/98	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-031899-7	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-031899-8	3/18/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-062399-8	6/23/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L
LB-27I	LB-091599-2	9/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-27I	LB-121599-6	12/15/99	0.2 L	0.3 L	0.2 L	0.3 L	0.2 L					
LB-27I	LB-031600-1	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031600-2	3/16/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-061300-1	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-061300-2	6/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091300-10	9/13/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-121500-6	12/15/00	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.2 J	0.5 L	0.5 L
LB-27I	LB-031301-4	3/13/01	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L	0.3 J	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031902-10	3/19/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091802-5	9/18/02	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031203-1	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031203-2	3/12/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-092203-2	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-092203-3	9/22/03	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-022604-17	2/26/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-090104-27	9/1/04	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB030805-5	3/8/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091405-3	9/14/05	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031606-18	3/16/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091206-2	9/12/06	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-030507-8	3/5/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L

Table B-2
Groundwater Chemisrty, Volatile Organic Compounds (µg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	PCE	TCE	1,1-DCE	Vinyl Chloride	1,4-DCB	1,1-DCA	1,1,1-TCA	Chloroethane	cis-1,2-DCE	Chlorobenzene
LB-27I	LB-0919-07-4	9/19/07	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-031908-4	3/19/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-091608-7	9/16/08	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I	3/18/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LBLF27i091109	9/11/09	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I032410	3/24/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I092310	9/23/10	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L
LB-27I	LB-27I	3/25/11	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-090711-01	9/7/11	0.1 L	0.1 L	0.1 L	0.053	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-032212-18	3/22/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
LB-27I	LB-091112-02	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
FIELDQC	LB-031212-06	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
FIELDQC	LB-091112-05	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
FIELDQC	Trip Blank	3/12/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L
FIELDQC	Trip Blank	9/11/12	0.1 L	0.1 L	0.1 L	0.02 L	0.2 L	0.1 L	0.1 L	0.25 L	0.1 L	0.1 L

Notes:
PCE = tetrachloroethene; TCE = trichloroethene; 1,1,1-TCA = 1,1,1-trichloroethane; 1,1-DCA = 1,1-dichloroethane; 1,1-DCB = 1,1,-dichlorobenzene;
1,4-DCB = 1,4-dichlorobenzene; cis-1,2-DCE = cis-1,2-dichloroethene; 1,1-DCE = 1,1-dichloroethene; B = analyte detected above the MDL but below the MRL;
L = not detected at or above MRL; J = estimated concentration; Dup = field duplicate sample; Re = resample.

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

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

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

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1D	LB-031998-4	3/19/98	227	7.1	6.2	184	0.02 L	0.005 L
LB-1D	LB-061698-6	6/16/98	158	6.7	6.1	184	0.02 L	0.005 L
LB-1D	LB-091798-3	9/17/98	224	6.7	5.7	196	0.02 L	0.005 L
LB-1D	LB-121898-10	12/18/98	178	7.4	6.3	201	0.02	0.005 L
LB-1D	LB-031799-4	3/17/99	182	7.4	6.1	161	0.02 L	0.005 L
LB-1D	LB-062399-15	6/23/99	187	7.2	6.2	187	0.02 L	0.005 L
LB-1D	LB-091799-11	9/17/99	204	7.6	6.0	157	0.02 L	0.005 L
LB-1D	LB-121699-12	12/16/99	190	6.9	5.6	178	0.02 L	0.005 L
LB-1D	LB-031700-16	3/17/00	180	7.0	5.8	170	0.02 L	0.005 L
LB-1D	LB-061300-8	6/13/00	190	7.3	6.0	184	0.01 B	0.005 L
LB-1D	LB-091100-2	9/11/00	215	7.6	6.4	192	0.02 L	0.005 L
LB-1D	LB-121500-10	12/15/00	219	7.0	5.7	146	0.02 L	0.005 L
LB-1D	LB-031501-15	3/15/01	NT	7.2	5.9	180	0.02 L	0.005 L
LB-1D	LB-031501-16	3/15/01	NT	7.0	5.9	166	0.02 L	0.005 L
LB-1D	LB-031902-02	3/19/02	NT	6.9	5.9	159	0.02 L	0.005 L
LB-1D	LB-031303-12	3/13/03	NT	6.6	5.7	198	0.02 L	0.005 L
LB-1D	LB-022404-1	2/24/04	NT	6.7	5.6	188	0.07	0.006
LB-1D	LB030905-13	3/9/05	NT	6.7	5.5	224	0.02 L	0.005 L
LB-1D	LB-031406-1	3/14/06	NT	6.0	5.3	168	0.02 L	0.005 L
LB-1D (Dup)	LB-031406-2	3/14/06	NT	6.1	5.3	144	0.02 L	0.005 L
LB-1D	LB-030507-2	3/5/07	NT	6.1	5.6	194	0.02 L	0.005 L
LB-1D	LB-032408-15	3/24/08	NT	6.6	5.7	154	0.02 L	0.005 L
LB-1D	LB-1D	3/17/09	NT	7.0	5.9	147	0.02 L	0.005 L
LB-1D	LB-1D032310	3/23/10	NT	6.39	6.14	162	0.02 L	0.005 L
LB-1D	LB-1D	3/28/11	220	7.49	5.87	195	0.025 L	0.002 L
LB-1D	LB-031312-13	3/13/12	NT	7.4	6.0	190	0.025 L	0.002 L
LB-1S	LB-01S	5/11/87	602	16.0	1.1	NT	0.05 L	0.031
LB-1S	LB-01S	7/21/87	NT	20.0	2.7	NT	0.05 L	0.006
LB-1S	LB-01S	9/4/87	NT	15.0	1.8	NT	0.05 L	0.01 L
LB-1S	LB-01S	11/6/87	NT	14.0	3.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	2/11/88	410	15.0	2.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	6/22/88	496	20.0	2.0	NT	0.05 L	0.05 L
LB-1S	LB-01S	8/30/88	478	18.0	3.3	NT	0.05 L	0.01 L
LB-1S	LB-01S	12/5/88	348	17.0	3.5	NT	0.01 L	0.01 L
LB-1S	LB-289-W05	2/28/89	408	14.0	3.7	NT	0.29	0.01 L
LB-1S	LB-589-W04	5/23/89	510	22.0	3.8	NT	0.05 L	0.01 L
LB-1S	LB-989-W15	9/12/89	334	13.0	4.0	NT	0.20 L	0.005 L
LB-1S	LB-1289-W12	12/15/89	300	12.0	4.7	NT	NT	NT
LB-1S	LB-390-W10	3/14/90	388	13.6	4.7	152	NT	NT
LB-1S	LB-690-W10	6/20/90	526	17.8	4.0	302	NT	NT
LB-1S	LB-990-W06	9/14/90	531	20.2	3.8	325	NT	NT
LB-1S	LB-1290-W05	12/11/90	456	23.6	2.5	328	NT	NT
LB-1S	LB-391-W10	3/20/91	602	17.7	3.1	320	NT	NT
LB-1S	LB-691-W05	6/26/91	472	14.8	4.4	294	NT	NT
LB-1S	LB-991-05	9/24/91	350	10.2	5.4	253	NT	NT
LB-1S	LB-1291-13	12/23/91	382	10.0	4.0	290	NT	NT
LB-1S	LB-392-15	3/23/92	421	13.0	4.0	287	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1S	LB-63092-1	6/30/92	367	10.0	5.7	259	NT	NT
LB-1S	LB-92292-2	9/22/92	367	11.0	5.0	252	NT	NT
LB-1S	LB-121192-15	12/11/92	378	12.0	5.0	246	NT	NT
LB-1S	LB-031093-4	3/10/93	675	17.0	1.8	388	NT	NT
LB-1S	LB-060293-5	6/2/93	616	12.0	3.5	388	NT	NT
LB-1S	LB-092393-9	9/23/93	487	15.0	3.9	309	NT	NT
LB-1S	LB-121593-1	12/15/93	382	17.0	4.2	291	NT	NT
LB-1S	LB-032494-1	3/24/94	591	20.0	3.3	373	NT	NT
LB-1S	LB-052194-4	6/21/94	463	14.0	5.1	305	NT	NT
LB-1S	LB-090694-1	9/6/94	481	15.0	5.4	369	NT	NT
LB-1S	LB-121494-11	12/14/94	499	16.0	5.2	357	NT	NT
LB-1S	LB-030995-01	3/9/95	330	14.0	7.1	296	NT	NT
LB-1S	LB-062095-12	6/20/95	410	12.0	8.8	307	NT	NT
LB-1S	LB-092295-13	9/22/95	494	19.0	7.0	248	NT	NT
LB-1S	LB-121995-5	12/19/95	422	17.0	8.0	291	NT	NT
LB-1S	LB-032096-17	3/20/96	488	21.0	6.8	312	NT	NT
LB-1S	LB-061896-9	6/18/96	325	15.0	9.1	275	NT	NT
LB-1S	LB-091796-5	9/17/96	377	15.0	8.7	303	0.02 L	0.005 L
LB-1S	LB121796-1	12/17/96	455	17.0	7.9	298	0.02 L	0.005 L
LB-1S	LB-031997-3	3/19/97	444	35.0	7.2	370	0.03	0.005 L
LB-1S	LB-061797-3	6/17/97	348	12.0	7.5	279	0.02 L	0.005 L
LB-1S	LB-091697-2	9/16/97	382	21.6	7.4	291	0.02 L	0.005 L
LB-1S	LB-121697-5	12/16/97	456	22.0	8.9	310	0.03	0.005 L
LB-1S	LB-031998-3	3/19/98	526	35.1	8.7	306	0.02 L	0.005 L
LB-1S	LB-061698-5	6/16/98	303	19.6	10.2	307	0.02 L	0.005 L
LB-1S	LB-091798-4	9/17/98	448	21.6	9.0	298	0.02	0.005 L
LB-1S	LB-121898-9	12/18/98	363	18.1	9.0	332	0.34	0.008
LB-1S	LB-031799-3	3/17/99	465	29.7	9.1	355	0.02	0.005 L
LB-1S	LB-062399-14	6/23/99	363	21.0	8.1	277	0.02 L	0.005 L
LB-1S	LB-091799-10	9/17/99	447	19.6	8.3	279	0.10	0.005 L
LB-1S	LB-091799-9	9/17/99	457	21.1	7.4	285	0.03	0.005 L
LB-1S	LB-121699-13	12/16/99	358	12.1	8.1	255	0.02 L	0.005 L
LB-1S	LB-031700-15	3/17/00	383	18.5	7.3	249	0.02 L	0.005 L
LB-1S	LB-061300-7	6/13/00	297	9.8	9.8	222	0.02 L	0.005 L
LB-1S	LB-091100-1	9/11/00	365	14.2	8.9	264	0.02 L	0.005 L
LB-1S	LB-121500-9	12/15/00	362	10.2	7.4	213	0.02 L	0.005 L
LB-1S	LB-031401-14	3/14/01	NT	8.6	9.8	227	0.02 L	0.005 L
LB-1S	LB-092001-6	9/20/01	NT	8.3	7.3	212	0.02 L	0.005 L
LB-1S	LB-031902-01	3/19/02	NT	7.5	4.3	206	0.02 L	0.005 L
LB-1S	LB-091802-01	9/17/02	NT	6.0	7.0	206	0.02 L	0.005 L
LB-1S	LB-031303-10	3/13/03	NT	5.2	4.7	216	0.02 L	0.005 L
LB-1S	LB-031303-11	3/13/03	NT	5.1	4.7	198	0.03	0.005 L
LB-1S	LB-092203-6	9/22/03	NT	4.5	5.2	208	2.32	0.069
LB-1S	LB-022404-2	2/24/04	NT	4.4	4.0	184	0.12	0.005 L
LB-1S	LB-090104-1	9/1/04	NT	4.0	3.6	179	0.02 L	0.005 L
LB-1S (Dup)	LB-090104-30	9/1/04	NT	4.0	3.6	186	0.02 L	0.005 L
LB-1S	LB030905-14	3/9/05	NT	4.7	3.7	220	0.24	0.203

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-1S	LB-091405-1	9/14/05	NT	5.0	4.4	148	0.02 L	0.005 L
LB-1S (Dup)	LB-091405-2	9/14/05	NT	5.0	4.5	188	0.02 L	0.005 L
LB-1S	LB-031406-3	3/14/06	NT	6.6	2.5	234	1.62	0.045
LB-1S	LB-091306-5	9/13/06	NT	4.6	5.0	174	0.02 L	0.005 L
LB-1S (Dup)	LB-091306-6	9/13/06	NT	4.6	5.0	176	0.104	0.005 L
LB-1S	LB-030507-1	3/5/07	NT	4.6	4.9	196	1.62	0.045
LB-1S	LB-091907-1	9/19/07	NT	4.6	4.6	168	0.02 L	0.005 L
LB-1S (Dup)	LB-091907-2	9/19/07	NT	4.6	4.7	187	0.104	0.005 L
LB-1S	LB-032408-14	3/24/08	NT	8.9	4.3	196	0.020 L	0.005 L
LB-1S	LB-091608-1	9/16/08	NT	5.2	5.6	209	0.024	0.005 L
LB-1S	LB-1S	3/17/09	NT	6.0	4.8	159	0.020 L	0.005 L
LB-1S	LBLF1S091109	9/11/09	NT	4.99	4.94	202	0.051	0.005 L
LB-1S	LB-1S032310	3/23/10	NT	6.53	4.08	201	0.020 L	0.005 L
LB-1S	LB-1092310	9/23/10	NT	6.96	6.21	185	0.020 L	0.005 L
LB-1S	LB-1S	3/24/11	248	5.92	5.70	220	0.025 L	0.002 L
LB-1S	LB-090811-07	9/8/11	NT	5.71	6.87	205	0.025 L	0.002 L
LB-1S	LB-031312-14	3/13/12	NT	5.2	6.0	210	0.025 L	0.002 L
LB-1S	LB-091212-08	9/12/12	NT	14	5.9	210	0.025 L	0.002
LB-3D	LB-03D	5/28/87	270	8.0	4.3	NT	0.05 L	0.01 L
LB-3D	LB-03D	7/17/87	NT	8.0	4.1	NT	0.05 L	0.005 L
LB-3D	LB-03D	9/8/87	NT	8.0	2.2	NT	0.05 L	0.05 L
LB-3D	LB-03D	11/6/87	NT	8.2	4.9	NT	0.05 L	0.01 L
LB-3D	LB-1189-W01	11/13/89	176	5.5	5.0	179	0.02 L	0.005 L
LB-3D	LB-1289-W20	12/18/89	206	6.2	4.8	173	0.02 L	0.005 L
LB-3D	LB-032097-14	3/20/97	204	5.3	6.2	196	0.02 L	0.005 L
LB-3D	LB-032098-21	3/20/98	236	5.2	7.3	175	0.02 L	0.005 L
LB-3D	LB-031899-15	3/18/99	193	5.2	7.7	182	0.03	0.005 L
LB-3D	LB-031600-9	3/16/00	199	4.7	8.0	222	0.02 L	0.005 L
LB-3D	LB-031501-17	3/15/01	NT	5.2	7.6	171	0.02 L	0.005 L
LB-3D	LB-032002-18	3/20/02	NT	5.6	6.7	157	0.02 L	0.005 L
LB-3D	LB-031303-14	3/13/03	NT	4.1	5.5	181	0.02 L	0.005 L
LB-3D	LB-022404-5	2/24/04	NT	3.3	4.4	164	0.02 L	0.005 L
LB-3D	LB-030905-15	3/9/05	NT	3.2	4.1	169	0.02 L	0.005 L
LB-3D	LB-031606-21	3/16/06	NT	3.0	4.2	122	0.02 L	0.005 L
LB-3D	LB-030507-4	3/5/07	NT	3.2	4.4	156	0.02 L	0.005 L
LB-3D (Dup)	LB-030507-5	3/5/07	NT	3.2	4.4	161	0.02 L	0.005 L
LB-3D	LB-032408-17	3/24/08	NT	3.3	4.2	145	0.02 L	0.005 L
LB-3D	LB-3D	3/18/09	NT	3.5	4.5	147	0.02 L	0.005 L
LB-3D	LB-3D032410	3/24/10	NT	3.60	5.76	152	0.02 L	0.005 L
LB-3D	LB-3D	3/28/11	210	4.23	5.05	201	0.025 L	0.002 L
LB-3D	LB-031312-09	3/13/12	NT	4.1	4.6	180	0.025 L	0.002 L
LB-3S	LB-03S	5/11/87	308	9.0	1.9	NT	0.05 L	0.01
LB-3S	LB-03S	7/16/87	NT	7.0	2.1	NT	0.05 L	0.005 L
LB-3S	LB-03S	9/4/87	NT	7.0	1.5	NT	0.05 L	0.01 L
LB-3S	LB-03S	11/5/87	NT	6.4	3.4	NT	0.05 L	0.01 L
LB-3S	LB-1089-W02	10/17/89	192	4.0	4.0	193	0.05 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-3S	LB-1189-W02	11/13/89	160	4.5	4.1	144	0.02	0.005 L
LB-3S	LB-1289-W11	12/15/89	190	5.0	4.0	176	0.03	0.064
LB-3S	LB-390-W11	3/14/90	218	5.3	3.8	164	NT	NT
LB-3S	LB-690-W06	6/19/90	212	4.7	3.7	148	NT	NT
LB-3S	LB-990-W10	9/14/90	213	4.9	3.6	219	NT	NT
LB-3S	LB-1290-W08	12/12/90	377	4.6	3.5	194	NT	NT
LB-3S	LB-391-W07	3/20/91	217	4.5	3.4	150	NT	NT
LB-3S	LB-691-W10	6/11/91	226	4.9	3.3	188	NT	NT
LB-3S	LB-991-16	9/26/91	250	4.6	2.4	193	NT	NT
LB-3S	LB-1291-06	12/20/91	333	4.5	3.3	186	NT	NT
LB-3S	LB-392-10	3/20/92	230	4.4	3.3	195	NT	NT
LB-3S	LB-62692-8	6/26/92	253	4.9	2.6	204	NT	NT
LB-3S	LB-91792-3	9/17/92	266	4.4	2.9	205	NT	NT
LB-3S	LB-121092-14	12/10/92	273	4.3	3.2	202	NT	NT
LB-3S	LB-031593-25	3/15/93	309	4.7	2.7	218	NT	NT
LB-3S	LB-060393-14	6/3/93	296	4.5	2.6	214	NT	NT
LB-3S	LB-092393-1	9/23/93	278	4.2	3.0	212	NT	NT
LB-3S	LB-121593-5	12/15/93	255	4.1	3.1	212	NT	NT
LB-3S	LB-032594-11	3/25/94	281	3.8	3.0	204	NT	NT
LB-3S	LB-062394-13	6/23/94	276	4.1	2.9	208	NT	NT
LB-3S	LB-090794-8	9/7/94	235	3.3	3.3	213	NT	NT
LB-3S	LB-121494-13	12/14/94	274	3.6	2.5	215	NT	NT
LB-3S	LB-031395-20	3/13/95	267	3.9	3.4	214	NT	NT
LB-3S	LB-062095-14	6/20/95	259	3.7	3.8	221	NT	NT
LB-3S	LB-092095-11	9/20/95	328	3.9	3.7	202	NT	NT
LB-3S	LB-121995-4	12/19/95	272	5.0	4.2	206	NT	NT
LB-3S	LB-032096-21	3/20/96	254	5.1	4.3	199	NT	NT
LB-3S	LB-061996-11	6/19/96	257	4.5	4.4	213	NT	NT
LB-3S	LB-032097-13	3/20/97	211	3.6	5.0	207	0.30	0.008
LB-3S	LB-032098-20	3/20/98	228	3.1	4.4	185	0.02 L	0.005 L
LB-3S	LB-031899-14	3/18/99	159	3.1	4.0	154	0.02 L	0.005 L
LB-3S	LB-031600-8	3/16/00	148	2.4	4.4	169	0.02	0.007
LB-3S	LB-031501-18	3/15/01	NT	3.2	4.6	148	0.02 L	0.005 L
LB-3S	LB-032002-17	3/20/02	NT	3.7	4.8	155	0.02 L	0.005 L
LB-3S	LB-031303-13	3/13/03	NT	3.1	4.1	220	0.02 L	0.005 L
LB-3S	LB-022404-6	2/24/04	NT	2.7	3.3	159	4.59	0.07
LB-3S	LB-030905-16	3/9/05	NT	2.7	2.7	163	0.10	0.005 L
LB-3S	LB-031606-22	3/16/06	NT	2.4	2.5	134	0.02 L	0.005 L
LB-3S	LB-030507-3	3/5/07	NT	2.7	2.9	160	0.02 L	0.005 L
LB-3S	LB-032408-18	3/24/08	NT	2.8	3.2	145	0.02 L	0.005 L
LB-3S	LB-3S	3/18/09	NT	3.3	3.3	162	0.02 L	0.005 L
LB-3S	LB-3S032310	3/23/10	NT	2.83	3.56	144	0.02 L	0.005 L
LB-3S	LB-3S	3/28/11	214	3.40	3.63	188	0.025 L	0.002 L
LB-3S	LB-031312-10	3/13/12	NT	3.7	3.8	170	0.025 L	0.002 L
LB-4D	LB-04D	5/29/87	52.2	4.0	2.8	NT	0.05 L	0.01 L
LB-4D	LB-04D	6/22/87	180	2.0	2.9	NT	0.27	0.016

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-4D	LB-04D	7/17/87	NT	2.0	3.0	NT	0.05 L	0.005 L
LB-4D	LB-04D	9/8/87	NT	2.0	1.5	NT	0.05 L	0.01 L
LB-4D	LB-04D	11/9/87	NT	2.8	0.6	NT	0.05 L	0.01 L
LB-4D	LB-04D	2/9/88	176	3.0	3.2	NT	0.05 L	0.01 L
LB-4D	LB-04D	6/21/88	162	1.0	2.8	NT	0.05 L	0.05 L
LB-4D	LB-04D	8/29/88	166	2.0	3.2	NT	0.05 L	0.01 L
LB-4D	LB-04D	12/5/88	153	2.6	2.8	NT	0.01 L	0.01 L
LB-4D	LB-289-W02	2/27/89	158	2.0	2.9	NT	0.01 L	0.01 L
LB-4D	LB-589-W02	5/22/89	169	2.4	3.6	NT	0.05 L	0.01 L
LB-4D	LB-989-W27	9/15/89	143	1.4	3.0	NT	0.02 L	0.005 L
LB-4D	LB-1289-W06	12/14/89	121	1.8	2.9	96	NT	NT
LB-4D	LB-390-W01	3/13/90	160	2.2	3.0	105	0.02 L	0.005 L
LB-4D	LB-690-W01	6/19/90	201	1.8	3.0	120	0.02 L	0.005 L
LB-4D	LB-990-W02	9/13/90	154	2.1	3.2	165	0.02	0.005 L
LB-4D	LB-1290-W01	12/11/90	188	2.0	3.0	93	0.02 L	0.005 L
LB-4D	LB-391-W27	3/21/91	152	1.9	3.0	146	0.03 L	0.005 L
LB-4D	LB-691-W02	6/26/91	158	1.7	2.9	134	0.04 L	0.005 L
LB-4D	LB-991-01	9/24/91	153	2.7	3.1	122	0.02 L	0.005 L
LB-4D	LB-1291-02	12/19/91	166	1.9	2.9	132	0.02 L	0.005 L
LB-4D	LB-392-02	3/19/92	161	1.9	2.9	118	0.02 L	0.005 L
LB-4D	LB-62692-2	6/26/92	155	4.9	3.8	129	0.02 L	0.005 L
LB-4D	LB-91792-5	9/17/92	151	2.0	3.1	110	0.02	0.005 L
LB-4D	LB-12992-3	12/9/92	150	2.1	3.2	111	0.02 L	0.005 L
LB-4D	LB-030993-2	3/9/93	157	1.8	2.8	103	0.02 L	0.005 L
LB-4D	LB-060493-17	6/4/93	149	1.9	2.9	119	0.02 L	0.005 L
LB-4D	LB-092393-3	9/23/93	157	2.4	3.1	117	0.02 L	0.005 L
LB-4D	LB-121693-11	12/16/93	130	2.4	3.2	132	0.02 L	0.005 L
LB-4D	LB-032594-10	3/25/94	151	2.1	3.0	119	0.02 L	0.005 L
LB-4D	LB-062794-18	6/27/94	107	2.0	3.0	112	0.02 L	0.005 L
LB-4D	LB-090894-20	9/8/94	154	1.9	3.0	128	0.02 L	0.007
LB-4D	LB-121494-15	12/14/94	146	1.8	3.1	122	0.07	0.005 L
LB-4D	LB-031395-22	3/13/95	137	1.7	3.2	126	0.02 L	0.005 L
LB-4D	LB-092295-21	9/22/95	169	2.1	2.9	92	0.02	0.005 L
LB-4D	LB-122795-21	12/27/95	41	1.0	0.2 L	47	2.82	0.078
LB-4D	LB-032796-22	3/27/96	30	1.0	0.5	31	0.92	0.036
LB-4D	LB-070996-21	7/9/96	116	2.1	3.2	132	0.02 L	0.005 L
LB-4D	LB-091896-15	9/18/96	164	2.3	3.7	15	0.02 L	0.005 L
LB-4D	LB121896-15	12/18/96	153	1.9	3.5	133	0.02 L	0.009
LB-4D	LB-031797-2	3/17/97	114	2.2	3.7	131	0.02 L	0.005 L
LB-4D	LB-061697-2	6/16/97	149	2.2	3.5	123	0.02 L	0.005 L
LB-4D	LB-091697-9	9/16/97	139	2.2	3.7	147	0.02 L	0.005 L
LB-4D	LB-121597-2	12/15/97	147	2.1	3.8	127	0.02	0.005 L
LB-4D	LB-031898-1	3/18/98	156	2.3	3.8	103	0.02 L	0.005 L
LB-4D	LB-061598-2	6/15/98	145	2.1	4.1	135	0.02 L	0.005 L
LB-4D	LB-091698-2	9/16/98	160	2.2	4.1	126 B	0.02 L	0.005 L
LB-4D	LB-121898-14	12/18/98	130	2.4	3.9	147	0.03	0.005 L
LB-4D	LB-031999-21	3/19/99	125	2.5	3.9	165	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-4D	LB-062299-2	6/22/99	124	2.4	3.9	112	0.02 L	0.005 L
LB-4D	LB-091699-8	9/16/99	152	2.4	3.7	120	0.02 L	0.005 L
LB-4D	LB-121499-1	12/14/99	150	2.3	3.8	119	0.02 L	0.005 L
LB-4D	LB-031700-20	3/17/00	131	2.4	3.6	86	0.02 L	0.005 L
LB-4D	LB-061400-12	6/14/00	187	4.8	4.8	185	0.02 L	0.005 L
LB-4D	LB-091200-7	9/12/00	150	2.2	4.0	121	0.02 L	0.005 L
LB-4D	LB-121300-4	12/13/00	168	2.2	4.0	124	0.05	0.005 L
LB-4D	LB-031301-1	3/13/01	NT	2.3	3.9	121	0.02 L	0.005 L
LB-4D	LB-031902-04	3/19/02	NT	2.5	4.1	107	0.02 L	0.005 L
LB-4D	LB-031902-05	3/19/02	NT	2.5	4.1	104	0.02 L	0.005 L
LB-4D	LB-031303-18	3/13/03	NT	2.5	4.3	88	0.02 L	0.005 L
LB-4D	LB031005-23	3/10/05	NT	2.3	4.5	145	0.02 L	0.005 L
LB-4D	LB-031506-11	3/15/06	NT	2.3	4.8	130	0.02 L	0.005 L
LB-4D	LB-030607-22	3/6/07	NT	2.6	5.7	137	0.02 L	0.005 L
LB-4D	LB-032408-19	3/24/08	NT	2.7	6.3	126	0.02 L	0.005 L
LB-4D	LB-4D	3/18/09	NT	3.0	6.4	125	0.02 L	0.005 L
LB-4D	Dup-2	3/18/09	NT	3.0	6.4	134	0.02 L	0.005 L
LB-4D	LB-4D032310	3/23/10	NT	2.90	7.17	134	0.02 L	0.005 L
LB-4D	LB-4D	3/22/11	180	3.23	6.20	169 H	0.025 L	0.002 L
LB-4D	LB-031312-11	3/13/12	NT	3.6	7.1	140	0.025 L	0.002 L
LB-4S(R)	LB-090894-21	9/8/94	208	7.6	4.9	240	0.02 L	0.005 L
LB-4S(R)	LB-121494-14	12/14/94	161	4.1	2.4	224	0.22	0.027
LB-4S(R)	LB-031395-21	3/13/95	140	3.6	3.8	182	0.02 L	0.005 L
LB-4S(R)	LB-092295-19	9/22/95	250	12.0	7.1	186	0.02	0.005 L
LB-4S(R)	LB-122795-20	12/27/95	62	1.4	0.5	81	0.24	0.018
LB-4S(R)	LB-032796-23	3/27/96	52	1.2	0.5	71	0.08	0.005 L
LB-4S(R)	LB-070996-20	7/9/96	168	8.1	7.2	248	0.02 L	0.005 L
LB-4S(R)	LB-091896-14	9/18/96	216	9.0	8.1	182	0.02 L	0.005 L
LB-4S(R)	LB121896-14	12/18/96	224	6.7	7.0	168	0.02 L	0.005 L
LB-4S(R)	LB-031797-1	3/17/97	180	5.6	6.8	193	0.26	0.026
LB-4S(R)	LB-061697-1	6/16/97	202	4.9	6.1	176	0.02 L	0.005 L
LB-4S(R)	LB-091697-10	9/16/97	182	4.7	5.4	175	0.02 L	0.005 L
LB-4S(R)	LB-121597-1	12/15/97	202	4.6	5.0	161	0.02	0.005 L
LB-4S(R)	LB-031898-2	3/18/98	222	6.0	9.3	165	0.02 L	0.005 L
LB-4S(R)	LB-061598-1	6/15/98	219	5.8	9.0	196	0.02 L	0.005 L
LB-4S(R)	LB-091698-1	9/16/98	213	5.7	6.3	174	0.02 L	0.005 L
LB-4S(R)	LB-121898-13	12/18/98	160	6.8	4.5	170	0.77	0.07
LB-4S(R)	LB-031999-20	3/19/99	186	7.5	6.4	127	0.03	0.005 L
LB-4S(R)	LB-062299-1	6/22/99	194	6.4	7.3	184	0.02 L	0.005 L
LB-4S(R)	LB-091699-7	9/16/99	212	6.4	5.1	172	0.02 L	0.005 L
LB-4S(R)	LB-121499-2	12/14/99	183	6.3	3.6	134	0.02 L	0.005 L
LB-4S(R)	LB-031700-19	3/17/00	190	4.5	3.8	172	0.24	0.029
LB-4S(R)	LB-061400-11	6/14/00	215	5.9	8.3	209	0.02 L	0.005 L
LB-4S(R)	LB-091200-6	9/12/00	194	6.2	5.2	169	0.02 L	0.005 L
LB-4S(R)	LB-121300-3	12/13/00	208	5.7	5.3	166	0.02 L	0.005 L
LB-4S(R)	LB-031301-2	3/13/01	NT	7.3	6.8	160	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-4S(R)	LB-031902-03	3/19/02	NT	4.7	4.9	139	0.02 L	0.005 L
LB-4S(R)	LB-031303-17	3/13/03	NT	6.8	6.9	230	0.02	0.005 L
LB-4S(R)	LB031005-22	3/10/05	NT	7.2	8.1	204	0.40	0.012
LB-4S(R)	LB-031506-12	3/15/06	NT	4.1	7.2	196	0.44	0.040
LB-4S(R)	LB-030607-21	3/6/07	NT	8.1	16.6	217	0.02 L	0.005 L
LB-4S(R)	LB-032408-20	3/24/08	NT	3.0	5.4	174	0.02 L	0.005 L
LB-4S(R)	LB-4S	3/18/09	NT	5.0	3.9	174	0.02 L	0.005 L
LB-4S(R)	LB-4SR032310	3/23/10	NT	3.03	3.52	143	0.02 L	0.005 L
LB-4S(R)	LB-4SR	3/22/11	224	5.36	4.89	191 H	0.025 L	0.002 L
LB-4S(R)	LB-031312-12	3/13/12	NT	3.3	2.8	150	0.025 L	0.002 L
LB-5D	LB-05D	5/27/87	606	38.0	2.6	NT	0.05 L	1.5
LB-5D	LB-05D	7/20/87	NT	45.0	0.1	NT	0.05 L	0.016
LB-5D	LB-05D	9/10/87	NT	44.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	11/11/87	NT	43.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	2/10/88	624	41.0	0.1	NT	0.05 L	0.01 L
LB-5D	LB-05D	6/23/88	593	42.0	0.1	NT	0.05 L	0.05 L
LB-5D	LB-05D	8/31/88	616	43.0	0.1 L	NT	0.07	0.01 L
LB-5D	LB-05D	12/6/88	494	40.0	0.6	NT	0.01 L	0.01 L
LB-5D	LB-289-W03	3/1/89	548	40.0	0.2 L	NT	0.01 L	0.025
LB-5D	LB-589-W13	5/24/89	576	51.0	0.2 L	NT	0.05 L	0.01 L
LB-5D	LB-989-W11	9/8/89	460	38.0	0.2 L	NT	0.02 L	0.006
LB-5D	LB-1289-W24	12/19/89	470	40.0	0.2	325	NT	NT
LB-5D	LB-390-W16	3/15/90	562	39.8	0.2	368	NT	NT
LB-5D	LB-690-W14	6/20/90	550	39.4	0.2 L	367	NT	NT
LB-5D	LB-990-W15	9/18/90	545	37.8	0.2	394	NT	NT
LB-5D	LB-1290-W24	12/14/90	472	40.8	0.2	346	NT	NT
LB-5D	LB-391-W14	3/21/91	615	45.9	0.3	521	NT	NT
LB-5D	LB-691-W17	6/26/91	551	39.6	0.3	372	NT	NT
LB-5D	LB-991-08	9/25/91	580	42.1	0.2	336	NT	NT
LB-5D	LB-1291-11	12/20/91	527	37.7	0.3	336	NT	NT
LB-5D	LB-392-03	3/19/92	582	44.0	0.2 L	348	NT	NT
LB-5D	LB-63092-4	6/30/92	548	42.0	0.2	356	NT	NT
LB-5D	LB-91892-2	9/18/92	549	44.0	0.2 L	351	NT	NT
LB-5D	LB-121092-11	12/10/92	562	45.0	0.2 L	NT	NT	NT
LB-5D	LB-031193-12	3/11/93	552	45.0	0.2	340	NT	NT
LB-5D	LB-060293-8	6/2/93	548	45.0	0.3	332	NT	NT
LB-5D	LB-092793-19	9/27/93	511	41.0	0.3	339	NT	NT
LB-5D	LB-121593-4	12/15/93	522	48.0	0.3	360	NT	NT
LB-5D	LB-032894-13	3/28/94	553	47.0	0.4	349	NT	NT
LB-5D	LB-062194-3	6/21/94	447	44.0	0.4	359	NT	NT
LB-5D	LB-090694-4	9/6/94	529	45.0	0.4	364	NT	NT
LB-5D	LB-121394-8	12/13/94	509	46.0	0.4	364	NT	NT
LB-5D	LB-030995-04	3/9/95	486	46.0	0.3	364	NT	NT
LB-5D	LB-61995-7	6/19/95	511	46.0	0.4	345	NT	NT
LB-5D	LB-092195-9	9/21/95	571	43.0	0.2 L	350	NT	NT
LB-5D	LB-121895-2	12/18/95	541	44.0	0.4	354	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-5D	LB-031996-9	3/19/96	570	41.0	0.3	321	NT	NT
LB-5D	LB-061896-8	6/18/96	473	42.0	0.3	369	NT	NT
LB-5D	LB-031997-9	3/19/97	419	38.0	0.3	355	0.03	0.005 L
LB-5D	LB-031998-6	3/19/98	541	33.8	0.2 L	319	0.02	0.005 L
LB-5D	LB-031899-11	3/18/99	419	32.6	0.4	332	0.02	0.005 L
LB-5D	LB-031600-5	3/16/00	411	26.4	0.3	292	0.02 L	0.005 L
LB-5D	LB-031401-11	3/14/01	NT	25.1	0.3	278	0.02 L	0.005 L
LB-5D	LB-031902-13	3/19/02	NT	23.0	0.5	269	0.02 L	0.005 L
LB-5D	LB-031303-9	3/13/03	NT	20.0	0.8	256	0.02 L	0.005 L
LB-5D	LB-022504-7	2/25/04	NT	18.0	0.6	276	0.02 L	0.005 L
LB-5D (Dup)	LB-022504-8	2/25/04	NT	18.0	0.6	296	0.08	0.005 L
LB-5D	LB030805-1	3/8/05	NT	16.7	1.1	282	0.02 L	0.005 L
LB-5D	LB-031606-14	3/16/06	NT	17.0	0.6	324	0.03	0.005 L
LB-5D (Dup)	LB-031606-15	3/16/06	NT	16.9	0.6	344	0.02 L	0.005 L
LB-5D	LB-030507-7	3/5/07	NT	13.7	0.7	249	0.02 L	0.005 L
LB-5D	LB-031908-2	3/19/08	NT	13.3	1.0	242	0.02 L	0.005 L
LB-5D (Dup)	LB-031908-3	3/19/08	NT	13.3	1.0	225	0.02 L	0.005 L
LB-5D	LB-5D	3/17/09	NT	13.0	1.2	209	0.02 L	0.005 L
LB-5D	LB-5D032410	3/24/10	NT	11.3	1.7	228	0.02 L	0.005 L
LB-5D	LB-5D	3/23/11	328	10.8	0.78	238	0.025 L	0.002 L
LB-5D	LB-031212-03	3/12/12	NT	11	1.2	240	0.025 L	0.002 L
LB-5S	LB-05S	5/26/87	152	6.0	2.4	NT	0.07	0.007
LB-5S	LB-05S	7/19/87	NT	4.0	2.7	NT	0.05 L	0.005 L
LB-5S	LB-05S	9/10/87	NT	4.0	1.7	NT	0.05 L	0.01 L
LB-5S	LB-05S	11/11/87	NT	6.3	1.9	NT	0.05 L	0.01 L
LB-5S	LB-05S	2/10/88	149	5.0	2.7	NT	0.05 L	0.01 L
LB-5S	LB-390-W17	3/15/90	156	4.8	4.9	184	NT	NT
LB-5S	LB-690-W13	6/20/90	161	5.0	4.8	153	NT	NT
LB-5S	LB-990-W14	9/18/90	192	6.1	6.1	202	NT	NT
LB-5S	LB-1290-W25	12/14/90	207	7.4	5.8	148	NT	NT
LB-5S	LB-391-W17	3/21/91	1410	4.4	4.0	704	NT	NT
LB-5S	LB-691-W16	6/26/91	168	4.4	3.4	175	NT	NT
LB-5S	LB-991-09	9/25/91	211	6.8	7.7	161	NT	NT
LB-5S	LB-1291-10	12/20/91	126	2.7	2.9	122	NT	NT
LB-5S	LB-392-04	3/19/92	160	4.3	4.1	142	NT	NT
LB-5S	LB-63092-3	6/30/92	179	5.1	5.7	183	NT	NT
LB-5S	LB-91892-1	9/18/92	182	5.5	6.1	181	NT	NT
LB-5S	LB-121092-10	12/10/92	170	6.3	6.5		NT	NT
LB-5S	LB-031193-11	3/11/93	181	7.0	5.4	175	NT	NT
LB-5S	LB-060293-7	6/2/93	195	7.6	5.0	173	NT	NT
LB-5S	LB-092793-18	9/27/93	170	4.8	4.5	147	NT	NT
LB-5S	LB-121593-3	12/15/93	162	4.9	3.9	152	NT	NT
LB-5S	LB-032894-12	3/28/94	154	4.9	4.6	148	NT	NT
LB-5S	LB-062194-2	6/21/94	163	5.6	5.0	176	NT	NT
LB-5S	LB-090694-3	9/6/94	167	4.7	4.1	159	NT	NT
LB-5S	LB-121394-9	12/13/94	95	2.6	1.7	114	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-5S	LB-030995-03	3/9/95	141	6.6	3.5	147	NT	NT
LB-5S	LB-061995-6	6/19/95	201	5.7	3.8	168	NT	NT
LB-5S	LB-092195-8	9/21/95	596	7.1	5.0	184	NT	NT
LB-5S	LB-121895-1	12/18/95	111	1.8	1.3	114	NT	NT
LB-5S	LB-031996-7	3/19/96	223	6.0	4.4	170	NT	NT
LB-5S	LB-061896-7	6/18/96	174	8.5	3.1	175	NT	NT
LB-5S	LB-031997-8	3/19/97	177	7.5	5.3	184	0.02	0.005 L
LB-5S	LB-031998-5	3/19/98	229	9.1	7.1	183	0.04	0.005 L
LB-5S	LB-031899-10	3/18/99	162	4.9	5.5	164	0.02 L	0.005 L
LB-5S	LB-031600-4	3/16/00	237	4.0	6.2	194	0.02 L	0.005 L
LB-5S	LB-031401-12	3/14/01	NT	4.3	4.7	159	0.02 L	0.005 L
LB-5S	LB-092001-1	9/20/01	NT	4.3	3.8	176	0.02 L	0.005 L
LB-5S	LB-031902-12	3/19/02	NT	3.1	2.7	137	0.02 L	0.005 L
LB-5S	LB-091802-06	9/17/02	NT	6.0	6.0	185	1.26	0.03
LB-5S	LB-031303-8	3/13/03	NT	4.1	3.7	138	0.02 L	0.005 L
LB-5S	LB-092203-1	9/22/03	NT	4.6	4.4	180	9.52	0.22
LB-5S	LB-022504-9	2/25/04	NT	4.0	2.7	159	14.80	0.407
LB-5S	LB-090104-5	9/1/04	NT	4.1	3.3	168	0.02 L	0.005 L
LB-5S	LB030805-2	3/8/05	NT	4.2	3.8	182	0.21	0.005 L
LB-5S (Dup)	LB030805-3	3/8/05	NT	4.0	3.6	186	0.05	0.005 L
LB-5S	LB-091405-4	9/14/05	NT	4.5	4.5	204	0.75	0.005 L
LB-5S	LB-031606-16	3/16/06	NT	3.5	3.6	192	0.02 L	0.005 L
LB-5S	LB-091206-1	9/12/06	NT	4.1	4.5	203	0.02 L	0.005 L
LB-5S	LB-030507-6	3/5/07	NT	3.6	4.5	169	0.02 L	0.005 L
LB-5S	LB-091907-3	9/19/07	NT	4.4	5.5	191	0.02 L	0.005 L
LB-5S	LB-031908-1	3/19/08	NT	4.9	5.2	186	0.14	0.005 L
LB-5S	LB-091608-2	9/16/08	NT	5.1	4.7	147	0.076	0.005 L
LB-5S (Dup)	LB-091608-8	9/16/08	NT	5.0	4.5	168	0.02 L	0.005 L
LB-5S	LB-5S	3/17/09	NT	6.1	5.3	159	0.092	0.005 L
LB-5S	LBLF5S091109	9/11/09	NT	4.42	3.91	164	0.707	0.0157
LB-5S	LB-5S032410	3/24/10	NT	7.30	4.09	163	0.020 L	0.005 L
LB-5S (Dup)	LBDUP2032410	3/24/10	NT	5.61	3.31	151	0.020 L	0.005 L
LB-5S	LB5S092310	9/23/10	NT	3.86	4.58	158	0.020 L	0.005 L
LB-5S (Dup)	LB5S1092310	9/23/10	NT	3.91	4.61	151	0.020 L	0.005 L
LB-5S	LB-5S	3/23/11	222	5.07	5.15	184	0.025 L	0.002 L
LB-5S	LB-090811-06	9/8/11	NT	7.08	6.19	210	0.025 L	0.002 L
LB-5S	LB-032212-17	3/22/12	NT	4.1	3.7	160	0.025 L	0.002 L
LB-5S	LB-091112-01	9/11/12	NT	4.2	4.7	160	0.025 L	0.002 L
LB-6S	LB-06S	7/17/87	NT	18.0	2.5	NT	0.05 L	0.012
LB-6S	LB-06S	9/10/87	NT	NT	1.0	NT	0.05 L	0.01 L
LB-6S	LB-06S	11/11/87	NT	28.0	0.7	NT	0.05 L	0.01 L
LB-6S	LB-06S	2/12/88	692	35.0	1.1	NT	0.05 L	0.06
LB-6S	LB-06S	6/22/88	502	18.0	2.1	NT	0.05 L	0.05 L
LB-6S	LB-06S	8/31/88	586	27.0	2.0	NT	0.05 L	0.01 L
LB-6S	LB-06S	12/6/88	594	21.0	0.7	NT	0.02	0.073
LB-6S	LB-289-W13	3/1/89	655	28.0	2.5	NT	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-6S	LB-289-W17	3/1/89	NT	NT	NT	NT	0.01	0.01 L
LB-6S	LB-589-W17	5/24/89	560	20.0	6.1	NT	0.05 L	0.01 L
LB-6S	LB-989-W07	9/7/89	500	32.0	1.0	NT	0.02 L	0.026
LB-6S	LB-1289-W13	12/15/89	680	34.0	0.6	462	0.02	0.078
LB-6S	LB-390-W24	3/15/90	616	17.0	2.3	376	0.03	0.923
LB-6S	LB-690-W22	6/21/90	597	24.0	1.1	401	0.02 L	0.039
LB-6S	LB-990-W11	11/21/90	713	31.1	0.8	604	0.02	0.35
LB-6S	LB-1290-W13	12/12/90	678	33.5	0.4	494	0.02 L	0.14
LB-6S	LB-391-W16	3/20/91	711	21.4	2.2	440	0.03 L	1.39
LB-6S	LB-691-W19	6/26/91	696	24.2	1.9	386	0.04 L	0.009
LB-6S	LB-691-W20	6/26/91	706	23.1	1.8	375	0.04 L	0.011
LB-6S	LB-991-14	9/25/91	676	28.2	0.8	392	0.02 L	0.017
LB-6S	LB-991-15	9/25/91	629	13.5	1.1	397	NT	NT
LB-6S	LB-1291-08	12/20/91	621	21.4	0.9	403	0.04 B	0.005 L
LB-6S	LB-1291-09	12/20/91	634	22.2	0.9	400	0.03 B	0.005 L
LB-6S	LB-392-07	3/20/92	497	16.0	2.8	333	0.02 L	0.537
LB-6S	LB-392-08	3/20/92	539	19.0	2.3	348	0.02 L	0.546
LB-6S	LB-62692-5	6/26/92	631	26.0	2.5	404	0.03	0.026
LB-6S	LB-62692-6	6/26/92	620	26.0	2.3	400	0.03	0.029
LB-6S	LB-92192-4	9/21/92	735	29.0	0.7	444	0.02	0.077
LB-6S	LB-92192-5	9/21/92	731	28.0	0.7	453	0.02	0.066
LB-6S	LB-12992-4	12/9/92	760	33.0	0.7	439	0.02 L	0.144
LB-6S	LB-12992-5	12/9/92	736	30.0	0.7	435	0.02 L	0.142
LB-6S	LB-030193-7	3/10/93	592	20.0	2.6	369	0.02 L	0.114
LB-6S	LB-030193-8	3/10/93	625	22.0	2.2	386	0.02 L	0.106
LB-6S	LB-060393-11	6/3/93	517	17.0	2.5	328	0.03	0.018
LB-6S	LB-060393-12	6/3/93	467	13.0	2.9	302	0.02 L	0.019
LB-6S	LB-092493-13	9/24/93	529	19.0	3.7	328	0.02 L	0.025
LB-6S	LB-121593-6	12/15/93	580	27.0	2.1	393	0.02	0.077
LB-6S	LB-032994-18	3/29/94	391	12.0	3.7	256	0.02 L	0.052
LB-6S	LB-032994-19	3/29/94	450	15.0	3.4	306	0.02 L	0.038
LB-6S	LB-062394-11	6/23/94	509	21.0	3.1	347	0.02 L	0.013
LB-6S	LB-062394-12	6/23/94	477	20.0	3.2	358	0.02 L	0.013
LB-6S	LB-090694-5	9/6/94	563	19.0	3.6	366	0.02 L	0.054
LB-6S	LB-090694-6	9/6/94	496	19.0	3.5	360	0.04	0.054
LB-6S	LB-121394-6	12/13/94	475	19.0	3.4	316	0.52	0.124
LB-6S	LB-121394-7	12/13/94	485	19.0	3.4	335	0.20	0.093
LB-6S	LB-031095-10	3/10/95	307	5.3	2.3	217	0.04	0.005 L
LB-6S	LB-031095-11	3/10/95	282	8.2	2.3	196	0.06	0.006
LB-6S	LB-062095-10	6/20/95	397	16.0	4.3	290	0.02 L	0.005 L
LB-6S	LB-062095-9	6/20/95	386	14.0	4.4	234	0.02 L	0.005 L
LB-6S	LB-092095-6	9/20/95	530	20.0	4.3	313	0.02 L	0.005 L
LB-6S	LB-092095-7	9/20/95	518	21.0	4.3	308	0.02	0.005 L
LB-6S	LB-122095-12	12/20/95	407	10.0	3.2	289	0.03	0.005 L
LB-6S	LB-122095-13	12/20/95	448	12.0	3.3	286	0.02 L	0.005 L
LB-6S	LB-031996-5	3/19/96	316	6.2	3.3	222	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-6S	LB-031996-6	3/19/96	326	5.4	3.6	226	0.02 L	0.005 L
LB-6S	LB-061996-12	6/19/96	NT	21.0	4.0	NT	NT	NT
LB-6S	LB-061996-13	6/19/96	451	23.0	3.8	320	0.03	0.005 L
LB-6S	LB-091896-12	9/18/96	426	22.0	2.4	280	0.02 L	0.005 L
LB-6S	LB-121796-3	12/17/96	460	20.0	1.5	312	0.02 L	0.005 L
LB-6S	LB-031997-7	3/19/97	360	26.0	3.8	318	0.03	0.005 L
LB-6S	LB-061797-6	6/17/97	578	30.0	1.3	349	0.02	0.005 L
LB-6S	LB-091697-3	9/16/97	436	28.6	1.3	364	0.02 L	0.005 L
LB-6S	LB-121797-14	12/17/97	516	22.5	3.2	340	0.16	0.005 L
LB-6S	LB-031998-7	3/19/98	628	22.6	4.9	388	0.03	0.005 L
LB-6S	LB-061698-7	6/16/98	422	30.8	2.6	375	0.02 L	0.005 L
LB-6S	LB-091798-5	9/17/98	625	22.0	3.5	372	0.03	0.005 L
LB-6S	LB-121798-1	12/17/98	519	28.0	5.1	407	0.03	0.005 L
LB-6S	LB-031799-2	3/17/99	521	25.1	3.7	389	0.03	0.005 L
LB-6S	LB-062399-11	6/23/99	443	20.6	2.1	323	0.03	0.005 L
LB-6S	LB-091699-5	9/16/99	557	26.1	3.0	350	0.03	0.005 L
LB-6S	LB-121599-11	12/15/99	518	23.8	4.9	324	0.02 L	0.005 L
LB-6S	LB-031700-10	3/17/00	397	23.0	4.9	295	0.02 L	0.008
LB-6S	LB-031700-11	3/17/00	407	25.4	5.2	328	0.02 L	0.005 L
LB-6S	LB-061300-6	6/13/00	445	28.4	4.6	318	0.01 B	0.005 L
LB-6S	LB-091200-3	9/12/00	441	29.8	4.2	313	0.02 L	0.005 L
LB-6S	LB-121200-1	12/12/00	578	31.7	3.3	352	0.02 L	0.005 L
LB-6S	LB-121200-2	12/12/00	585	35.5	2.9	338	0.02 L	0.0073
LB-6S	LB-031301-7	3/13/01	NT	36.8	3.0	326	0.02 L	0.006
LB-6S	LB-031301-8	3/13/01	NT	35.9	3.2	352	0.02 L	0.0055
LB-6S	LB-092001-5	9/20/01	NT	19.0	3.3	246	0.02 L	0.035
LB-6S	LB-032002-15	3/20/02	NT	17.7	4.3	291	0.02 L	0.005 L
LB-6S	LB-032002-16	3/20/02	NT	21.1	4.4	305	0.02 L	0.005 L
LB-6S	LB-091802-02	9/17/02	NT	16.0	5.0	302	0.02 L	0.005 L
LB-6S	LB-091802-03	9/17/02	NT	16.0	5.0	306	0.02 L	0.005 L
LB-6S	LB-031303-21	3/13/03	NT	26.0	2.9	348	0.02 L	0.005 L
LB-6S	LB-092203-5	9/22/03	NT	11.9	2.7	274	0.13	0.014
LB-6S	LB-022604-18	2/26/04	NT	13.4	2.7	284	0.02 L	0.005 L
LB-6S	LB-090104-6	9/1/04	NT	9.6	2.1	268	0.02 L	0.005 L
LB-6S	LB030805-9	3/8/05	NT	13.0	1.6	328	0.02 L	0.017
LB-6S	LB-091405-6	9/14/05	NT	9.3	2.1	254	0.02 L	0.005 L
LB-6S	LB-031506-13	3/15/06	NT	5.1	2.4	132	0.02 L	0.005 L
LB-6S	LB-091206-4	9/12/06	NT	6.9	2.9	228	0.02 L	0.005 L
LB-6S	LB-030507-12	3/5/07	NT	5.6	2.7	238	0.02 L	0.005 L
LB-6S	LB-091907-6	9/19/07	NT	7.1	1.7	245	0.297	0.0369
LB-6S	LB-031908-9	3/19/08	NT	6.1	2.9	240	0.029	0.005 L
LB-6S	LB-091608-3	9/16/08	NT	5.7	1.4	222	0.02 L	0.005 L
LB-6S	LB-6S	3/18/09	NT	5.2	2.2	194	0.02 L	0.005 L
LB-6S	LBLF6S091109	9/11/09	NT	6.72	2.82	244	0.061	0.0059
LB-6S (Dup)	LBLFDUP1091109	9/11/09	NT	6.89	2.83	220	0.035	0.005 L
LB-6S	LB-6S032310	3/23/10	NT	6.64	3.53	194	0.024	0.005 L
LB-6S	LB6S092310	9/23/10	NT	5.67	2.60	192	0.379	0.031

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-6S	LB-6S	3/22/11	248	6.29	2.79	218 H	0.025 L	0.00218
LB-6S (Dup)	DUP1	3/22/11	266	7.05	2.90	229 H	0.025 L	0.002 L
LB-6S	LB-090711-05	9/7/11	NT	9.09	0.73	178	0.025 L	0.002 L
LB-6S (Dup)	LB-090711-04	9/7/11	NT	8.97	0.73	177	0.025 L	0.002 L
LB-6S	LB-032212-23	3/22/12	NT	5.5	1.7	180	0.025 L	0.002 L
LB-6S (Dup)	LB-032212-22	3/22/12	NT	5.6	1.7	180	0.025 L	0.002 L
LB-6S	LB-091212-06	9/12/12	NT	5.5	0.78	160	0.025 L	0.002 L
LB-6S (Dup)	LB-091212-07	9/12/12	NT	9.8	0.75	160	0.025 L	0.002 L
LB10-DR	LB-031005-19	3/10/05	NT	26.8	0.7	428	1.03	0.879
LB10-DR (Dup)	LB-031005-20	3/8/05	NT	27.0	0.7	432	0.93	0.771
LB10-DR	LB-031406-5	3/14/06	NT	31.3	0.6	492	0.763	0.417
LB10-DR	LB-030607-20	3/6/07	NT	24.9	0.9	332	0.022	0.197
LB10-DR	LB-032408-22	3/24/08	NT	28.3	0.8	320	0.02 L	0.155
LB10-DR	LB-10D	3/17/09	NT	26.8	1.0	286	0.032	0.0677
LB10-DR	LB10-DR032310	3/23/10	NT	23.9	1.1	295	0.047	0.0320
LB-10DR	LB-10DR	3/29/11	479	26.0	1.27	329	0.025 L	0.00696
LB-10DR	LB-0313012-07	3/13/12	NT	20	1.8	280	0.025 L	0.002 L
LB10-SR	LB031005-21	3/10/05	NT	3.8	9.8	272	0.13	2.050
LB10-SR	LB-091505-7	9/15/05	NT	4.6	6.5	506	1.04	0.0187
LB10-SR	LB-031406-6	3/14/06	NT	4.8	2.6	116	0.02 L	0.006
LB10-SR	LB-091306-9	9/13/06	NT	13.5	0.7	298	0.02 L	0.005 L
LB10-SR	LB-030607-19	3/6/07	NT	3.6	1.2	105	0.02 L	0.006
LB10-SR	LB-091907-7	9/19/07	NT	14.3	1.1	297	0.02 L	0.005 L
LB10-SR	LB-032408-21	3/24/08	NT	6.3	0.9	202	0.02 L	0.005 L
LB10-SR	LB-091608-4	9/16/08	NT	6.1	2.5	225	0.02 L	0.005 L
LB10-SR	LB-10S	3/17/09	NT	10.0	2.3	216	0.02 L	0.005 L
LB10-SR (Dup)	Dup-1	3/17/09	NT	10.6	2.3	207	0.02 L	0.005 L
LB10-SR	LBLF10S091190	9/11/09	NT	5.55	5.13	233	1.15	0.0138
LB10-SR	LB10-SR032310	3/23/10	NT	8.53	5.97	196	0.02 L	0.005 L
LB10-SR	LB10S092310	9/23/10	NT	3.90	2.80	176	0.02 L	0.005 L
LB-10SR	LB-10SR	3/29/11	341	15.30	1.53	270	0.025 L	0.002 L
LB-10SR (Dup)	DUP2	3/29/11	341	15.30	1.57	270	0.025 L	0.002 L
LB-10SR	LB-090811-08	9/8/11	NT	17.70	1.15	251	0.025 L	0.00205
LB-10SR	LB-031312-08	3/13/12	NT	26	1.8	330	0.025 L	0.0023
LB-10SR	LB-091212-09	9/12/12	NT	30	0.91	310	0.025 L	0.0033
LB-13D	LB-989-W20	9/13/89	199	6.0	4.0	244	0.02 L	0.05
LB-13D	LB-1089-W15	10/19/89	200	6.5	4.5	197	0.05 L	0.028
LB-13D	LB-1189-W20	11/16/89	176	6.0	4.7	91	0.02	0.014
LB-13D	LB-1289-W18	12/18/89	210	5.0	4.7	134	0.02 L	0.007
LB-13D	LB-390-W18	3/15/90	244	8.2	4.9	206	0.02 L	0.005 L
LB-13D	LB-690-W20	6/21/90	235	6.8	4.9	242	0.02 L	0.005 L
LB-13D	LB-990-W17	9/18/90	230	6.9	4.9	225	0.02	0.005 L
LB-13D	LB-1290-W20	12/13/90	238	6.8	4.8	160	0.02 L	0.005 L
LB-13D	LB-391-W15	3/20/91	241	6.4	4.8	179	0.03 L	0.005 L
LB-13D	LB-691-W22	6/26/91	314	6.3	4.4	258	NT	NT
LB-13D	LB-991-13	9/25/91	248	6.1	5.0	183	NT	NT

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13D	LB-1291-19	12/23/91	243	5.1	4.9	186	NT	NT
LB-13D	LB-392-19	3/24/92	246	5.9	4.9	190	NT	NT
LB-13D	LB-7292-2	7/2/92	239	5.7	4.8	194	NT	NT
LB-13D	LB-91792-2	9/17/92	240	5.3	4.5	190	NT	NT
LB-13D	LB-121092-9	12/10/92	240	6.2	5.1	179	NT	NT
LB-13D	LB-031293-20	3/12/93	245	6.0	4.6	180	NT	NT
LB-13D	LB-060493-21	6/4/93	238	6.1	4.4	182	NT	NT
LB-13D	LB-092393-7	9/23/93	240	5.8	4.3	178	NT	NT
LB-13D	LB-121693-12	12/16/93	220	6.1	4.9	193	NT	NT
LB-13D	LB-032894-17	3/28/94	242	6.2	4.8	188	NT	NT
LB-13D	LB-052894-20	6/28/94	220	6.0	4.8	186	NT	NT
LB-13D	LB-090794-10	9/7/94	217	5.8	5.5	191	NT	NT
LB-13D	LB-121594-21	12/15/94	216	6.3	5.3	176	NT	NT
LB-13D	LB-031395-18	3/13/95	222	6.0	5.2	170	NT	NT
LB-13D	LB-062195-19	6/21/95	239	6.5	5.7	205	NT	NT
LB-13D	LB-092295-16	9/22/95	299	6.5	5.8	165	NT	NT
LB-13D	LB-121995-8	12/19/95	249	6.9	6.4	185	NT	NT
LB-13D	LB-032096-15	3/20/96	262	6.6	6.8	200	NT	NT
LB-13D	LB-032096-16	3/20/96	253	6.6	6.7	178	NT	NT
LB-13D	LB-061996-16	6/19/96	267	7.0	7.1	224	NT	NT
LB-13D	LB-091796-4	9/17/96	261	7.8	7.2	201	0.02 L	0.005 L
LB-13D	LB121796-9	12/17/96	312	9.9	7.4	223	0.02 L	0.005 L
LB-13D	LB-032097-18	3/20/97	241	9.8	0.2 L	217	0.02 L	0.005 L
LB-13D	LB-061897-15	6/18/97	305	8.8	7.1	223	0.02 L	0.005 L
LB-13D	LB-091897-11	9/18/97	310	8.8	8.1	246	0.02 L	0.005 L
LB-13D	LB-121797-9	12/17/97	239	8.3	8.0	133	0.02	0.005 L
LB-13D	LB-032098-19	3/20/98	296	7.8	7.9	207	0.05 B	0.005 L
LB-13D	LB-061798-14	6/17/98	242	7.6	8.4	210	0.02 L	0.005 L
LB-13D	LB-091898-15	9/18/98	277	7.0	7.8	172	0.02 L	0.005 L
LB-13D	LB-121898-12	12/18/98	223	7.1	8.1	245	0.02	0.005 L
LB-13D	LB-031999-23	3/19/99	219	6.5	7.6	207	0.02	0.005 L
LB-13D	LB-062399-12	6/23/99	222	6.7	7.6	198	0.02	0.005 L
LB-13D	LB-091799-13	9/17/99	246	7.2	7.5	176	0.02 L	0.005 L
LB-13D	LB-121499-3	12/14/99	243	6.3	7.4	161	0.02 L	0.005 L
LB-13D	LB-031700-18	3/17/00	210	6.0	6.8	200	0.02 L	0.005 L
LB-13D	LB-061400-10	6/14/00	215	5.9	7.8	222	0.02 L	0.005 L
LB-13D	LB-091300-11	9/13/00	231	6.0	7.5	204	0.02 L	0.005 L
LB-13D	LB-121500-12	12/15/00	233	5.2	7.5	165	2.06	0.0053
LB-13D	LB-031501-19	3/15/01	NT	5.2	7.1	170	0.02 L	0.005 L
LB-13D	LB-032002-20	3/20/02	NT	5.0	6.3	174	0.02 L	0.005 L
LB-13D	LB-031303-16	3/13/03	NT	4.3	5.8	224	0.02 L	0.005 L
LB-13D	LB-022404-3	2/24/04	NT	4.0	5.2	179	0.02 L	0.005 L
LB-13D	LB-031005-17	3/10/05	NT	3.8	4.9	190	0.02	0.005
LB-13D	LB-031506-9	3/15/06	NT	3.4	4.6	115	0.02 L	0.005 L
LB-13D	LB-030607-18	3/6/07	NT	3.6	5.0	118	0.02 L	0.005 L
LB-13D	LB-032008-13	3/20/08	NT	3.6	4.8	190	0.02 L	0.005 L
LB-13D	LB-13-D	3/17/09	NT	4.0	5.1	148	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13D	LB-13D032410	3/24/10	NT	3.59	5.4	167	0.02 L	0.005 L
LB-13D	LB-13D	3/25/11	214	4.36	5.3	193	0.025 L	0.002 L
LB-13D	LB-031212-01	3/12/12	NT	4.4	5.3	190	0.025 L	0.002 L
LB-13I	LB-989-W22	9/13/89	600	28.0	1.4	402	0.02 L	0.017
LB-13I	LB-989-W23	9/13/89	576	28.0	1.3	478	0.02 L	0.013
LB-13I	LB-1089-W17	10/17/89	600	33.0	1.3	460	0.05 L	0.012
LB-13I	LB-1189-W17	11/16/89	530	31.0	1.2	404	0.04	0.091
LB-13I	LB-1289-W16	12/18/89	596	34.0	0.8	377	0.02	0.009
LB-13I	LB-390-W19	3/15/90	704	40.0	0.2 L	462	0.02	0.009
LB-13I	LB-690-W19	6/21/90	695	38.4	0.3	481	0.02 L	0.018
LB-13I	LB-990-W16	9/18/90	703	40.5	0.6	491	0.02	0.012
LB-13I	LB-1290-W21	12/13/90	629	36.9	0.6	433	0.02 L	0.01
LB-13I	LB-391-W14	3/20/91	740	43.4	0.4	486	0.03 L	0.012
LB-13I	LB-691-W21	6/26/91	738	26.6	0.9	454	0.04 L	0.018
LB-13I	LB-991-12	9/25/91	765	35.3	0.6	444	0.02	0.016
LB-13I	LB-1291-18	12/23/91	707	32.9	0.2 L	347	0.10	0.047
LB-13I	LB-392-20	3/24/92	661	33.0	0.2 L	422	0.02 L	0.017
LB-13I	LB-7292-1	7/2/92	659	37.0	0.2 L	402	1.16	0.039
LB-13I	LB-91792-1	9/17/92	680	31.0	0.6	429	0.48	0.025
LB-13I	LB-121092-8	12/10/92	687	33.0	0.8	393	0.02 L	0.014
LB-13I	LB-031293-19	3/12/93	681	27.0	0.9	410	0.02 L	0.014
LB-13I	LB-060493-20	6/4/93	620	23.0	1.5	376	0.02 L	0.016
LB-13I	LB-092393-6	9/23/93	568	20.0	1.5	339	0.05	0.017
LB-13I	LB-121693-14	12/16/93	511	21.0	1.8	352	0.03	0.12
LB-13I	LB-032894-16	3/28/94	590	22.0	2.2	364	0.02 L	0.017
LB-13I	LB-052894-19	6/28/94	430	22.0	0.6	309	0.02 L	0.013
LB-13I	LB-090794-9	9/7/94	418	22.0	0.8	329	0.21	0.14
LB-13I	LB-121594-20	12/15/94	453	21.0	2.6	339	0.04	0.017
LB-13I	LB-031395-17	3/13/95	468	17.0	3.1	287	0.02	0.014
LB-13I	LB-061996-15	6/19/95	NT	NT	NT	NT	0.03	0.005 L
LB-13I	LB-052195-18	6/21/95	424	18.0	2.5	289	0.02 L	0.014
LB-13I	LB-092295-15	9/22/95	469	18.0	0.9	248	0.02	0.012
LB-13I	LB-121995-7	12/19/95	463	18.0	3.6	193	0.02 L	0.005 L
LB-13I	LB-032096-14	3/20/96	477	20.0	0.9	349	0.02	0.01
LB-13I	LB-061996-15	6/19/96	549	29.0	1.3	371	0.03 L	0.005 L
LB-13I	LB-091796-3	9/17/96	548	37.0	0.2 L	348	0.02 L	0.01
LB-13I	LB121796-10	12/17/96	708	52.0	0.2 L	418	0.02 L	0.013
LB-13I	LB-032097-19	3/20/97	579	70.0	0.2 L	458	0.02	0.014
LB-13I	LB-061897-14	6/18/97	729	63.0	0.2 L	462	0.03	0.019
LB-13I	LB-091897-12	9/18/97	814	68.1	0.2 L	514	0.02	0.021
LB-13I	LB-121797-8	12/17/97	578	63.0	0.2 L	444	0.03	0.021
LB-13I	LB-032098-18	3/20/98	695	58.8	0.3	428	0.02 L	0.02
LB-13I	LB-061798-15	6/17/98	624	66.4	0.2 L	444	0.03	0.02
LB-13I	LB-091898-14	9/18/98	763	62.4	0.3	394	0.03	0.022
LB-13I	LB-121898-11	12/18/98	616	32.4	3.2	464	0.04	0.022
LB-13I	LB-031999-22	3/19/99	582	51.1	0.5	457	0.03	0.022

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-13I	LB-062399-13	6/23/99	576	44.7	0.3	389	0.02	0.02
LB-13I	LB-091799-12	9/17/99	626	44.6	0.2	383	0.03	0.021
LB-13I	LB-121499-4	12/14/99	637	29.2	2.6	357	0.02 L	0.022
LB-13I	LB-121499-5	12/14/99	634	30.0	2.6	378	0.02 L	0.022 L
LB-13I	LB-031700-17	3/17/00	552	28.1	0.8	392	0.02 L	0.02
LB-13I	LB-061400-9	6/14/00	525	29.3	0.5	372	0.02 L	0.02
LB-13I	LB-091300-12	9/13/00	680	42.7	2.7	417	0.02 L	0.0246
LB-13I	LB-121500-11	12/15/00	577	30.0	3.5	306	0.02 L	0.0284
LB-13I	LB-031501-20	3/15/01	NT	26.1	3.4	318	0.02 L	0.0252
LB-13I	LB-092001-8	9/20/01	NT	12.9	3.3	241	0.02 L	0.023
LB-13I	LB-032002-19	3/20/02	NT	10.2	4.7	219	0.02 L	0.016
LB-13I	LB-091802-07	9/17/02	NT	22.0	6.0	292	0.31	0.042
LB-13I	LB-031303-15	3/13/03	NT	13.2	3.4	168	0.22	0.039
LB-13I	LB-092203-7	9/22/03	NT	13.7	2.9	272	0.15	0.052
LB-13I	LB-022404-4	2/24/04	NT	9.8	2.4	232	0.09	0.028
LB-13I	LB-090104-13	9/1/04	NT	7.0	1.8	232	0.03	0.024
LB-13I	LB031005-18	3/10/05	NT	7.2	2.7	232	0.02 L	0.006
LB-13I	LB-091505-9	9/15/05	NT	5.8	3.8	202	0.03	0.014
LB-13I	LB-031506-10	3/15/06	NT	4.9	4.2	152	0.02 L	0.007
LB-13I	LB-091306-8	9/13/06	NT	5.4	4.0	182	0.02 L	0.006
LB-13I	LB-030607-17	3/5/07	NT	5.5	3.2	170	0.02 L	0.006
LB-13I	LB-091907-8	9/19/07	NT	5.6	2.9	260	0.02 L	0.005 L
LB-13I	LB-032008-12	3/20/08	NT	6.6	3.4	207	0.02 L	0.0054
LB-13I	LB-091608-5	9/16/08	NT	7.0	3.9	193	0.02 L	0.005 L
LB-13I	LB-13I	3/17/09	NT	6.9	4.3	186	0.02 L	0.005 L
LB-13I	LBLF13i091109	9/11/09	NT	6.06	4.82	192	0.02 L	0.005 L
LB-13I	LB-13I032410	3/24/10	NT	5.53	5.21	193	0.02 L	0.005 L
LB-13I	LB13I092310	9/23/10	NT	5.24	5.31	196	0.02 L	0.005 L
LB-13I	LB-13I	3/23/11	270	5.56	4.58	202	0.025 L	0.00296
LB-13I	LB-090711-02	9/7/11	NT	5.99	4.53	204	0.025 L	0.002 L
LB-13I	LB-032212-19	3/22/12	NT	6.1	4.1	200	0.025 L	0.002 L
LB-13I (Dup)	LB-032212-20	3/22/12	NT	6.1	4.0	190	0.025 L	0.002 L
LB-13I	LB-091112-03	9/11/12	NT	12	4.4	220	0.025 L	0.002 L
LB-17D	LB-989-W08	9/7/89	640	46.0	0.2 L	518	0.33	9.73
LB-17D	LB-1089-W10	10/18/89	780	58.0	0.2 L	492	0.24	10.6
LB-17D	LB-1089-W11	10/18/89	780	60.0	0.2 L	508	0.25	10.7
LB-17D	LB-1189-W12	11/15/89	644	70.0	0.2 L	479	0.02 L	10.9
LB-17D	LB-1189-W13	11/15/89	682	70.0	0.2 L	465	0.32	10.8
LB-17D	LB-1289-W28	12/20/89	740	68.0	0.2 L	532	0.33	10.8
LB-17D	LB-390-W21	3/15/90	918	70.8	0.2 L	566	0.36	11.4
LB-17D	LB-390-W22	3/15/90	922	71.0	0.2 L	594	0.35	11.5
LB-17D	LB-690-W18	6/21/90	843	59.6	0.2 L	540	0.30	11
LB-17D	LB-990-W19	9/19/90	839	65.2	0.2 L	577	0.33	11.4
LB-17D	LB-990-W20	9/19/90	895	66.2	0.2 L	575	0.30	11.4
LB-17D	LB-1290-W23	12/14/90	945	65.6	0.2 L	538	0.19	11.3
LB-17D	LB-391-W19	3/21/91	870	56.2	0.2 L	653	0.21	10.9

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-17D	LB-391-W21	3/21/91	1060	58.7	0.2 L	530	0.20	10.3
LB-17D	LB-691-W14	6/11/91	786	47.3	0.2 L	423	0.19	10.1
LB-17D	LB-691-W15	6/11/91	812	47.3	0.2 L	441	0.18	10.1
LB-17D	LB-991-10	9/25/91	895	58.5	0.2 L	489	0.26	10.4
LB-17D	LB-991-11	9/25/91	895	58.7	0.2 L	503	0.26	10.5
LB-17D	LB-1291-16	12/23/91	1020	19.6	0.2 L	593	0.44	13.3
LB-17D	LB-1291-17	12/23/91	1010	18.6	0.2 L	586	0.36	13.4
LB-17D	LB-392-11	3/23/92	934	68.0	0.2 L	570	0.34	12.6
LB-17D	LB-392-12	3/23/92	927	69.0	0.2 L	542	0.33	12.5
LB-17D	LB-63092-5	6/30/92	842	58.0	0.2 L	522	0.20	11.6
LB-17D	LB-031093-6	3/10/93	712	52.0	0.2 L	432	0.18	9.57
LB-17D	LB-060493-22	6/4/93	682	44.0	0.2 L	422	0.28	9.41
LB-17D	LB-092793-21	9/27/93	719	48.0	0.2 L	424	0.25	9.54
LB-17D	LB-121593-7	12/15/93	769	59.0	0.2 L	461	0.25	9.86
LB-17D	LB-032994-20	3/29/94	695	51.0	0.2 L	425	0.25	9.75
LB-17D	LB-062394-14	6/23/94	646	43.0	0.1	401	0.20	8.21
LB-17D	LB-090794-7	9/7/94	659	39.0	0.3	390	0.17	8.57
LB-17D	LB-121494-10	12/14/94	534	41.0	0.2 L	367	0.24	8.45
LB-17D	LB-030995-05	3/9/95	511	36.0	0.2 L	366	0.21	7.62
LB-17D	LB-062095-11	6/20/95	595	44.0	1.8	377	0.20	8.37
LB-17D	LB-092095-10	9/20/95	854	55.0	0.2 L	416	0.25	9.96
LB-17D	LB-121895-3	12/18/95	611	52.0	0.2 L	394	0.25	8.75
LB-17D	LB-031996-11	3/19/96	662	43.0	0.2 L	342	0.27	8.63
LB-17D	LB-061996-14	6/19/96	593	47.0	0.2 L	387	0.22	8.59
LB-17D	LB-032097-16	3/20/97	512	50.0	0.2 L	345	0.20	7.63
LB-17D	LB-031998-14	3/19/98	540	37.2	0.2 L	340	0.25	7.09
LB-17D	LB-031899-13	3/18/99	390	19.2	0.3	304	0.17	5.62
LB-17D	LB-031600-7	3/16/00	363	16.0	0.2 L	246	0.13	4.98
LB-17D	LB-031401-9	3/14/01	NT	12.5	0.2 L	243	0.07	4.47
LB-17D	LB-031902-07	3/19/02	NT	9.4	0.2 L	192	0.02 L	3.89
LB-17D	LB-031203-7	3/12/03	NT	10.3	0.2 L	226	0.07	4.05
LB-17D	LB-022504-10	2/25/04	NT	10.9	0.2 L	208	0.06	3.76
LB-17D	LB-030905-10	3/9/05	NT	10.3	0.2 L	264	0.06	3.70
LB-17D	LB-031506-7	3/15/06	NT	8.8	0.2 L	184	0.07	3.71
LB-17D	LB-030607-14	3/6/07	NT	11.0	0.1 L	155	0.08	3.93
LB-17D (Dup)	LB-030607-15	3/6/07	NT	11.0	0.1 L	141	0.10	3.98
LB-17D	LB-032008-11	3/20/08	NT	10.1	0.1 L	205	0.078	4.04
LB-17D	LB-17D	3/18/09	NT	7.8	0.1 L	190	0.082	3.57
LB-17D	LB-17D032410	3/24/10	NT	5.8	0.1 L	185	0.090	3.66
LB-17D	LB-17D	3/22/11	277	7.97	0.1 L	209 H	0.0623	3.38
LB-17D	LB-031212-04	3/12/12	NT	19	0.1 L	230	0.12	4.6
LB-17I	LB-989-W04	9/6/89	1020	85.0	0.2 L	770	45.70	13.3
LB-17I	LB-1089-W14	10/19/89	1080	125.0	0.2 L	692	46.00	10.1
LB-17I	LB-1189-W14	11/15/89	872	115.0	0.2 L	613	41.50	8.07
LB-17I	LB-1289-W29	12/20/89	920	90.0	0.2	585	36.50	7.67
LB-17I	LB-1289-W30	12/20/89	910	90.0	0.2	591	34.70	8
LB-17I	LB-390-W20	3/15/90	724	26.9	0.2 L	484	29.30	4.01

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen		Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-17I	LB-690-W17	6/21/90	1140	96.0	0.2	L	766	48.50	6.74
LB-17I	LB-990-W18	9/19/90	1090	92.0	0.2	L	710	37.30	8.09
LB-17I	LB-1290-W22	12/13/90	967	38.4	0.2	L	666	41.50	7.17
LB-17I	LB-391-W20	3/21/91	1240	36.6	0.2	L	663	46.40	6.14
LB-17I	LB-392-13	3/23/92	1010	40.0	0.2	L	545	45.90	3.86
LB-17I	LB-63092-6	6/30/92	1210	71.0	0.2	L	708	56.20	6.5
LB-17I	LB-63092-7	6/30/92	1230	71.0	0.2	L	697	56.50	6.49
LB-17I	LB-91892-3	9/18/92	1290	71.0	0.2	L	746	58.60	7.88
LB-17I	LB-91892-4	9/18/92	1380	74.0	0.2	L	781	59.90	7.73
LB-17I	LB-121192-18	12/11/92	1030	61.0	0.2	L	562	31.20	8.34
LB-17I	LB-121192-19	12/11/92	1040	62.0	0.2	L	544	31.30	8.51
LB-17I	LB-031093-5	3/10/93	896	51.0	0.2	L	501	32.30	7.34
LB-17I	LB-032994-21	3/29/94	719	35.0	0.2	L	450	25.90	4.89
LB-17I	LB-030995-06	3/9/95	562	27.0	0.2	L	361	21.00	3.58
LB-17I	LB-031996-10	3/19/96	869	48.0	0.2	L	484	27.00	1.82
LB-17I	LB-032097-17	3/20/97	557	56.0	0.2	L	366	16.60	1.08
LB-17I	LB-031998-13	3/19/98	464	30.8	0.2	L	284	14.00	0.913
LB-17I	LB-031899-12	3/18/99	418	18.4	0.2		297	14.40	0.987
LB-17I	LB-031600-6	3/16/00	304	12.8	0.2	L	220	8.90	0.776
LB-17I	LB-031401-10	3/14/01	NT	13.6	0.2	L	241	8.86	0.918
LB-17I	LB-031902-06	3/19/02	NT	15.8	0.2		252	8.96	1.1
LB-17I	LB-031203-6	3/12/03	NT	18.0	0.2		278	9.99	1.37
LB-17I	LB-022504-11	2/25/04	NT	18.0	0.2	L	242	8.73	1.12
LB-17I	LB-030905-11	3/9/05	NT	21.0	0.2		288	10.80	1.79
LB-17I	LB-031506-8	3/15/06	NT	22.8	0.2	L	344	12.00	1.59
LB-17I	LB-030607-13	3/6/07	NT	24.2	0.1	L	291	11.30	1.51
LB-17I	LB-032008-10	3/20/08	NT	19.2	0.1	L	221	8.5	1.3
LB-17I	LB-17I	3/18/09	NT	10.0	0.1	L	193	6.77	1.12
LB-17I	LB-17I032310	3/23/10	NT	11.8	0.1	L	217	8.44	1.52
LB-17I (Dup)	LBDUP1032310	3/23/10	NT	11.7	0.1	L	231	8.41	1.51
LB-17I	LB-17I	3/22/11	498	27.4	0.1	L	306 H	8.95	1.55
LB-17I	LB-031312-16	3/13/12	NT	12	0.1	L	240	6.8	0.98
LB-20S	LB-991-19	9/26/81	NT	NT	NT		NT	2.81	7.64
LB-20S	LB-1289-W36	12/21/89	600	27.0	0.2	L	470	0.09	2.14
LB-20S	LB-390-W12	3/14/90	1340	45.7	0.2	L	892	2.72	13.4
LB-20S	LB-690-W08	6/19/90	1250	42.6	0.2	L	880	21.70	13.2
LB-20S	LB-690-W09	6/19/90	1220	41.8	0.2	L	832	21.00	13.3
LB-20S	LB-990-W09	9/14/90	844	22.8	0.2	L	574	0.78	6.88
LB-20S	LB-1290-W10	12/12/90	983	4.1	0.2	L	682	0.17	9
LB-20S	LB-1290-W11	12/12/90	988	21.3	0.2	L	708	0.16	9.32
LB-20S	LB-391-W08	3/20/91	667	9.9	0.2	L	374	0.09	5.07
LB-20S	LB-691-W11	6/11/91	960	NT	NT		583	4.16	9.44
LB-20S	LB-991-19	9/26/91	NT	NT	NT		620	2.81	7.64
LB-20S	LB-1291-5	12/19/91	1160	NT	NT		667	0.63	9.69
LB-20S	LB-392-18	3/24/92	778	20.0	0.2	L	485	0.10	7.34
LB-20S	LB-031593-26	3/15/93	713	10.0	0.2	L	411	1.36	5.34

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-20S	LB-031593-27	3/15/93	720	11.0	0.2 L	415	1.30	5.28
LB-20S	LB-032994-23	3/29/94	753	20.0	0.2 L	464	2.08	6.4
LB-20S	LB-031395-19	3/13/95	933	45.0	0.2	636	0.37	5.45
LB-20S	LB-032096-20	3/20/96	1020	42.0	0.2 L	620	6.06	7.49
LB-20S	LB-032097-15	3/20/97	625	46.0	0.2 L	459	25.60	3.98
LB-20S	LB-032098-23	3/20/98	467	39.0	0.2 L	297	15.90	1.83
LB-20S	LB-031899-16	3/18/99	279	13.8	0.3	210	11.80	1.28
LB-20S	LB-031700-14	3/17/00	279	14.6	0.2	228	10.60	1.53
LB-20S	LB-031401-13	3/14/01	NT	8.8	0.2 L	278	17.30	2.21
LB-20S	LB-032002-14	3/20/02	NT	3.3	0.2	283	2.07	2.09
LB-20S	LB-031303-20	3/13/03	NT	2.4	0.2 L	194	2.99	1.3
LB-20S	LB-022604-19	2/26/04	NT	2.9	0.2 L	236	0.41	1.01
LB-20S	LB-030905-12	3/9/05	NT	3.3	0.2	388	6.79	2.290
LB-20S	LB-031406-4	3/14/06	NT	2.1	0.2 L	148	0.16	0.026
LB-20S	LB-030607-16	3/6/07	NT	7.3	0.1 L	219	0.031	0.967
LB-20S	LB-032408-16	3/24/08	NT	7.9	0.1 L	186	0.08	1.22
LB-20S	LB-20S	3/18/09	NT	9.2	0.1 L	271	0.281	1.48
LB-20S	LB-20S032410	3/24/10	NT	3.0	0.1	237	0.027	0.34
LB-20S	LB-20S	3/24/11	544	22.1	0.1 L	361	0.368	2.20
LB-20S	LB-031312-15	3/13/12	NT	6.2	0.1 L	210	0.076	2.4
LB-26D	LB-031193-14	3/11/93	307	NT	4.7	226	0.02 L	0.024
LB-26D	LB-060193-3	6/1/93	290	NT	4.7	226	0.02 L	0.017
LB-26D	LB-092493-12	9/24/93	293	NT	5.3	216	0.02 L	0.009
LB-26D	LB-121693-16	12/16/93	285	NT	5.2	240	0.14	0.007
LB-26D	LB-032594-7	3/25/94	297	8.3	5.7	223	0.02 L	0.007
LB-26D	LB-062294-6	6/22/94	277	NT	5.4	226	0.03	0.005 L
LB-26D	LB-090894-15	9/8/94	296	NT	7.0	228	0.02 L	0.005 L
LB-26D	LB-121394-5	12/13/94	274	8.5	6.5	233	0.15	0.006
LB-26D	LB-031095-14	3/10/95	252	NT	6.2	199	0.02 L	0.005 L
LB-26D	LB-061995-2	6/19/95	270	NT	7.4	230	0.02 L	0.005 L
LB-26D	LB-092095-4	9/20/95	338	NT	7.5	218	0.00 L	0.005 L
LB-26D	LB-122095-15	12/20/95	325	NT	8.1	233	0.02 L	0.002 J
LB-26D	LB-031996-2	3/19/96	336	NT	8.7	241	0.02 L	0.005 L
LB-26D	LB-061896-2	6/18/96	281	NT	7.7 J	251	0.02	0.005 L
LB-26D	LB-091896-11	9/18/96	347	10.0	8.1	246	0.02 L	0.005 L
LB-26D	LB121796-4	12/17/96	391	12.0	7.9	272	0.02 L	0.005 L
LB-26D	LB-031997-6	3/19/97	306	14.0	8.4	284	0.03	0.005 L
LB-26D	LB-061797-8	6/17/97	379	12.0	7.6	256	0.02 L	0.005 L
LB-26D	LB-091697-4	9/16/97	307	12.8	8.2	251	0.02 L	0.005 L
LB-26D	LB-121697-6	12/16/97	331	12.0	9.3	244	0.02	0.005 L
LB-26D	LB-031998-9	3/19/98	358	11.8	10.0	251	0.02 L	0.005 L
LB-26D	LB-061698-9	6/16/98	247	11.5	9.2	260	0.02	0.005 L
LB-26D	LB-091798-6	9/17/98	324	10.2	8.8	230	0.02 L	0.005 L
LB-26D	LB-121798-3	12/17/98	264	10.3	9.7	272	0.02 L	0.005 L
LB-26D	LB-031899-6	3/18/99	252	10.7	8.9	241	0.02 L	0.005 L
LB-26D	LB-062399-9	6/23/99	251	9.8	9.3	235	0.02 L	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-26D	LB-091699-3	9/16/99	282	9.3	9.1	234	0.02 L	0.005 L
LB-26D	LB-121599-9	12/15/99	278	8.0	9.0	191	0.04	0.005 L
LB-26D	LB-031700-13	3/17/00	236	7.5	8.4	209	0.02 L	0.005 L
LB-26D	LB-061300-5	6/13/00	240	7.6	9.5	206	0.02 L	0.005 L
LB-26D	LB-091200-4	9/12/00	258	8.1	9.3	203	0.02 L	0.005 L
LB-26D	LB-121500-7	12/15/00	262	6.7	8.2	168	0.02 L	0.005 L
LB-26D	LB-031301-5	3/13/01	NT	6.6	8.1	198	0.02 L	0.005 L
LB-26D	LB-031902-8	3/19/02	NT	5.5	7.2	165	0.02 L	0.005 L
LB-26D	LB-031203-5	3/12/03	NT	4.7	6.0	216	0.02 L	0.005 L
LB-26D	LB-022504-12	2/25/04	NT	4.3	5.1	173	0.02 L	0.005 L
LB-26D	LB-030805-7	3/8/05	NT	4.0	4.8	170	0.02 L	0.005 L
LB-26D	LB-031606-19	3/16/06	NT	3.6	4.9	190	0.02 L	0.005 L
LB-26D	LB-030507-11	3/5/07	NT	4.1	5.3	145	0.02 L	0.005 L
LB-26D	LB-031908-8	3/19/08	NT	4.0	5.2	177	0.02 L	0.005 L
LB-26D	LB-26D	3/17/09	NT	4.3	5.9	144	0.02 L	0.005 L
LB-26D	LB-26D032410	3/24/10	NT	3.9	6.5	194	0.02 L	0.005 L
LB-26D	LB-26D	3/23/11	224	4.97	6.3	196	0.025 L	0.002 L
LB-26D	LB-031212-05	3/12/12	NT	4.8	5.9	190	0.025 L	0.0034
LB-26I	LB-121092-12	12/10/92	NT	NT	0.7	NT	0.03	0.075
LB-26I	LB-031193-13	3/11/93	638	NT	0.7	380	0.02 L	0.053
LB-26I	LB-060193-1	6/1/93	577	NT	1.0	352	0.02 L	0.027
LB-26I	LB-092493-11	9/24/93	587	NT	1.0	363	0.03	0.039
LB-26I	LB-121693-15	12/16/93	531	NT	0.8	377	0.03	0.031
LB-26I	LB-032594-6	3/25/94	528	NT	1.2	326	0.02 L	0.024
LB-26I	LB-062294-5	6/22/94	488	NT	1.2	329	0.03	0.028
LB-26I	LB-090894-16	9/8/94	519	NT	1.3	327	0.03	0.031
LB-26I	LB-121394-4	12/13/94	465	25.0	1.3	307	0.02 L	0.022
LB-26I	LB-031095-13	3/10/95	499	NT	1.1	311	0.02	0.023
LB-26I	LB-061995-1	6/19/95	434	NT	1.6	296	0.02	0.025
LB-26I	LB-092095-5	9/20/95	493	NT	1.8	274	0.03	0.026
LB-26I	LB-122095-14	12/20/95	458	NT	1.9	289	0.02 L	0.013
LB-26I	LB-031996-1	3/19/96	479	NT	1.7	302	0.02 L	0.02
LB-26I	LB-061896-1	6/18/96	387	NT	2.0 J	301	0.02	0.02
LB-26I	LB-091896-10	9/18/96	469	25.0	2.0	298	0.02 L	0.016
LB-26I	LB121796-5	12/17/96	498	24.0	2.2	323	0.02 L	0.014
LB-26I	LB-031997-5	3/19/97	424	30.0	3.0	329	0.04	0.014
LB-26I	LB-061797-7	6/17/97	525	30.0	2.3	323	0.02 L	0.018
LB-26I	LB-091697-5	9/16/97	436	33.4	2.1	312	0.02 L	0.019
LB-26I	LB-121697-7	12/16/97	647	26.8	3.0	444	0.03	0.032
LB-26I	LB-031998-8	3/19/98	605	34.3	3.6	379	0.02 L	0.013
LB-26I	LB-061698-8	6/16/98	406	35.7	2.7	356	0.02 L	0.015
LB-26I	LB-091798-7	9/17/98	557	34.2	2.4	304	0.03	0.014
LB-26I	LB-121798-2	12/17/98	456	35.1	2.8	368	0.04	0.013
LB-26I	LB-031799-1	3/17/99	456	33.7	2.9	347	0.02	0.014
LB-26I	LB-062399-10	6/23/99	361	22.6	5.1	280	0.02 L	0.008
LB-26I	LB-091699-4	9/16/99	535	32.9	2.2	340	0.03	0.013

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1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-26I	LB-121599-8	12/15/99	499	30.7	2.9	293	0.02 L	0.01
LB-26I	LB-031700-12	3/17/00	445	28.9	2.4	298	0.02 L	0.011
LB-26I	LB-061300-4	6/13/00	440	30.0	2.6	342	0.02 L	0.01
LB-26I	LB-091200-5	9/12/00	470	26.8	2.7	304	0.02 L	0.0131
LB-26I	LB-121500-8	12/15/00	376	15.2	5.0	217	0.02 L	0.005 L
LB-26I	LB-031301-6	3/13/01	NT	18.3	2.8	284	0.02 L	0.0069
LB-26I	LB-092001-3	9/20/01	NT	15.3	3.4	251	0.02 L	0.011
LB-26I	LB-092001-4	9/20/01	NT	15.5	3.5	266	0.02 L	0.011
LB-26I	LB-031902-09	3/19/02	NT	13.0	3.2	230	0.02 L	0.006
LB-26I	LB-091802-04	9/17/02	NT	11.0	4.0	237	0.02 L	0.014
LB-26I	LB-031203-4	3/12/03	NT	10.0	2.6	238	0.02 L	0.008
LB-26I	LB-092203-4	9/22/03	NT	9.5	2.0	248	0.03	0.015
LB-26I	LB-022504-13	2/25/04	NT	8.3	2.5	192	0.02 L	0.005
LB-26I	LB-090104-26	9/1/04	NT	6.7	2.2	190	0.02 L	0.009
LB-26I	LB-030805-8	3/8/05	NT	8.5	2.3	206	0.02 L	0.006
LB-26I	LB-091405-5	9/14/05	NT	7.4	2.7	190	0.02 L	0.005 L
LB-26I	LB-031606-20	3/16/06	NT	7.1	2.7	230	0.02 L	0.009
LB-26I	LB-091206	9/12/06	NT	6.6	3.2	199	0.02 L	0.010
LB-26I	LB-030507-10	3/5/07	NT	6.7	2.6	193	0.02 L	0.009
LB-26I	LB-091907-5	9/19/07	NT	7.7	2.3	207	0.02 L	0.011
LB-26I	LB-031908-7	3/19/08	NT	10.1	2.1	213	0.02 L	0.011
LB-26I	LB-091608-6	9/16/08	NT	4.1	5.6	168	0.02 L	0.005 L
LB-26I	LB-26I	3/17/09	NT	11.6	2.5	202	0.02 L	0.0057
LB-26I	LB-26I	9/11/09	NT	4.05	5.85	173	0.02 L	0.005 L
LB-26I	LB-26I032410	3/24/10	NT	8.52	3.41	211	0.02 L	0.010
LB-26I	LB26092310	9/23/10	NT	7.71	3.76	229	0.02 L	0.010
LB-26I	LB-26I	3/23/11	226	7.97	3.71	226	0.025 L	0.00743
LB-26I	LB-090711--3	9/7/11	NT	6.22	5.02	200	0.0392	0.00356
LB-26I	LB-032212-21	3/22/12	NT	8.4	4.8	200	0.037	0.0026
LB-26I	LB-091112-04	9/11/12	NT	5.8	5.2	200	0.025 L	0.0020
LB-27D	LB-031193-16	3/11/93	309	NT	1.6	217	0.02 L	0.034
LB-27D	LB-060193-4	6/1/93	302	NT	1.7	196	0.02 L	0.005 L
LB-27D	LB-092493-16	9/24/93	297	NT	1.9	205	0.02 L	0.005 L
LB-27D	LB-092493-17	9/24/93	296	NT	1.8	202	0.02 L	0.005 L
LB-27D	LB-121693-17	12/16/93	270	NT	2.0	235	0.04	0.005 L
LB-27D	LB-121693-18	12/16/93	282	NT	1.9	225	0.02	0.005 L
LB-27D	LB-032494-4	3/24/94	290	NT	0.2 L	210	0.02 L	0.005 L
LB-27D	LB-032494-5	3/24/94	293	NT	0.2 L	209	0.02 L	0.005 L
LB-27D	LB-062294-10	6/22/94	291	NT	1.9	219	0.02 L	0.005 L
LB-27D	LB-062294-9	6/22/94	284	NT	1.9	214	0.02 L	0.005 L
LB-27D	LB-090894-12	9/8/94	303	NT	2.3	214	0.02 L	0.005 L
LB-27D	LB-090894-13	9/8/94	299	NT	2.1	214	0.02 L	0.005 L
LB-27D	LB-121394-2	12/13/94	264	12.0	1.9	215	0.02 L	0.005 L
LB-27D	LB-121394-3	12/13/94	259	12.0	1.9	222	0.02 L	0.005 L
LB-27D	LB-031095-7	3/10/95	274	NT	0.7	193	0.02 L	0.005 L
LB-27D	LB-031095-9	3/10/95	265	NT	1.9	190	0.02	0.005 L

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27D	LB-061995-4	6/19/95	272	NT	2.3	217	0.02 L	0.005 L
LB-27D	LB-061995-5	6/19/95	277	NT	2.2	208	0.02 L	0.005 L
LB-27D	LB-092095-1	9/20/95	334	NT	2.1	195	0.00 L	0.005 L
LB-27D	LB-092095-2	9/20/95	326	NT	2.0	205	0.00 L	0.005 L
LB-27D	LB-122095-17	12/20/95	306	NT	2.1	209	0.02 L	0.005 L
LB-27D	LB-122095-18	12/20/95	302	NT	2.1	210	0.06	0.001 J
LB-27D	LB-031996-3	3/19/96	302	NT	2.1	208	0.02 L	0.005 L
LB-27D	LB-061896-4	6/18/96	260	NT	2.2	220	0.10	0.005 L
LB-27D	LB-061896-5	6/18/96	251	NT	NT	217	0.09	0.005 L
LB-27D	LB-091796-9	9/17/96	286	11.0	2.1	214	0.02 L	0.005 L
LB-27D	LB121796-8	12/17/96	303	11.0	2.1	204	0.02 L	0.005 L
LB-27D	LB-031997-12	3/19/97	235	13.0	2.2	221	0.02	0.005 L
LB-27D	LB-061797-11	6/17/97	283	10.0	1.8	210	0.03	0.005 L
LB-27D	LB-091697-8	9/16/97	235	8.4	2.3	216	0.02 L	0.005 L
LB-27D	LB-121797-14	12/17/97	231	11.0	2.2	160	0.02 L	0.005 L
LB-27D	LB-031998-12	3/19/98	301	11.2	2.2	214	0.02 L	0.005 L
LB-27D	LB-061798-10	6/17/98	286	11.1	2.1	218	0.02 L	0.005 L
LB-27D	LB-091798-8	9/17/98	286	10.8	2.2	172	0.02 L	0.005 L
LB-27D	LB-121798-6	12/17/98	251	12.6	2.6	240	0.21	0.008
LB-27D	LB-031899-9	3/18/99	226	11.4	2.1	213	0.02 L	0.005 L
LB-27D	LB-062399-7	6/23/99	231	10.4	2.3	193	0.02	0.005 L
LB-27D	LB-091599-1	9/15/99	206	11.1	2.4	216	0.16	0.005 L
LB-27D	LB-121599-7	12/15/99	270	10.7	2.5	195	0.02 L	0.005 L
LB-27D	LB-031600-3	3/16/00	248	10.2	2.4	221	0.02 L	0.005 L
LB-27D	LB-061300-3	6/13/00	249	11.4	2.5	225	0.02 L	0.005 L
LB-27D	LB-091300-8	9/13/00	283	11.9	2.8	198	0.02 L	0.005 L
LB-27D	LB-091300-9	9/13/00	272	11.2	2.6	209	0.02 L	0.005 L
LB-27D	LB-121500-5	12/15/00	294	11.4	2.5	207	0.02 L	0.005 L
LB-27D	LB-031301-3	3/13/01	NT	12.2	2.7	226	0.02 L	0.005 L
LB-27D	LB-031902-11	3/19/02	NT	13.5	2.8	187	0.02 L	0.005 L
LB-27D	LB-031203-3	3/12/03	NT	12.7	3.0	218	0.02 L	0.005 L
LB-27D	LB-022604-15	2/26/04	NT	12.7	2.9	236	0.02 L	0.005 L
LB-27D (Dup)	LB-022604-16	2/26/04	NT	12.5	2.9	238	0.02 L	0.005 L
LB-27D	LB-030805-6	3/8/05	NT	13.6	3.0	248	0.02 L	0.017
LB-27D	LB-031606-17	3/16/06	NT	12.4	3.2	242	0.02 L	0.005 L
LB-27D	LB-030507-9	3/5/07	NT	11.5	3.3	209	0.02 L	0.005 L
LB-27D	LB-031908-5	3/19/08	NT	11.1	3.4	241	0.02 L	0.005 L
LB-27D	LB-031908-6	3/19/08	NT	11.9	1.4	364	0.02 L	0.285
LB-27D	LB-27D	3/18/09	NT	10.7	3.5	217	0.02 L	0.005 L
LB-27D	LB-27D032410	3/24/10	NT	9.8	3.9	238	0.02 L	0.005 L
LB-27D	LB-27D	3/25/11	307	10.4	3.77	245	0.025 L	0.002 L
LB-27D	LB-031212-02	3/12/12	NT	10	4.0	220	0.033	0.0054
LB-27I	LB-121192-20	12/11/92	NT	NT	6.2	NT	0.04	0.471
LB-27I	LB-031293-21	3/12/93	729	NT	4.5	459	0.02 L	0.343
LB-27I	LB-060193-2	6/1/93	706	NT	3.8	436	0.02 L	0.283
LB-27I	LB-092493-14	9/24/93	785	NT	21.0	526	0.07	0.413

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27I	LB-092493-15	9/24/93	771	NT	20.0	504	0.08	0.381
LB-27I	LB-121693-19	12/16/93	676	NT	22.0	499	0.03	0.284
LB-27I	LB-121693-20	12/16/93	711	NT	22.0	506	0.04	0.28
LB-27I	LB-032494-3	3/24/94	685	NT	NT	469	0.02 L	0.276
LB-27I	LB-062294-8	6/22/94	582	NT	5.3	397	0.02	0.213
LB-27I	LB-090894-11	9/8/94	573	NT	6.2	402	0.03	0.238
LB-27I	LB-121394-1	12/13/94	519	13.0	16.0	410	0.02	0.267
LB-27I	LB-031095-7	3/10/95	573	NT	9.0	346	0.02	0.198
LB-27I	LB-061995-3	6/19/95	566	NT	7.5	394	0.02	0.188
LB-27I	LB-092095-3	9/20/95	651	NT	1.2	377	0.03	0.247
LB-27I	LB-122095-16	12/20/95	584	NT	0.8	353	0.02 L	0.236
LB-27I	LB-031996-4	3/19/96	653	NT	0.2 L	392	0.10	0.273
LB-27I	LB-061896-3	6/18/96	532	NT	0.0 J	414	0.03	0.282
LB-27I	LB-091796-7	9/17/96	859	38.0	0.2 L	555	0.08	0.352
LB-27I	LB-091796-8	9/17/96	874	39.0	0.2 L	552	0.03	0.356
LB-27I	LB121796-6	12/17/96	1150	30.0	30.0	650	0.04	0.373
LB-27I	LB121796-7	12/17/96	1140	29.0	60.0	650	0.02 L	0.364
LB-27I	LB-031997-10	3/19/97	681	49.0	1.1	530	0.04	0.312
LB-27I	LB-031997-11	3/19/97	747	49.0	1.1	523	0.04	0.288
LB-27I	LB-061797-10	6/17/97	762	44.0	0.1	459	0.03	0.277
LB-27I	LB-061797-9	6/17/97	764	43.0	0.1	459	0.03	0.273
LB-27I	LB-091697-6	9/16/97	844	48.9	0.2 L	690	0.03	0.396
LB-27I	LB-091697-7	9/16/97	860	49.3	0.2 L	671	0.03	0.396
LB-27I	LB-121797-11	12/17/97	720	30.7	0.2 L	609	0.03	0.406
LB-27I	LB-121797-12	12/17/97	738	30.5	0.2 L	589	0.03	0.397
LB-27I	LB-031998-10	3/19/98	877	25.9	0.2 L	576	0.04	0.381
LB-27I	LB-031998-11	3/19/98	896	26.6	0.2 L	573	0.03	0.373
LB-27I	LB-061798-11	6/17/98	869	37.0	0.4	602	0.04	0.342
LB-27I	LB-061798-12	6/17/98	729	36.7	0.4	599	0.04	0.342
LB-27I	LB-091798-10	9/17/98	1030	47.0	0.2	620	0.04	0.375
LB-27I	LB-091798-9	9/17/98	1030	46.5	0.2 L	586	0.04	0.388
LB-27I	LB-121798-4	12/17/98	714	36.0	0.2 L	545	0.04	0.354
LB-27I	LB-121798-5	12/17/98	710	36.3	0.2 L	522	0.04	0.36
LB-27I	LB-031899-7	3/18/99	712	39.3	0.7	565	0.04	0.335
LB-27I	LB-031899-8	3/18/99	707	39.5	0.7	565	0.04	0.29
LB-27I	LB-062399-8	6/23/99	693	46.4	1.0	502	0.03	0.305
LB-27I	LB-091599-2	9/15/99	691	56.7	0.3	602	0.03	0.336
LB-27I	LB-121599-6	12/15/99	910	81.4	0.2	553	0.04	3.72
LB-27I	LB-031600-1	3/16/00	803	69.4	0.2 L	675	0.02 L	0.356
LB-27I	LB-031600-2	3/16/00	810	69.1	0.2 L	598	0.21	0.349
LB-27I	LB-061300-1	6/13/00	743	70.9	0.1 L	532	0.03	0.305
LB-27I	LB-061300-2	6/13/00	738	70.5	0.1 L	662	0.02	0.322
LB-27I	LB-091300-10	9/13/00	819	47.5	0.7	368	0.02	0.289
LB-27I	LB-121500-6	12/15/00	885	66.0	1.2	504	0.02 L	0.0851
LB-27I	LB-031301-4	3/13/01	NT	42.8	0.1 L	226	0.02 L	0.268
LB-27I	LB-092001-2	9/20/01	NT	39.7	0.1 L	378	0.02 L	0.186

Table B-3
Groundwater Chemistry, Inorganic Parameters and Dissolved Metals Concentrations (mg/L)
1987 through 2012
Leichner Brothers Landfill

Location	Sample Number	Date	Conductivity	Chloride	Nitrate as Nitrogen	Total Dissolved Solids	Dissolved Iron	Dissolved Manganese
LB-27I	LB-031902-10	3/19/02	NT	42.1	0.6	403	0.02 L	0.277
LB-27I	LB-091802-05	9/17/02	NT	25.0	8.0	382	0.02 L	0.243
LB-27I	LB-031203-1	3/12/03	NT	23.0	1.4	384	0.02 L	0.187
LB-27I	LB-031203-2	3/12/03	NT	23.0	1.4	312	0.02 L	0.206
LB-27I	LB-092203-2	9/22/03	NT	26.0	1.2	424	0.02 L	0.516
LB-27I	LB-092203-3	9/22/03	NT	25.0	1.2	388	0.02 L	0.545
LB-27I	LB-022604-17	2/26/04	NT	18.5	0.2 L	288	0.02 L	0.193
LB-27I	LB-090104-27	9/1/04	NT	20.4	1.1	268	0.02 L	0.217
LB-27I	LB-030805-5	3/8/05	NT	10.9	2.8	312	0.02 L	0.195
LB-27I	LB-091405-3	9/14/05	NT	12.4	2.4	316	0.02 L	0.131
LB-27I	LB-031606-18	3/16/06	NT	9.7	4.2	346	0.02 L	0.121
LB-27I	LB-091206-2	9/12/06	NT	14.8	1.9	346	0.02 L	0.185
LB-27I	LB-030507-8	3/5/07	NT	14.2	2.2	363	0.02 L	0.238
LB-27I	LB-091907-4	9/19/07	NT	16.7	0.1 L	295	0.04	0.530
LB-27I	LB-031908-4	3/19/08	NT	11.9	1.4	340	0.02 L	0.282
LB-27I	LB-091608-7	9/16/08	NT	17.0	1.0	311	0.02 L	0.196
LB-27I	LB-27I	3/18/09	NT	14.3	2.1	322	0.02 L	0.186
LB-27I	LBLF27i091109	9/11/09	NT	19.3	0.86	309	0.02 L	0.173
LB-27I	LB-27I032410	3/24/10	NT	7.7	1.82	266	0.02 L	0.121
LB-27I	LB27I092310	9/23/10	NT	19.4	0.62	311	0.02 L	0.196
LB-27I	LB-27I	3/25/11	512	20.1	0.14	335	0.025 L	0.191
LB-27I	LB-090711-01	9/7/11	NT	41.2	0.10 L	464	0.050 L	0.456
LB-27I	LB-032212-18	3/22/12	NT	23	0.2	370	0.025 L	0.38
LB-27I	LB-091112-02	9/11/12	NT	32	0.2 L, H	420	0.032	0.54
FIELDQC	LB-031212-06	03/12/12	NT	0.5 L	0.1 L	10 L	0.025 L	0.0020 L
FIELDQC	LB-091112-05	9/11/12	NT	0.5 L	0.1 L	10 L	0.025 L	0.0020 L

Notes:
Conductivity = umhos/cm; B = analyte detected above the MDL but below the MRL; L = not detected at or above method reporting limit; J = estimated concentration; H = due to laboratory error, sample was extracted and analyzed past the recommended 7-day hold time; NT = not tested.

APPENDIX C

Summary of 2012 Groundwater Statistical Calculations

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-1S					LB-1D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Non	6.94	M(14)	5	5	Lognormal	6.98	7.48
Nitrate (mg/L)	10	10	Lognormal	5.44	6.04	5	5	Lognormal	5.92	6.08
TDS (mg/L)	10	10	Lognormal	199.70	209.61	5	5	Lognormal	169.60	193.73
Metals (mg/L)										
Iron (dissolved)	10	2	NC	0.38	M(0.51)	5	0	NC	NC	All ND
Manganese (dissolved)	10	1	NC	0.002	M(0.002)	5	0	NC	NC	All ND
VOCs (µg/L)										
1,1-Dichloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
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
Vinyl Chloride	10	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-3S					LB-3D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	5	5	Lognormal	3.21	3.64	5	5	Lognormal	3.75	4.18
Nitrate (mg/L)	5	5	Lognormal	3.50	3.75	5	5	Lognormal	4.82	5.48
TDS (mg/L)	5	5	Lognormal	161.80	181.81	5	5	Lognormal	165.00	192.39
Metals (mg/L)										
Iron (dissolved)	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	5	0	NC	NC	All ND	5	0	NC	NC	All ND
VOCs (µg/L)										
1,1-Dichloroethene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
1,4-Dichlorobenzene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	5	0	NC	NC	All ND	5	0	NC	NC	All ND
Vinyl Chloride	5	0	NC	NC	All ND	5	0	NC	NC	All ND

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-4SR (background)					LB-4D (background)				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	5	5	Lognormal	3.94	5.55	6	6	Lognormal	3.07	3.35
Nitrate (mg/L)	5	5	Lognormal	4.10	5.60	6	6	Lognormal	6.60	6.96
TDS (mg/L)	5	5	Lognormal	166.40	188.42	6	6	Lognormal	138.00	152.10
Metals (mg/L)										
Iron (dissolved)	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Manganese (dissolved)	5	0	NC	NC	All ND	6	0	NC	NC	All ND
VOCs (µg/L)										
1,1-Dichloroethene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
1,4-Dichlorobenzene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	5	0	NC	NC	All ND	6	0	NC	NC	All ND
Vinyl Chloride	5	0	NC	NC	All ND	6	0	NC	NC	All ND

Parameter	LB-5S					LB-5D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	13	13	Lognormal	5.13	5.74	6	6	Lognormal	12.12	13.22
Nitrate (mg/L)	13	13	Lognormal	4.61	5.03	6	6	Lognormal	1.15	1.48
TDS (mg/L)	13	13	Lognormal	166.23	174.91	6	6	Lognormal	230.33	241.39
Metals (mg/L)										
Iron (dissolved)	13	4	Lognormal*	0.0254	M(0.707)	6	0	NC	NC	All ND
Manganese (dissolved)	13	1	NC	0.0157	M(0.0157)	6	0	NC	NC	All ND
VOCs (µg/L)										
1,1-Dichloroethene	13	0	NC	NC	All ND	6	0	NC	NC	All ND
1,4-Dichlorobenzene	13	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	13	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	13	0	NC	NC	All ND	6	0	NC	NC	All ND
Vinyl Chloride	13	0	NC	NC	All ND	6	0	NC	NC	All ND

* MTCAStat 97 indicated lognormal distribution; however, the UCL 95 cannot be determined because more than 50 percent of the data are censored (i.e., non-detect).

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-6S					LB-20S				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	15	15	Non	6.72	M(9.8)	5	5	Lognormal	9.68	M(22.1)
Nitrate (mg/L)	15	15	Normal	2.02	2.46	5	1	NC	0.10	M(0.1)
TDS (mg/L)	15	15	Lognormal	199.20	212.88	5	5	Lognormal	253.00	341.80
Metals (mg/L)										
Iron (dissolved)	15	5	Lognormal*	0.11	M(0.379)	5	5	Lognormal	0.17	M(0.368)
Manganese (dissolved)	15	3	Lognormal*	0.013	0.031	5	5	Normal	1.53	2.31
VOCs (µg/L)										
1,1-Dichloroethene	15	0	NC	NC	All ND	5	0	NC	NC	All ND
1,4-Dichlorobenzene	15	0	NC	NC	All ND	5	2	NC	0.023	M(0.25)
Tetrachloroethene	15	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	15	0	NC	NC	All ND	5	0	NC	NC	All ND
Vinyl Chloride	15	0	NC	NC	All ND	5	0	NC	NC	All ND

* MTCAStat 97 indicated lognormal distribution; however, the UCL 95 cannot be determined because more than 50 percent of the data are censored (i.e., non-detect).

Parameter	LB-10SR					LB-10DR				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	12	12	Lognormal	12.94	20.61	5	5	Lognormal	25.00	28.86
Nitrate (mg/L)	12	12	Lognormal	2.41	3.66	5	5	Lognormal	1.19	1.73
TDS (mg/L)	12	12	Lognormal	240.50	267.58	5	5	Lognormal	302.00	324.08
Metals (mg/L)										
Iron (dissolved)	12	1	NC	1.15	M(1.15)	5	2	Non	0.04	M(0.047)
Manganese (dissolved)	12	4	Lognormal	0.005	M(0.0138)	5	5	Lognormal	0.053	M(0.155)
VOCs (µg/L)										
1,1-Dichloroethene	13*	0	NC	NC	All ND	5	0	NC	NC	All ND
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*	1	NC	0.15	M(0.15)	5	0	NC	NC	All ND
Vinyl Chloride	13*	0	NC	NC	All ND	5	0	NC	NC	All ND

* LB-10SR was resampled for VOCs only on 4/30/2008 due to a random detection of methyl ethyl ketone (MEK).

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-13I					LB-13D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	11	11	Non	6.64	M(12)	5	5	Lognormal	3.99	4.42
Nitrate (mg/L)	11	11	Lognormal	4.41	4.76	5	5	Normal	5.19	5.42
TDS (mg/L)	11	11	Lognormal	198.46	203.74	5	5	Lognormal	177.60	M(193)
Metals (mg/L)										
Iron (dissolved)	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Manganese (dissolved)	11	2	Non	0.004	0.0054	5	0	NC	NC	All ND
VOCs (µg/L)										
1,1-Dichloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
1,4-Dichlorobenzene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Tetrachloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	11	0	NC	NC	All ND	5	0	NC	NC	All ND
Vinyl Chloride	11	0	NC	NC	All ND	5	0	NC	NC	All ND

Parameter	LB-17I					LB-17D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	6	6	Lognormal	15.35	23.35	5	5	Lognormal	10.12	M(19)
Nitrate (mg/L)	6	0	NC	NC	All ND	5	0	NC	NC	All ND
TDS (mg/L)	6	6	Lognormal	234.67	269.93	5	5	Lognormal	203.80	222.36
Metals (mg/L)										
Iron (dissolved)	6	6	Normal	7.98	8.76	5	5	Lognormal	0.086	0.114
Manganese (dissolved)	6	6	Lognormal	1.33	M(1.55)	5	5	Lognormal	3.85	4.37
VOCs (µg/L)										
1,1-Dichloroethene	6	0	NC	NC	All ND	5	0	NC	NC	All ND
1,4-Dichlorobenzene	6	1	NC	0.26	M(0.26)	5	0	NC	NC	All ND
Tetrachloroethene	6	0	NC	NC	All ND	5	0	NC	NC	All ND
Trichloroethene	6	1	NC	0.81	M(0.81)	5	0	NC	NC	All ND
Vinyl Chloride	6	0	NC	NC	All ND	5	0	NC	NC	All ND

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-26I					LB-26D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	7.45	9.55	5	5	Lognormal	4.40	4.91
Nitrate (mg/L)	10	10	Lognormal	4.20	5.36	5	5	Lognormal	5.96	6.50
TDS (mg/L)	10	10	Lognormal	200.20	214.94	5	5	Lognormal	180.20	M(196)
Metals (mg/L)										
Iron (dissolved)	10	2	NC	0.04	M(0.0392)	5	0	NC	NC	All ND
Manganese (dissolved)	10	8	Non	0.007	M(0.011)	5	1	NC	0.034	M(0.0034)
VOCs (µg/L)										
1,1-Dichloroethene	10	0	NC	NC	All ND	5	0	NC	NC	All ND
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
Vinyl Chloride	10	1	NC	0.044	M(0.044)	5	0	NC	NC	All ND

Leichner Brothers Landfill
Groundwater Statistics - March 2008 through September 2012 Data
95 Percent Upper Confidence Limits on the Mean

Parameter	LB-27I					LB-27D				
	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]	No. Analyses	No. Detected	Distribution[a]	Mean	UCL 95[b]
Inorganics										
Chloride (mg/L)	10	10	Lognormal	20.59	29.57	6	6	Lognormal	10.66	11.32
Nitrate (mg/L)	10	8	Normal	1.01	1.24	6	6	Non	3.33	M(4.0)
TDS (mg/L)	10	10	Lognormal	344.50	381.48	6	6	Non	254.17	M(364)
Metals (mg/L)										
Iron (dissolved)	10	1	NC	0.03	M(0.032)	6	1	NC	0.03	M (0.033)
Manganese (dissolved)	10	10	Lognormal	0.272	0.39	6	2	NC	0.145	M(0.285)
VOCs (µg/L)										
1,1-Dichloroethene	10	0	NC	NC	All ND	6	0	NC	NC	All ND
1,4-Dichlorobenzene	10	0	NC	NC	All ND	6	0	NC	NC	All ND
Tetrachloroethene	10	0	NC	NC	All ND	6	0	NC	NC	All ND
Trichloroethene	10	0	NC	NC	All ND	6	0	NC	NC	All ND
Vinyl Chloride	10	1	NC	0.053	M(0.053)	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.

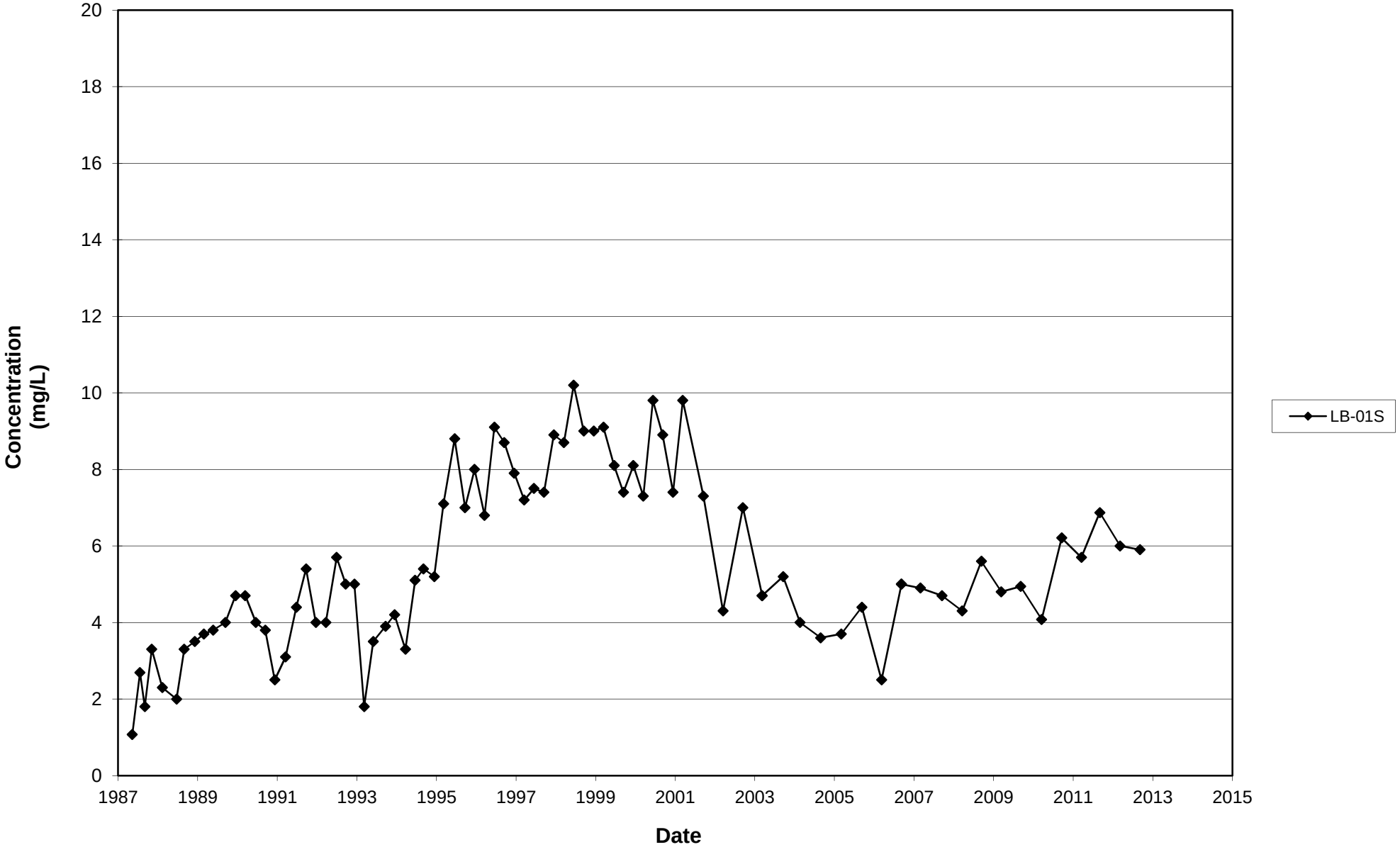
[b] UCL 95 was calculated using MTCAStat 97 program and Statistical Guidance for Ecology Site Managers.

APPENDIX D

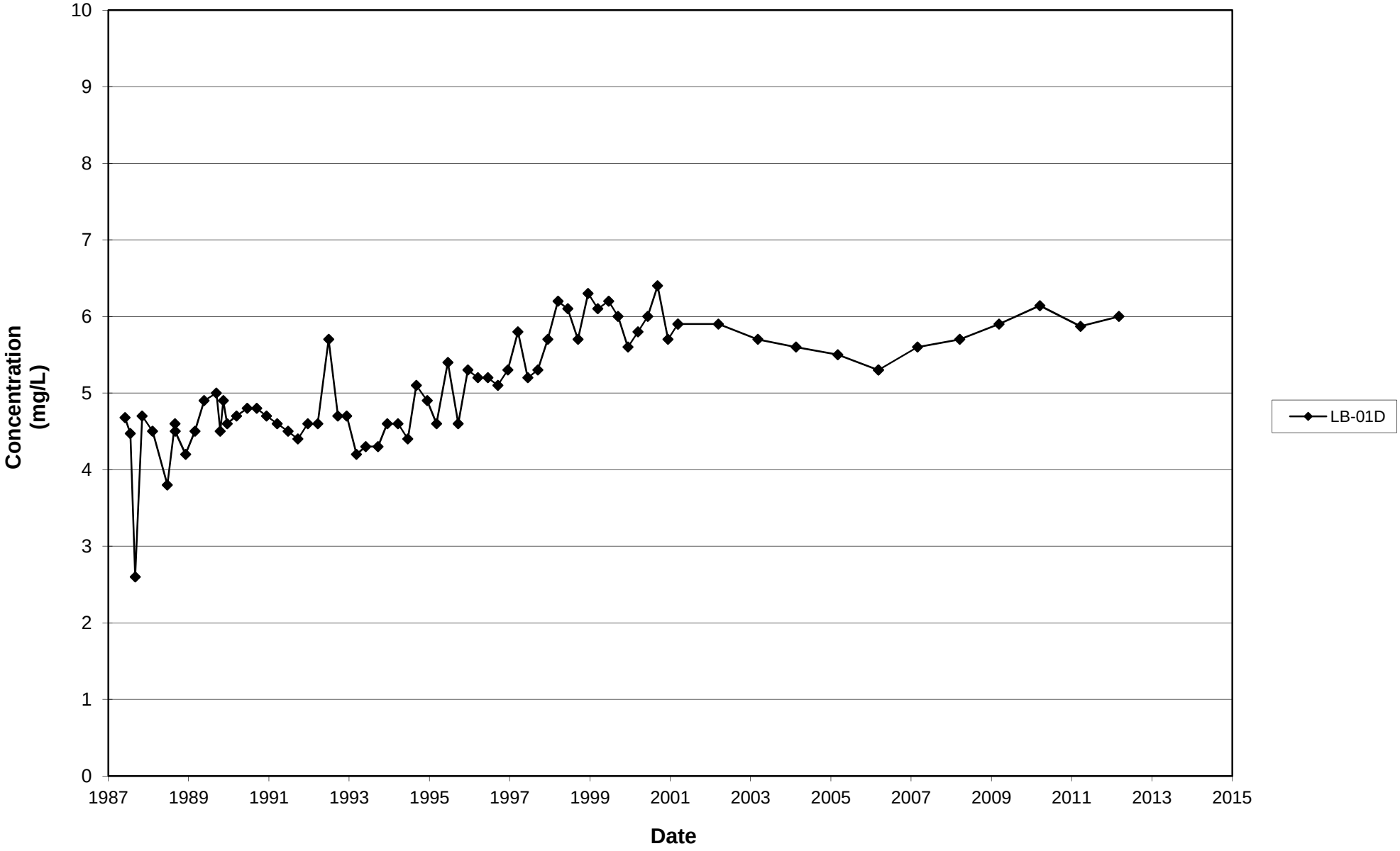
Groundwater Time-Series Concentration Graphs

Nitrate

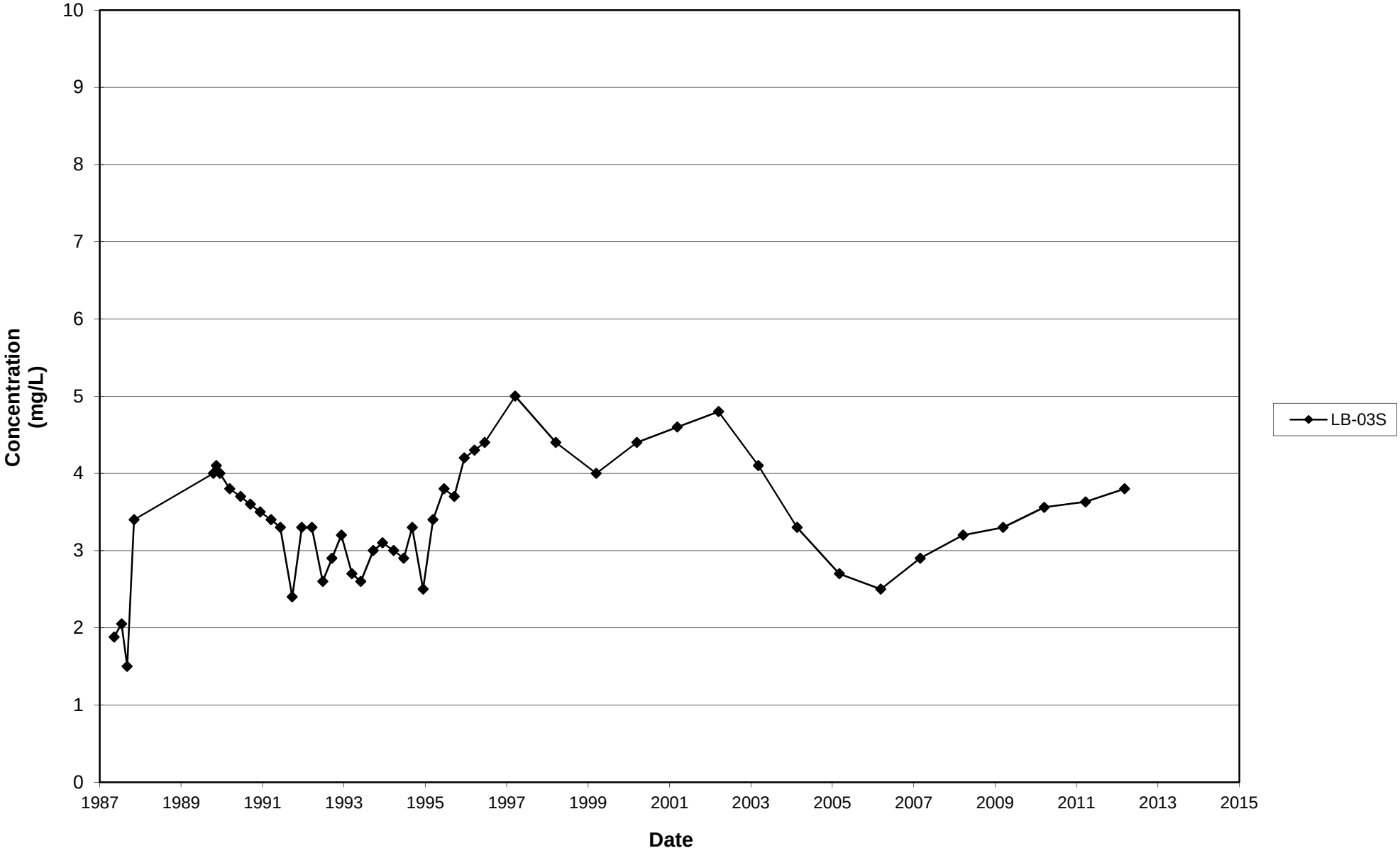
Leichner Landfill
Nitrate, LB-01S
1987 - 2012



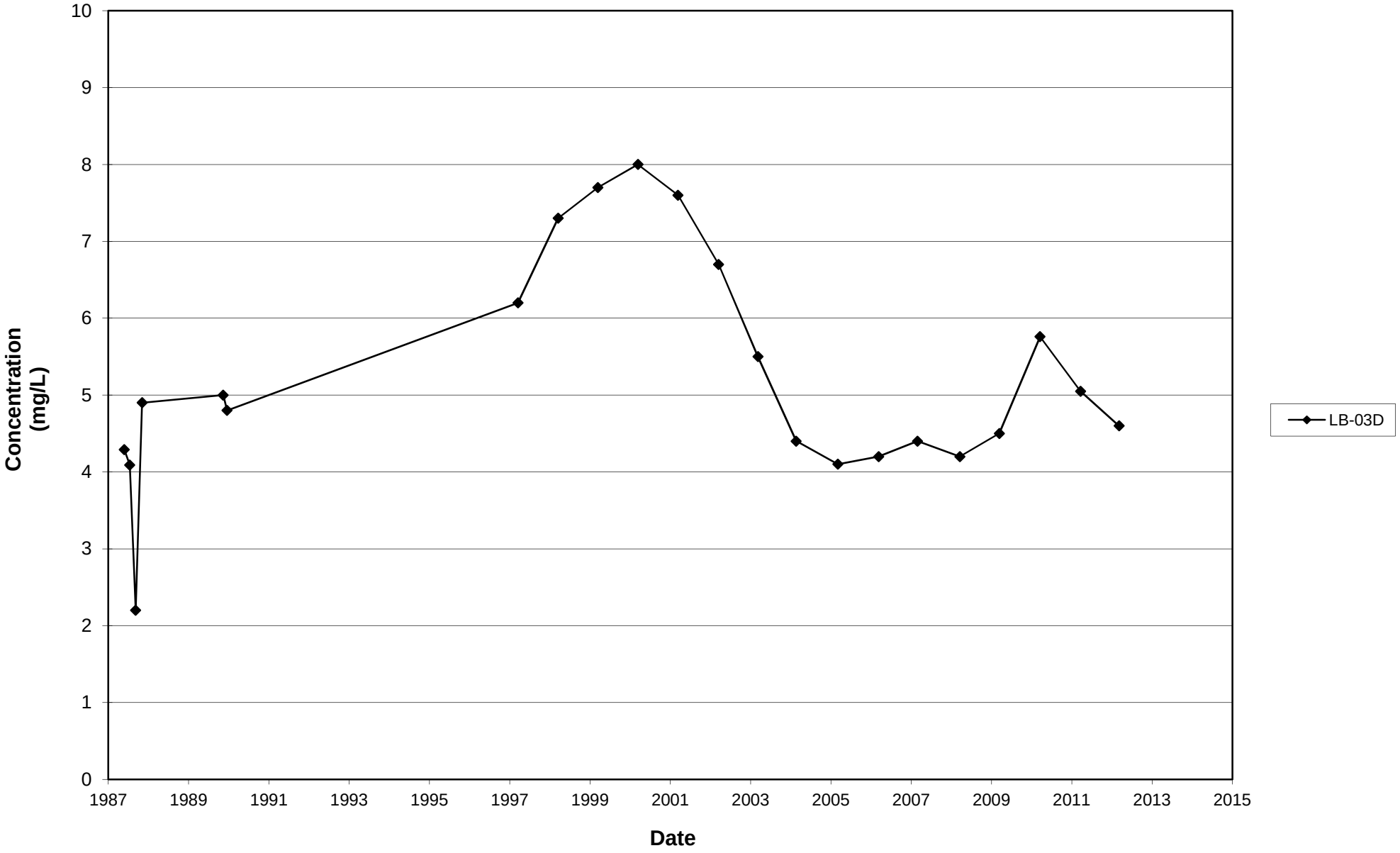
Leichner Landfill
Nitrate, LB-01D
1987 - 2012



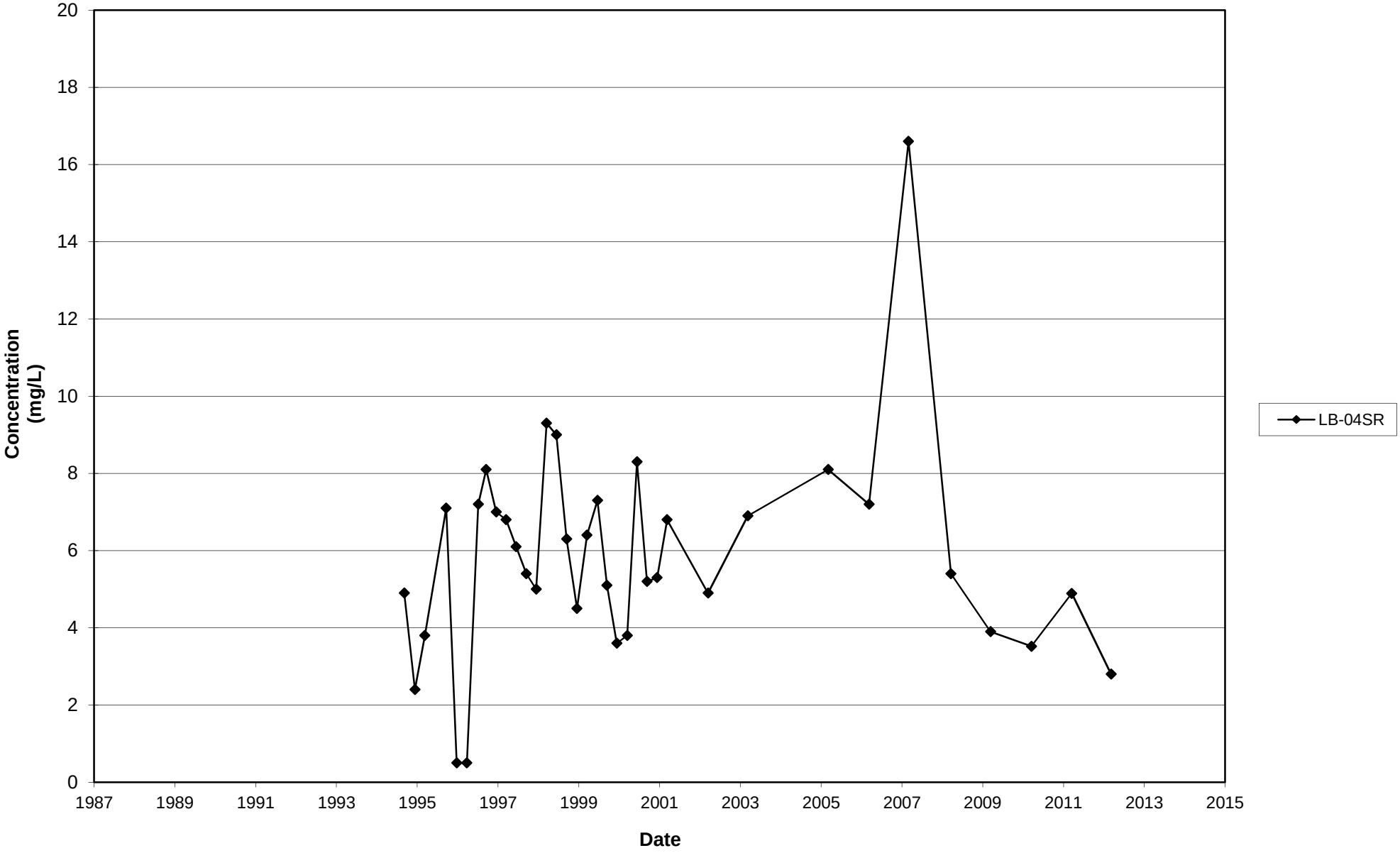
Leichner Landfill
Nitrate, LB-03S
1987 - 2012



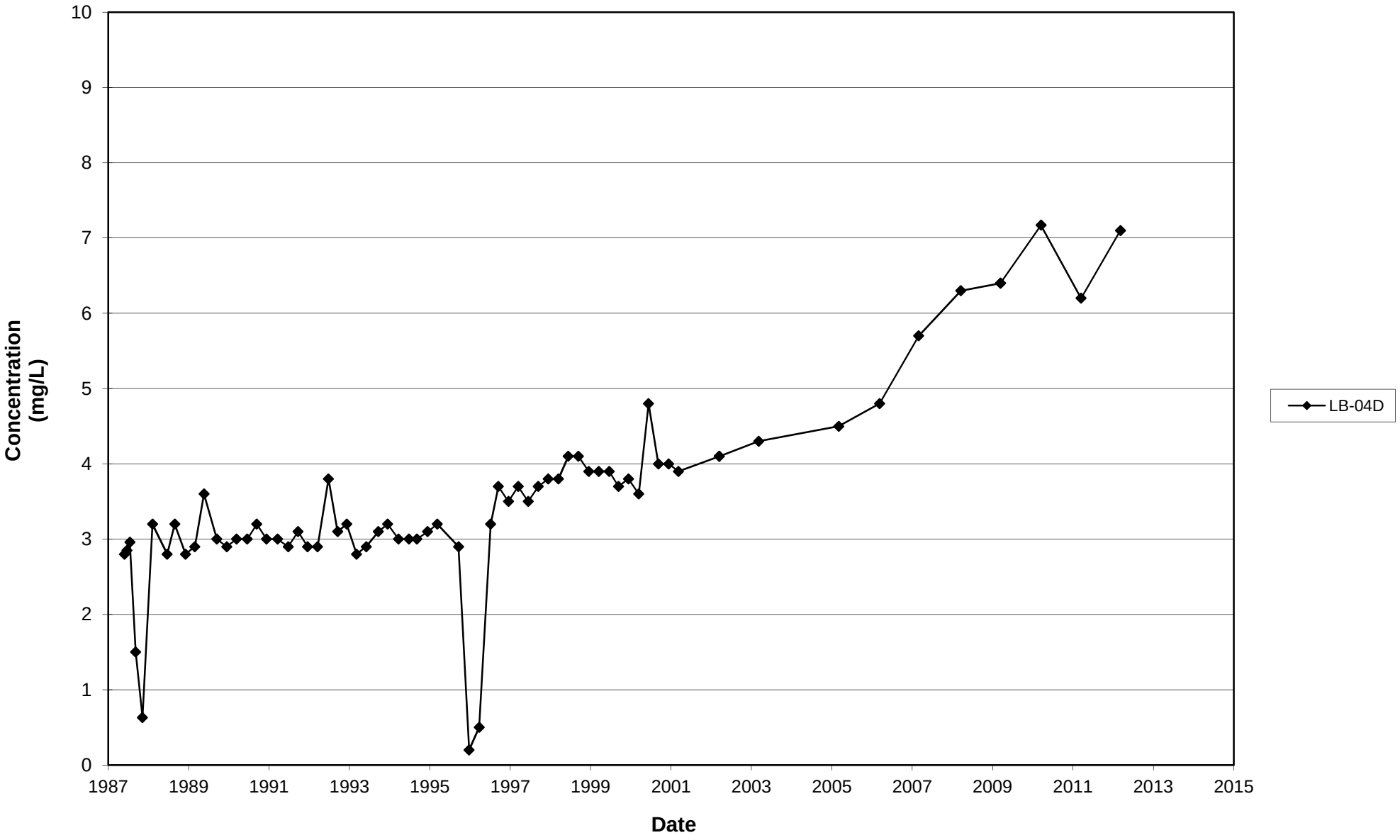
Leichner Landfill
Nitrate, LB-03D
1987 - 2012



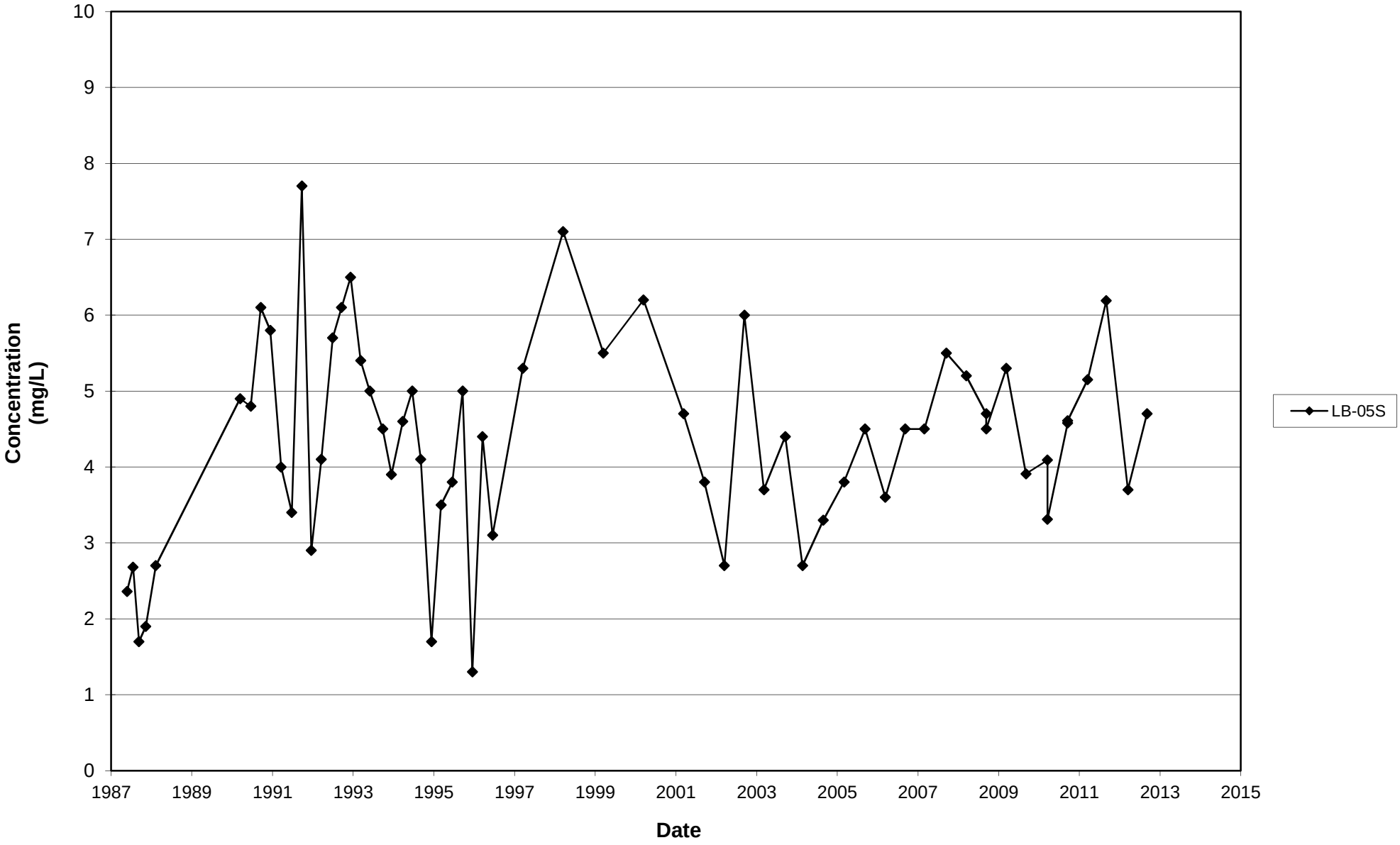
Leichner Landfill
Nitrate, LB-04SR
1987 - 2012



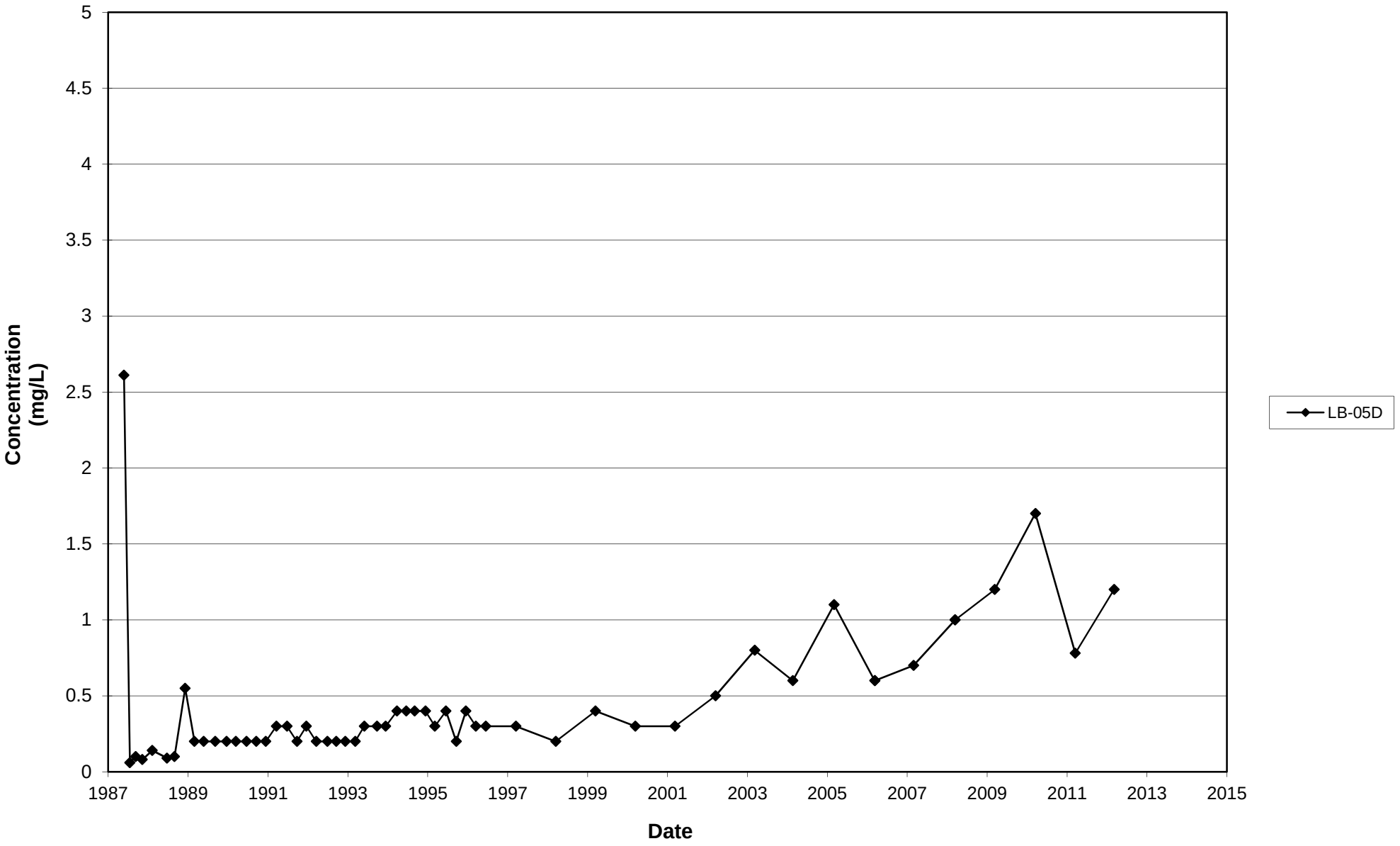
Leichner Landfill
Nitrate, LB-04D
1987 - 2012



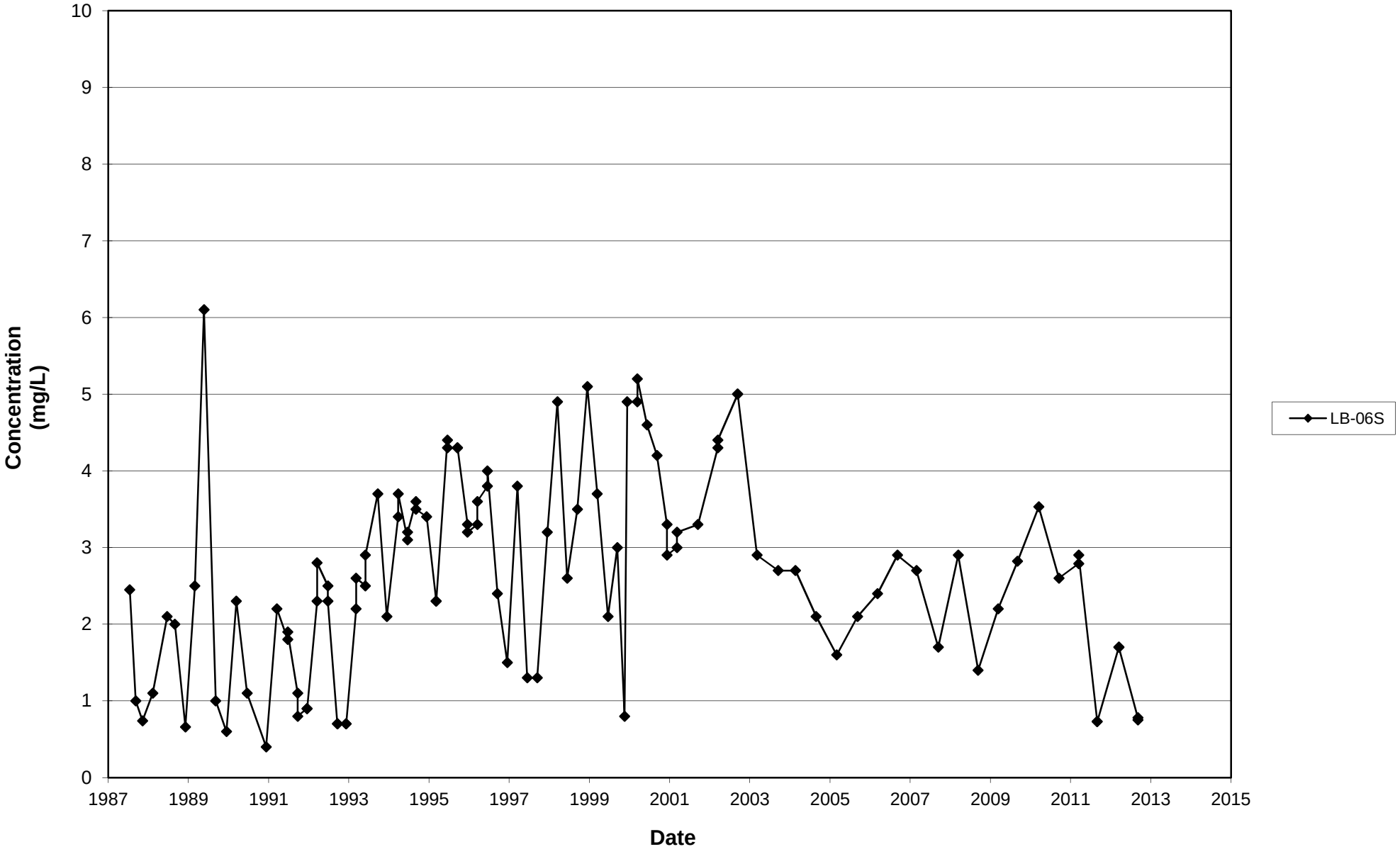
Leichner Landfill
Nitrate, LB-05S
1987 - 2012



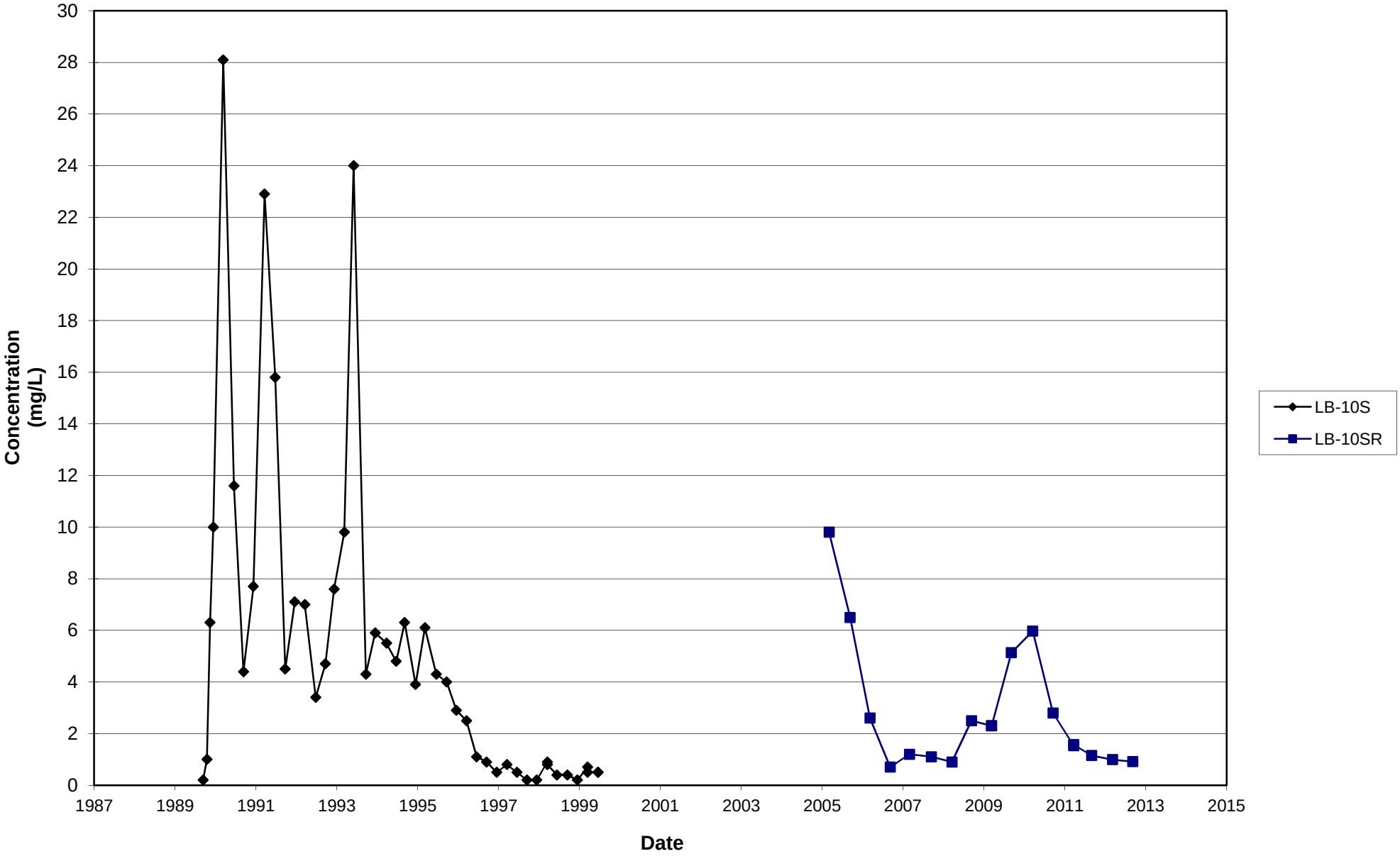
Leichner Landfill
Nitrate, LB-05D
1987 - 2012



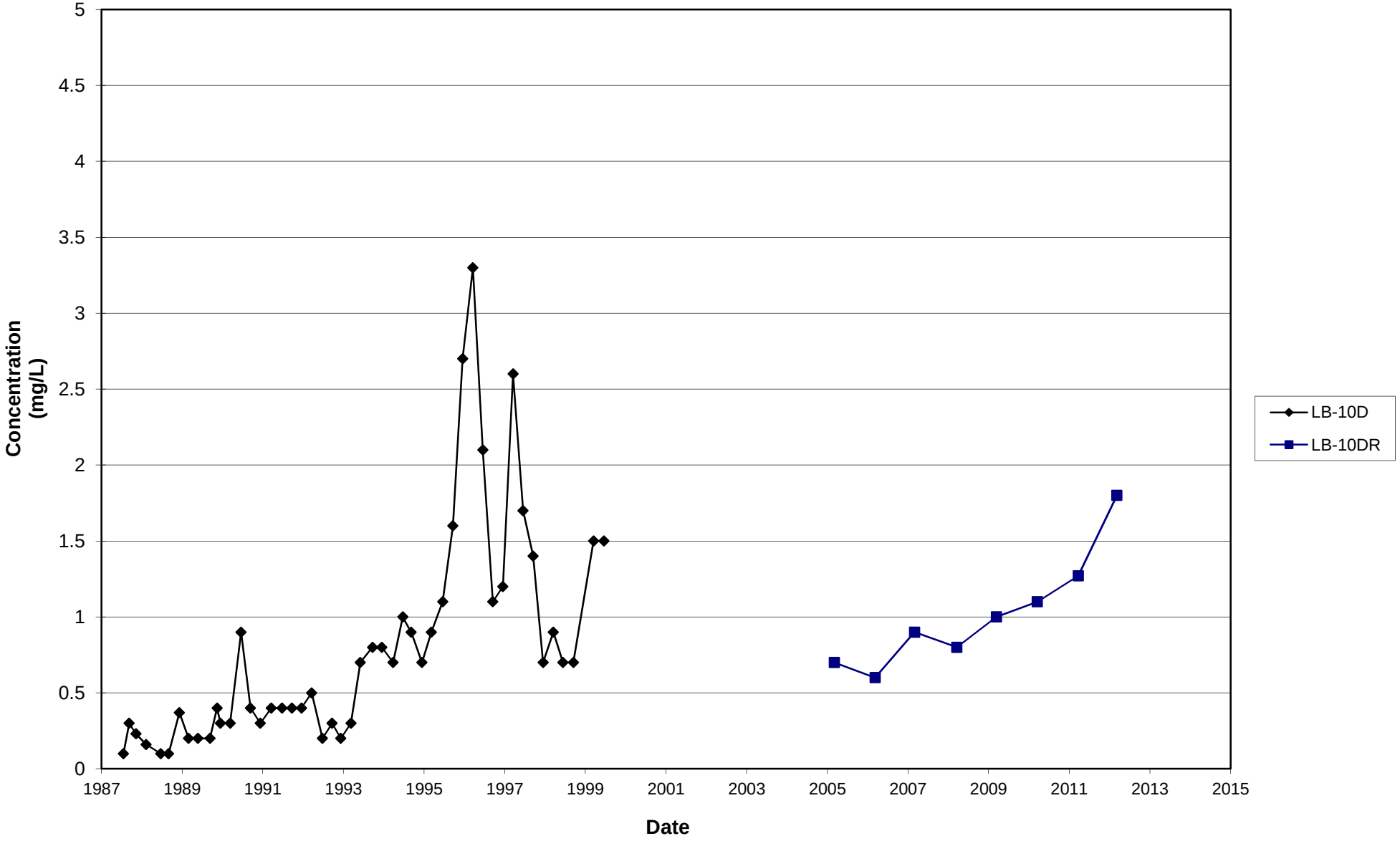
Leichner Landfill
Nitrate, LB-06S
1987 - 2012



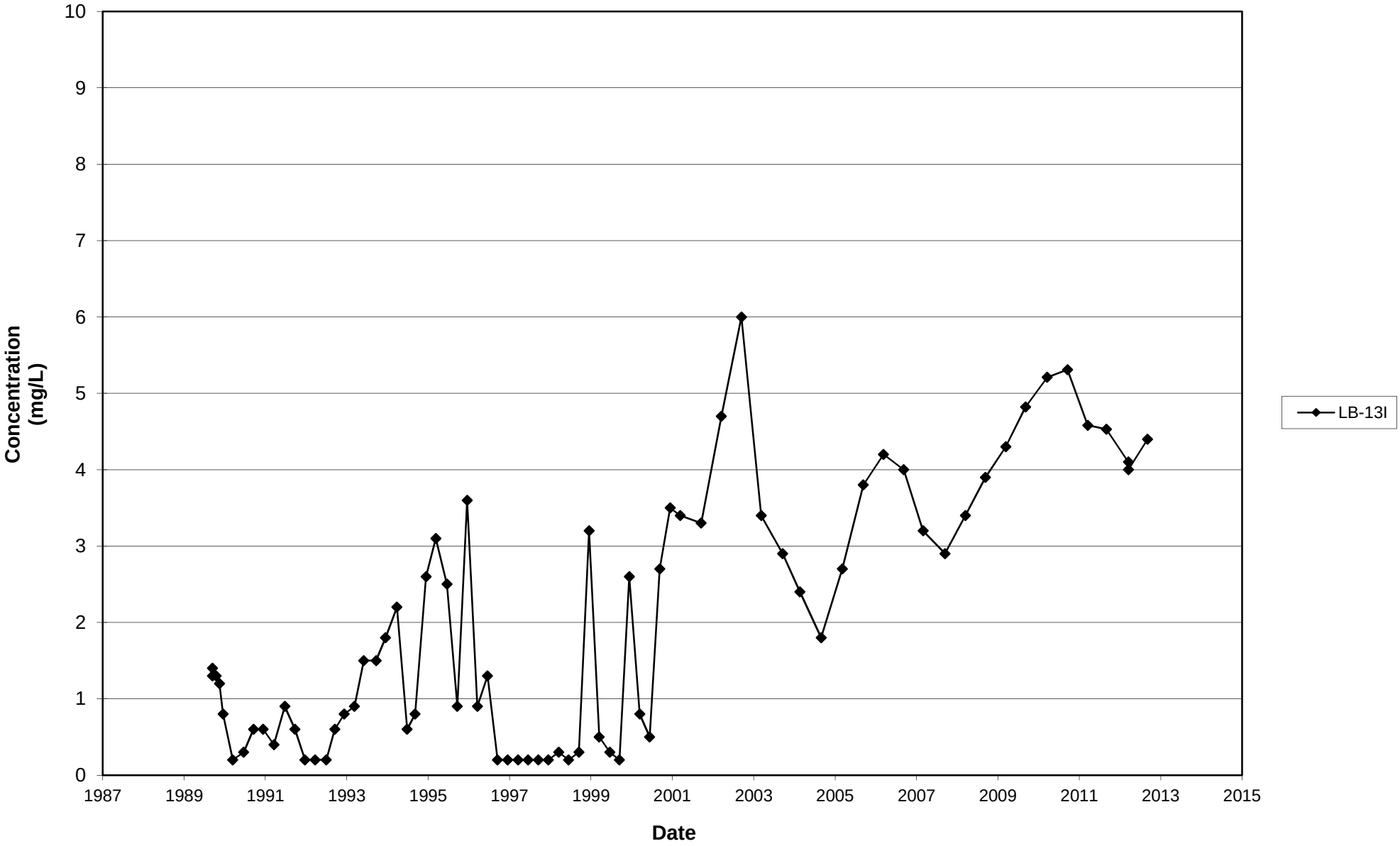
Leichner Landfill
Nitrate, LB-10S and LB-10SR
1987 - 2012



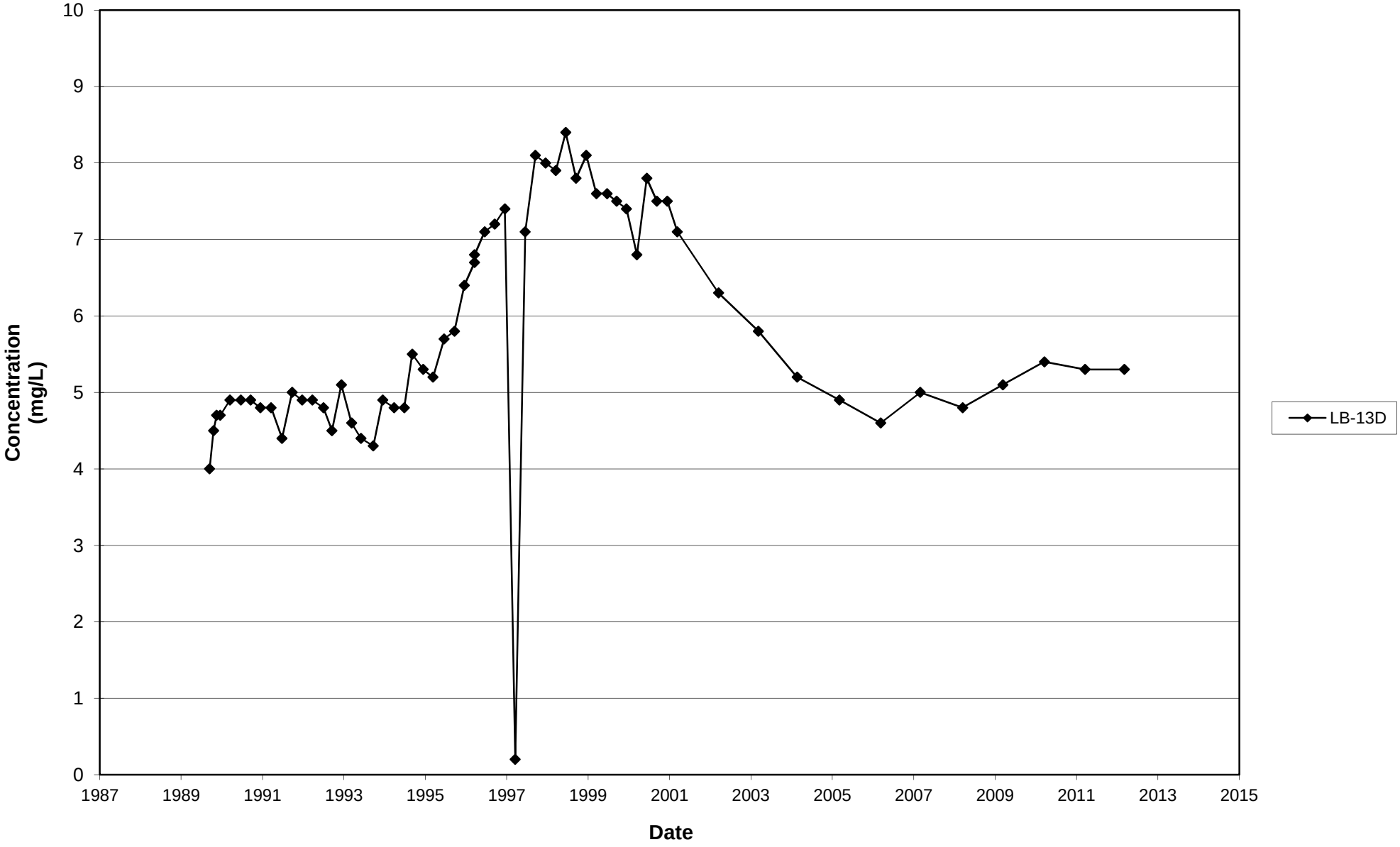
Leichner Landfill
Nitrate, LB-10D and LB-10DR
1987 - 2012



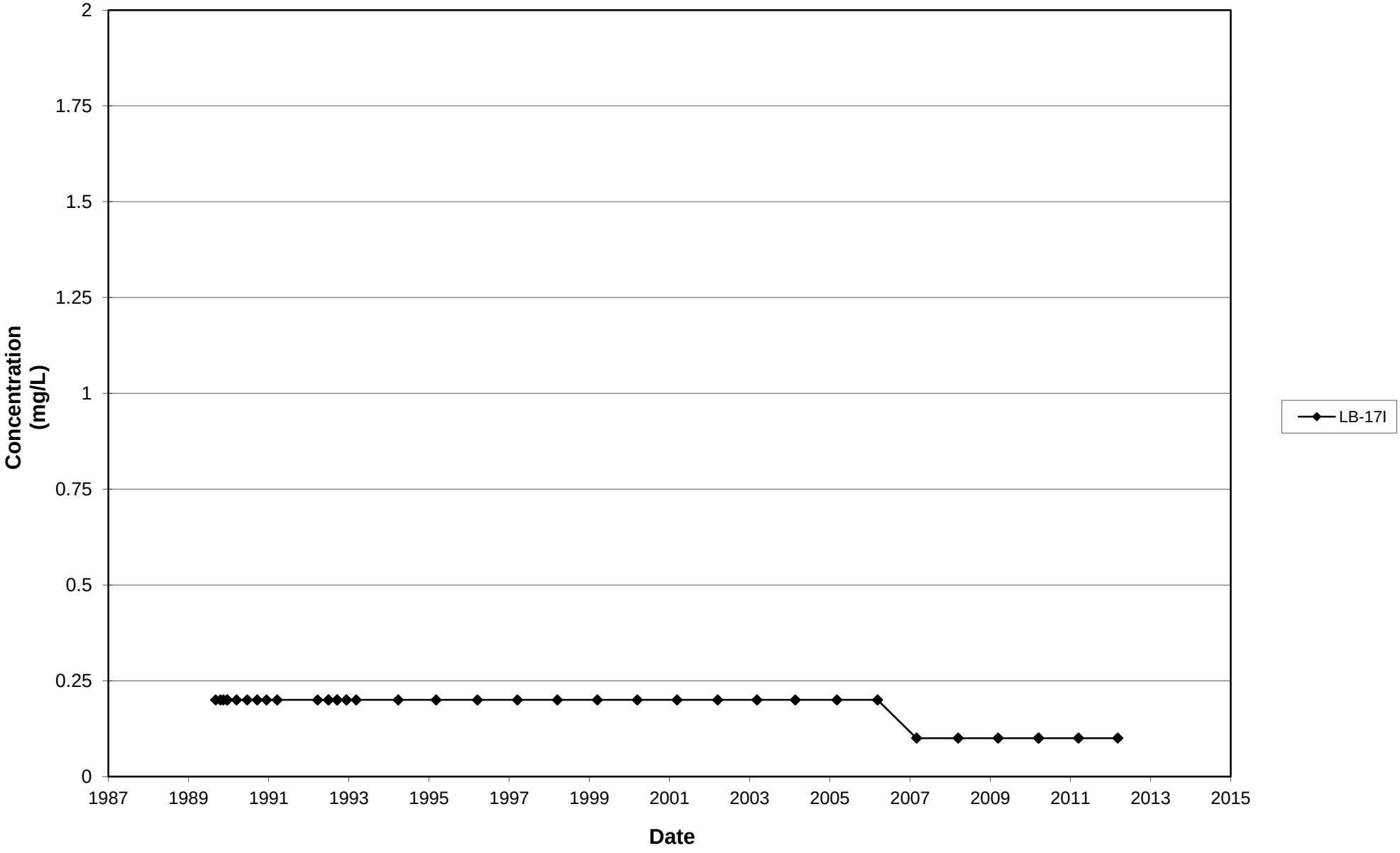
Leichner Landfill
Nitrate, LB-13I
1987 - 2012



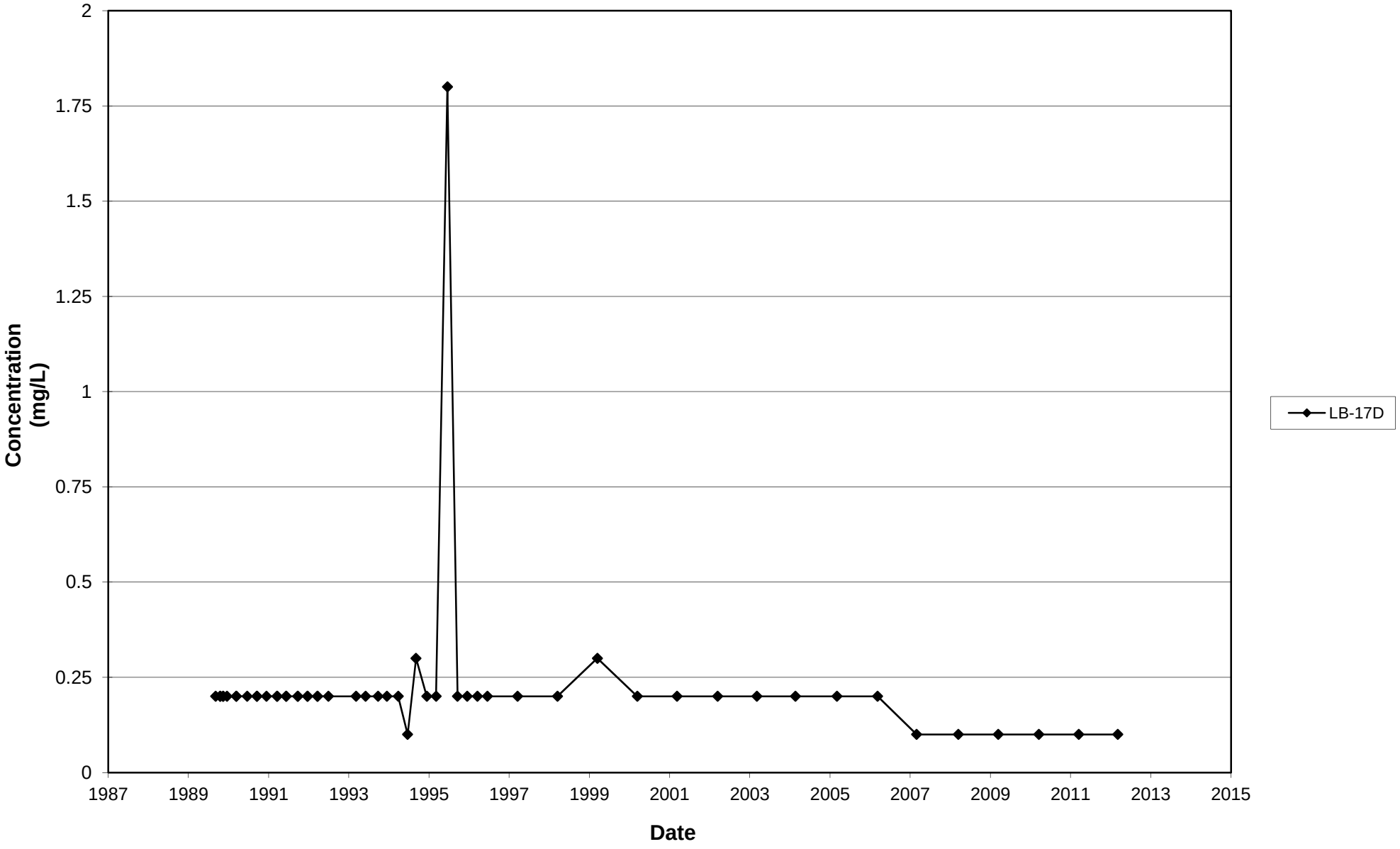
Leichner Landfill
Nitrate, LB-13D
1987 - 2012



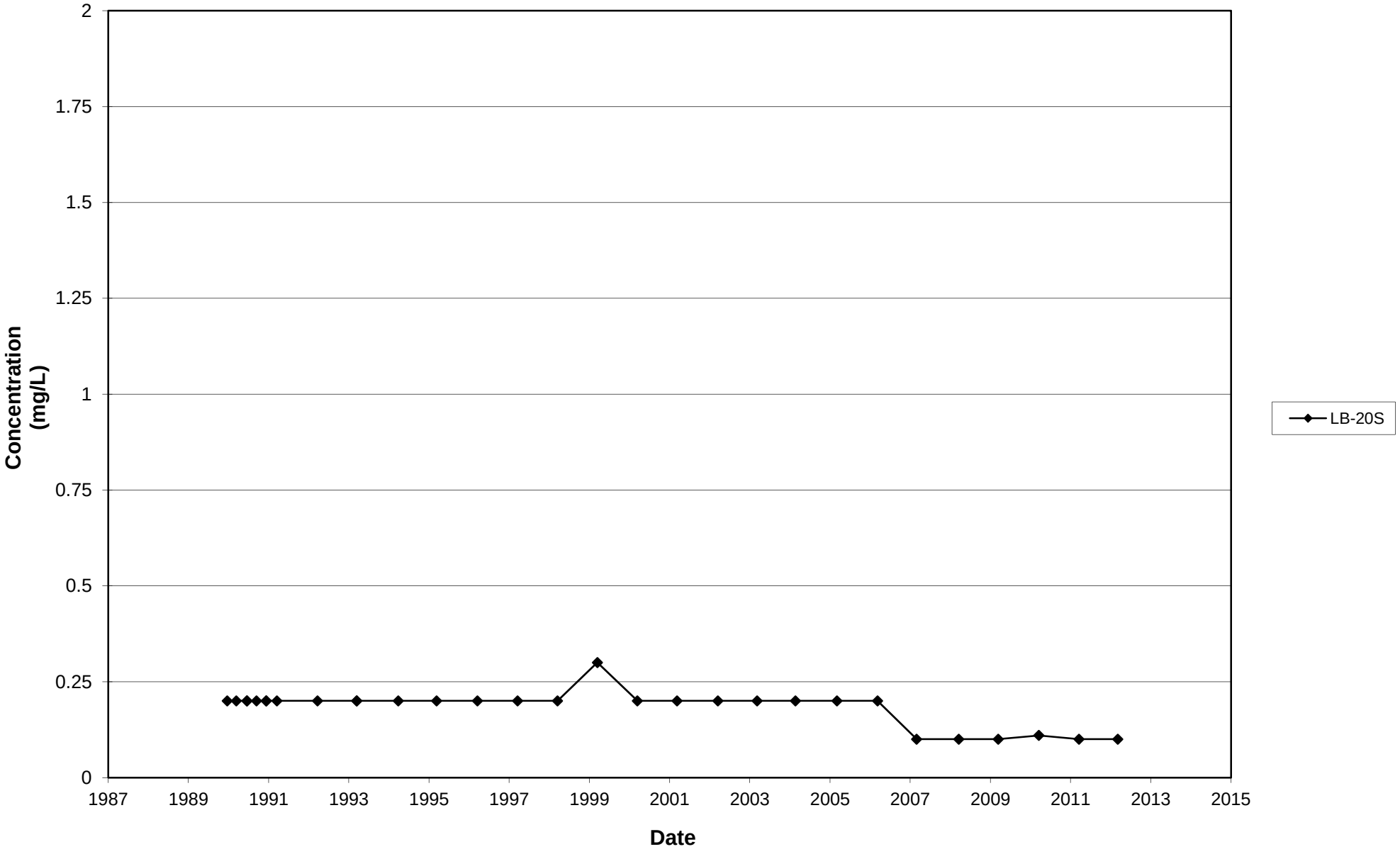
Leichner Landfill
Nitrate, LB-17I
1987 - 2012



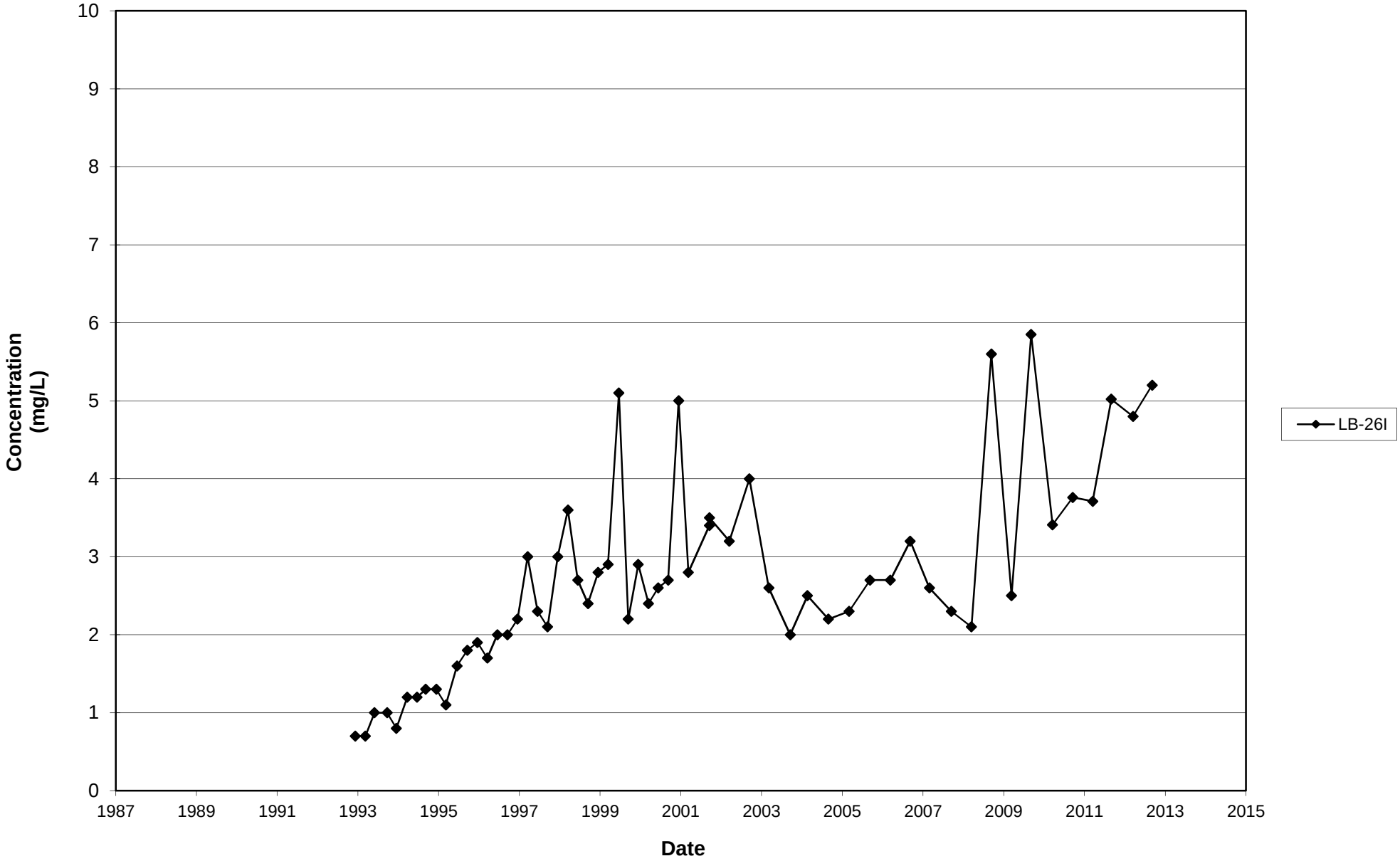
Leichner Landfill
Nitrate, LB-17D
1987 - 2012



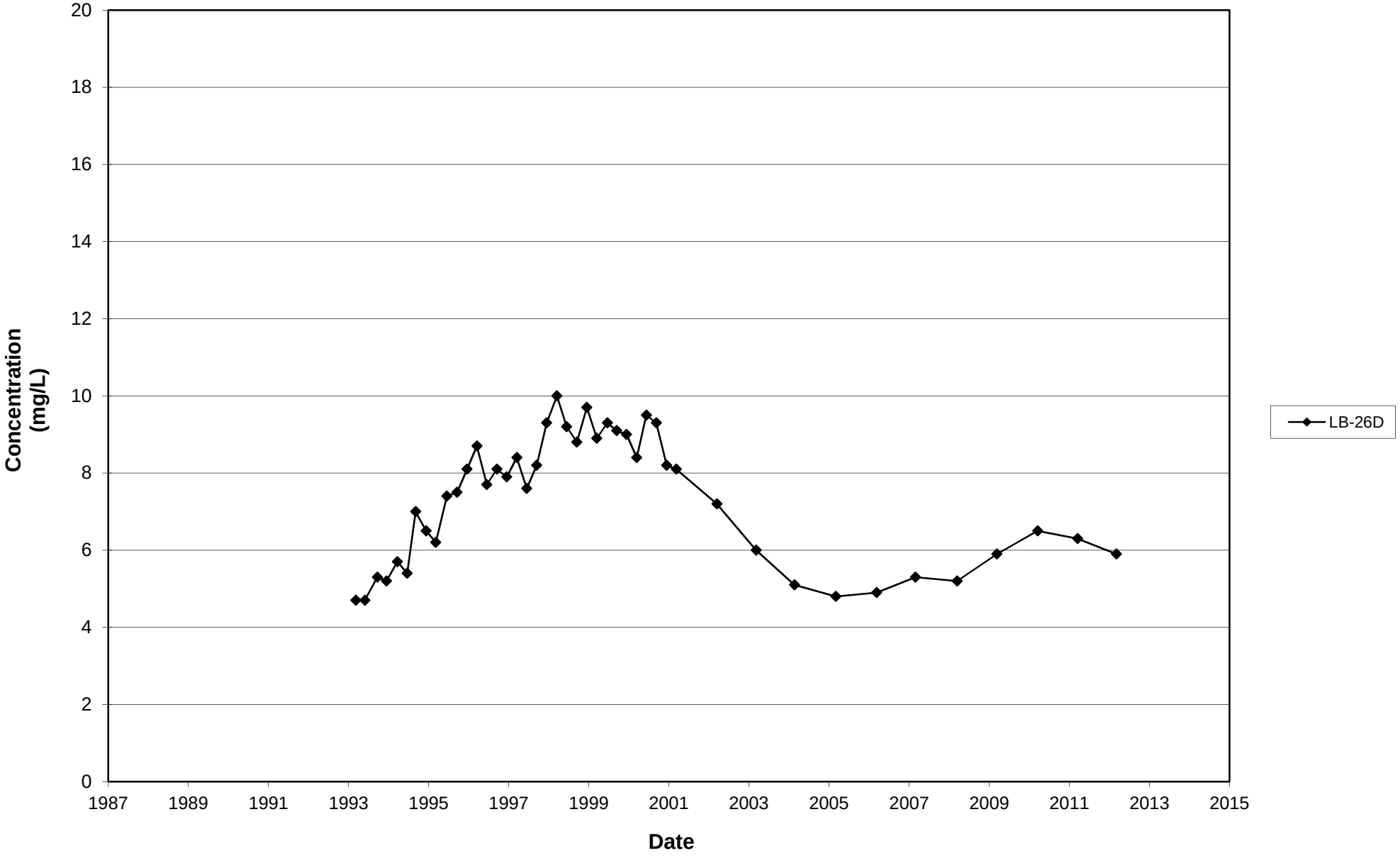
Leichner Landfill
Nitrate, LB-20S
1987 - 2012



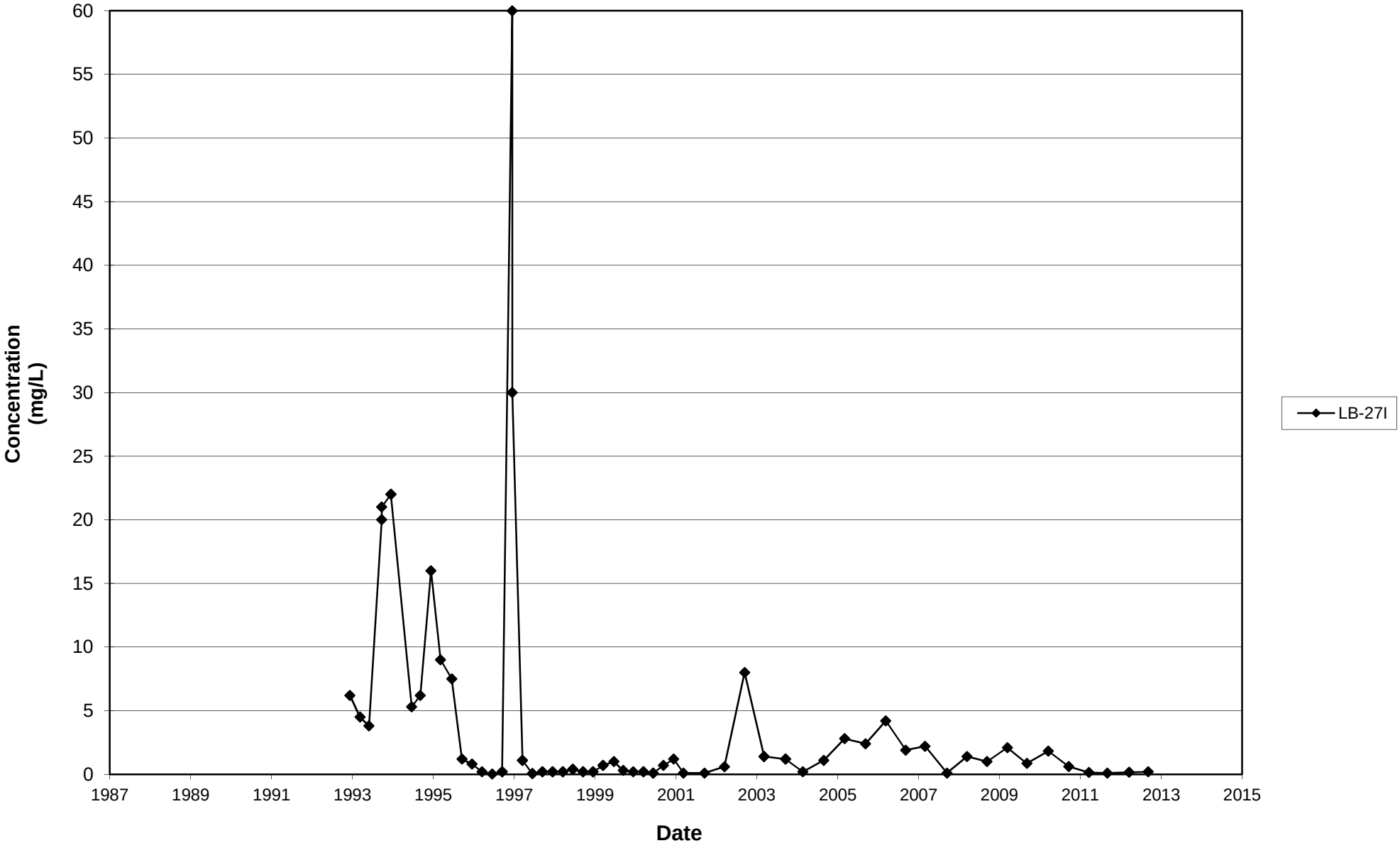
Leichner Landfill
Nitrate, LB-26I
1987 - 2012



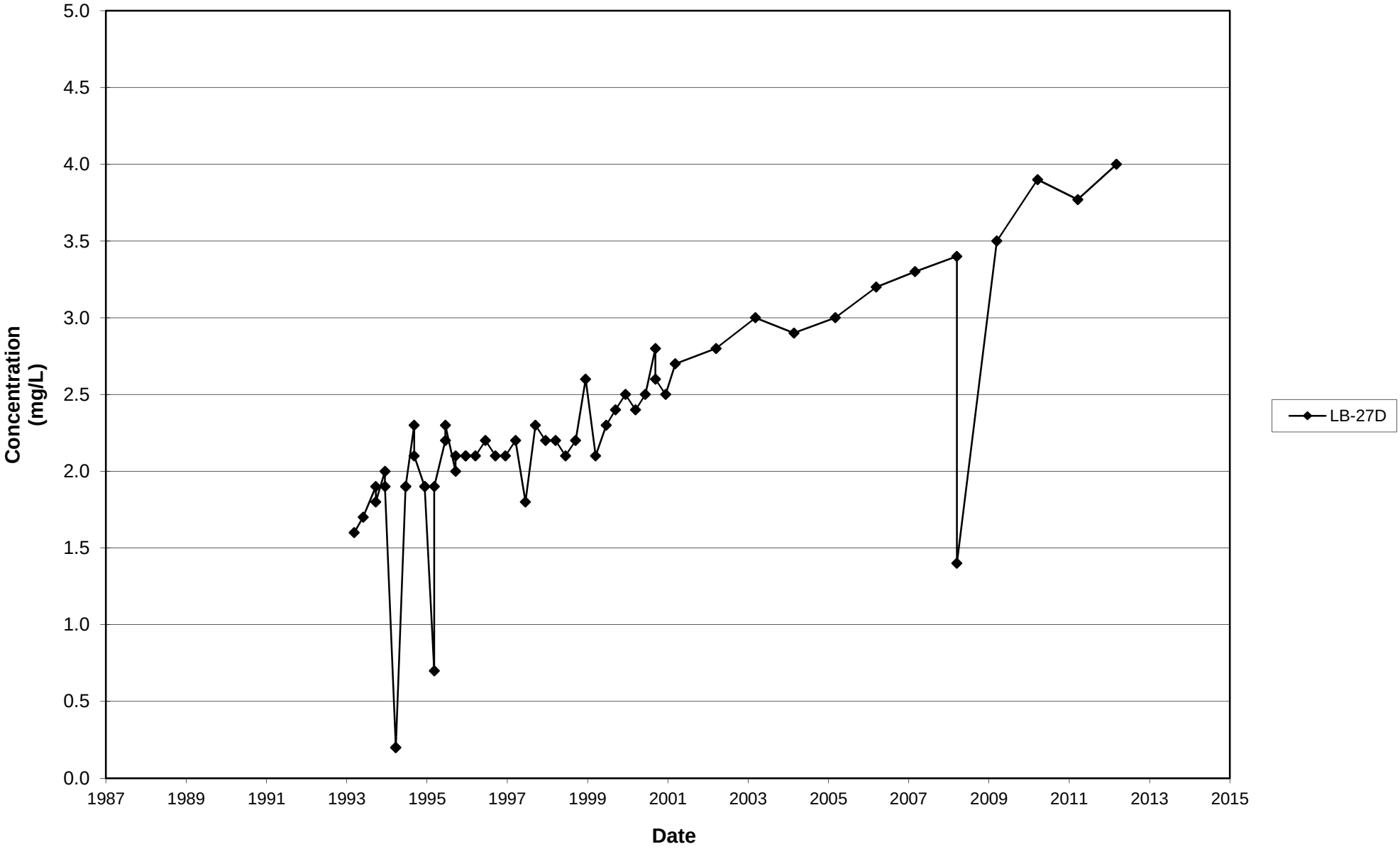
Leichner Landfill
Nitrate, LB-26D
1987 - 2012



Leichner Landfill
Nitrate, LB-27I
1987 - 2012

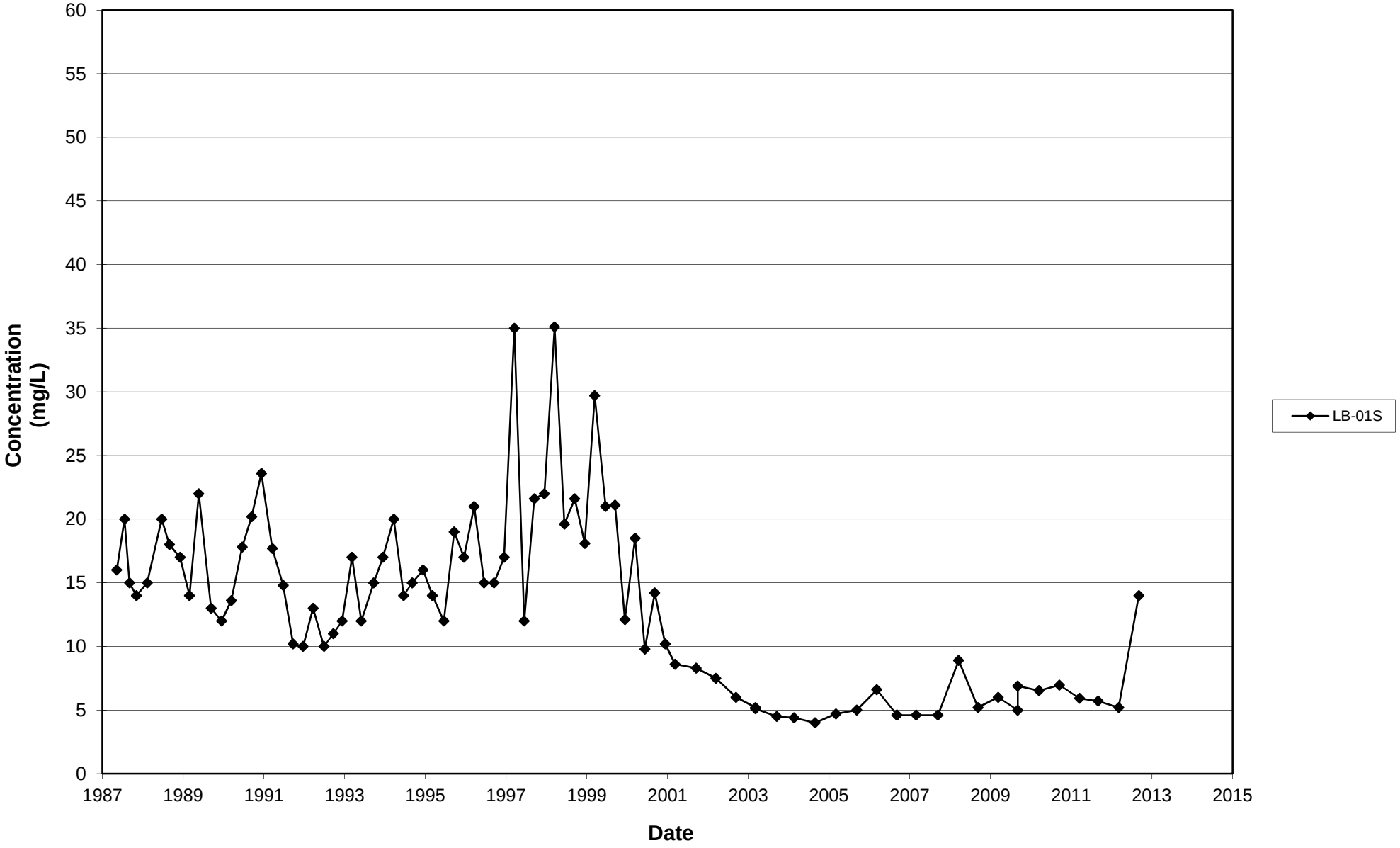


Leichner Landfill
Nitrate, LB-27D
1987 - 2012

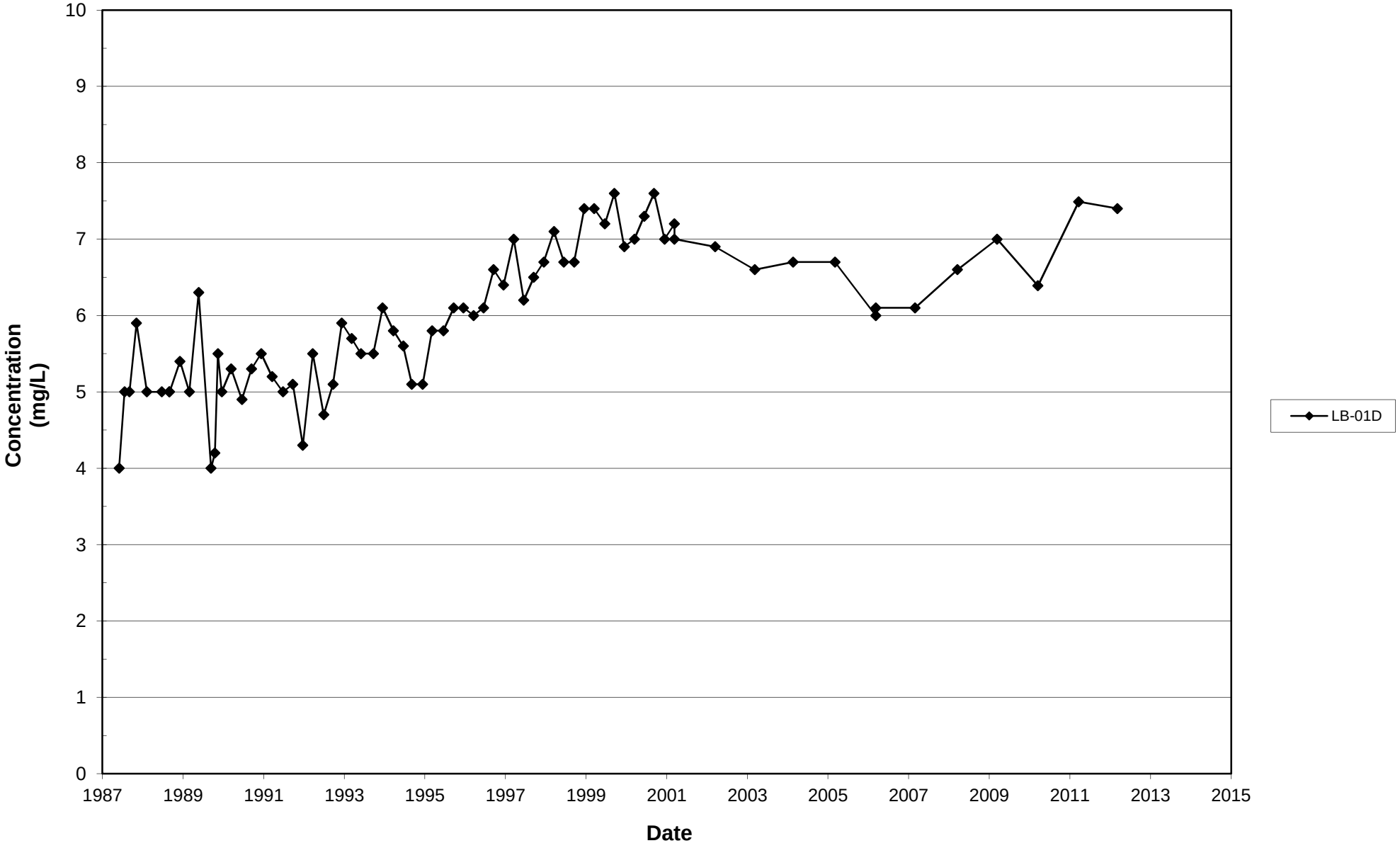


Chloride

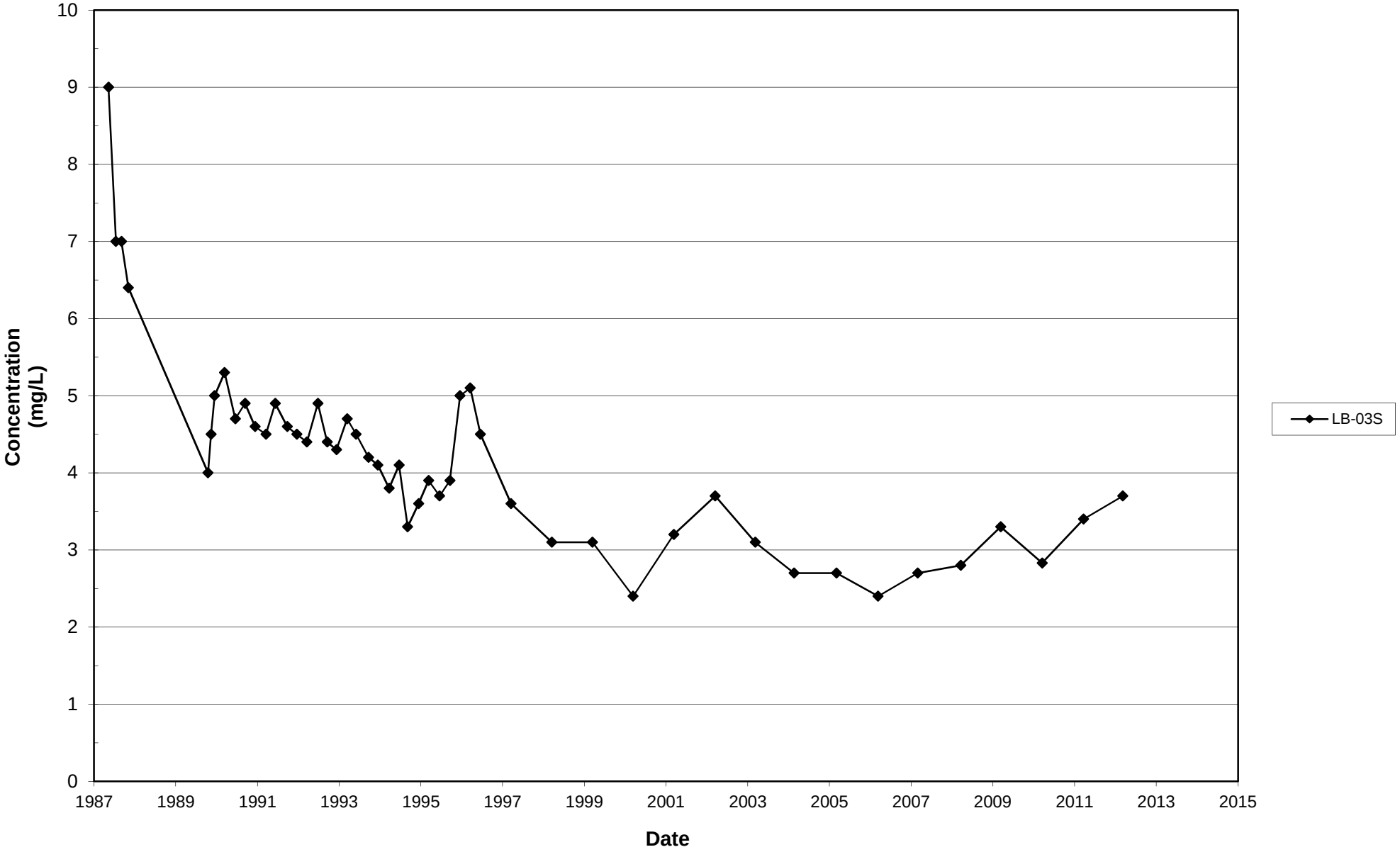
Leichner Landfill
Chloride, LB-01S
1987 - 2012



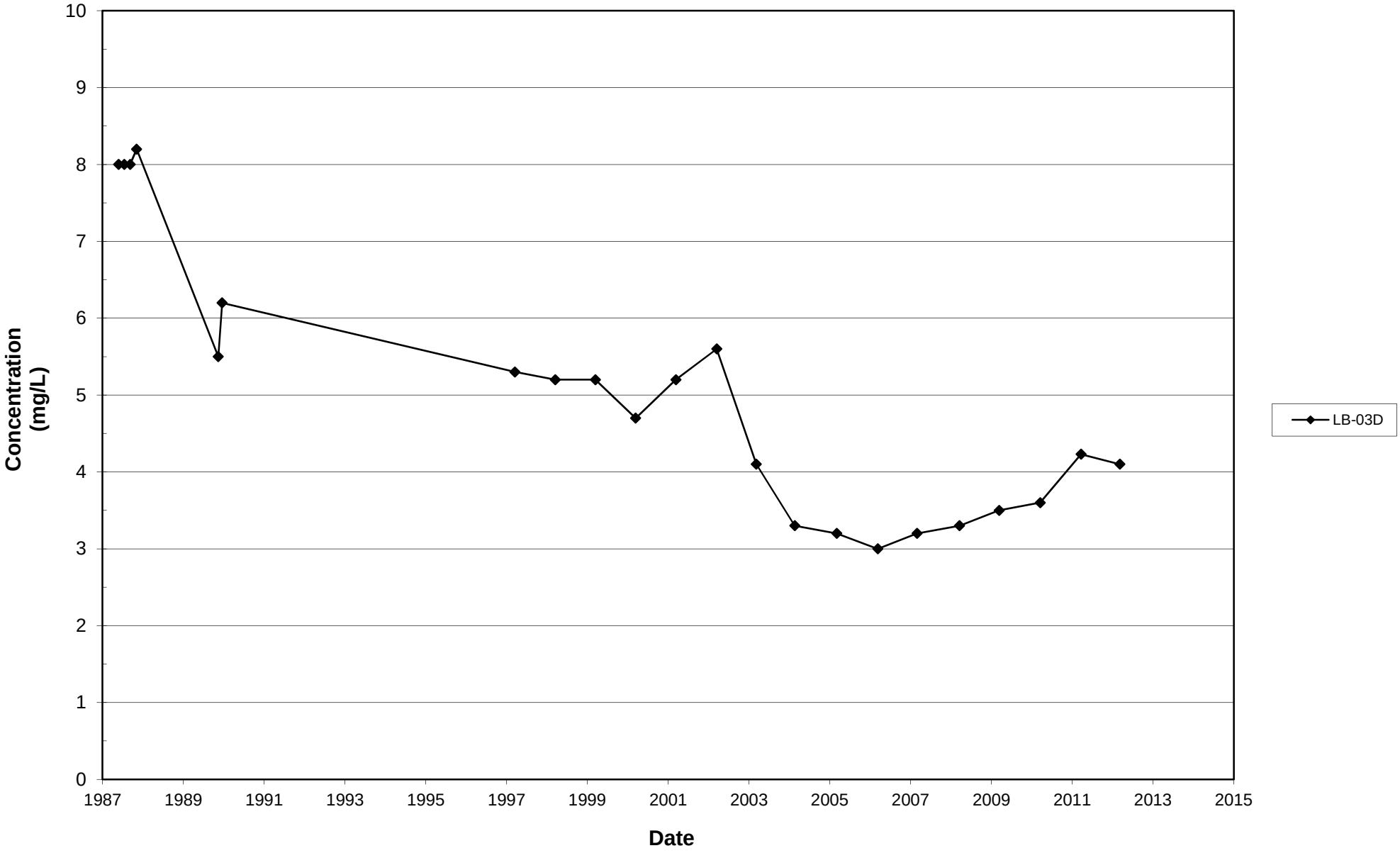
Leichner Landfill
Chloride, LB-01D
1987 - 2012



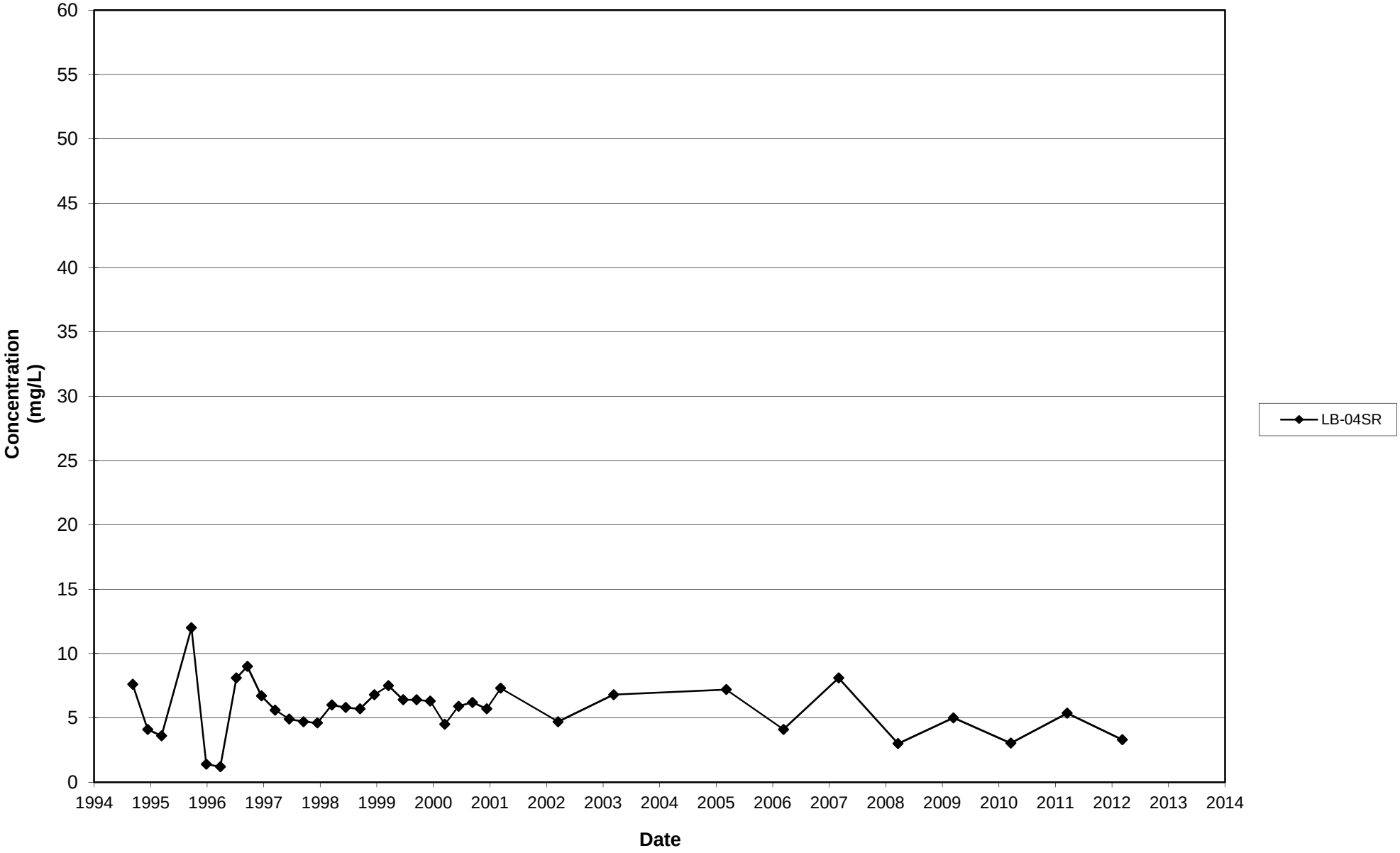
Leichner Landfill
Chloride, LB-03S
1987 - 2012



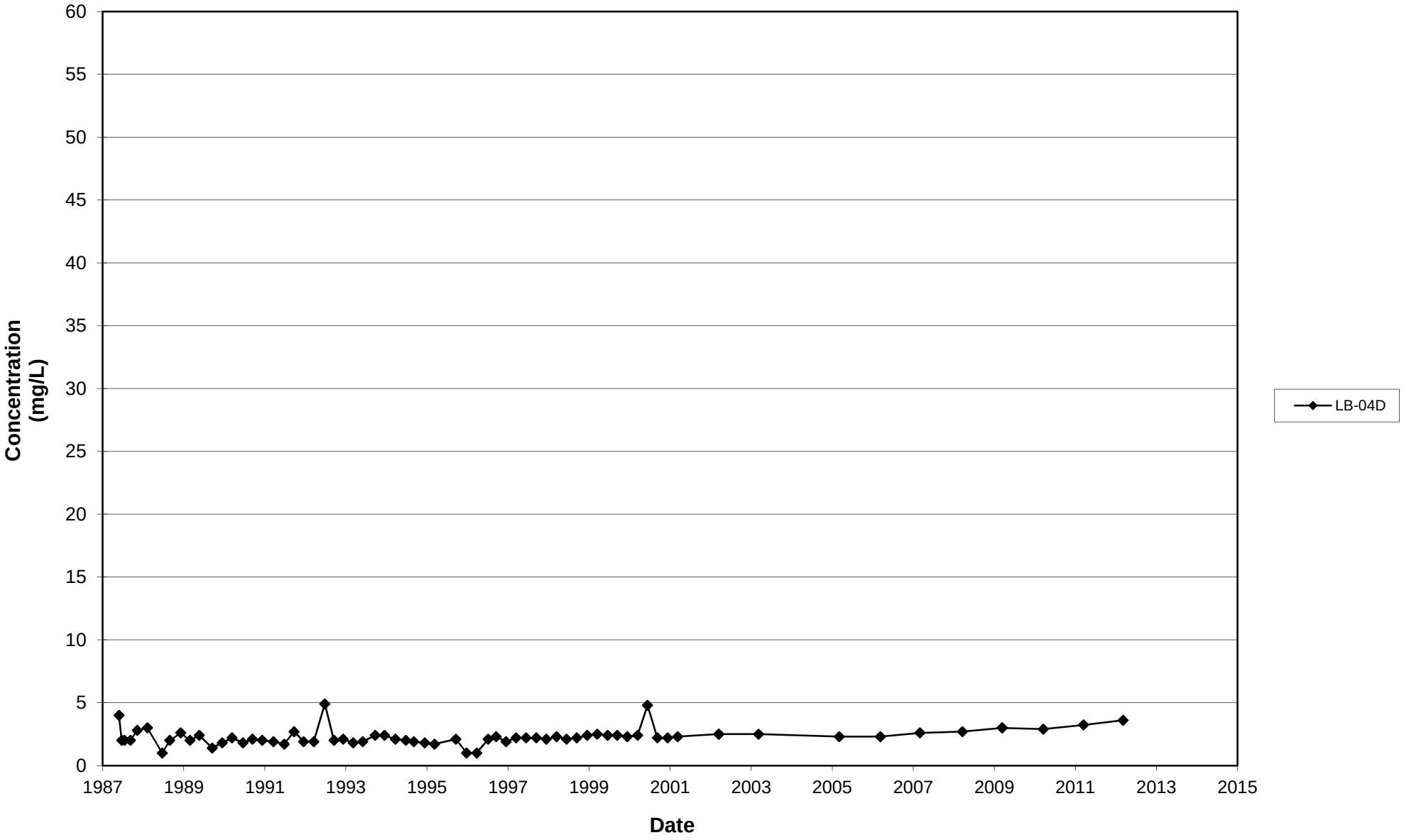
Leichner Landfill
Chloride, LB-03D
1987 - 2012



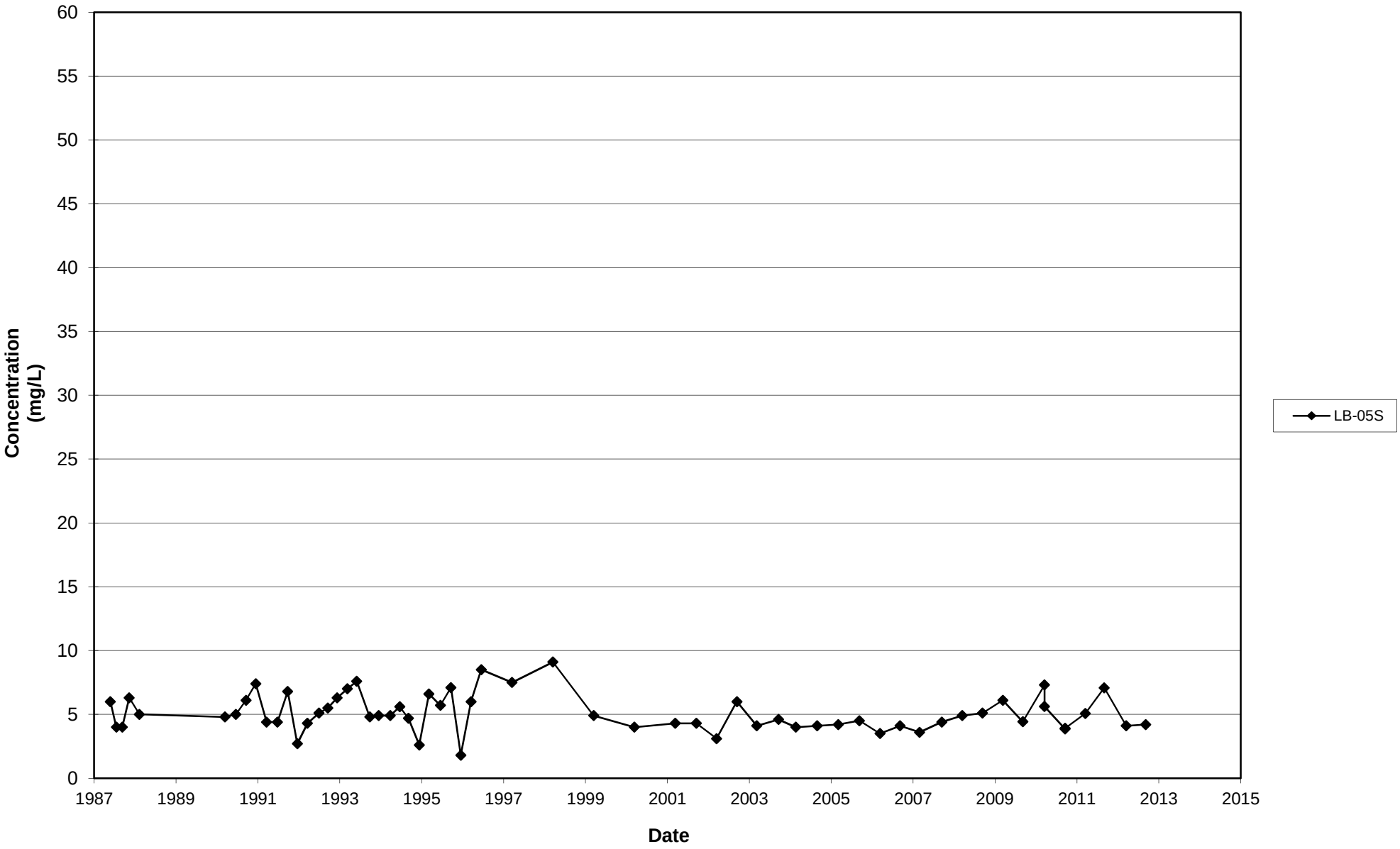
Leichner Landfill
Chloride, LB-04SR
1994 - 2012



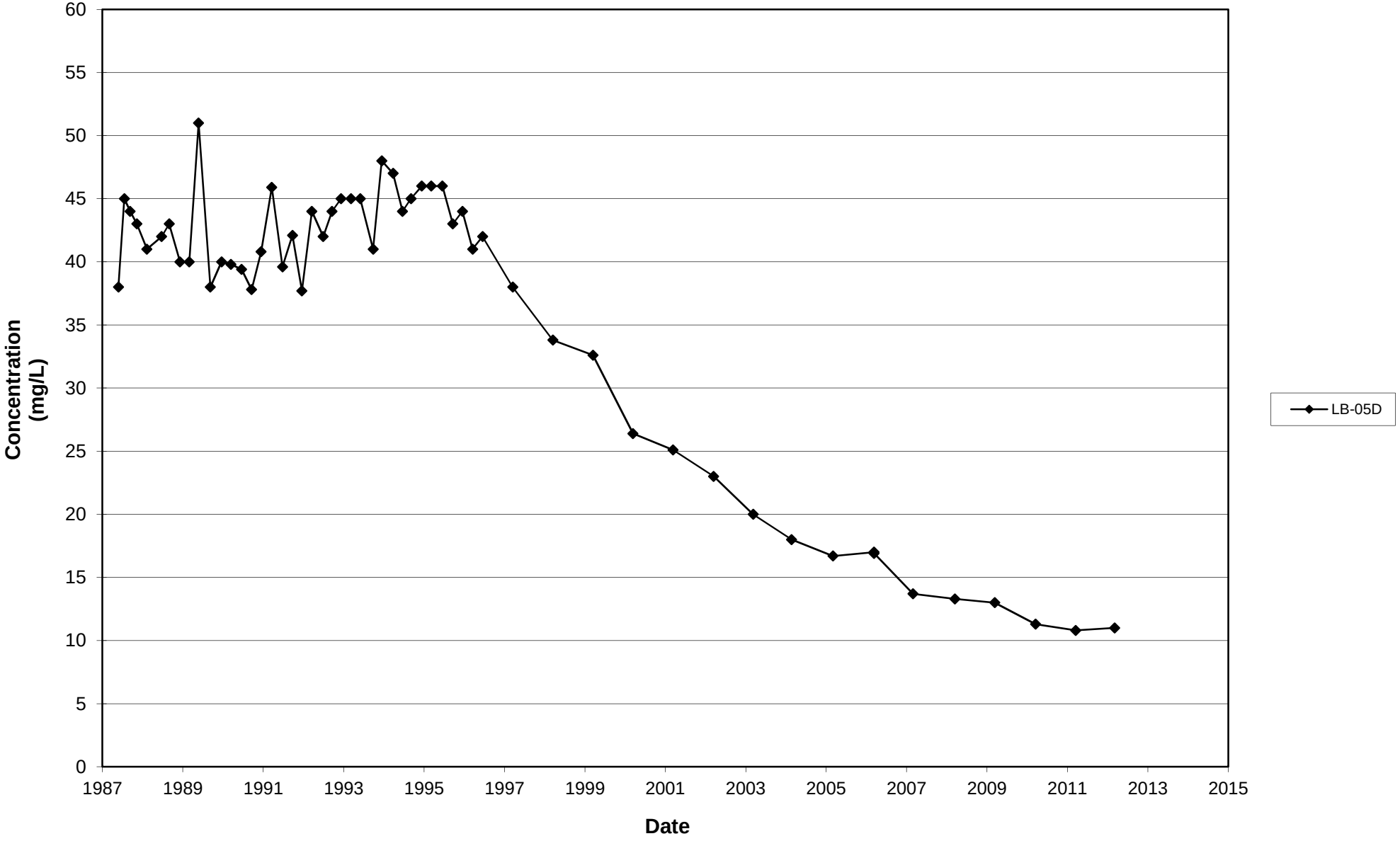
Leichner Landfill
Chloride, LB-04D
1987 - 2012



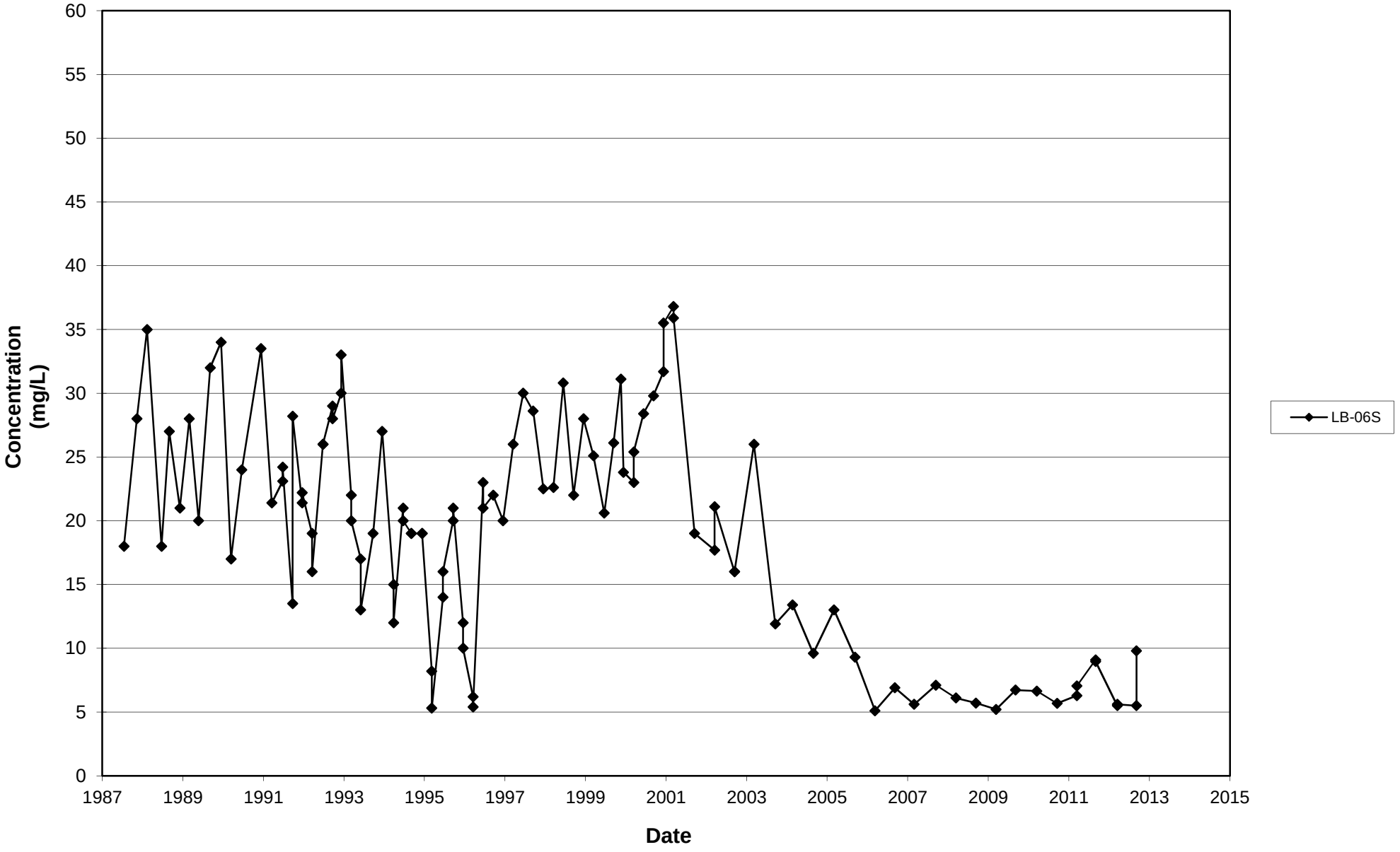
Leichner Landfill
Chloride, LB-05S
1987 - 2012



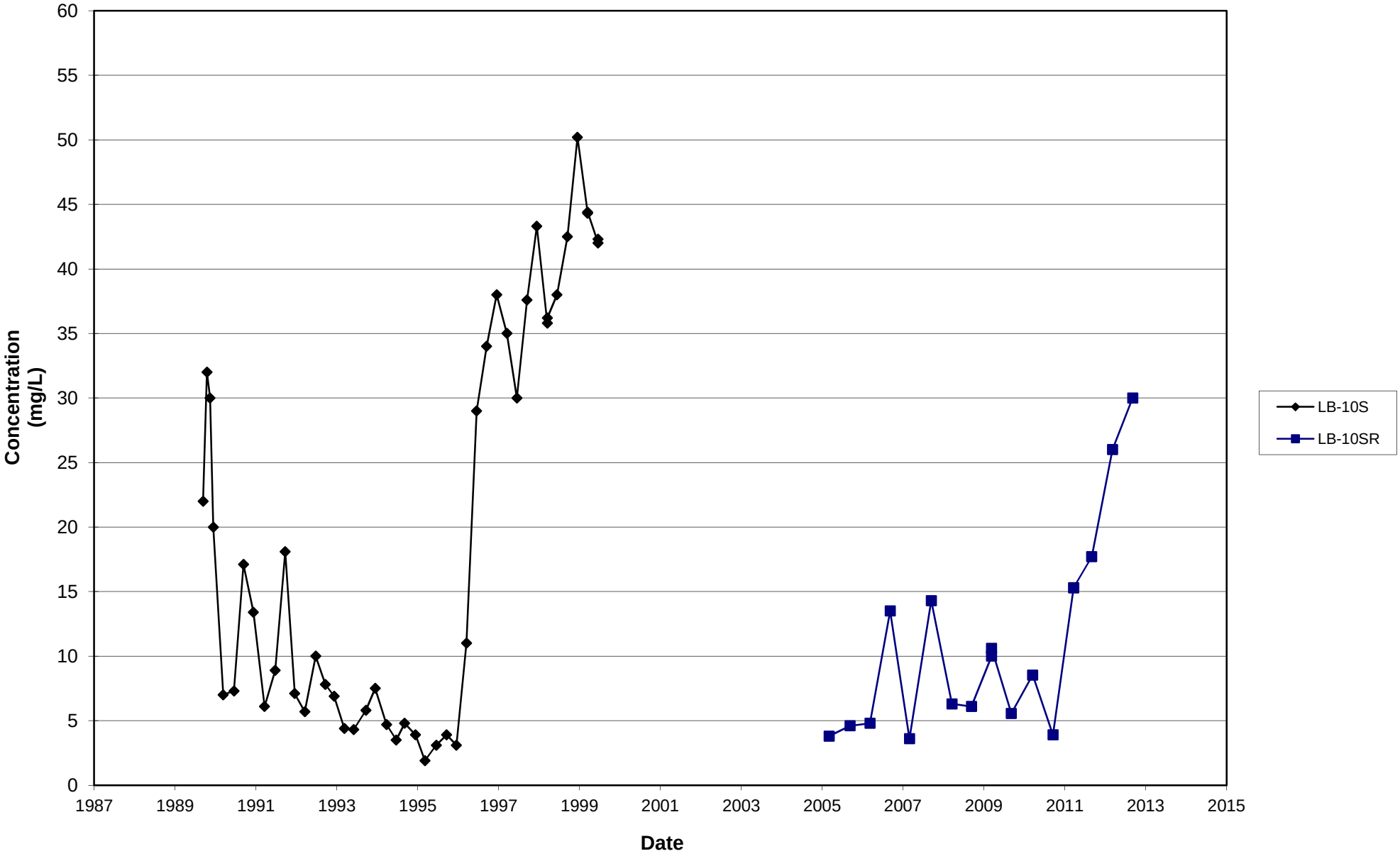
Leichner Landfill
Chloride, LB-05D
1987 - 2012



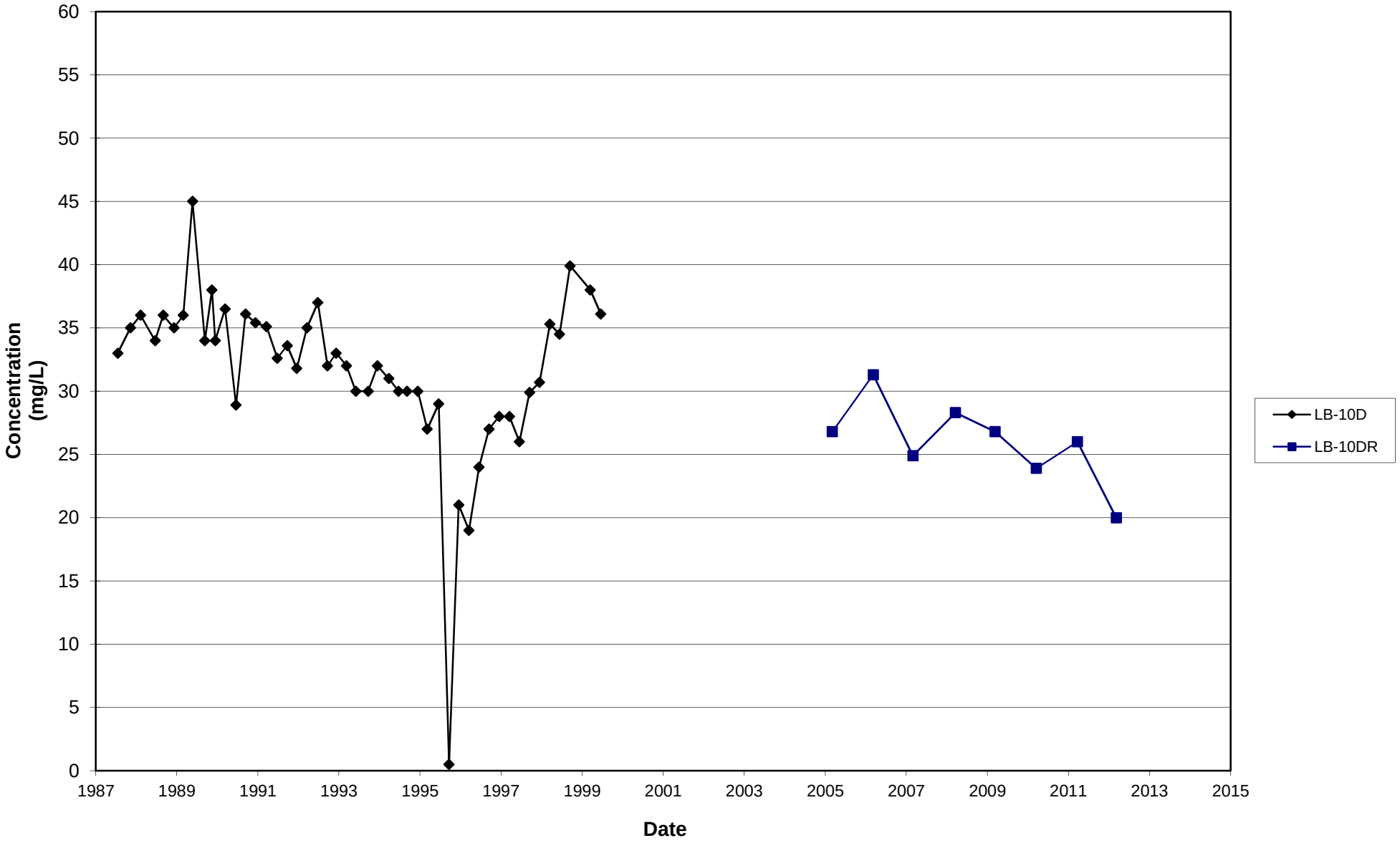
Leichner Landfill
Chloride, LB-06S
1987 - 2012



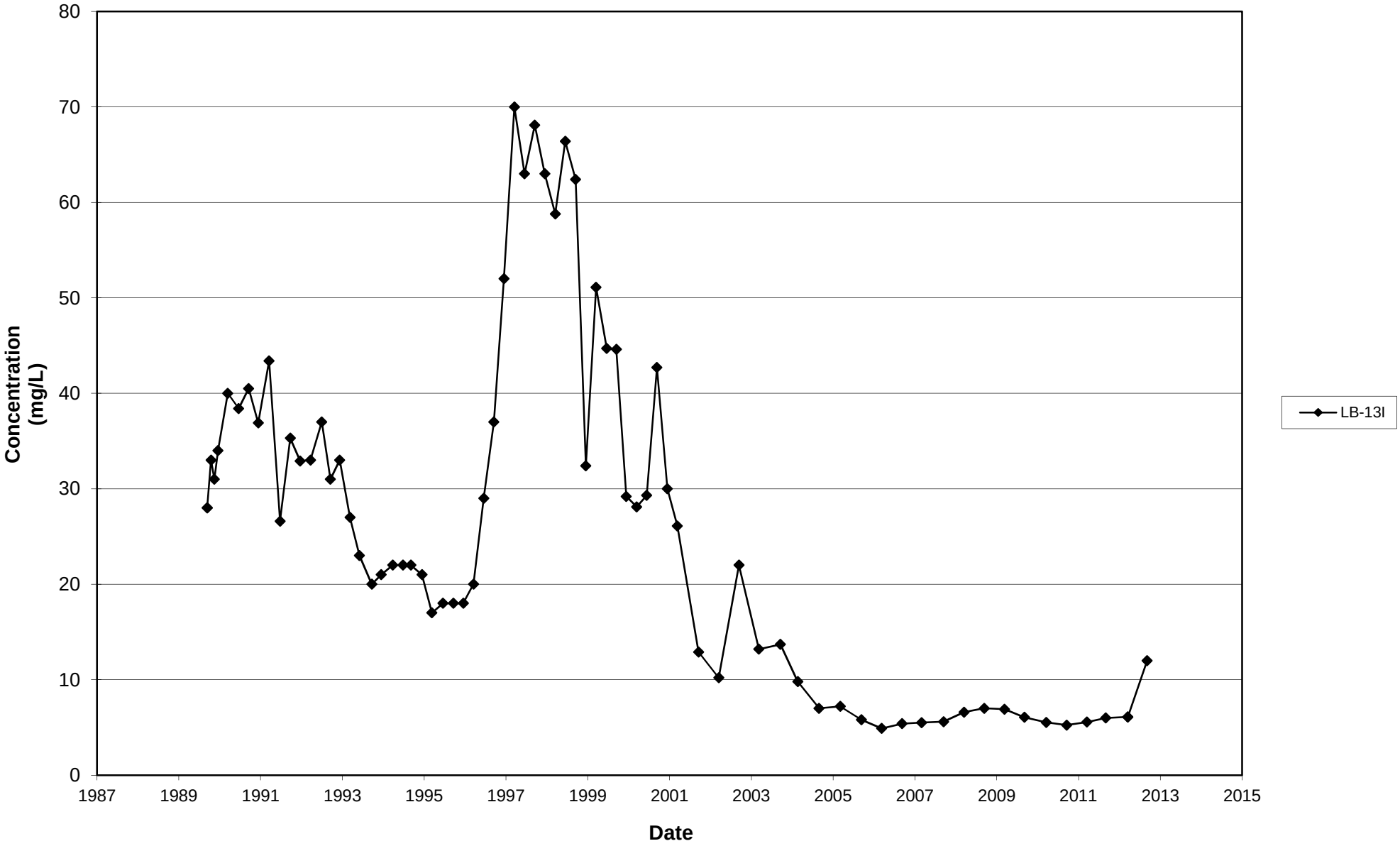
Leichner Landfill
Chloride, LB-10S and LB-10SR
1987 - 2012



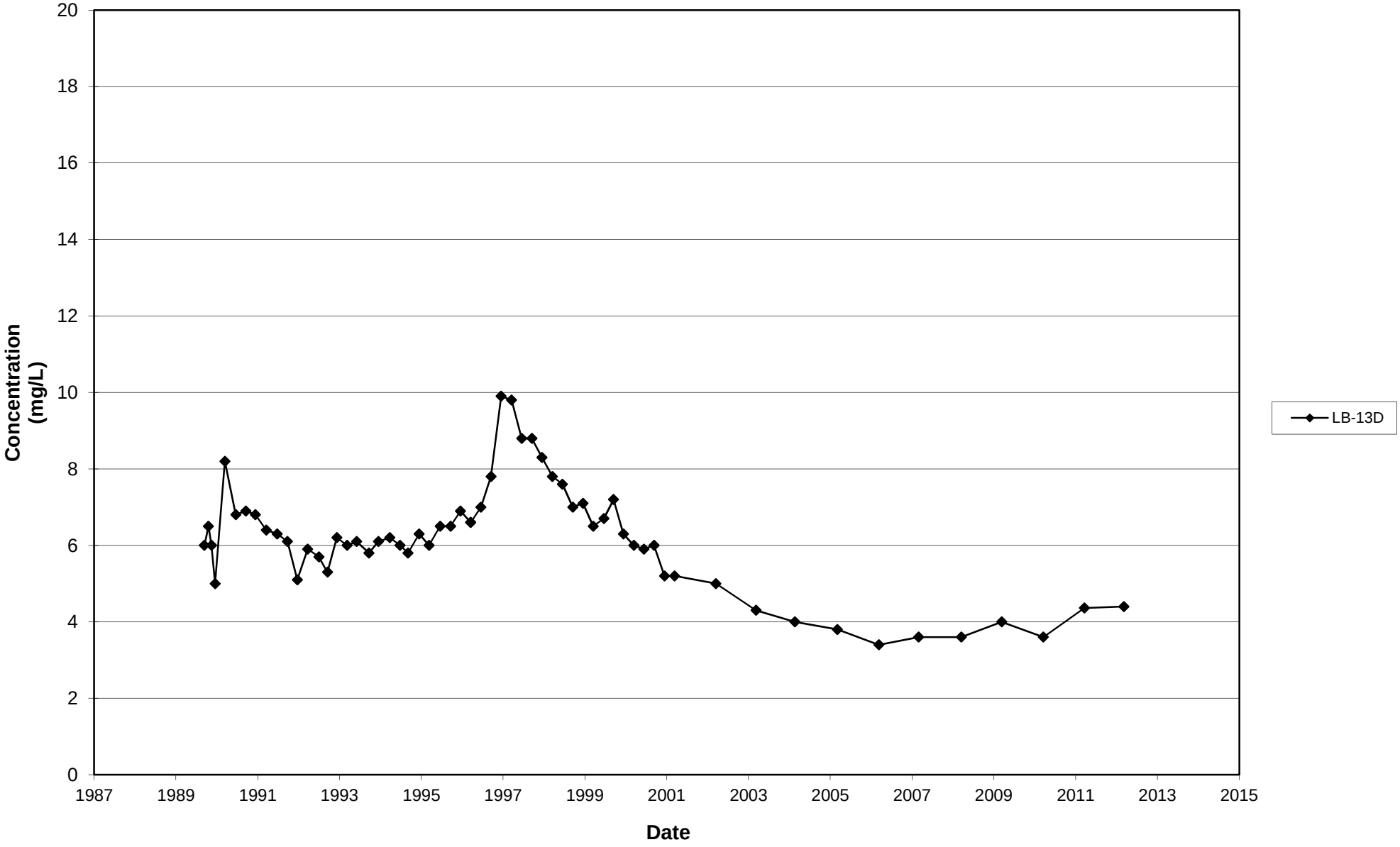
Leichner Landfill
Chloride, LB-10D and LB-10DR
1987 - 2012



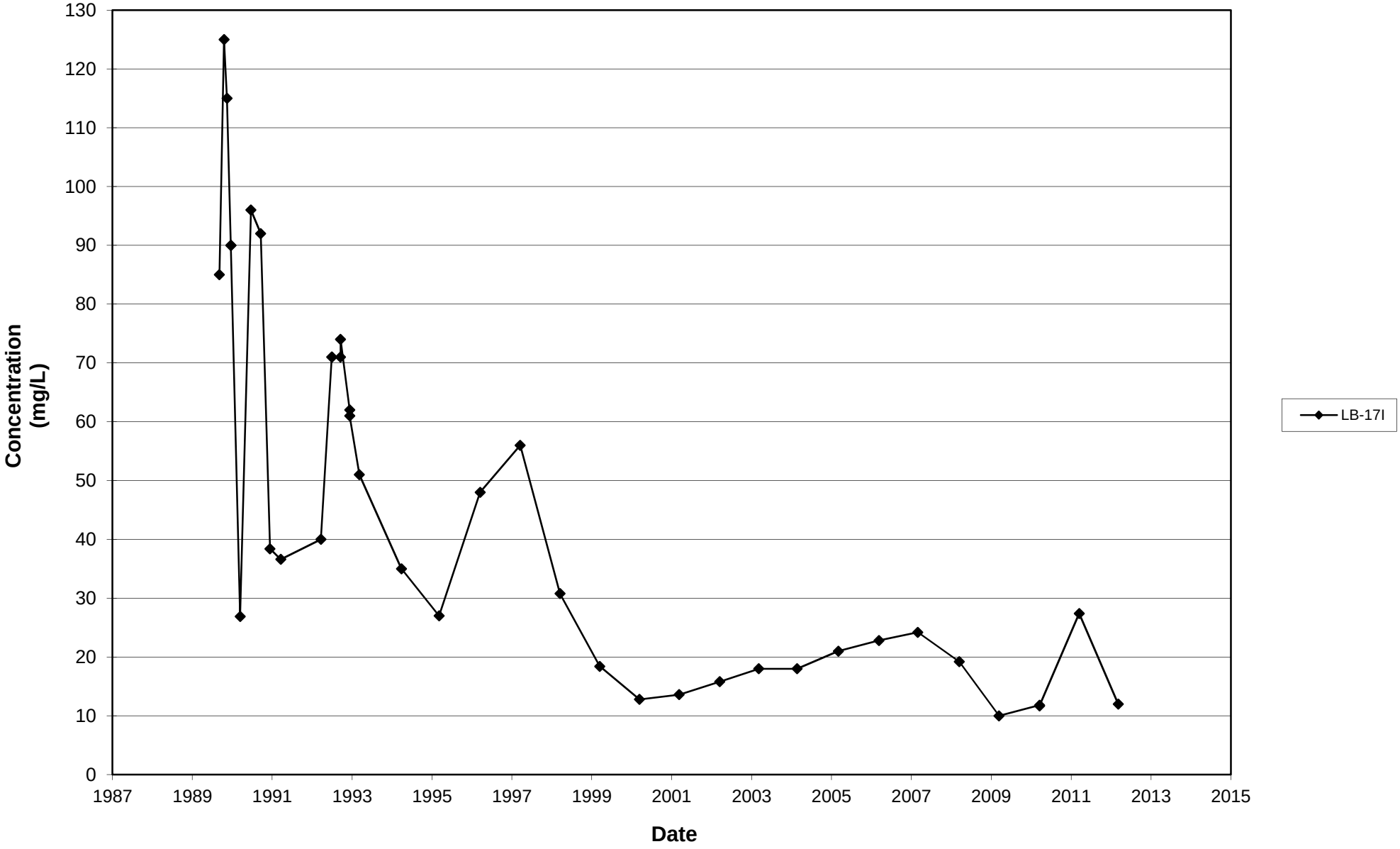
Leichner Landfill
Chloride, LB-13I
1987 - 2012



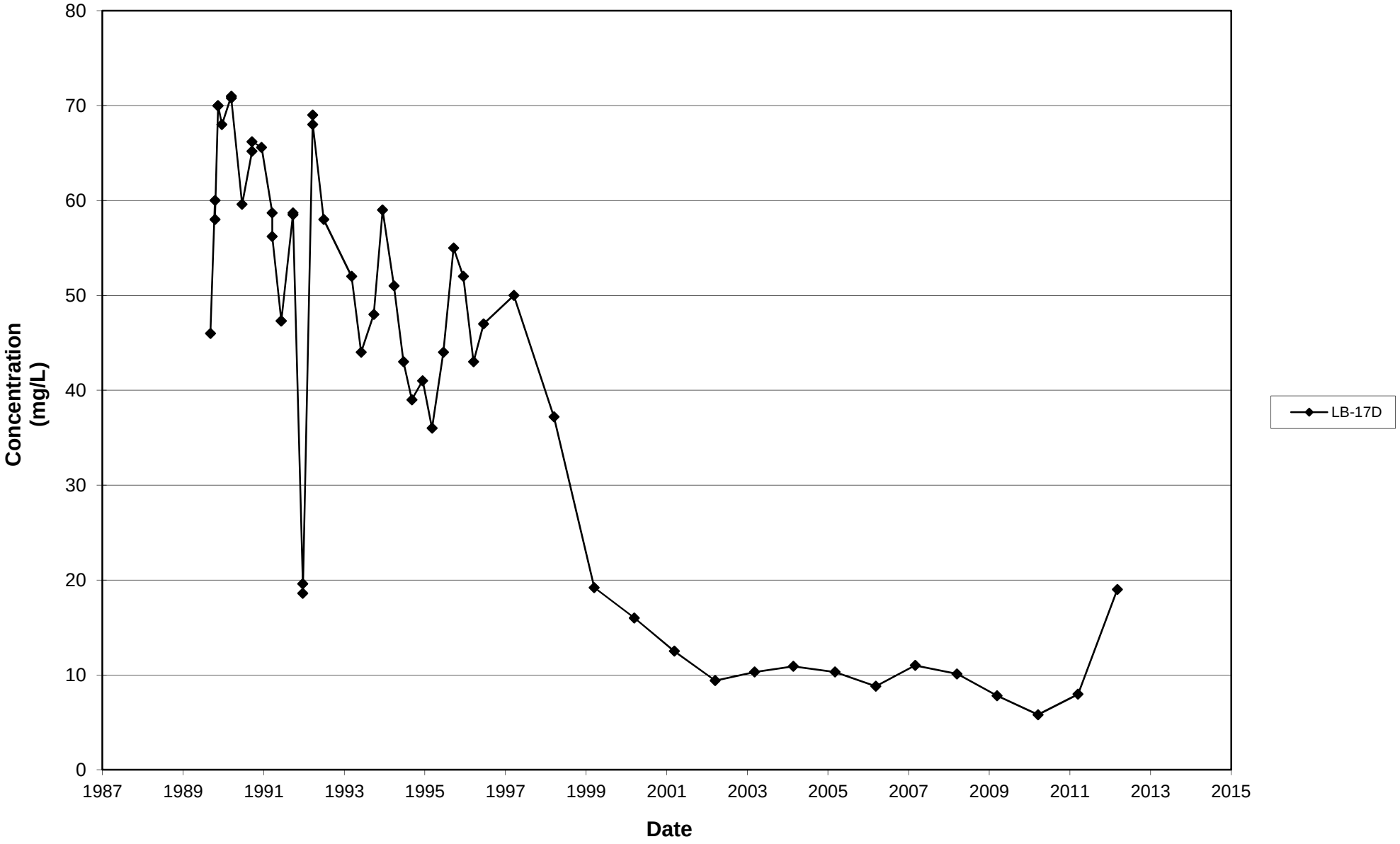
Leichner Landfill
Chloride, LB-13D
1987 - 2012



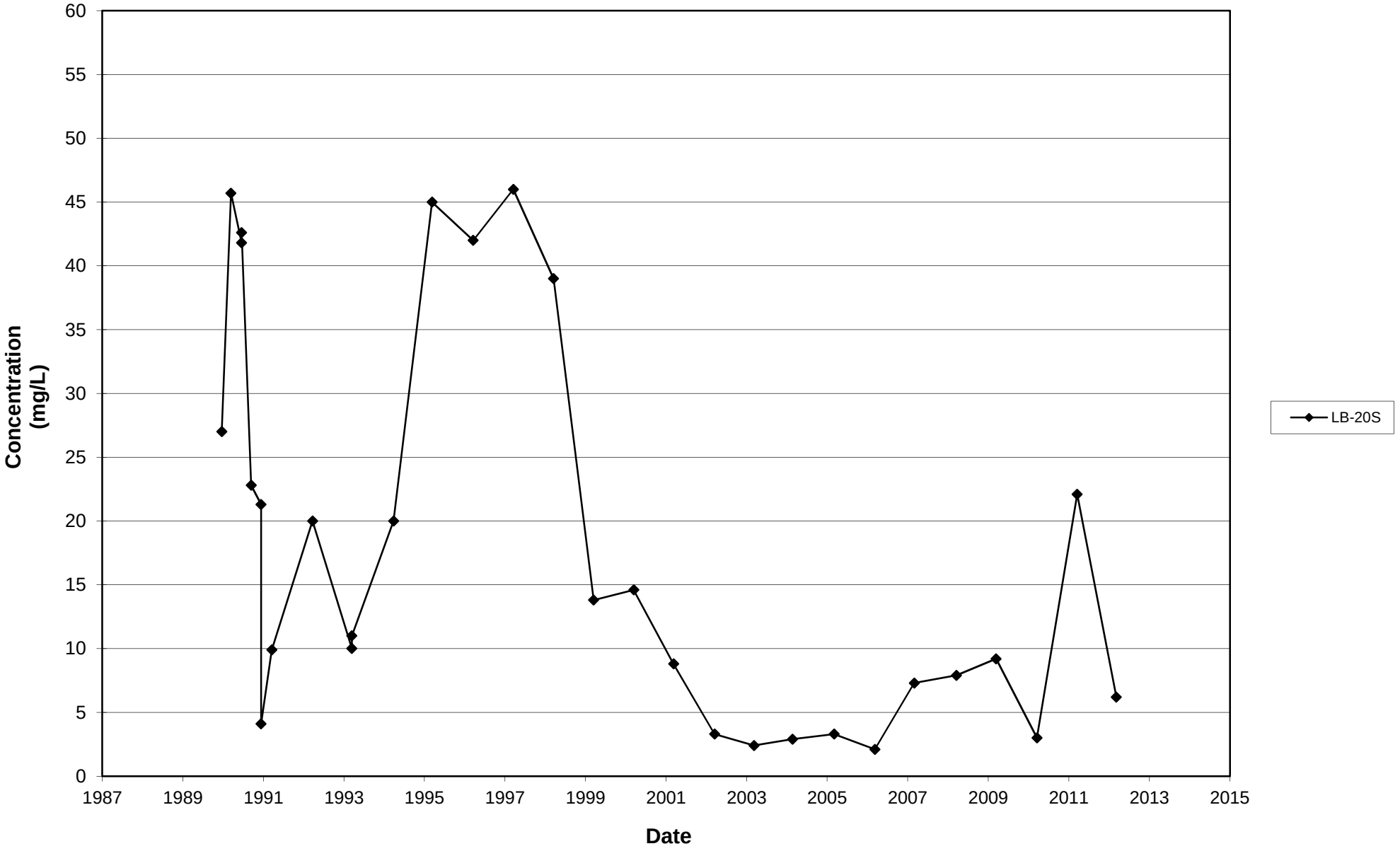
Leichner Landfill
Chloride, LB-17I
1987 - 2012



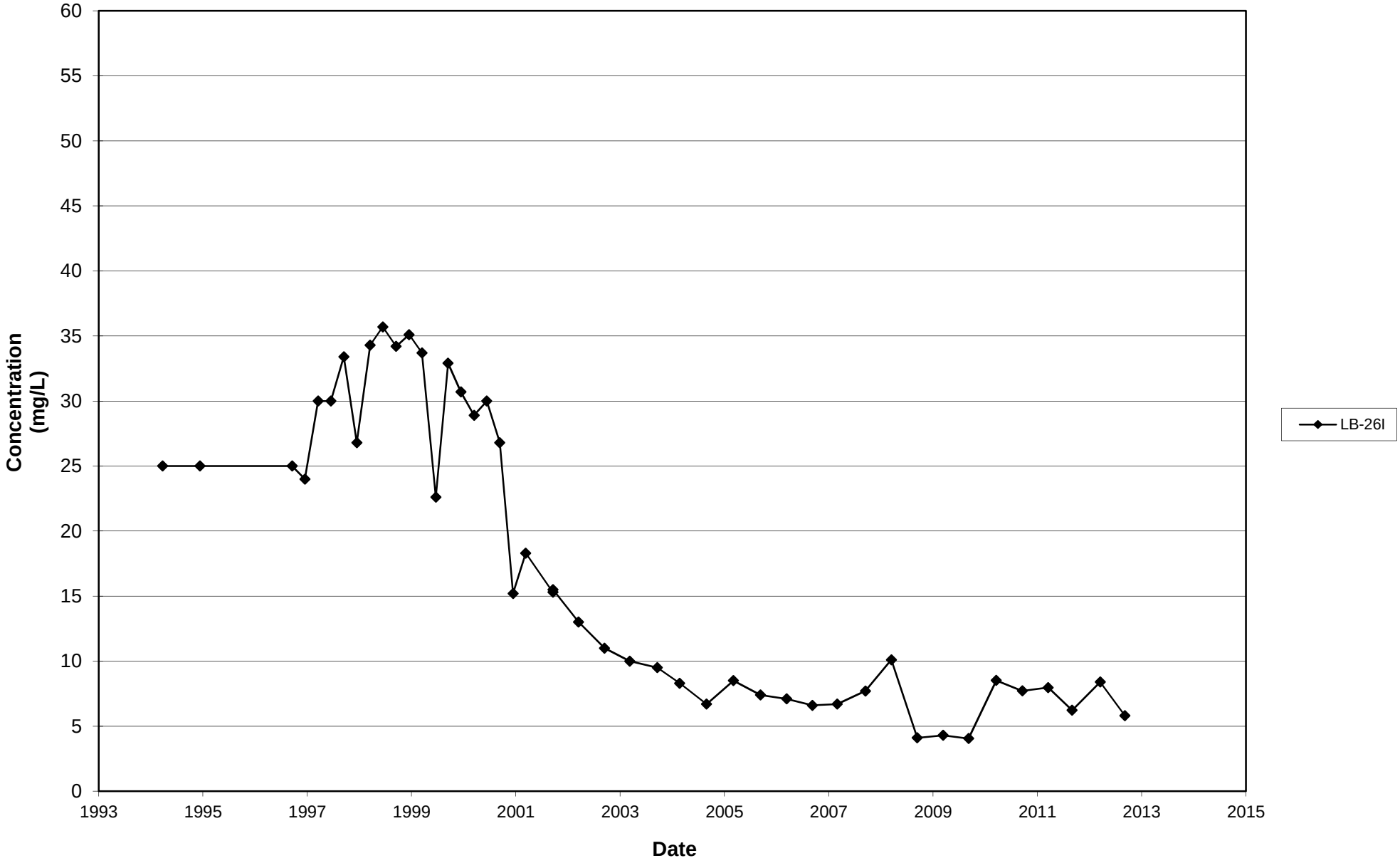
Leichner Landfill
Chloride, LB-17D
1987 - 2012



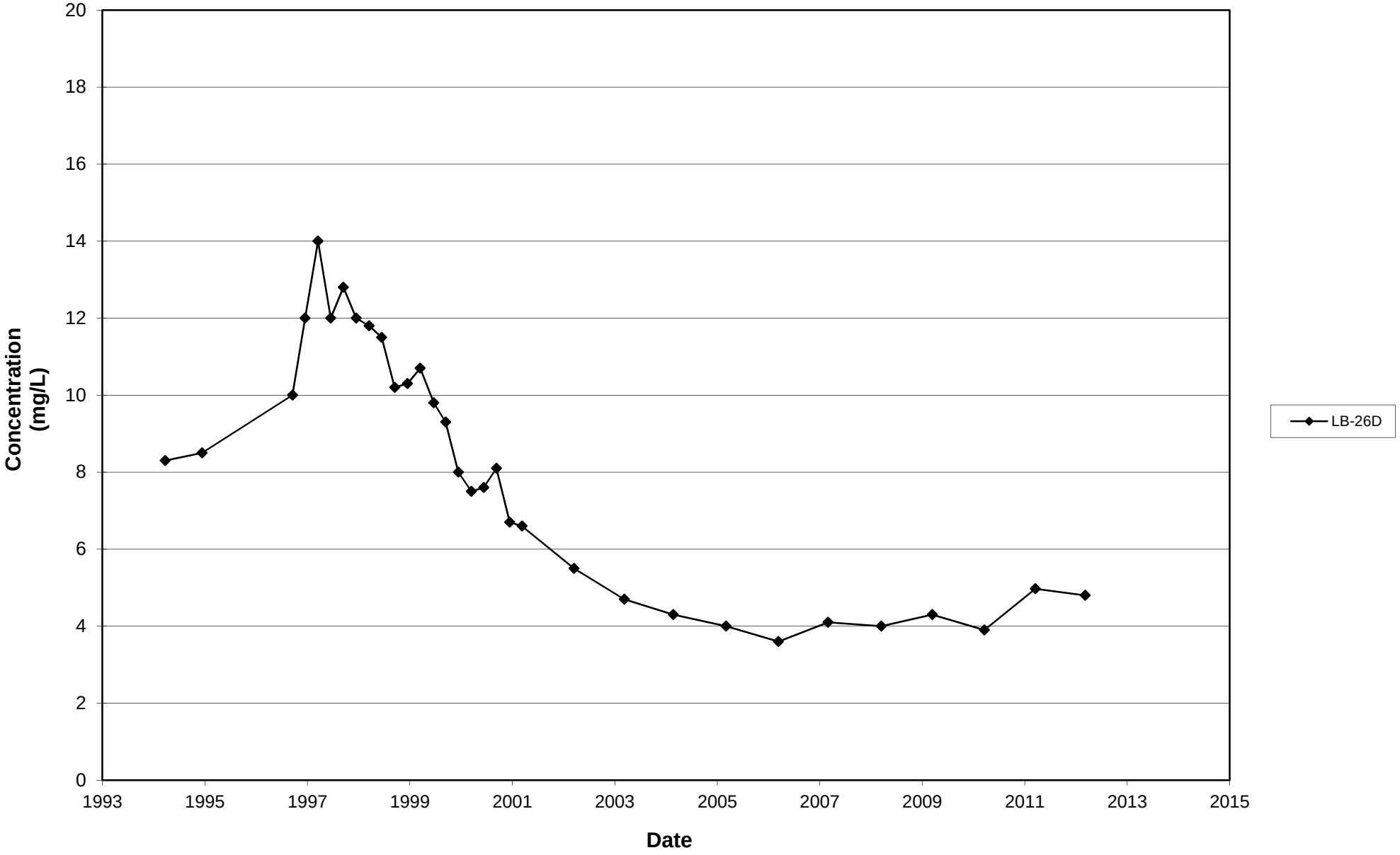
Leichner Landfill
Chloride, LB-20S
1987 - 2012



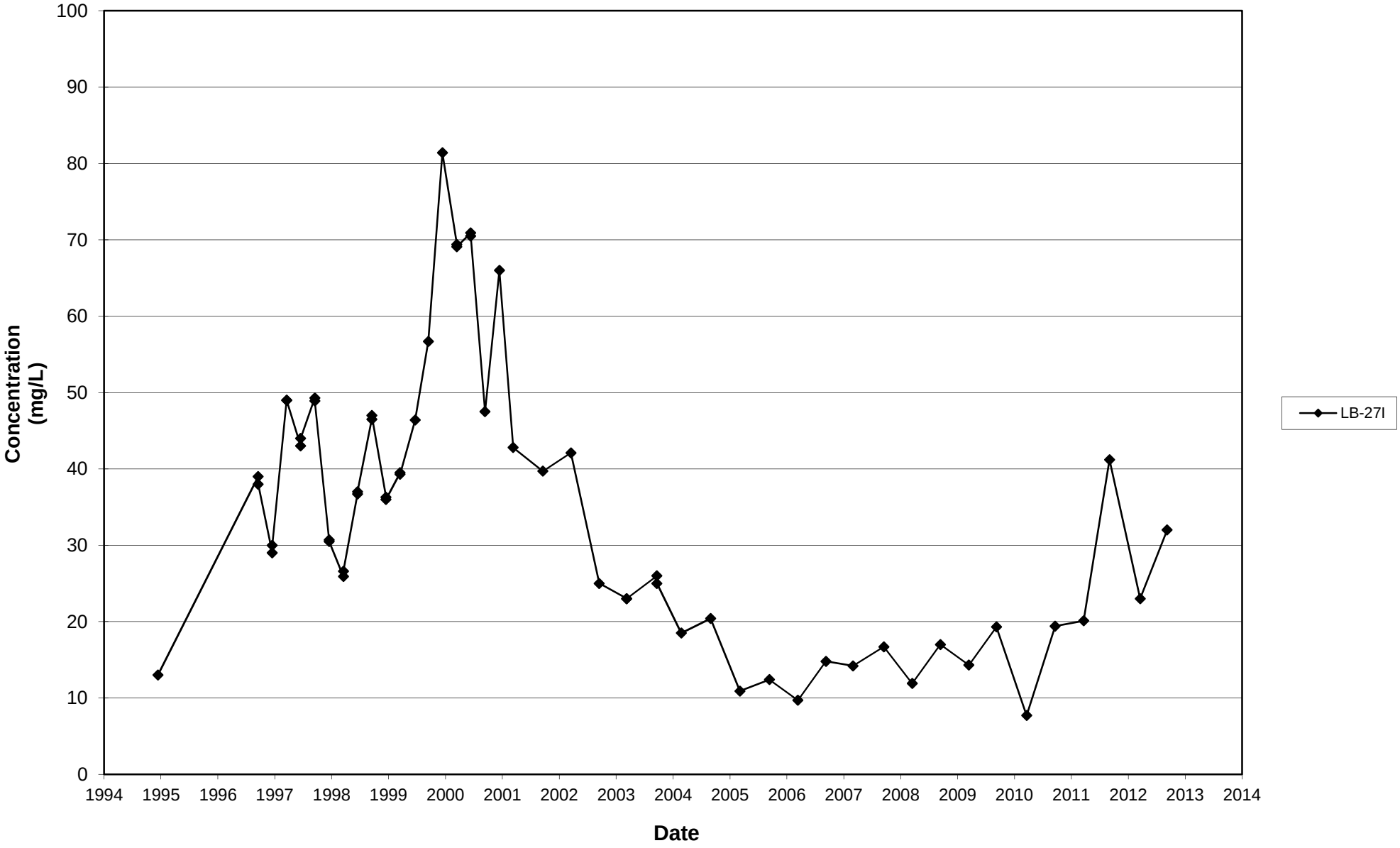
Leichner Landfill
Chloride, LB-26I
1987 - 2012



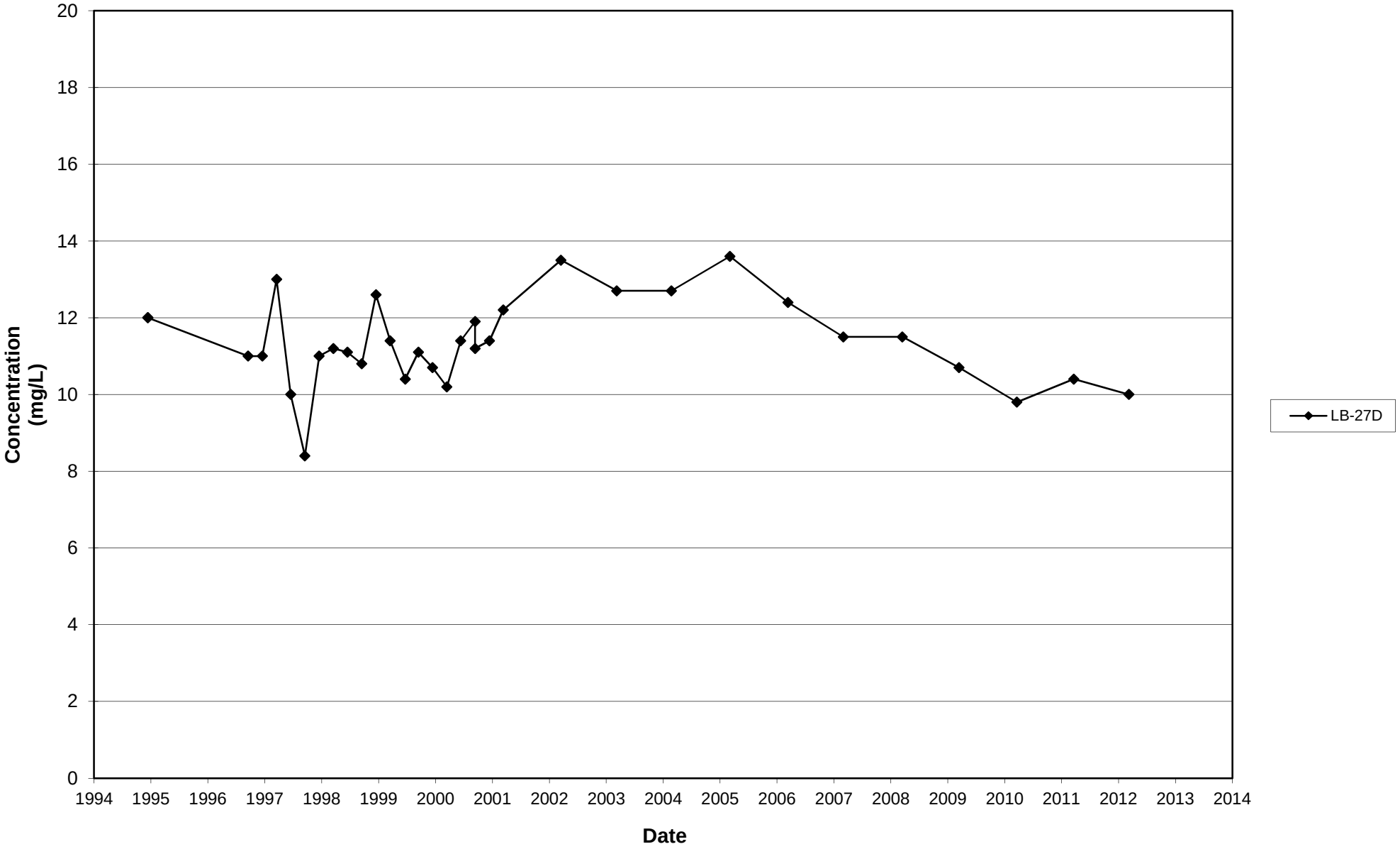
Leichner Landfill
Chloride, LB-26D
1987 - 2012



Leichner Landfill
Chloride, LB-27I
1994 - 2012

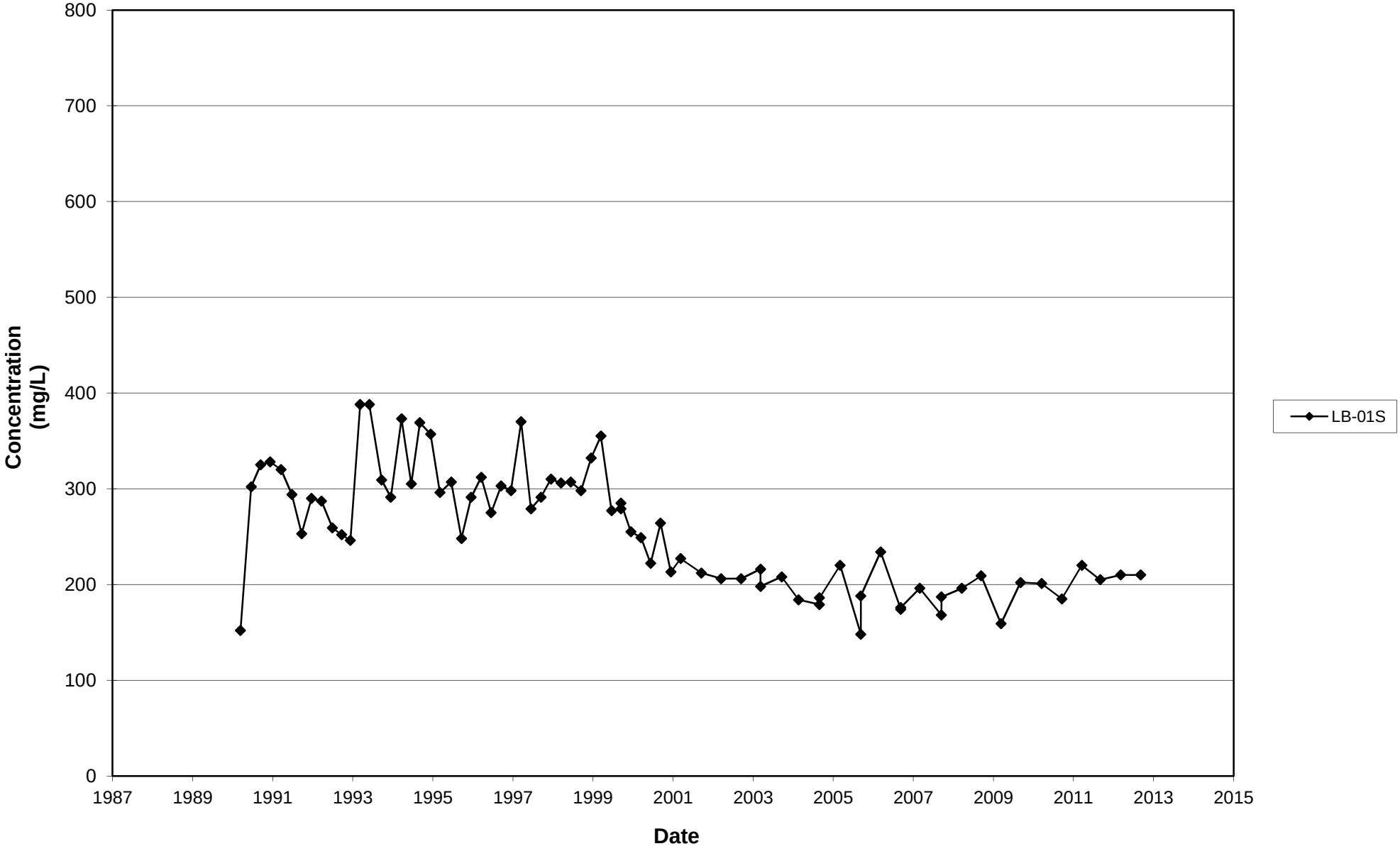


Leichner Landfill
Chloride, LB-27D
1994 - 2012

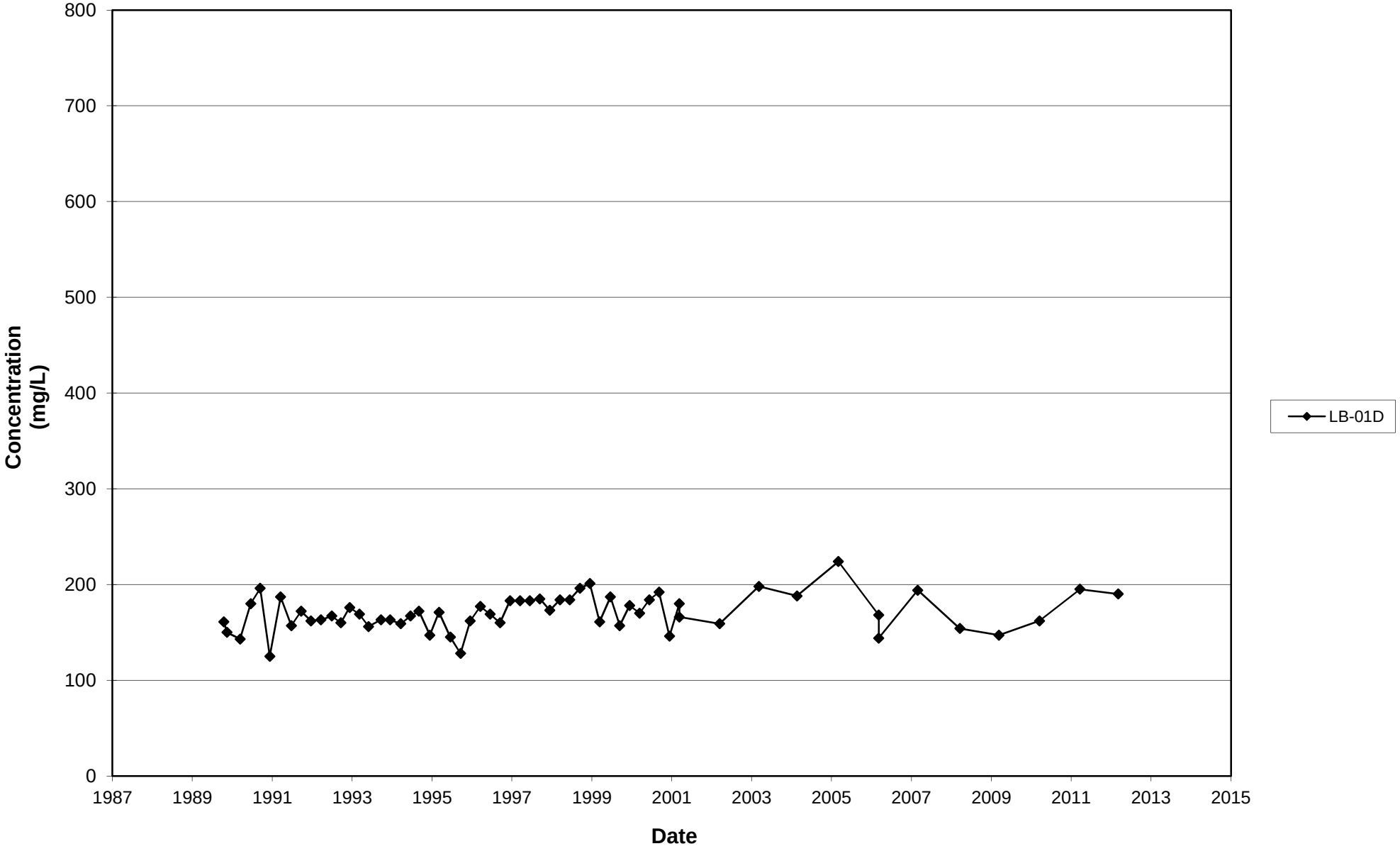


Total Dissolved Solids

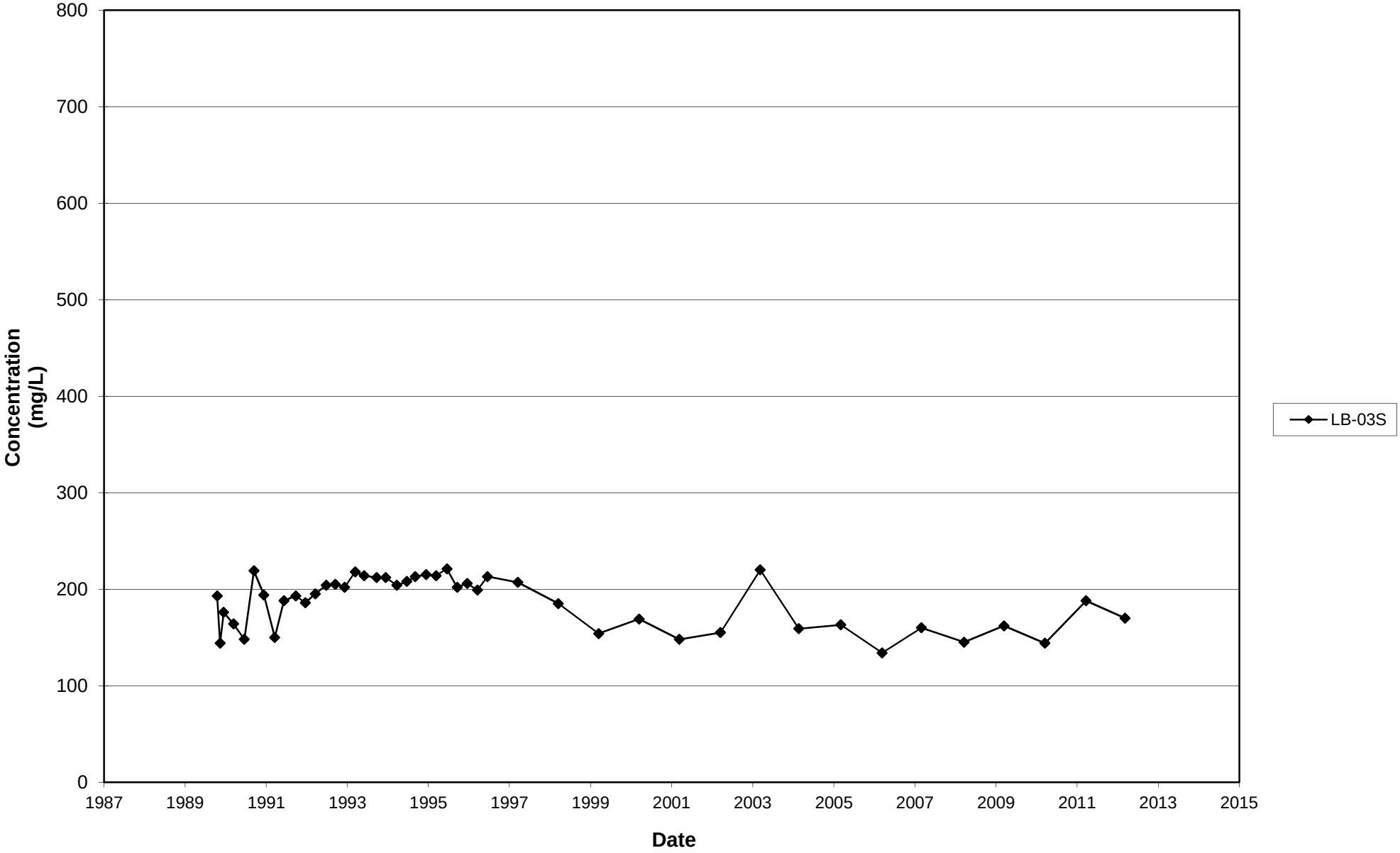
Leichner Landfill
Total Dissolved Solids, LB-01S
1987 - 2012



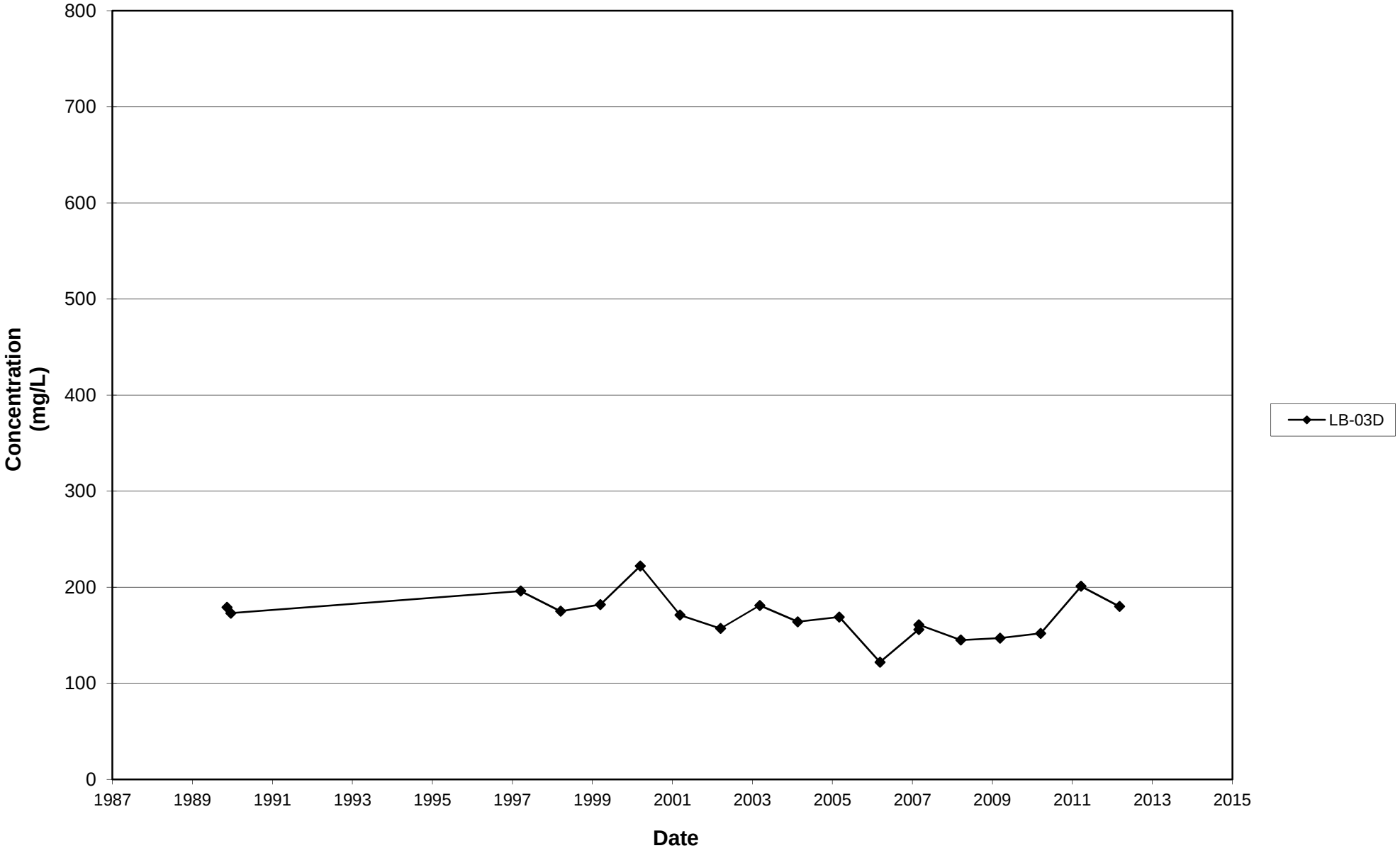
Leichner Landfill
Total Dissolved Solids, LB-01D
1987 - 2012



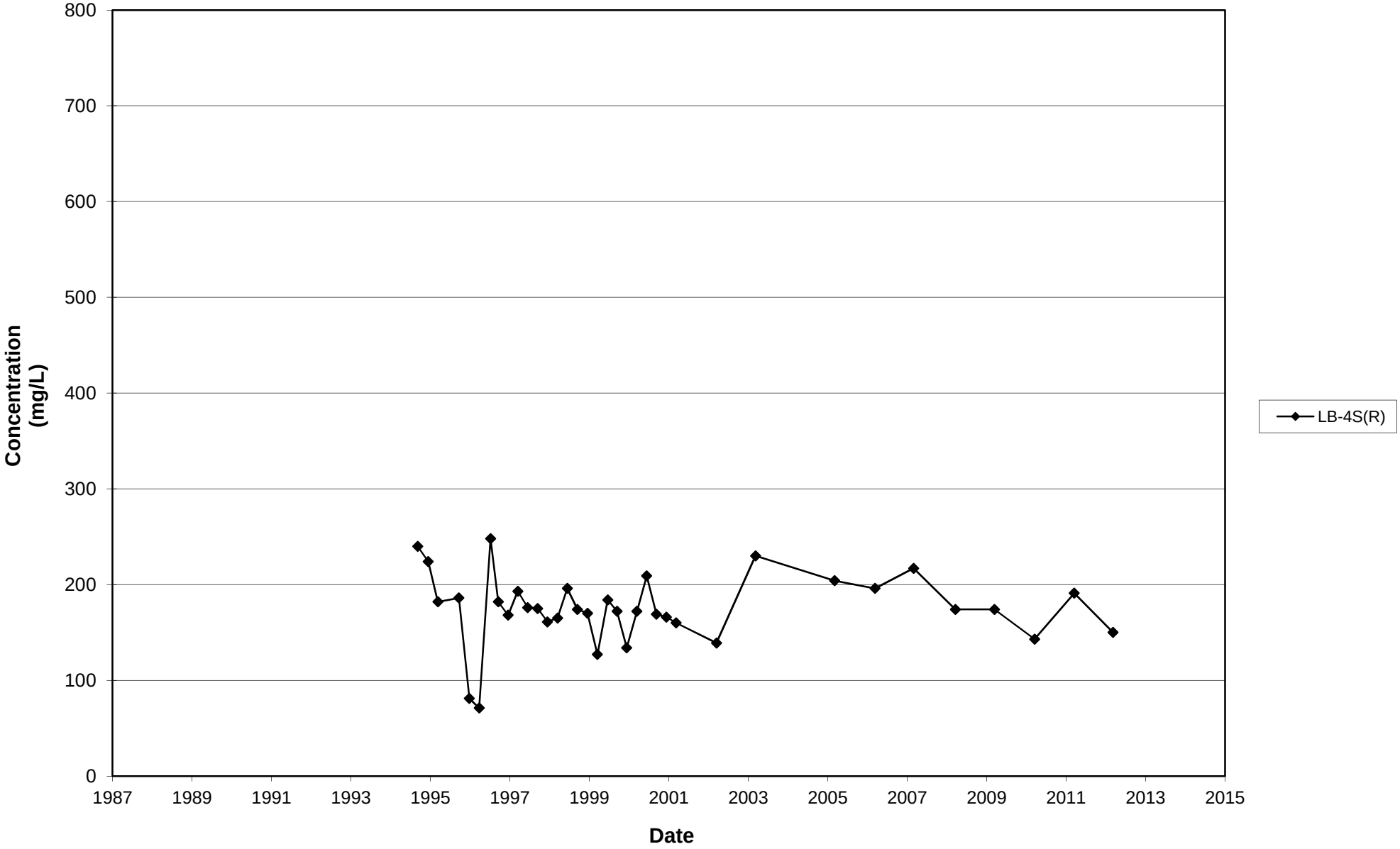
Leichner Landfill
Total Dissolved Solids, LB-03S
1987 - 2012



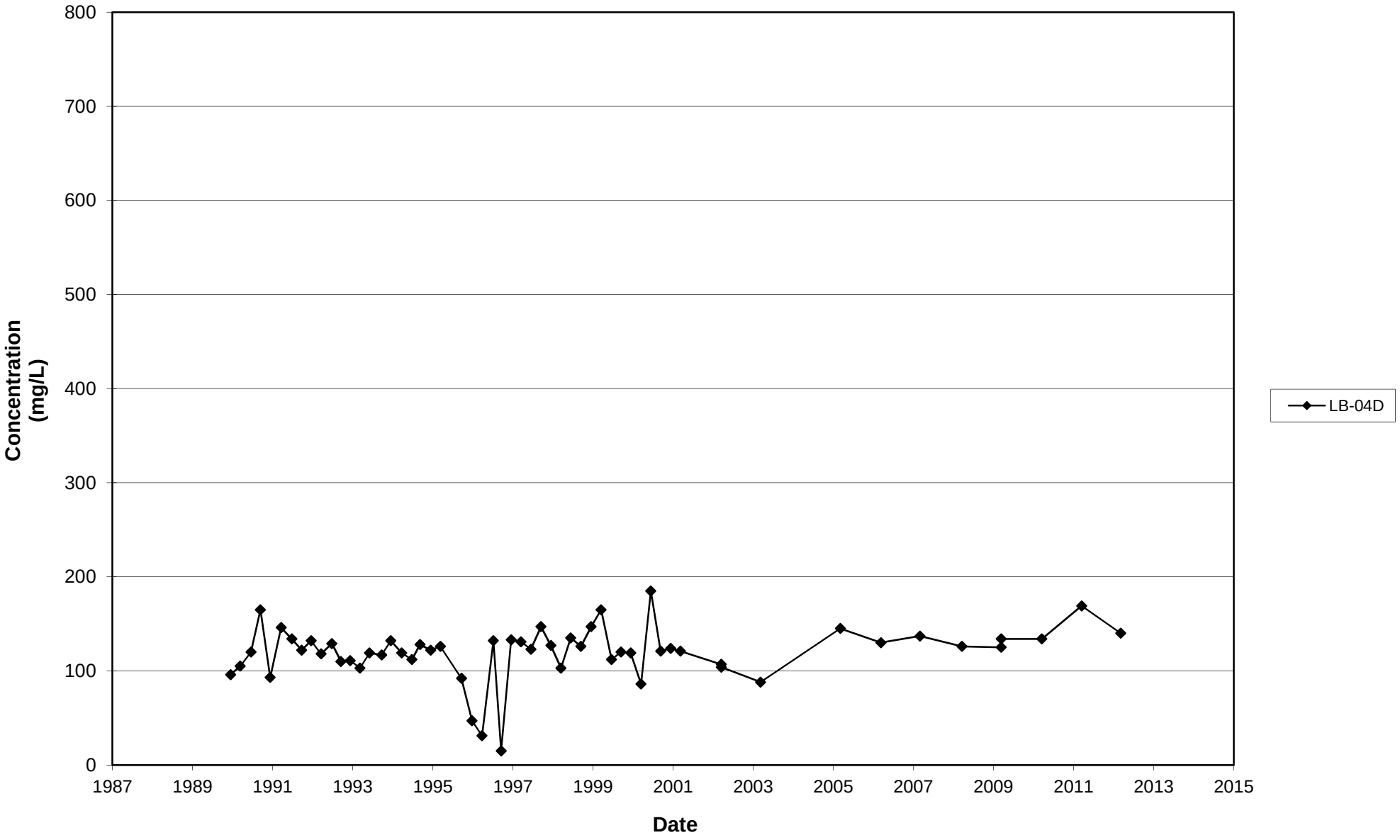
Leichner Landfill
Total Dissolved Solids, LB-03D
1987 - 2012



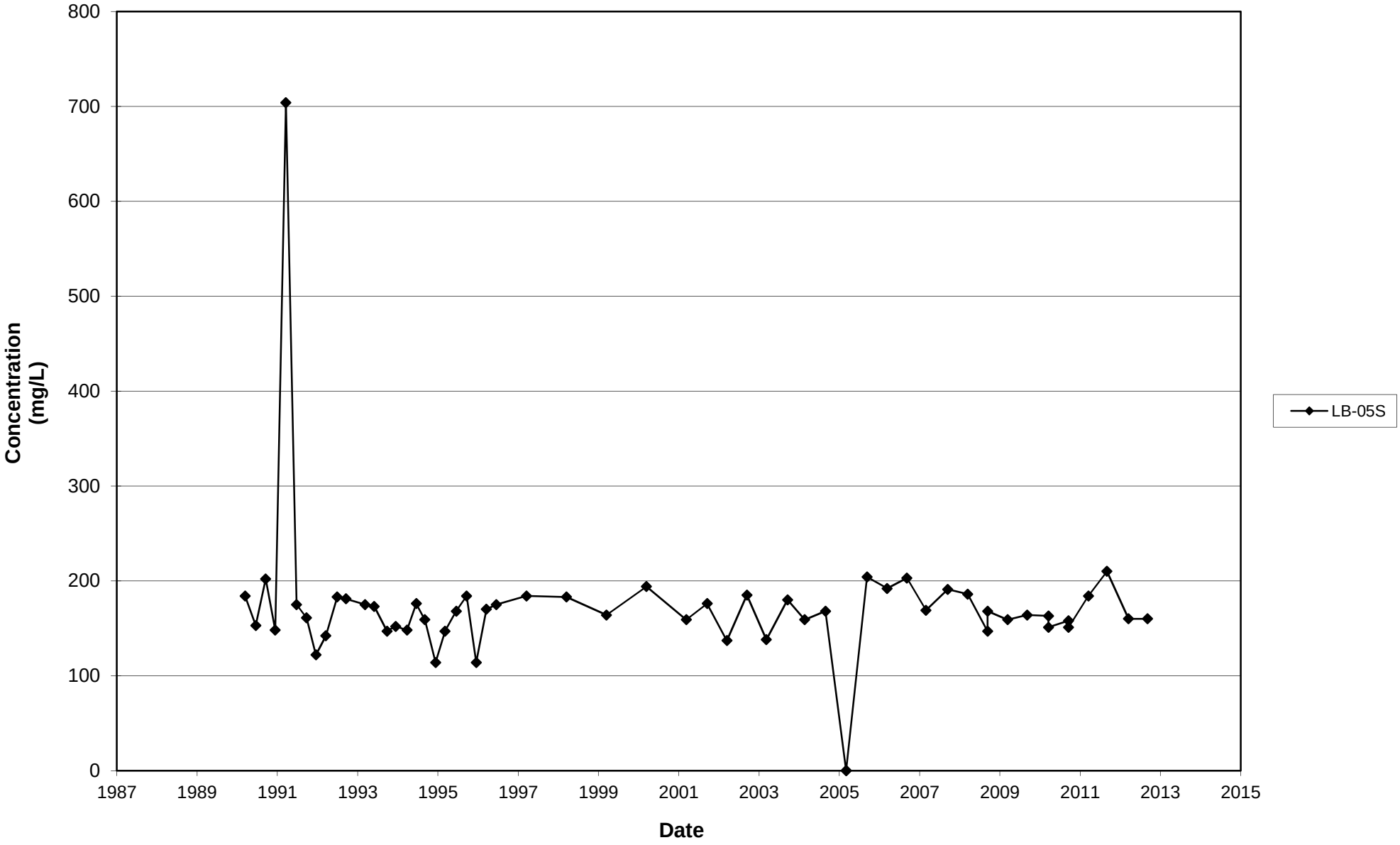
Leichner Landfill
Total Dissolved Solids, LB-04SR
1987 - 2012



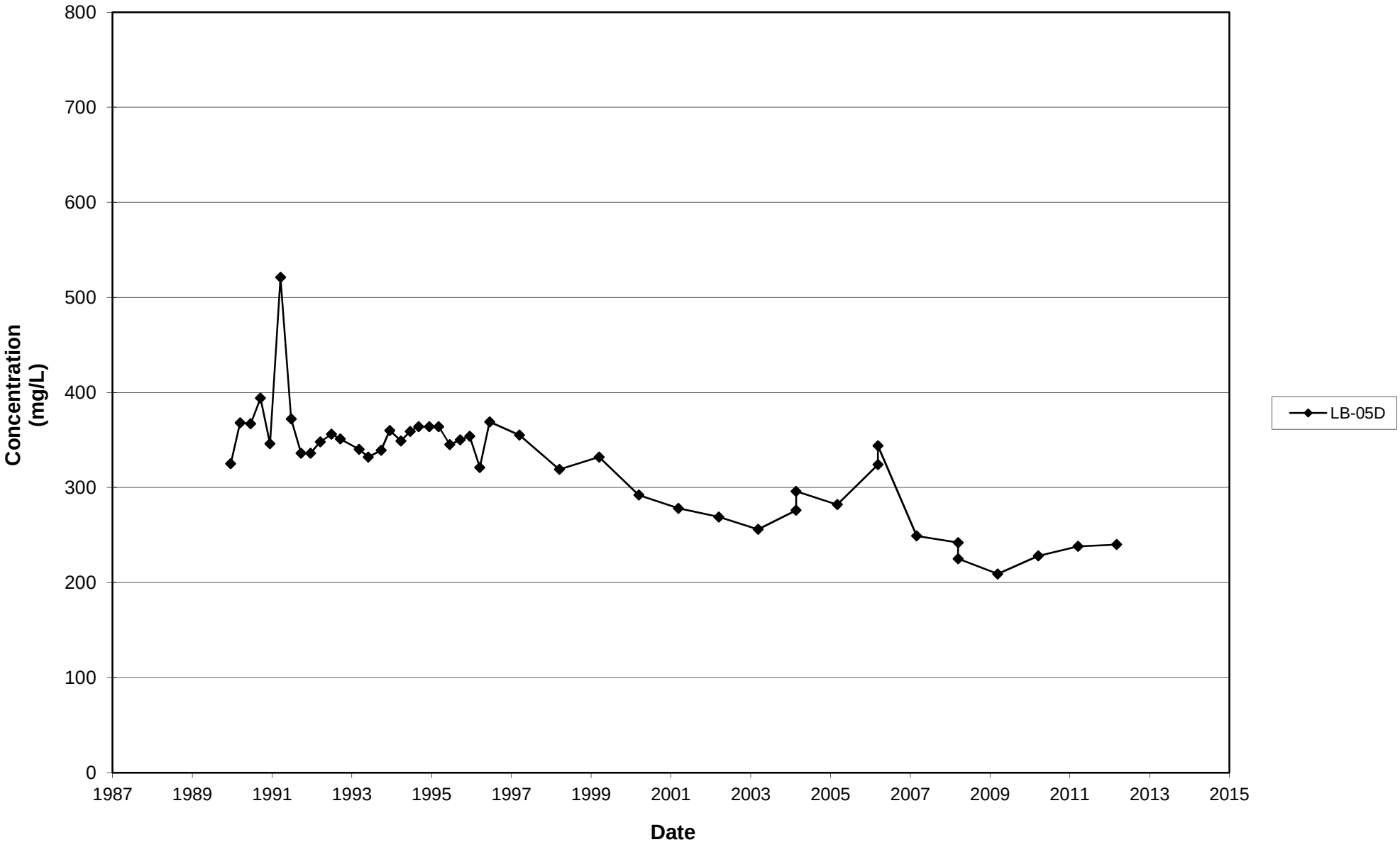
Leichner Landfill
Total Dissolved Solids, LB-04D
1987 - 2012



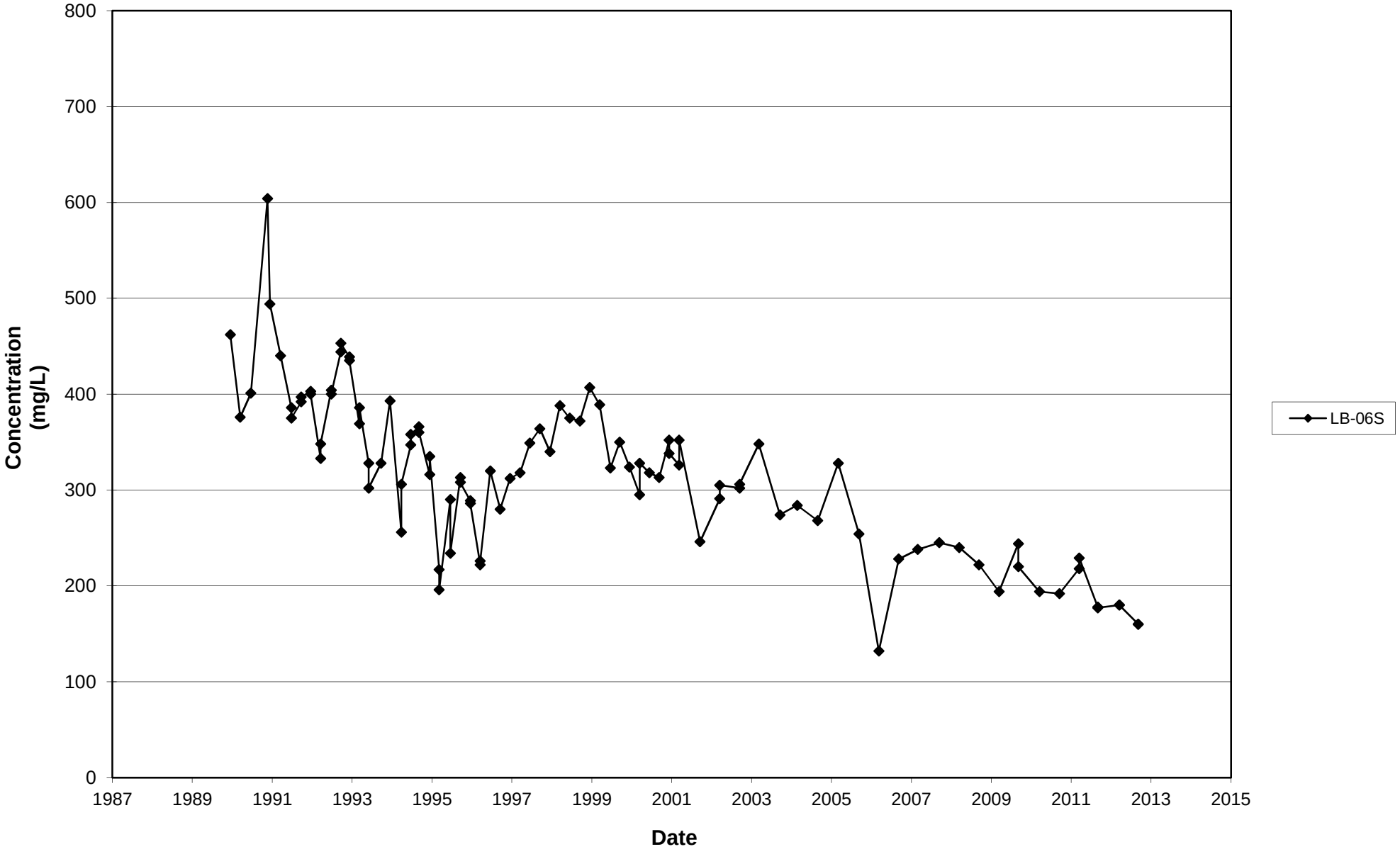
Leichner Landfill
Total Dissolved Solids, LB-05S
1987 - 2012



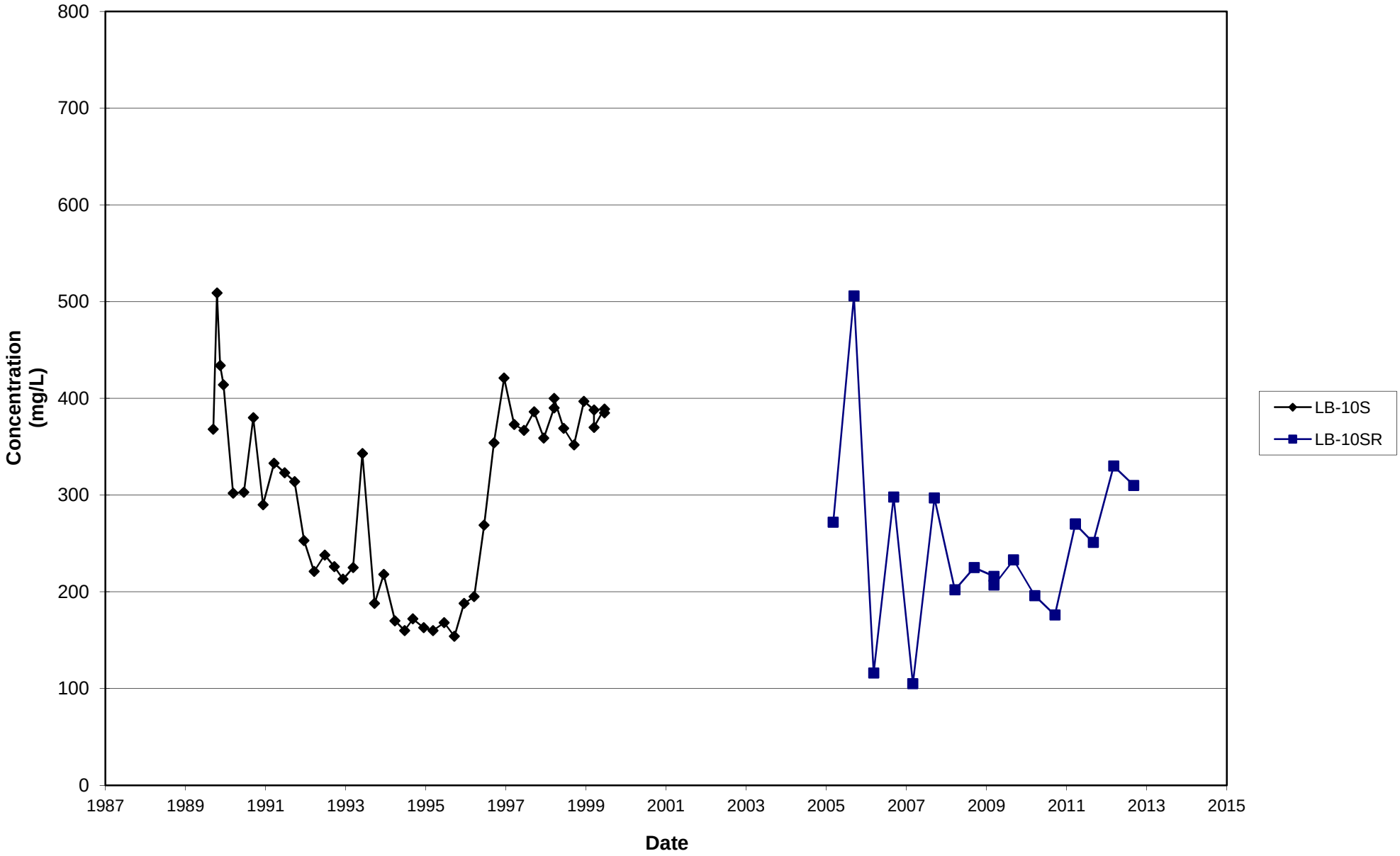
Leichner Landfill
Total Dissolved Solids, LB-05D
1987 - 2012



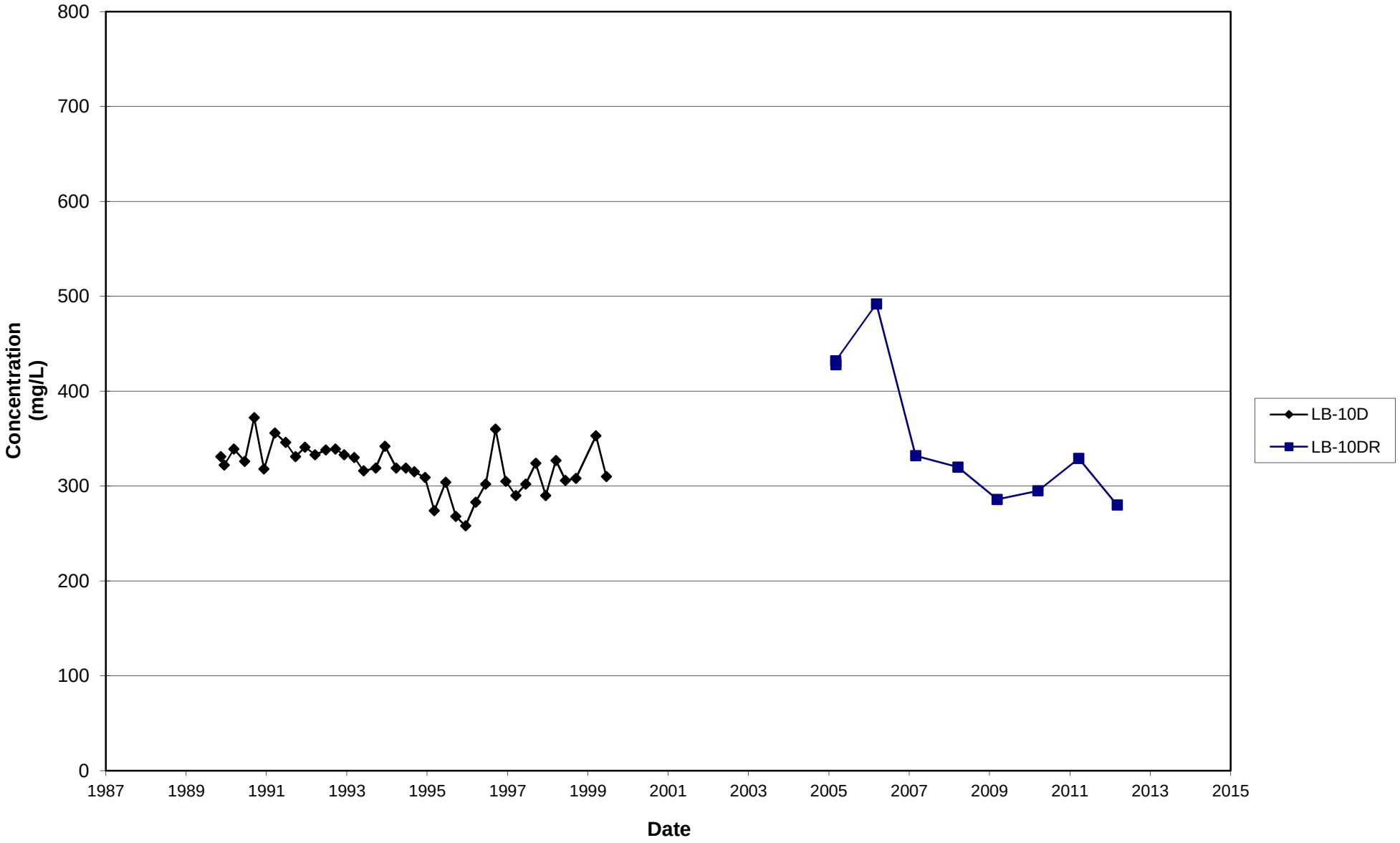
Leichner Landfill
Total Dissolved Solids, LB-06S
1987 - 2012



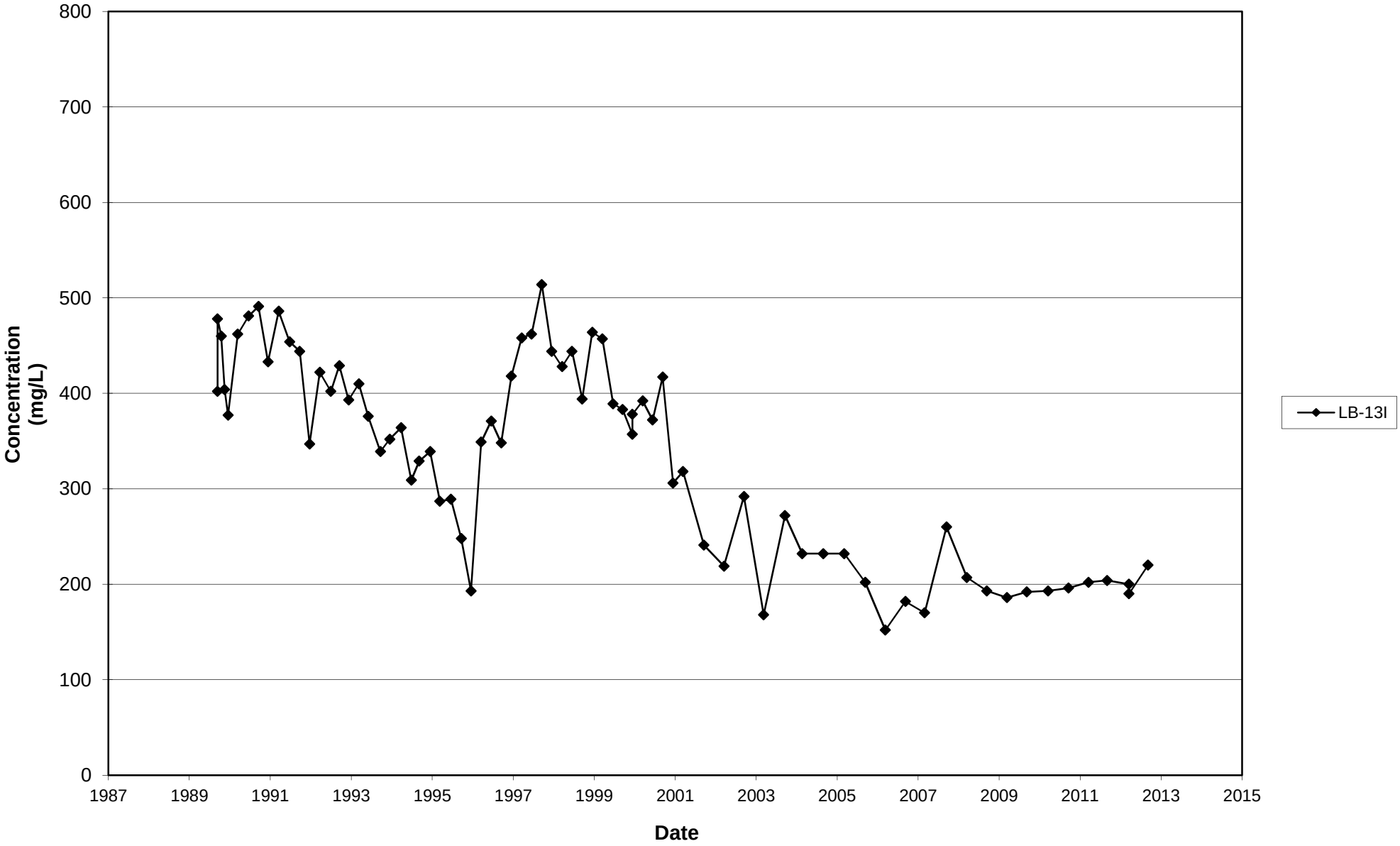
Leichner Landfill
Total Dissolved Solids, LB-10S and LB-10SR
1987 - 2012



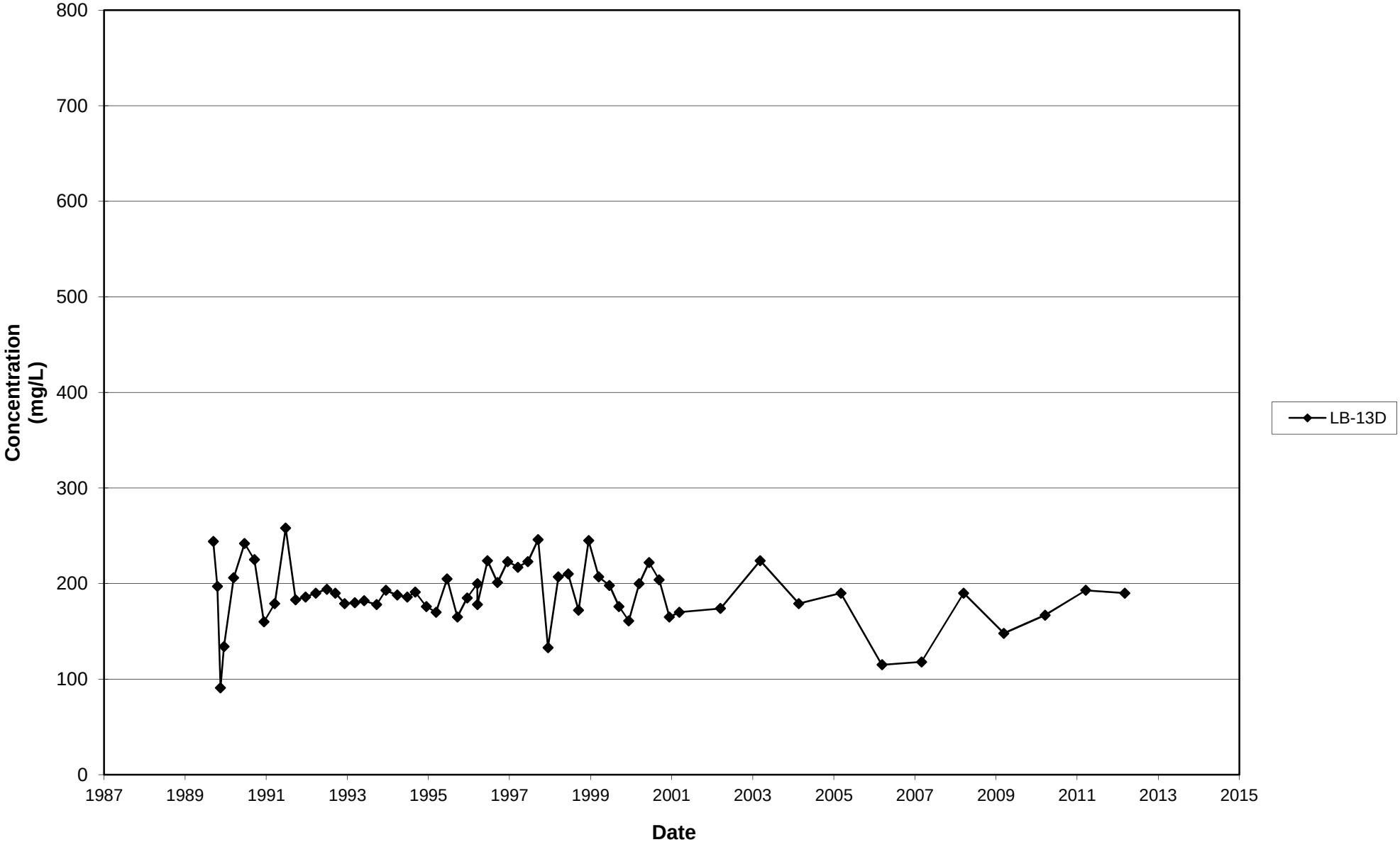
Leichner Landfill
Total Dissolved Solids, LB-10D and LB-10DR
1987 - 2012



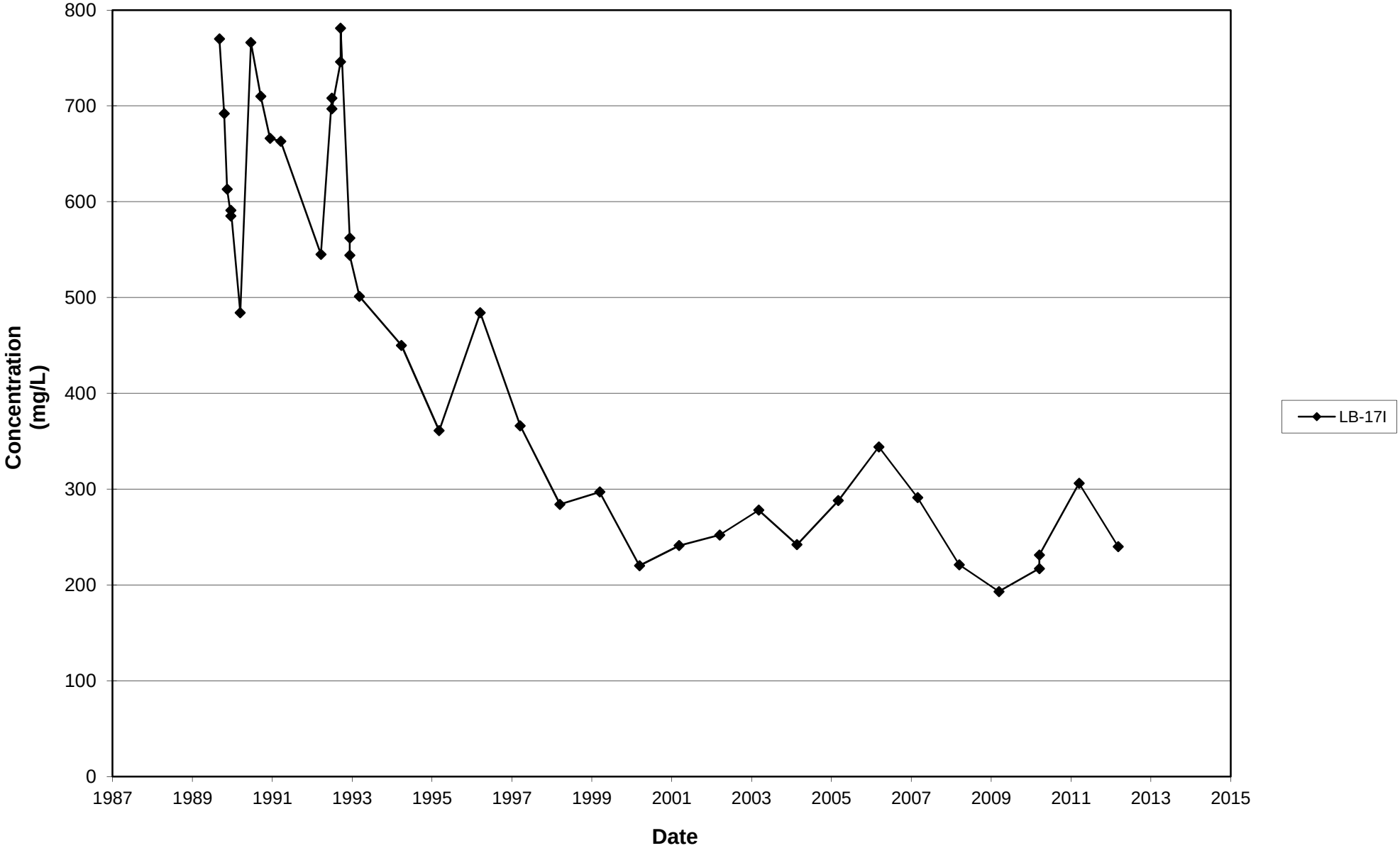
Leichner Landfill
Total Dissolved Solids, LB-13I
1987 - 2012



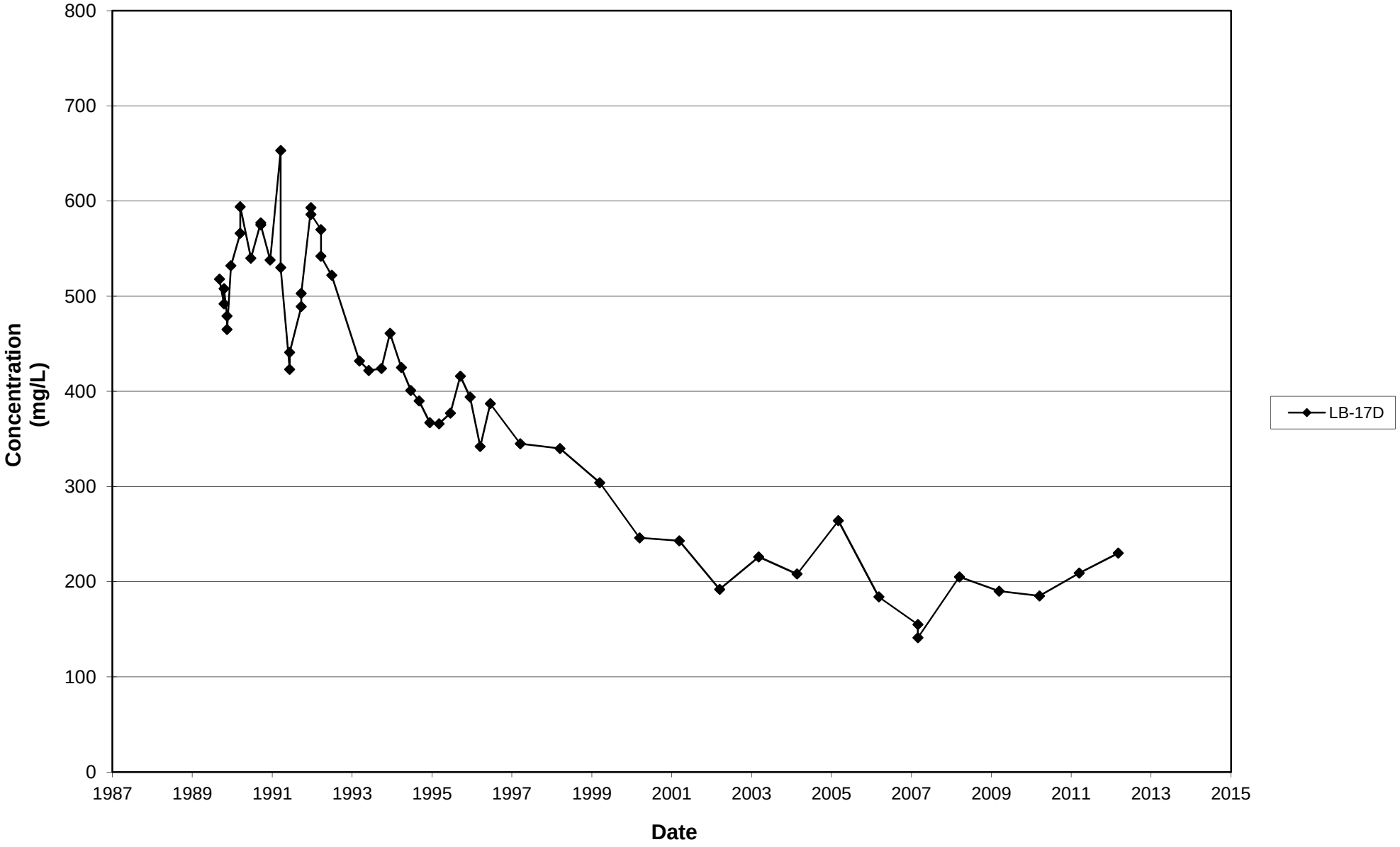
Leichner Landfill
Total Dissolved Solids, LB-13D
1987 - 2012



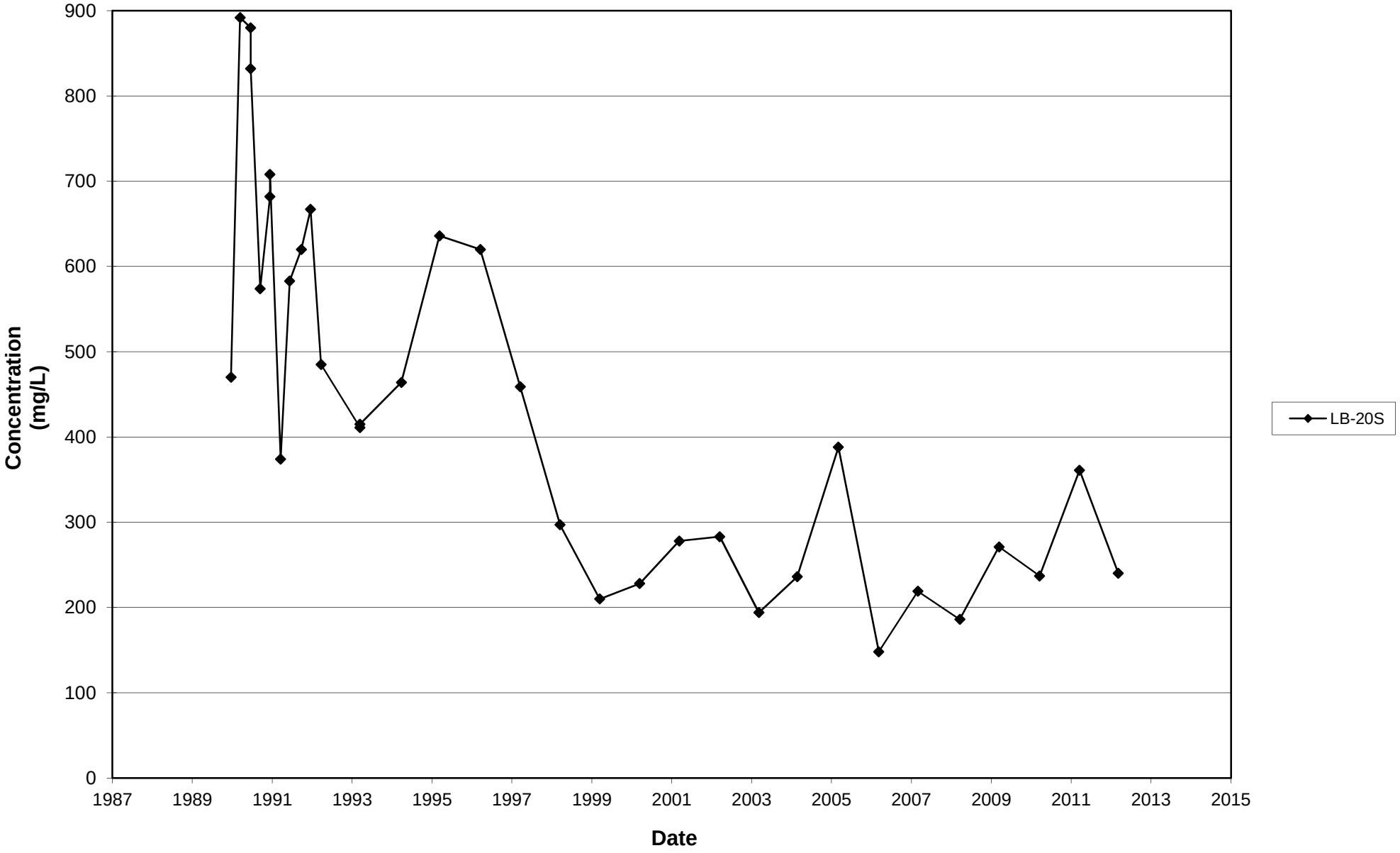
Leichner Landfill
Total Dissolved Solids, LB-17I
1987 - 2012



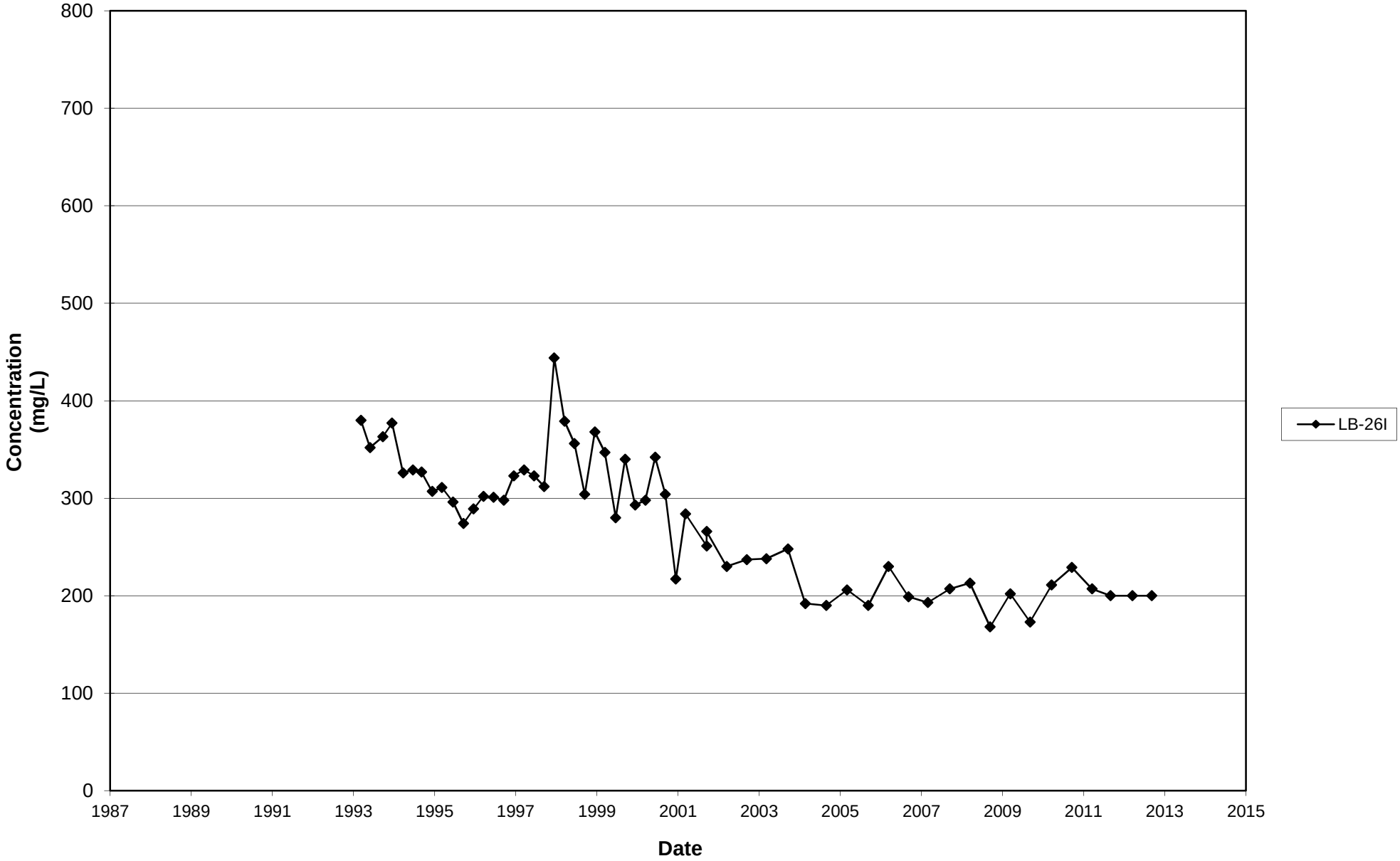
Leichner Landfill
Total Dissolved Solids, LB-17D
1987 - 2012



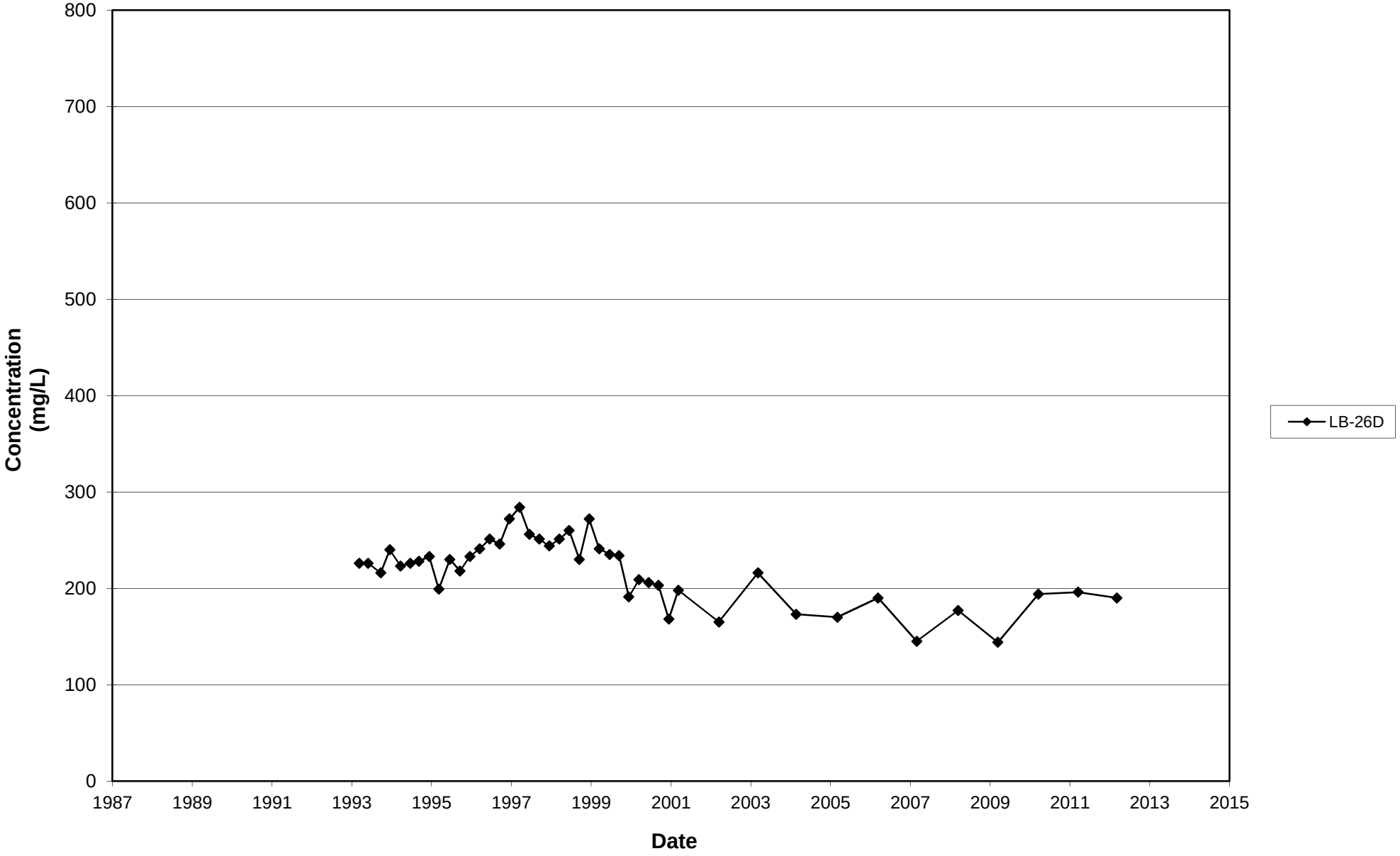
Leichner Landfill
Total Dissolved Solids, LB-20S
1987 - 2012



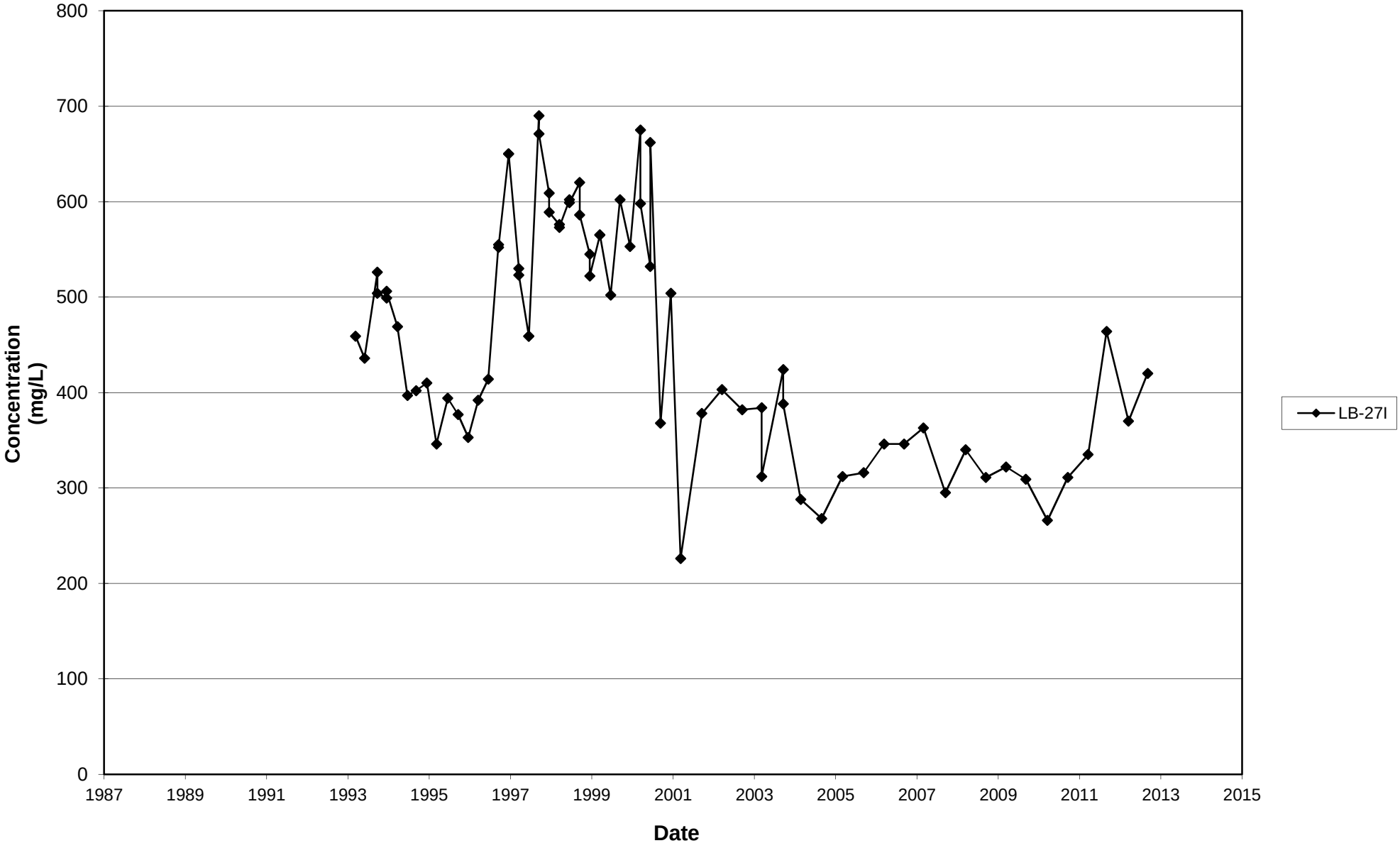
Leichner Landfill
Total Dissolved Solids, LB-26I
1987 - 2012



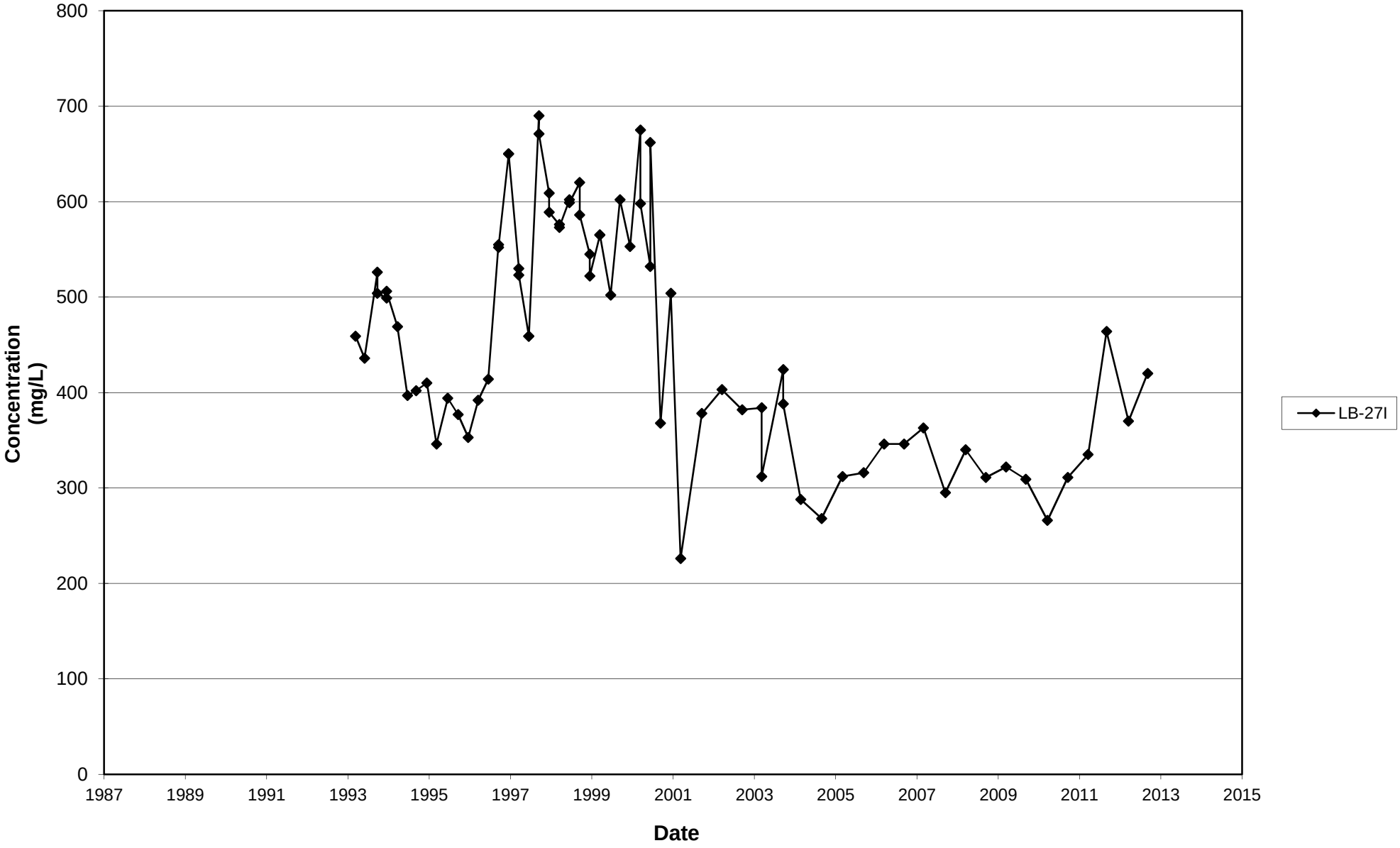
Leichner Landfill
Total Dissolved Solids, LB-26D
1987 - 2012



Leichner Landfill
Total Dissolved Solids, LB-27I
1987 - 2012

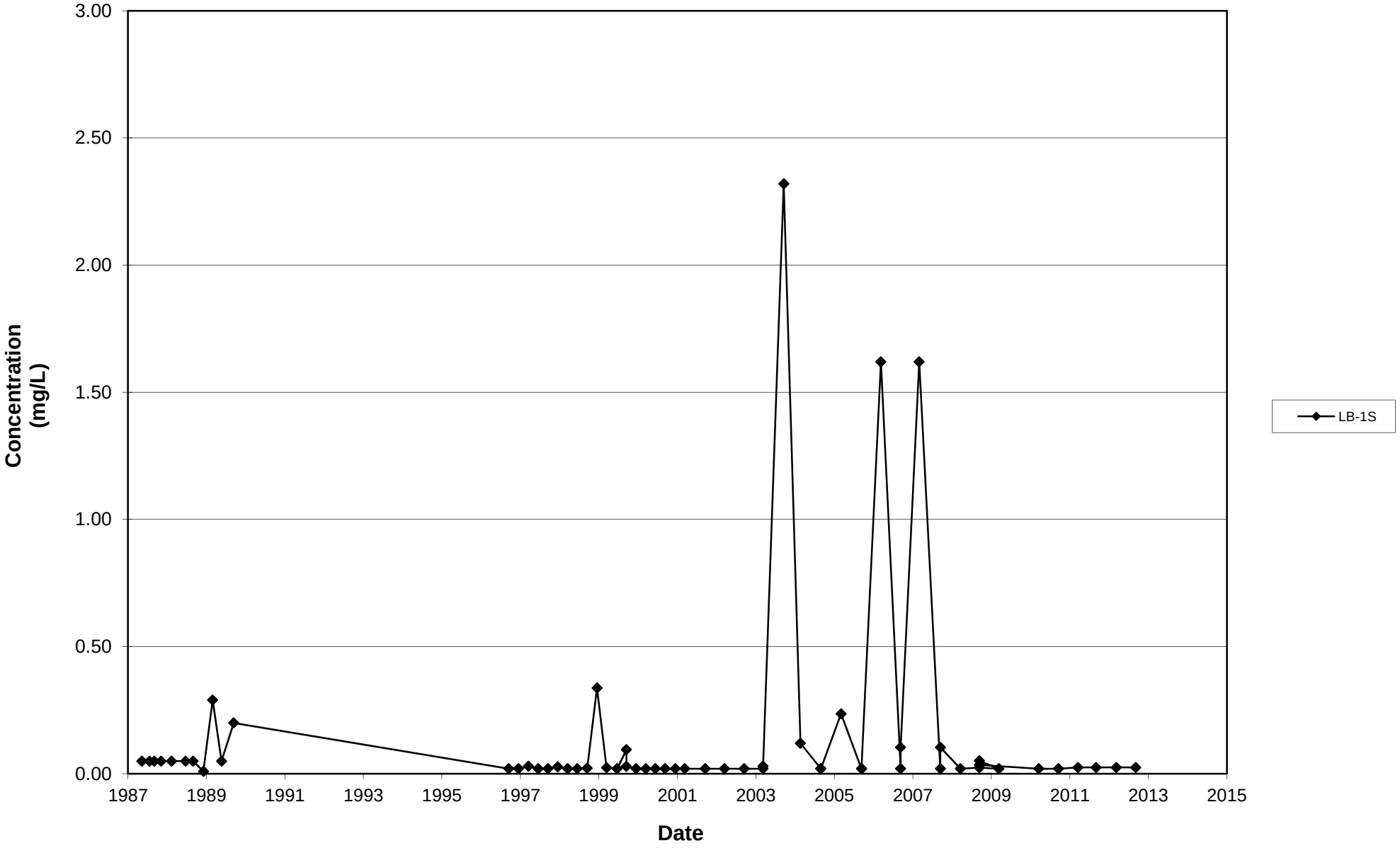


Leichner Landfill
Total Dissolved Solids, LB-27I
1987 - 2012

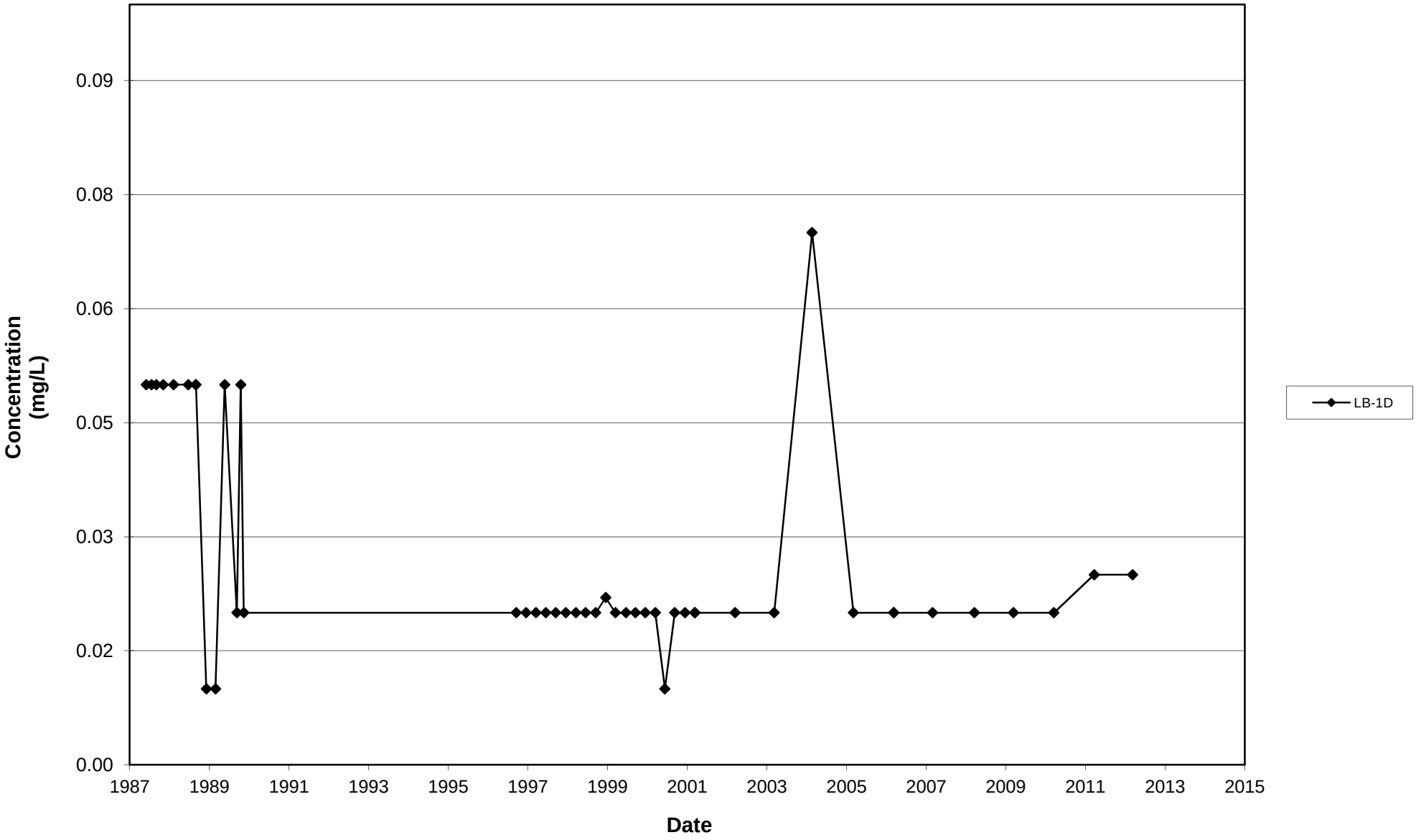


Dissolved Iron

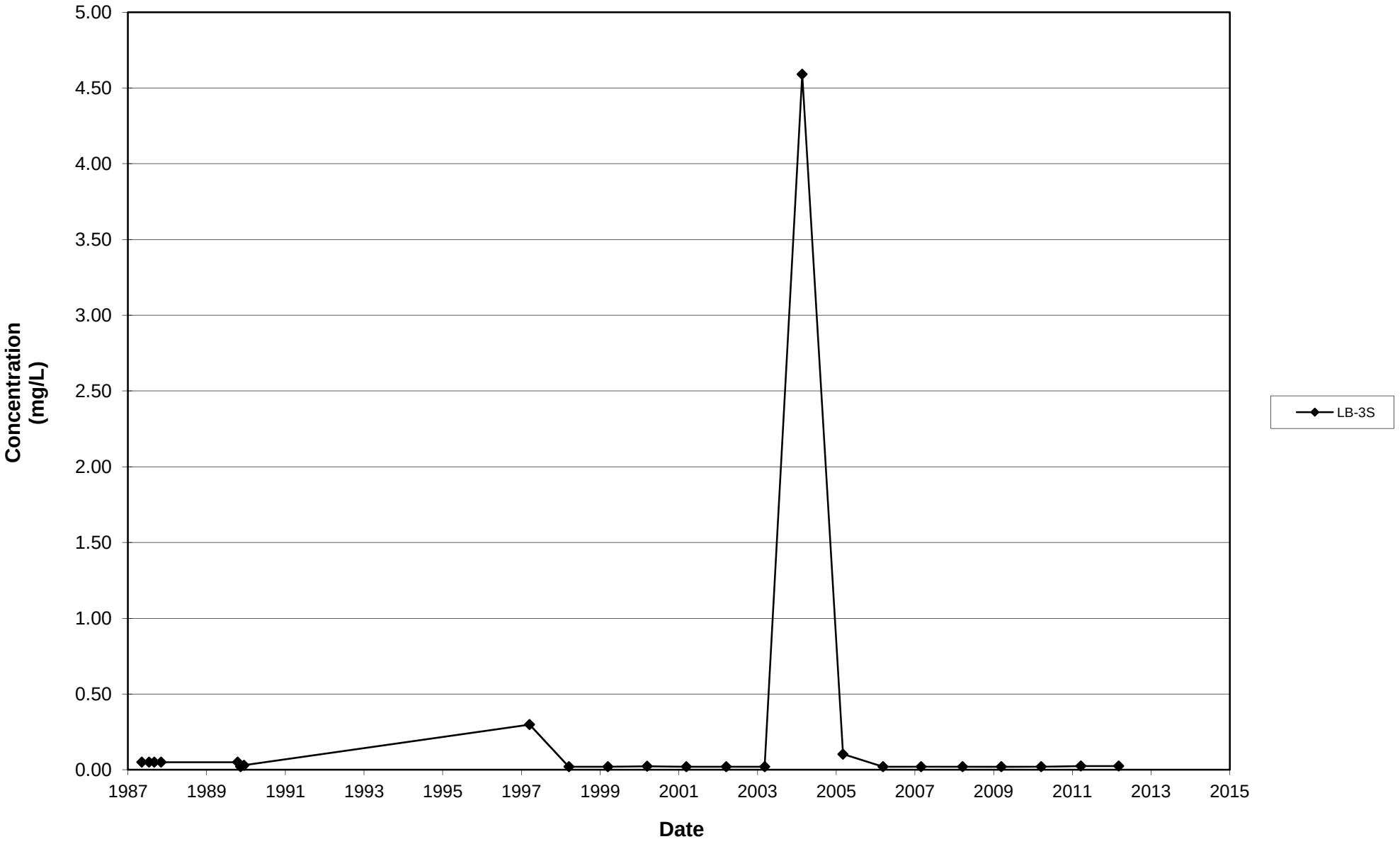
Leichner Landfill
Dissolved Iron, LB-01S
1987 - 2012



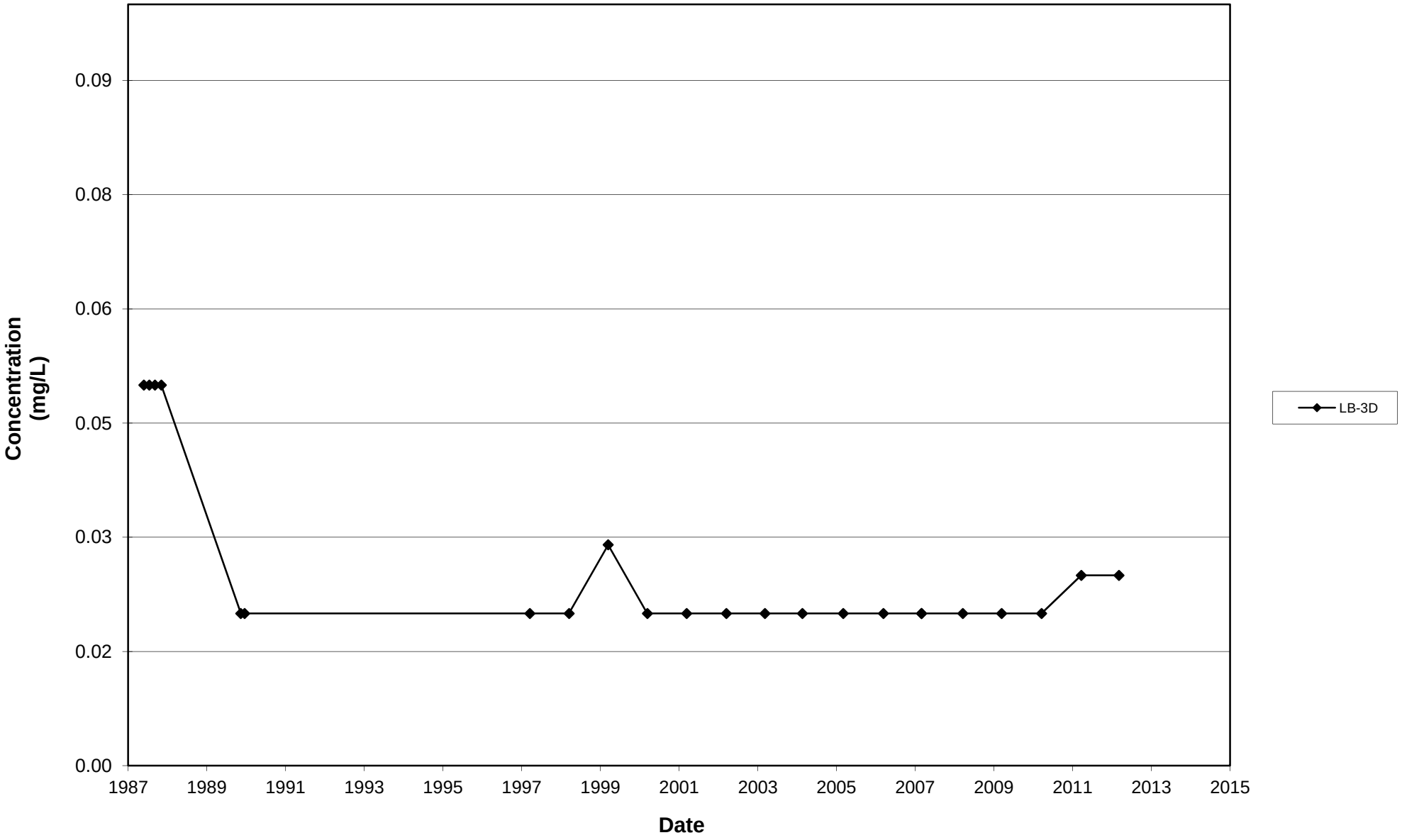
Leichner Landfill
Dissolved Iron, LB-01D
1987 - 2012



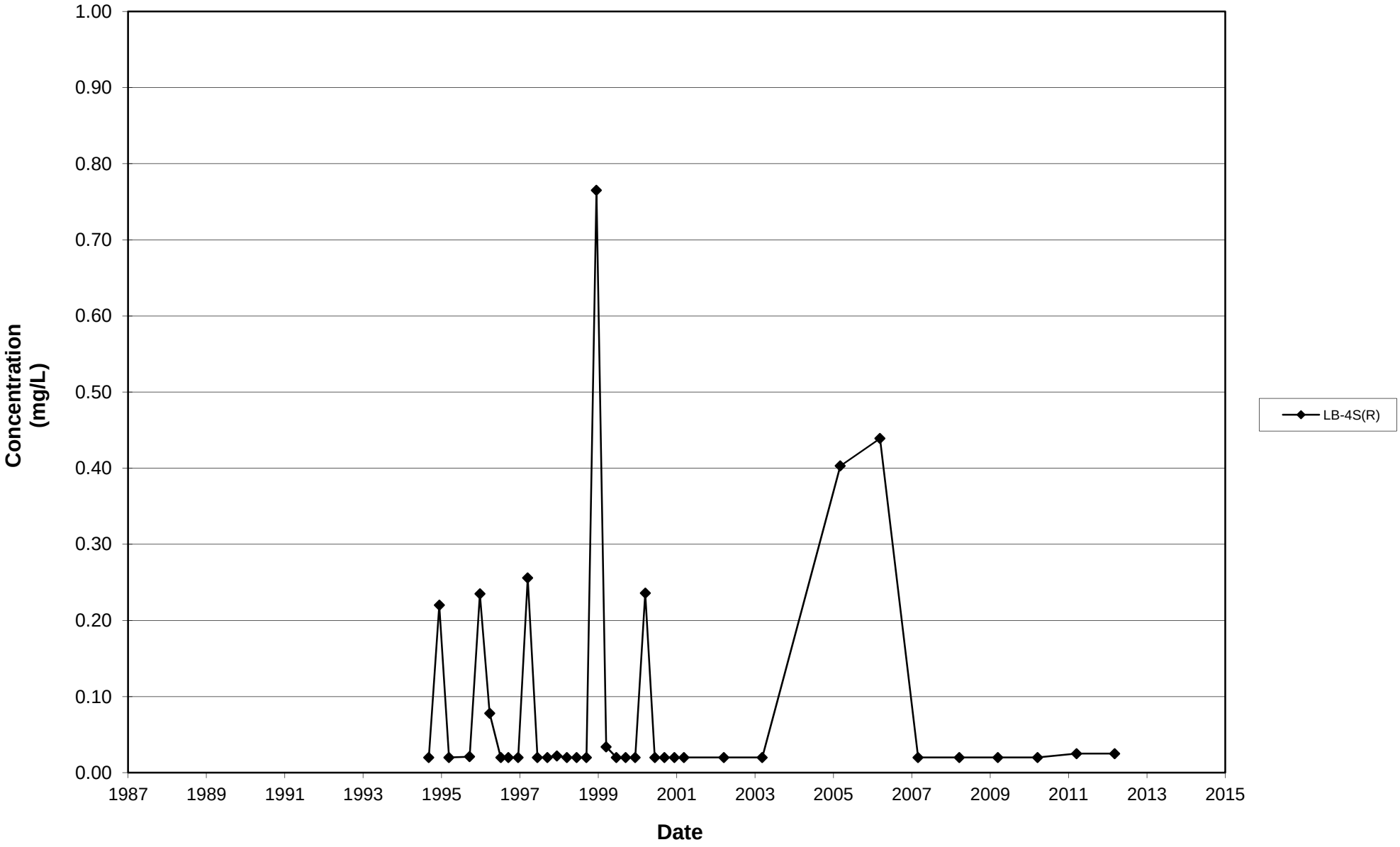
Leichner Landfill
Dissolved Iron, LB-03S
1987 - 2012



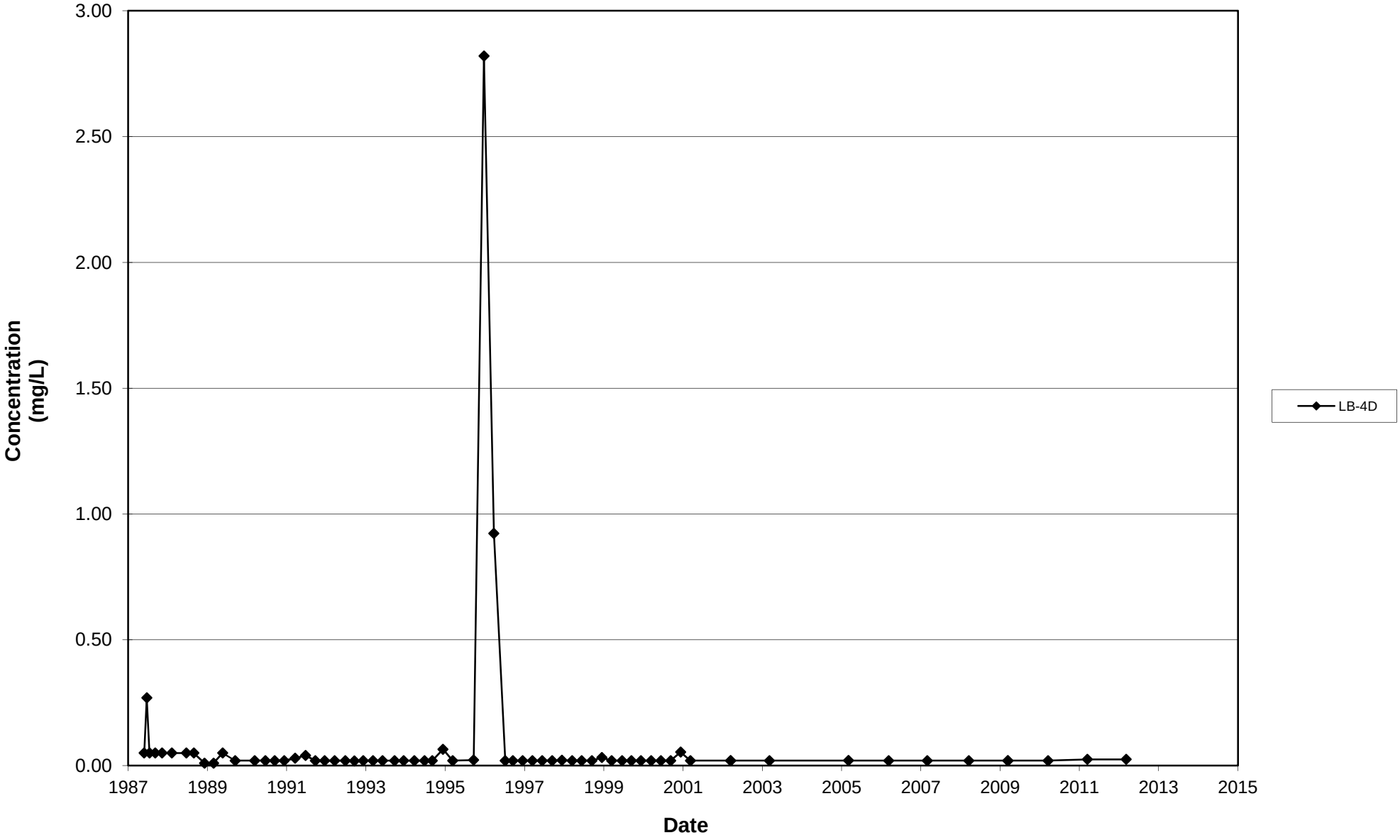
Leichner Landfill
Dissolved Iron, LB-03D
1987 - 2012



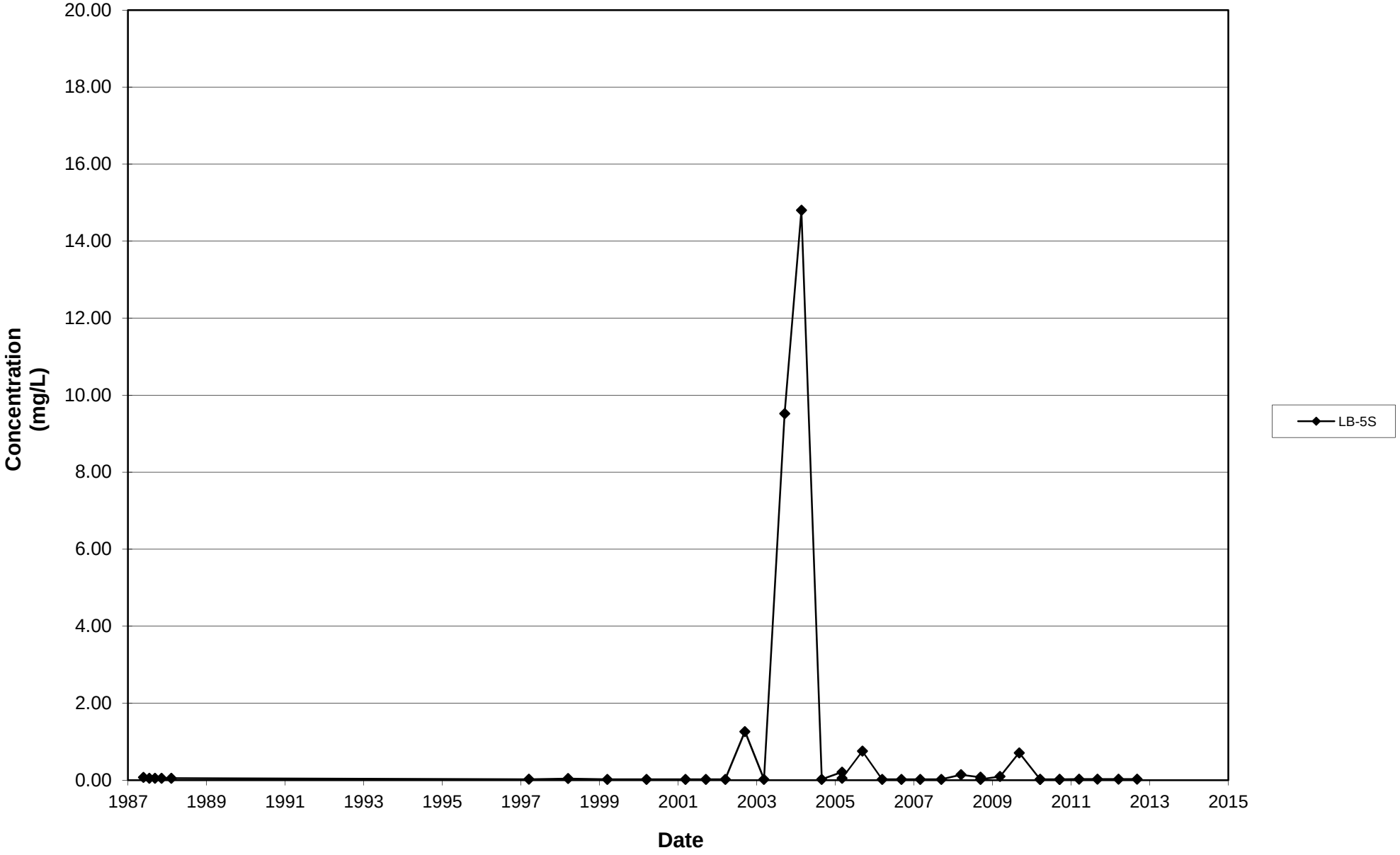
Leichner Landfill
Dissolved Iron, LB-04SR
1987 - 2011



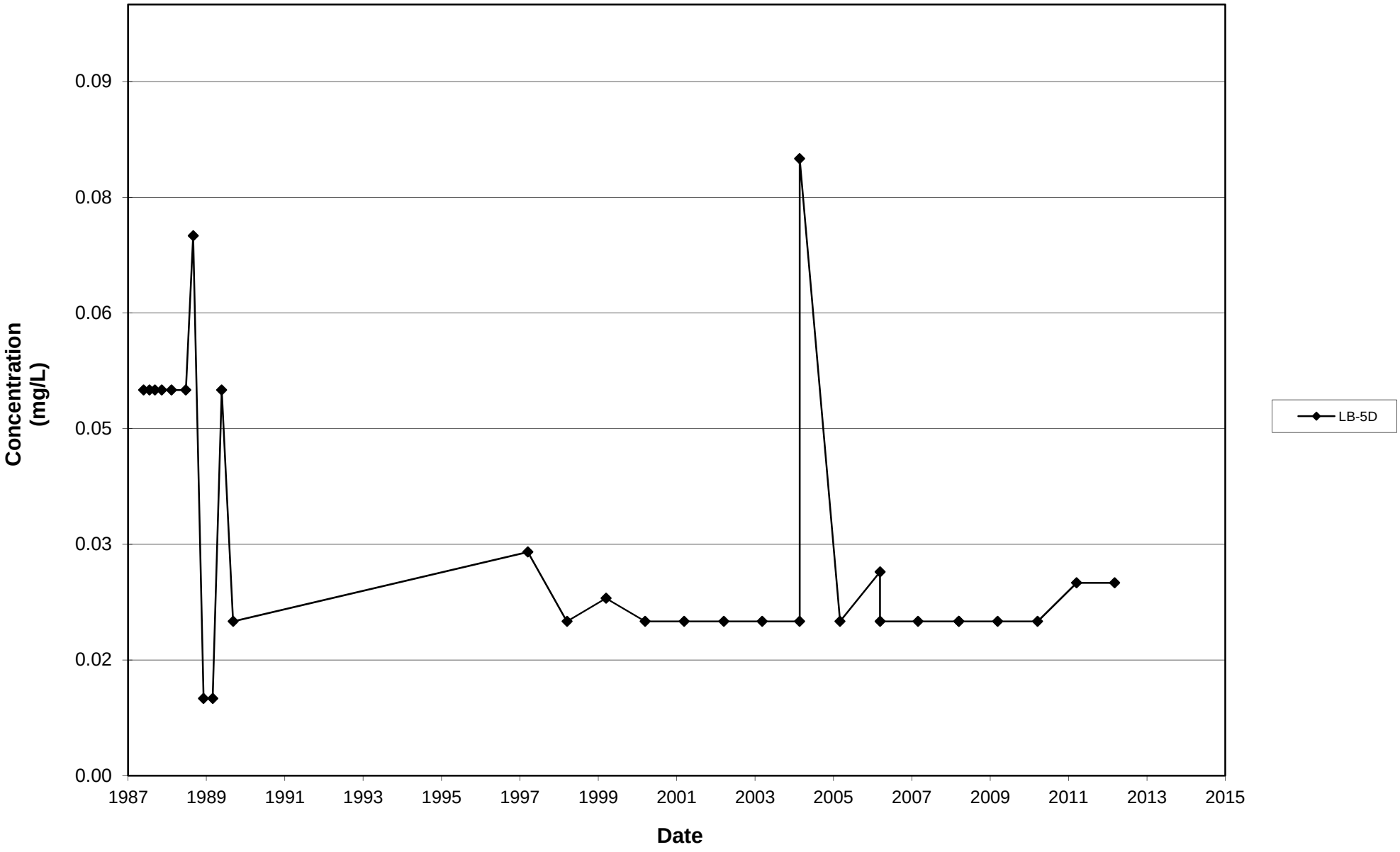
Leichner Landfill
Dissolved Iron, LB-04D
1987 - 2012



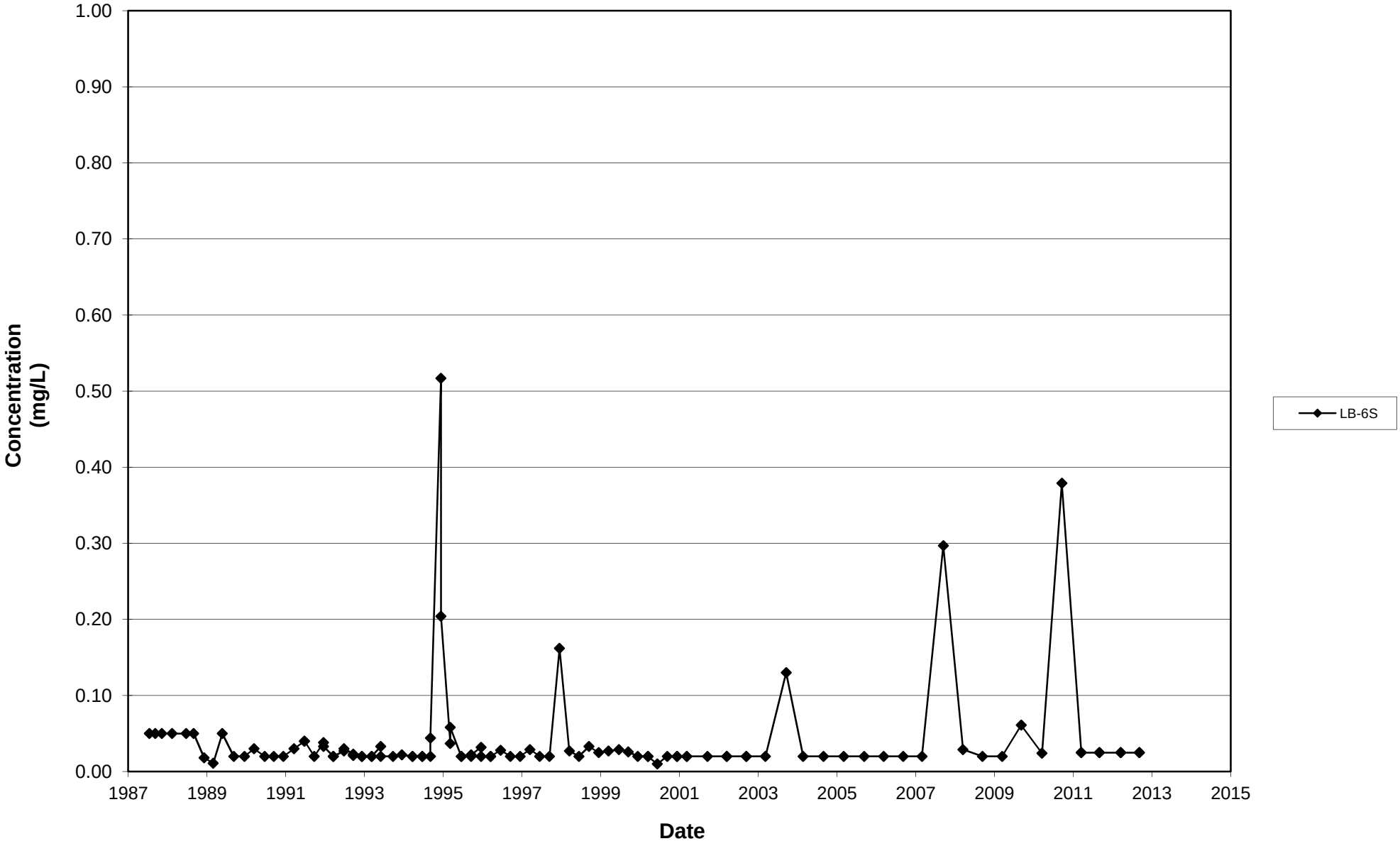
Leichner Landfill
Dissolved Iron, LB-05S
1987 - 2012



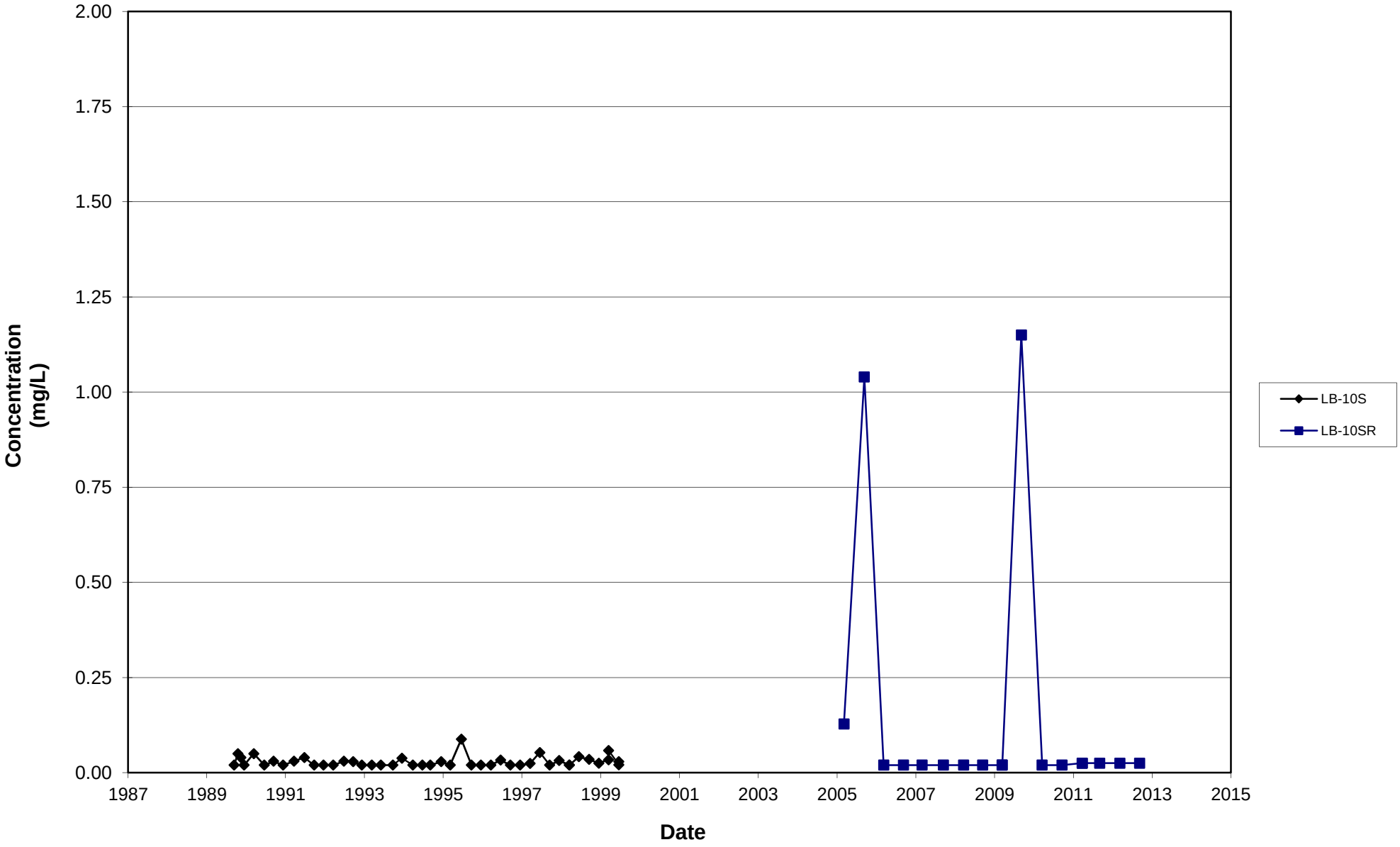
Leichner Landfill
Dissolved Iron, LB-05D
1987 - 2012



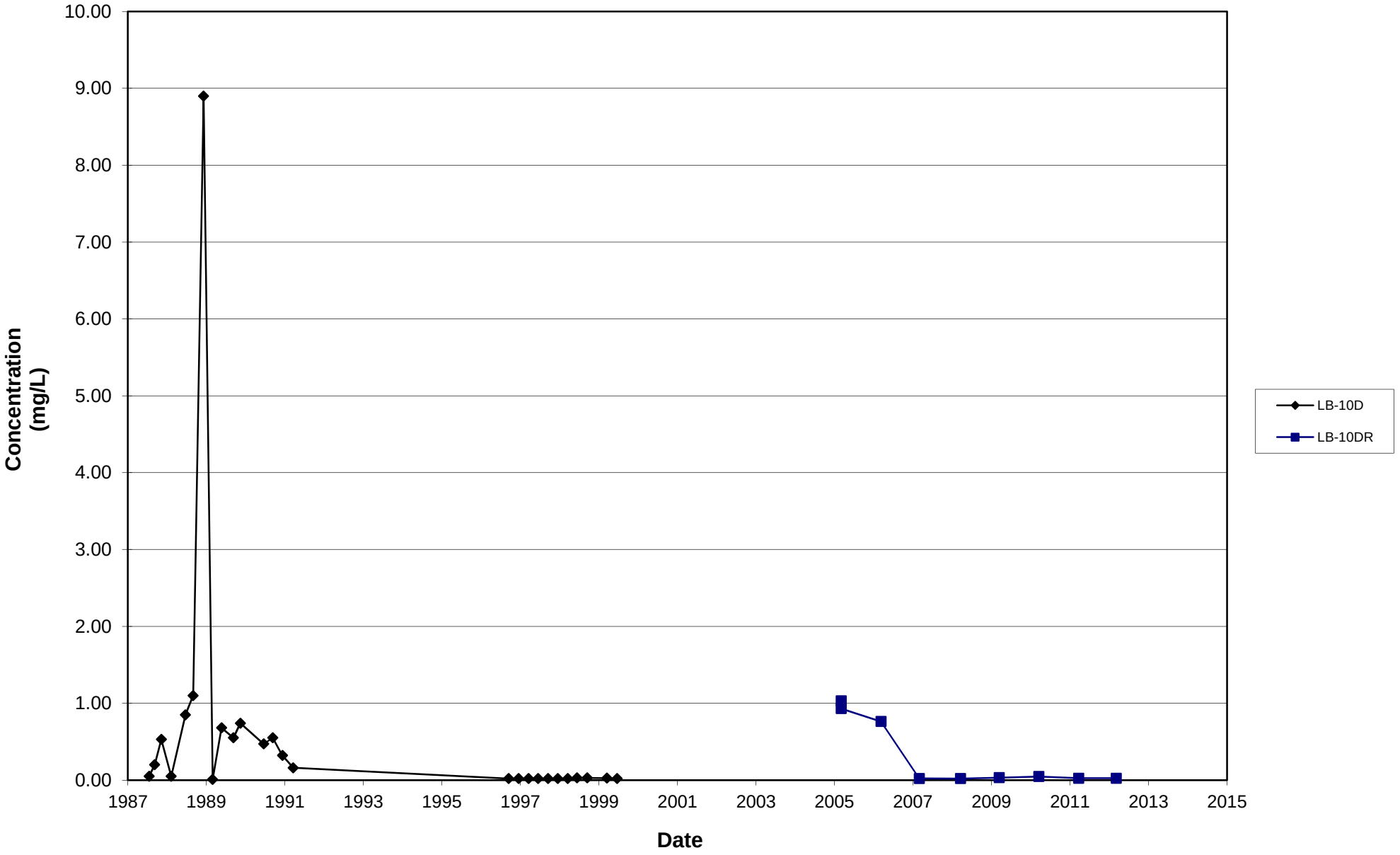
Leichner Landfill
Dissolved Iron, LB-06S
1987 - 2012



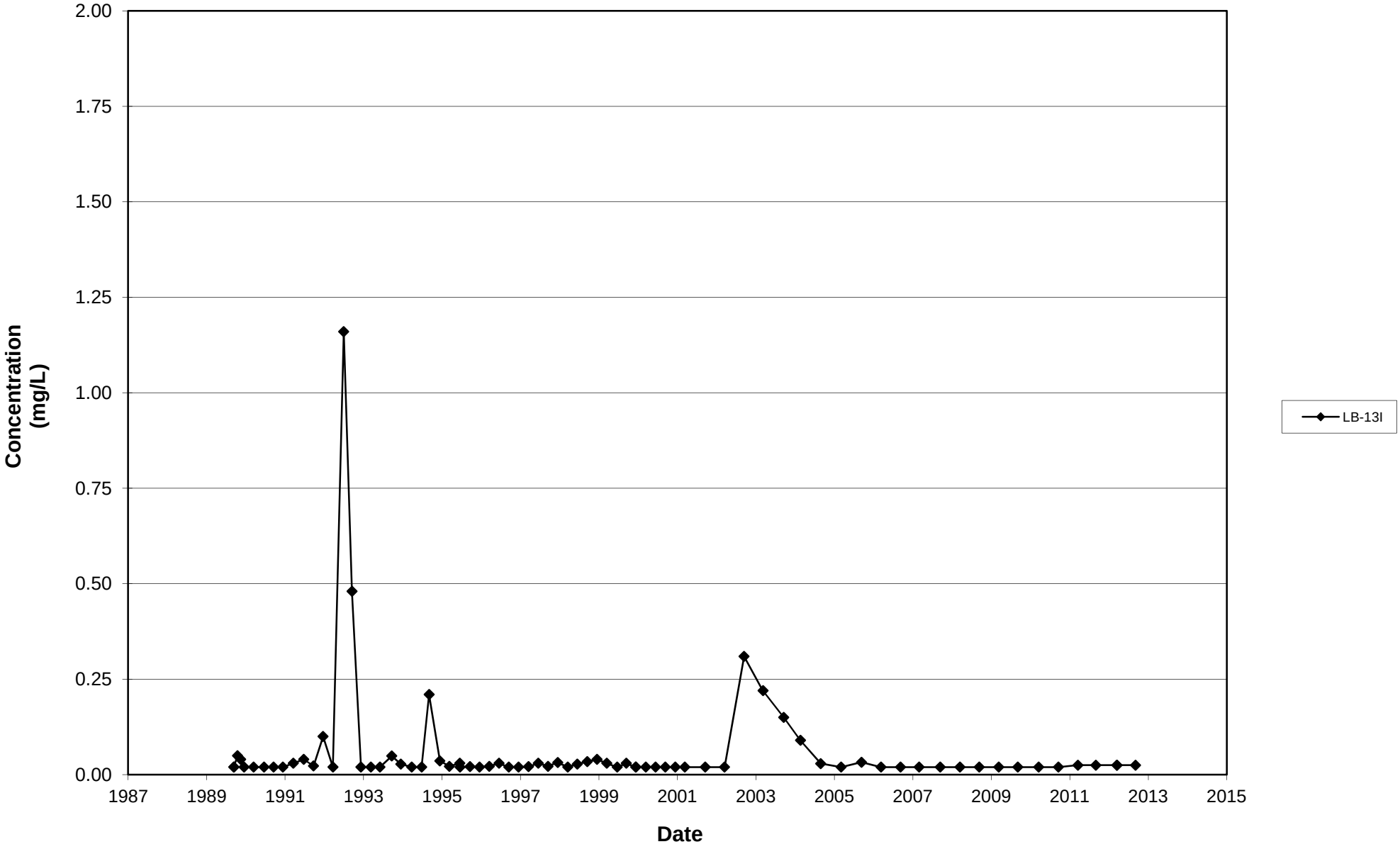
Leichner Landfill
Dissolved Iron, LB-10S and LB-10SR
1987 - 2012



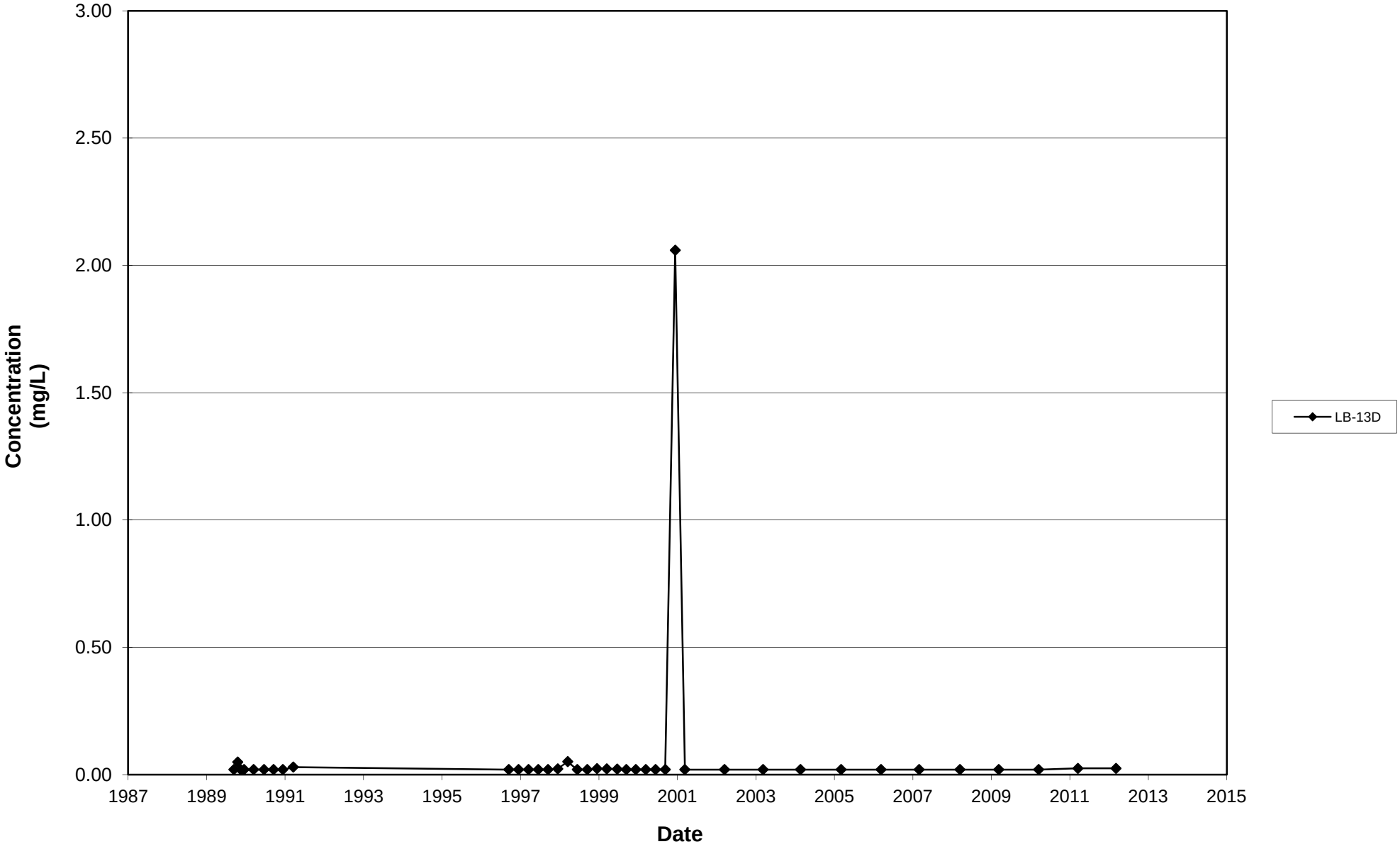
Leichner Landfill
Dissolved Iron, LB-10D and LB-10DR
1987 - 2012



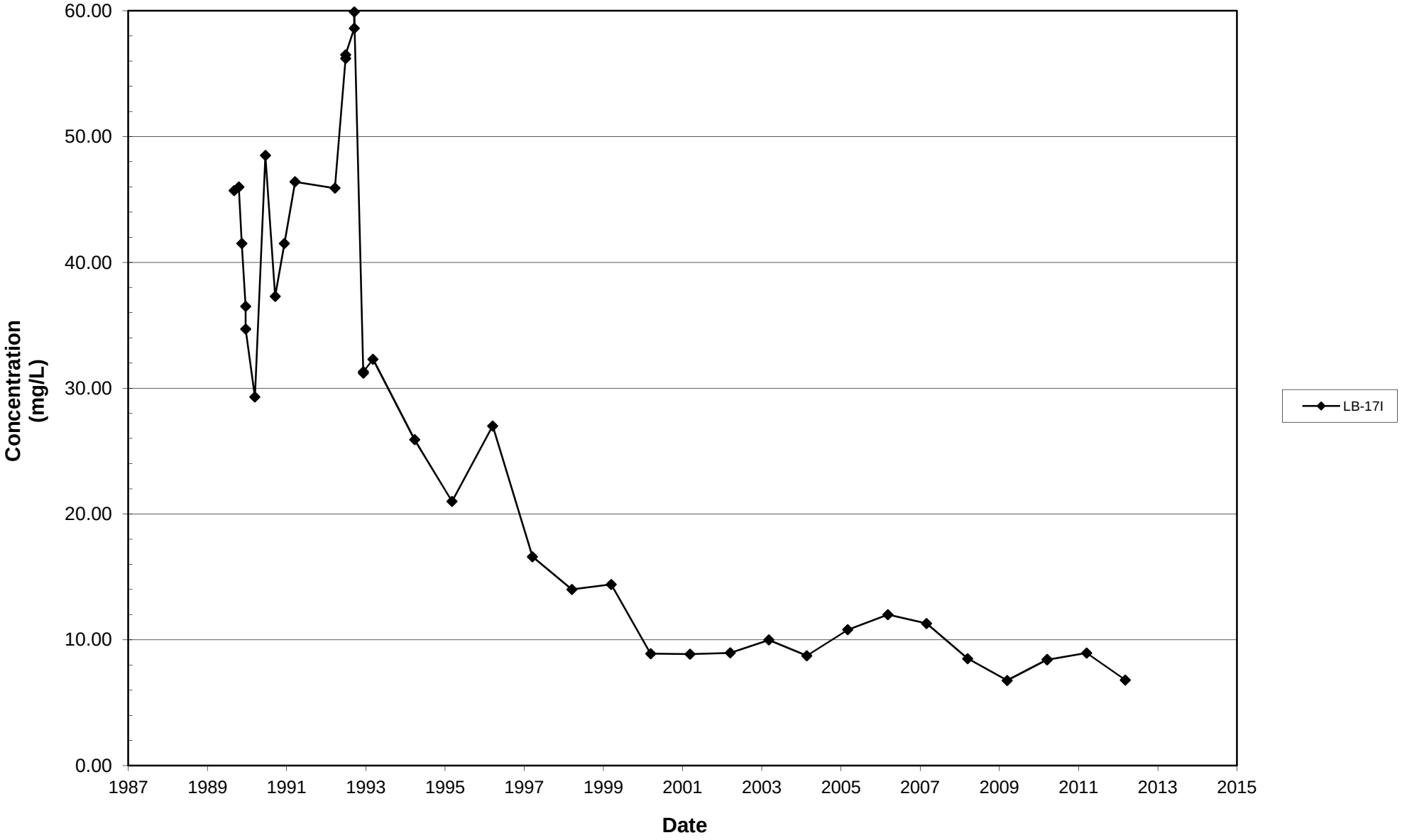
Leichner Landfill
Dissolved Iron, LB-13I
1987 - 2012



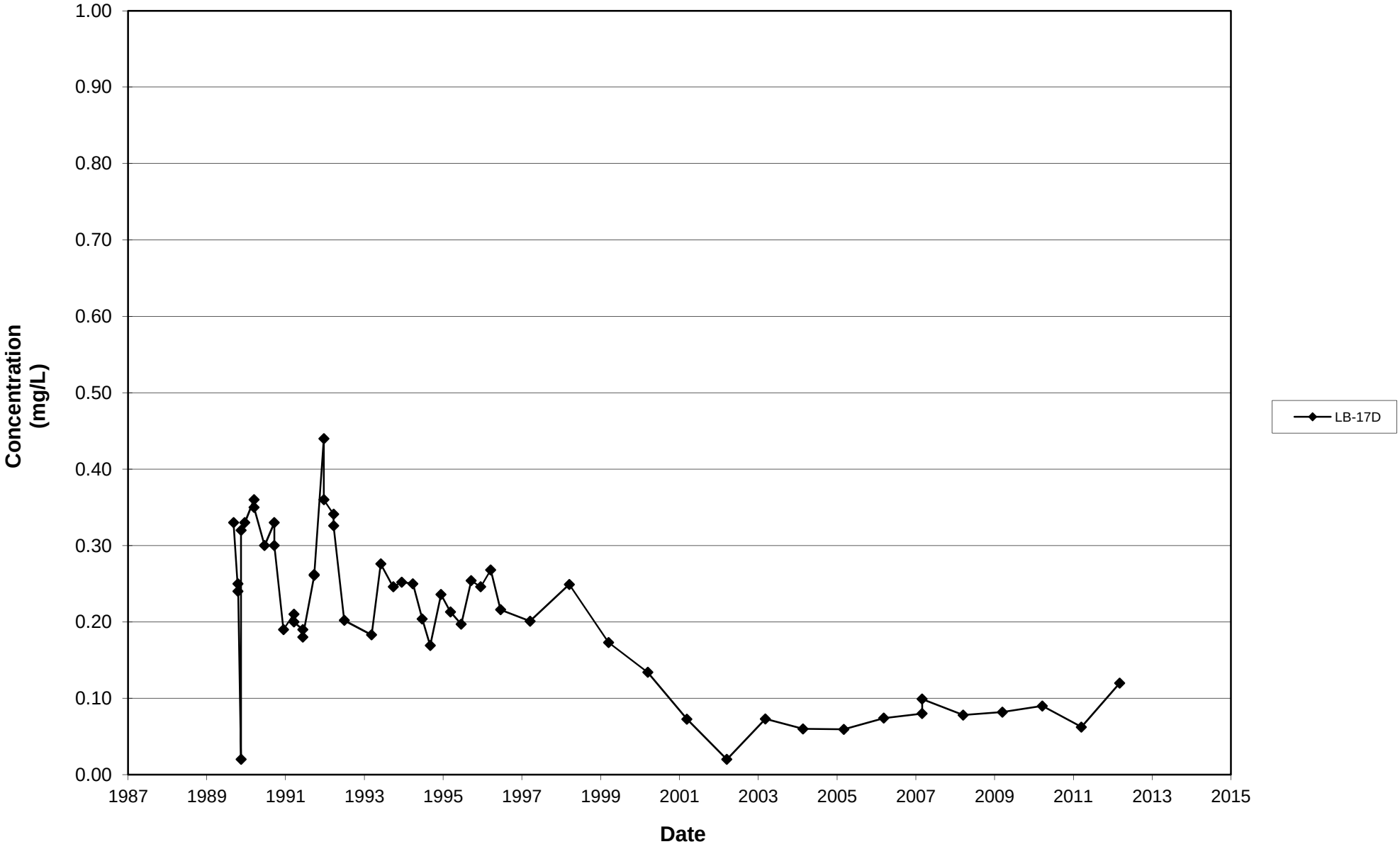
Leichner Landfill
Dissolved Iron, LB-13D
1987 - 2012



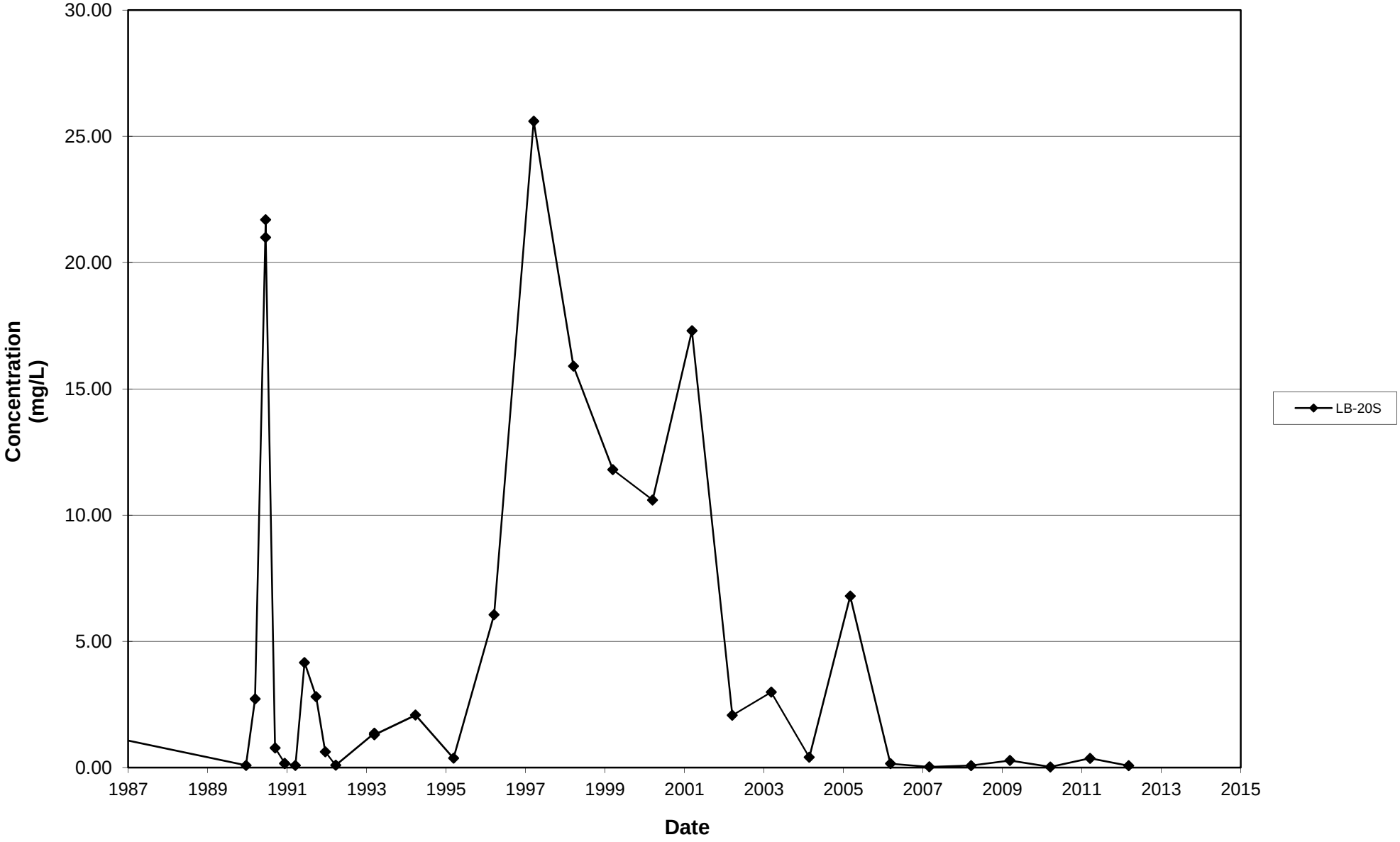
Leichner Landfill
Dissolved Iron, LB-17I
1987 - 2012



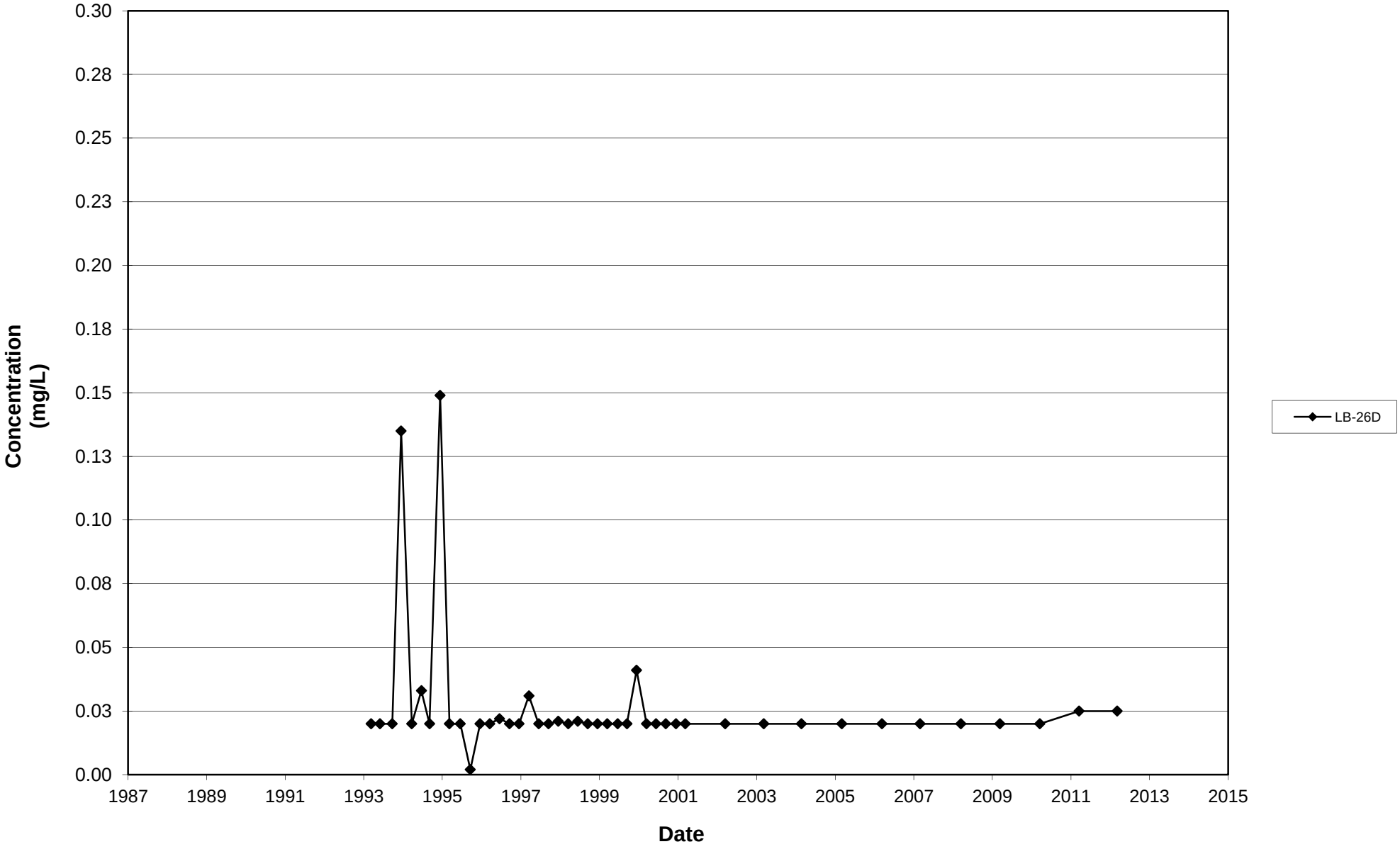
Leichner Landfill
Dissolved Iron, LB-17D
1987 - 2012



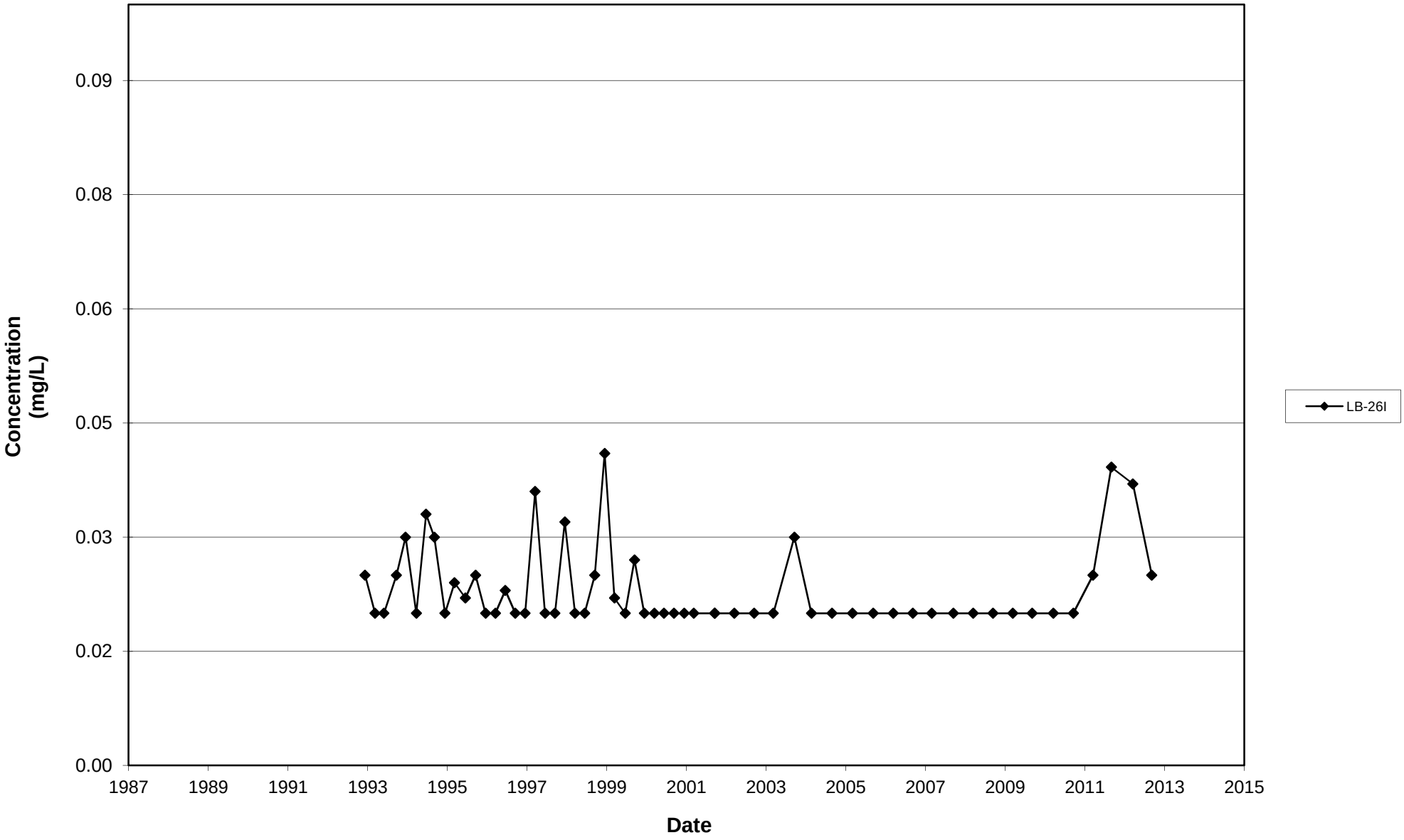
Leichner Landfill
Dissolved Iron, LB-20S
1987 - 2012



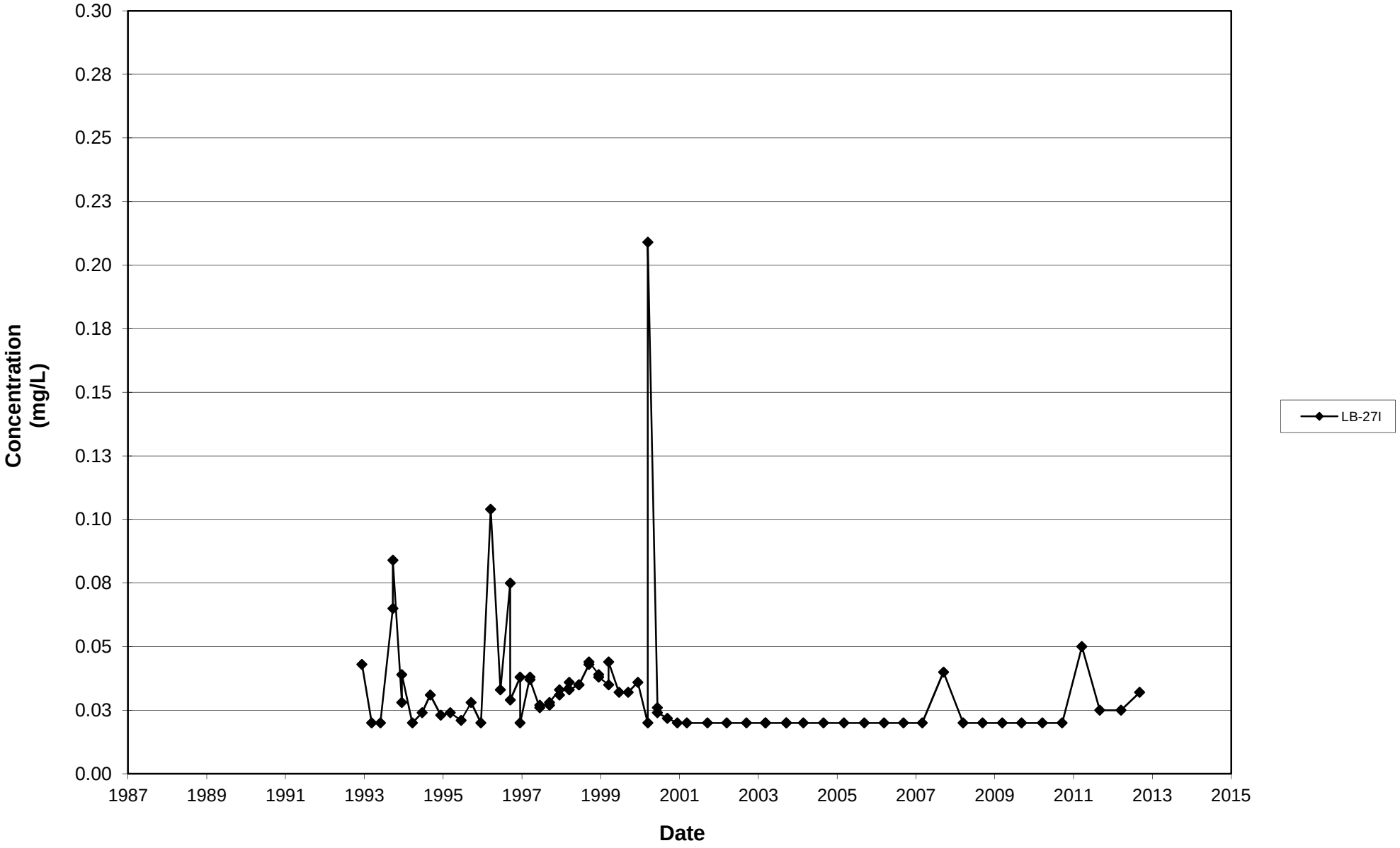
Leichner Landfill
Dissolved Iron, LB-26D
1987 - 2012



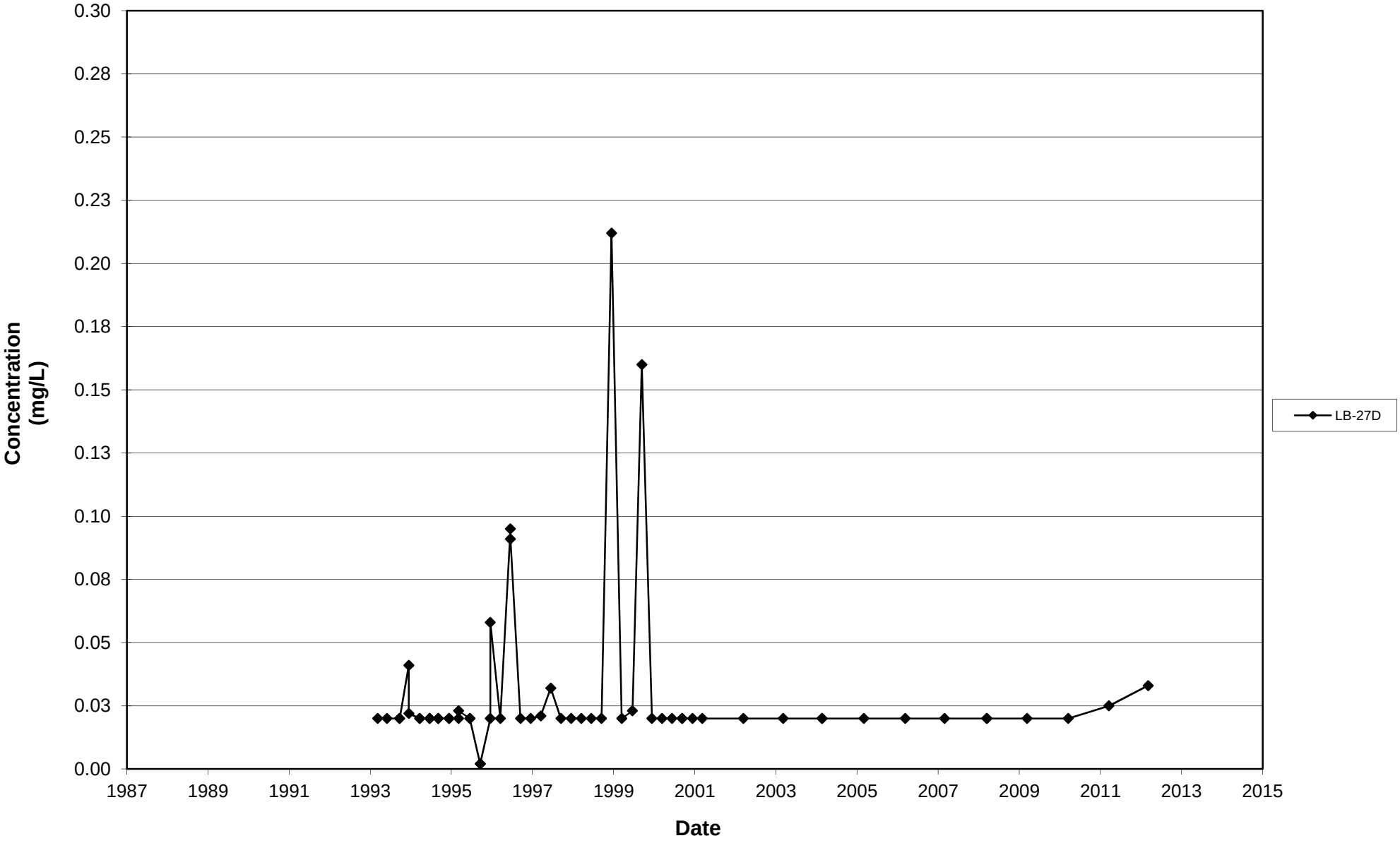
Leichner Landfill
Dissolved Iron, LB-26I
1987 - 2012



Leichner Landfill
Dissolved Iron, LB-27I
1987 - 2012

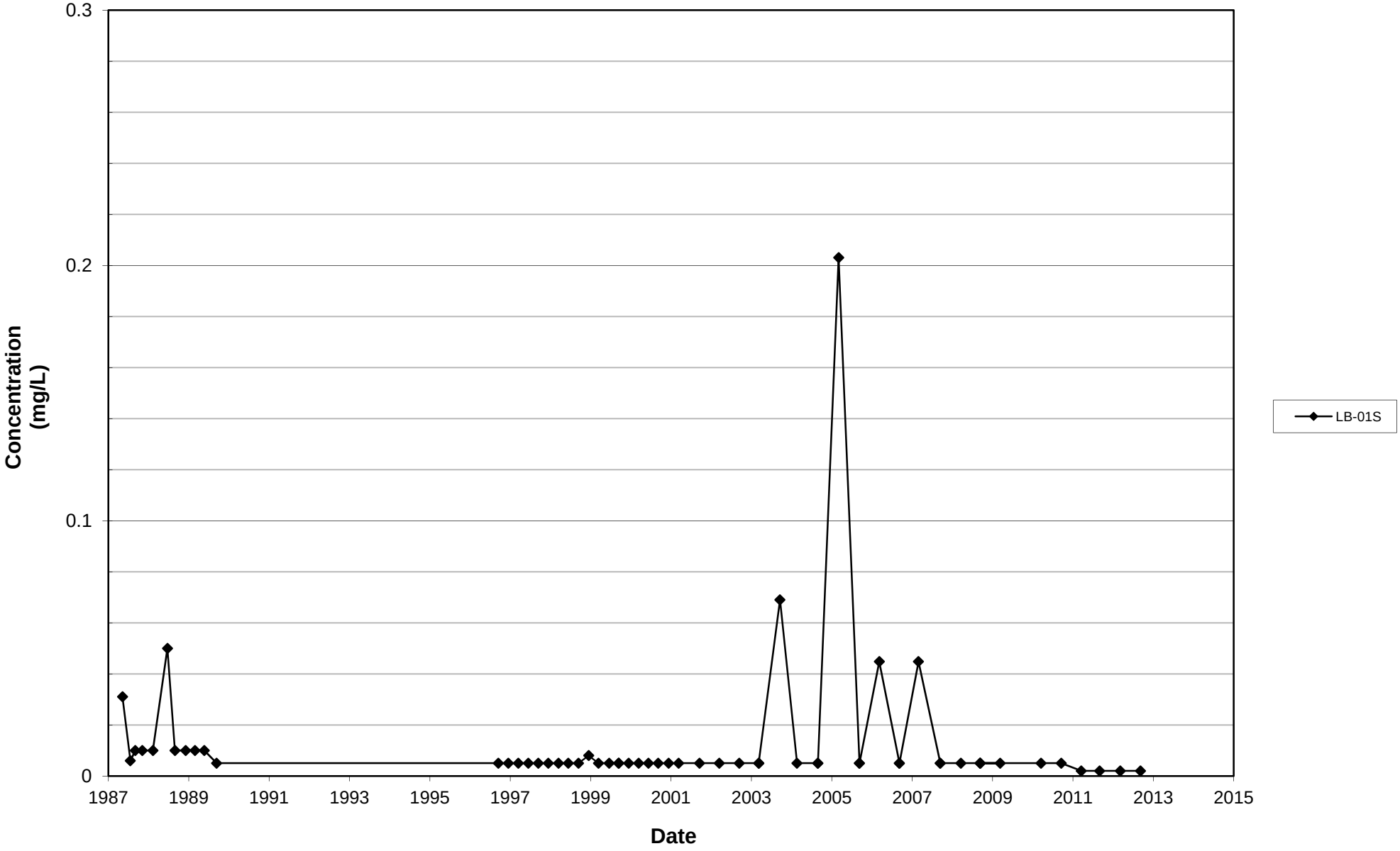


Leichner Landfill
Dissolved Iron, LB-27D
1987 - 2012

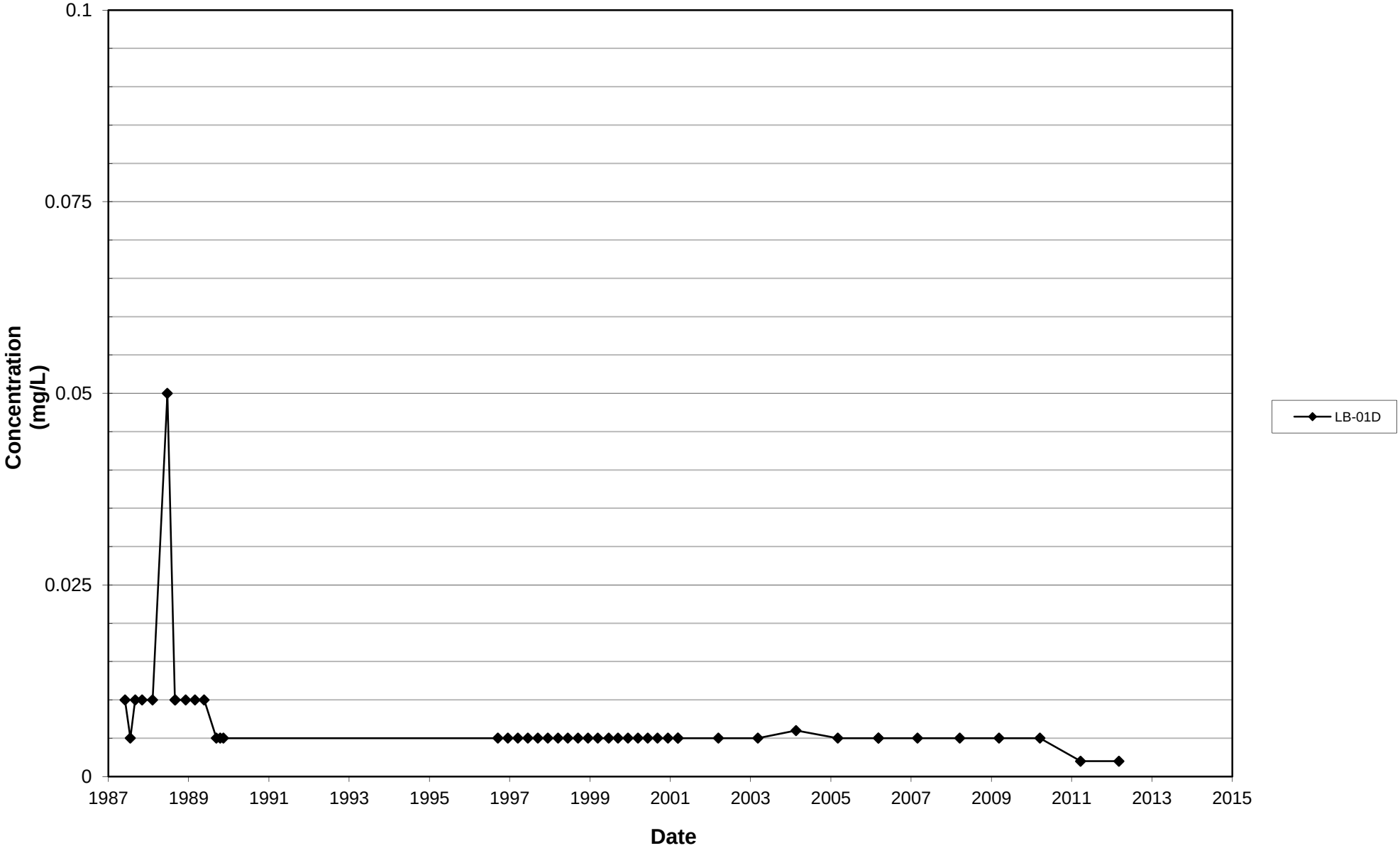


Dissolved Manganese

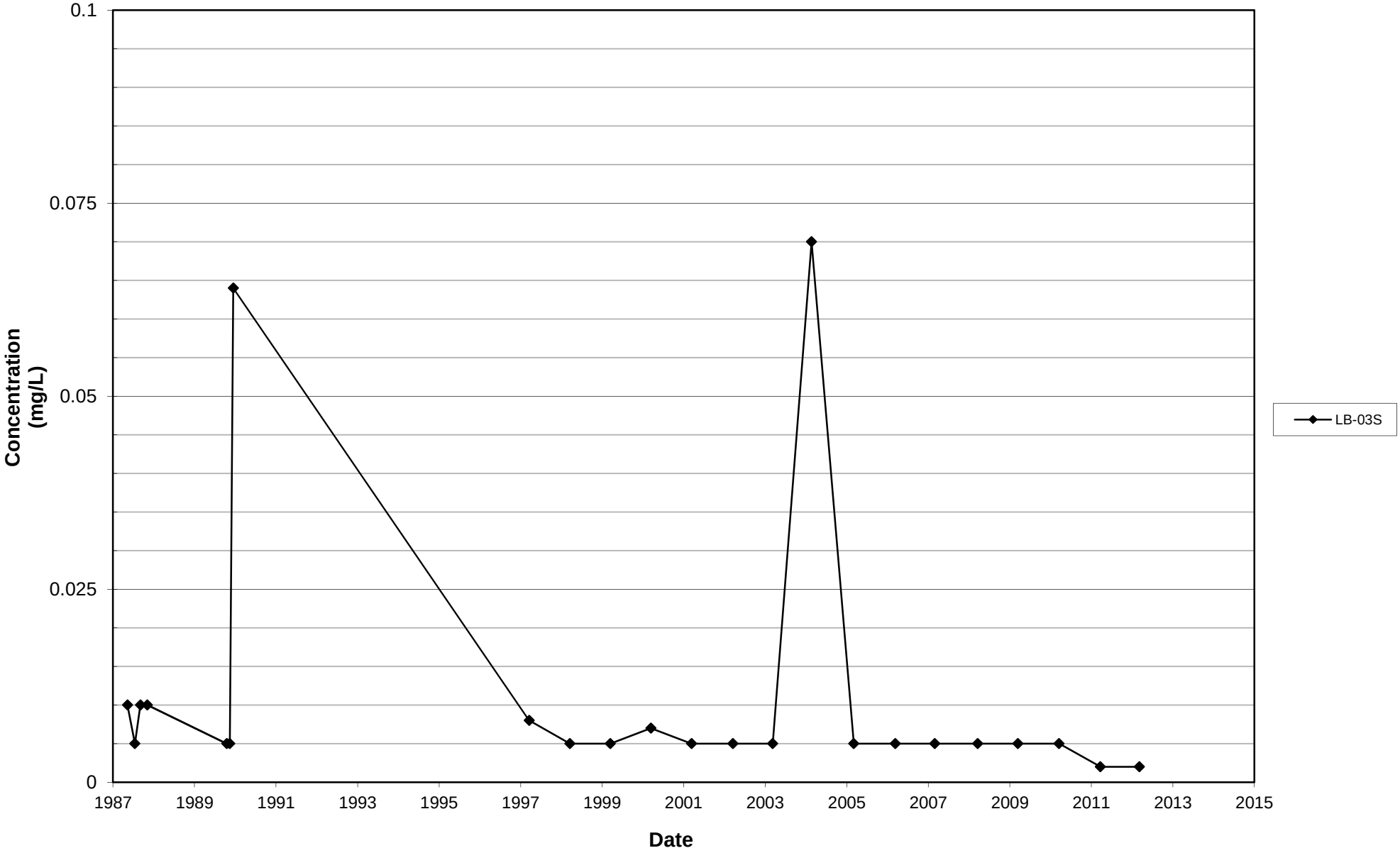
Leichner Landfill
Dissolved Manganese, LB-01S
1987 - 2012



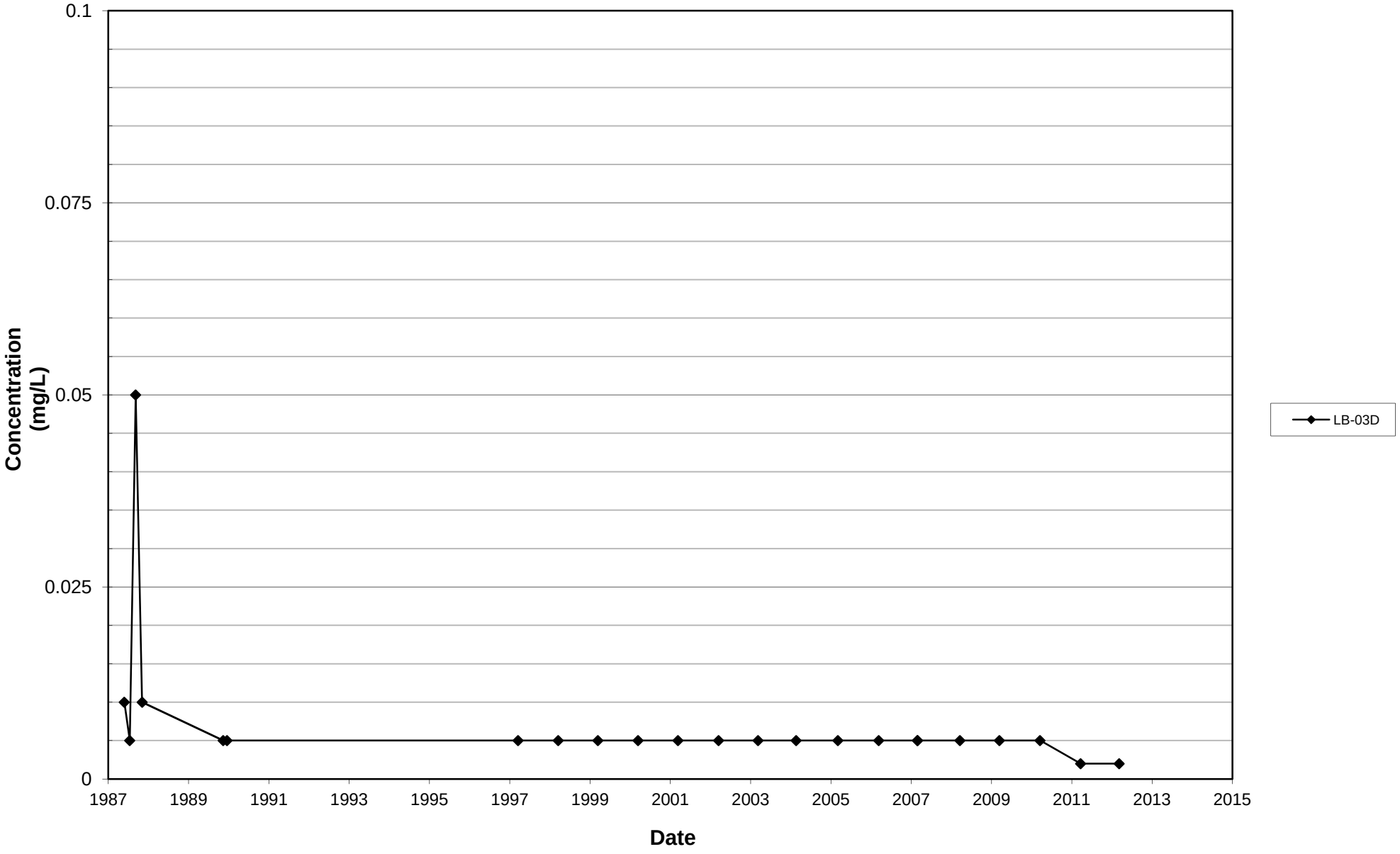
Leichner Landfill
Dissolved Manganese, LB-01D
1987 - 2012



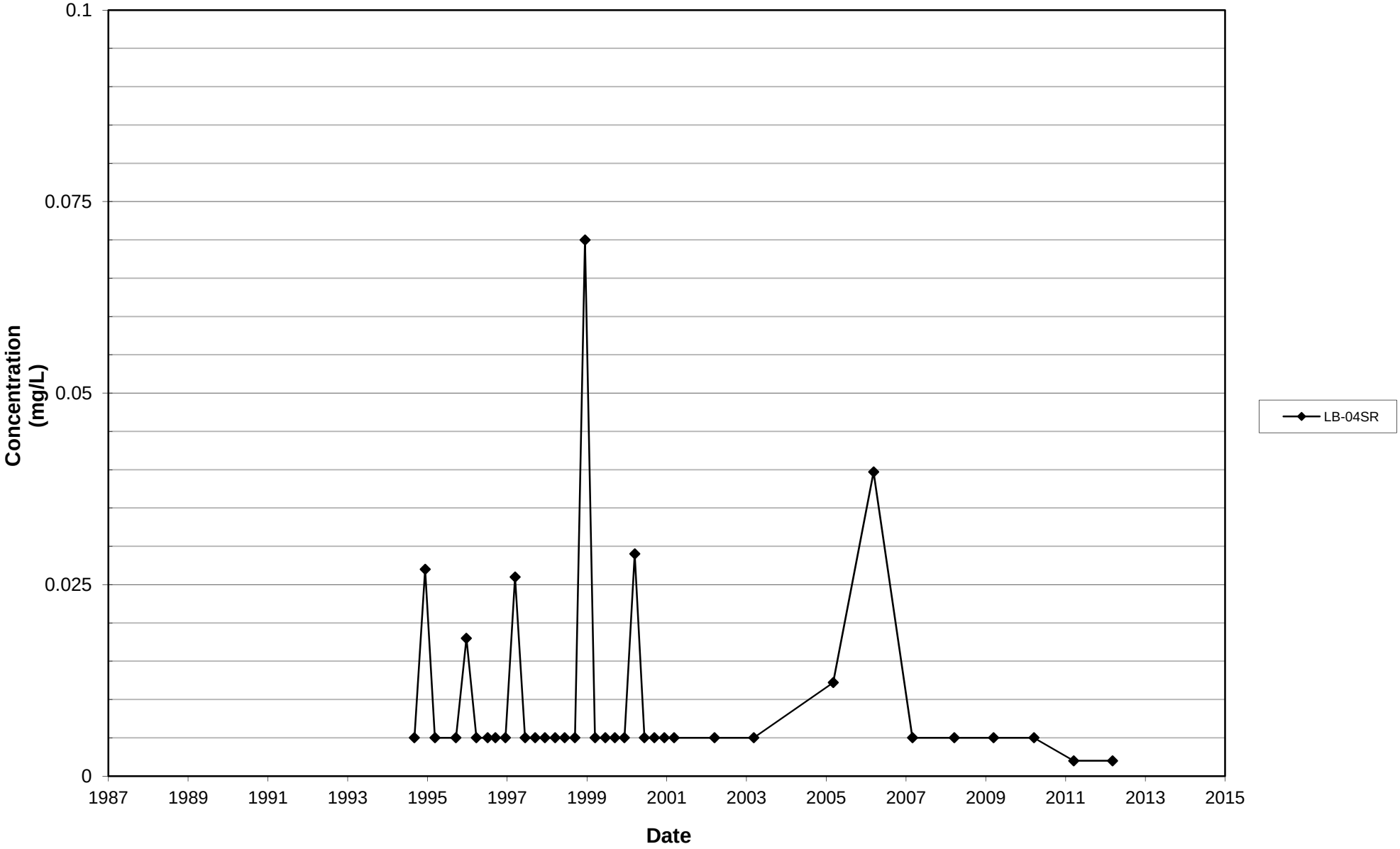
Leichner Landfill
Dissolved Manganese, LB-03S
1987 - 2012



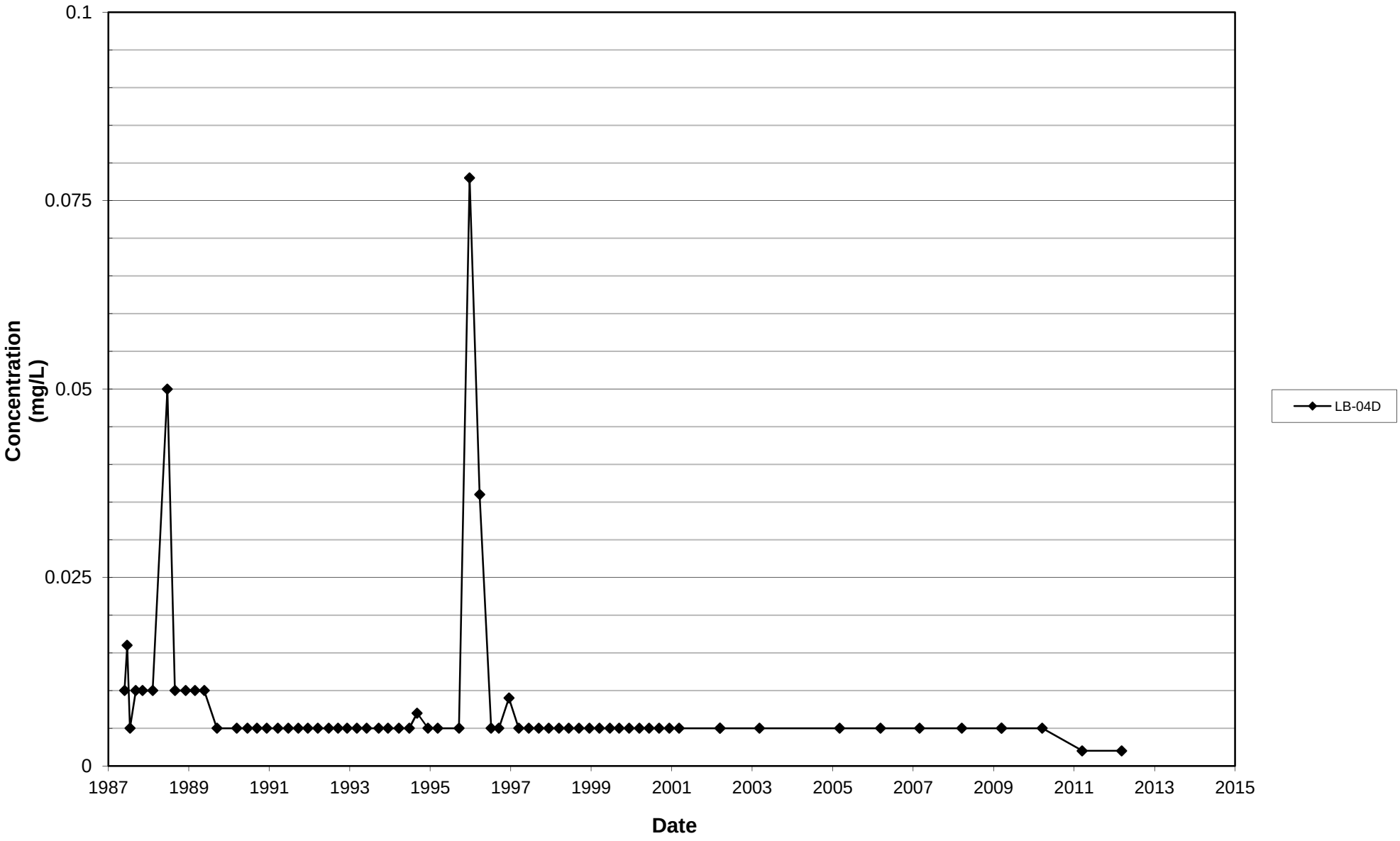
Leichner Landfill
Dissolved Manganese, LB-03D
1987 - 2012



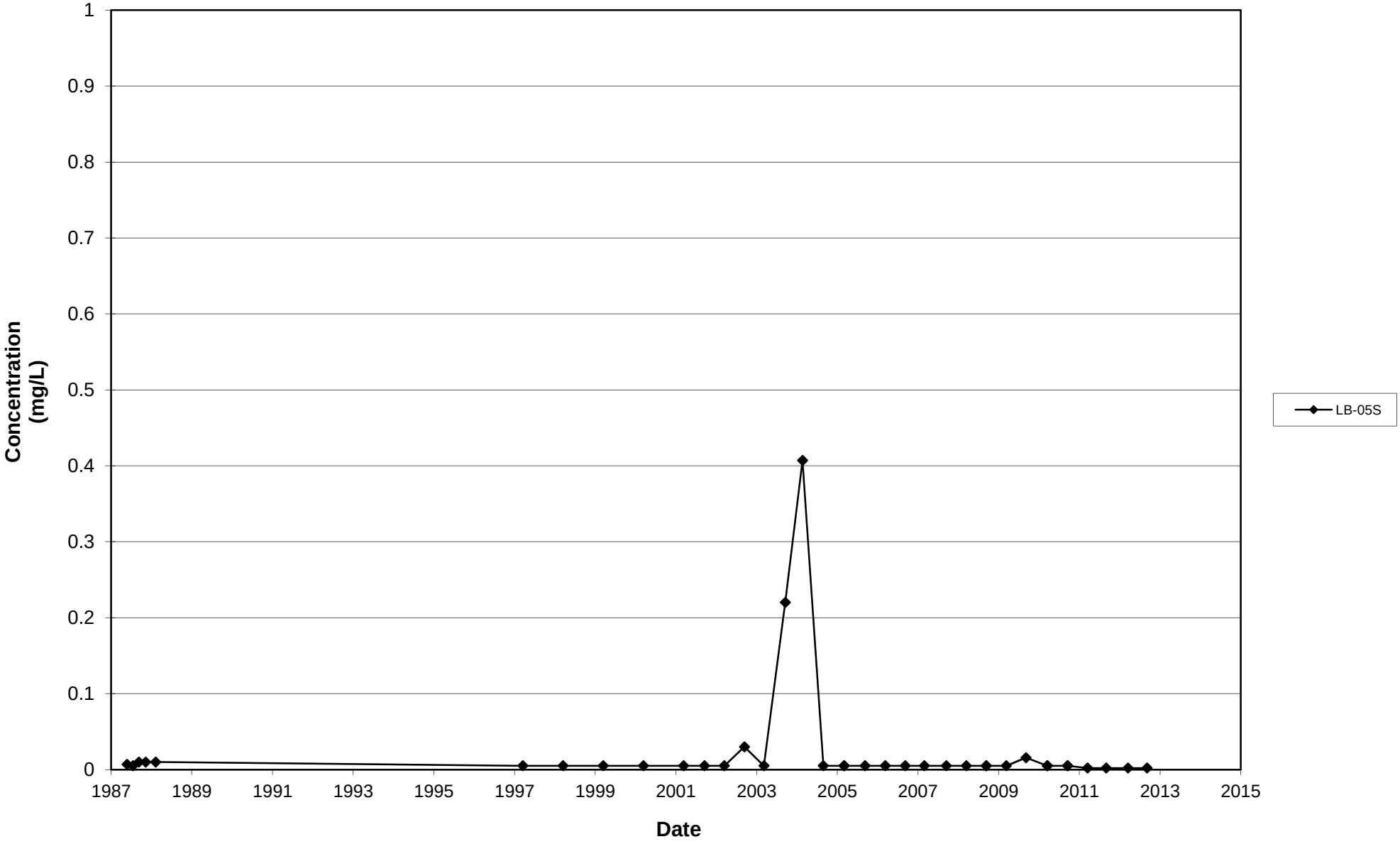
Leichner Landfill
Dissolved Manganese, LB-04SR
1987 - 2012



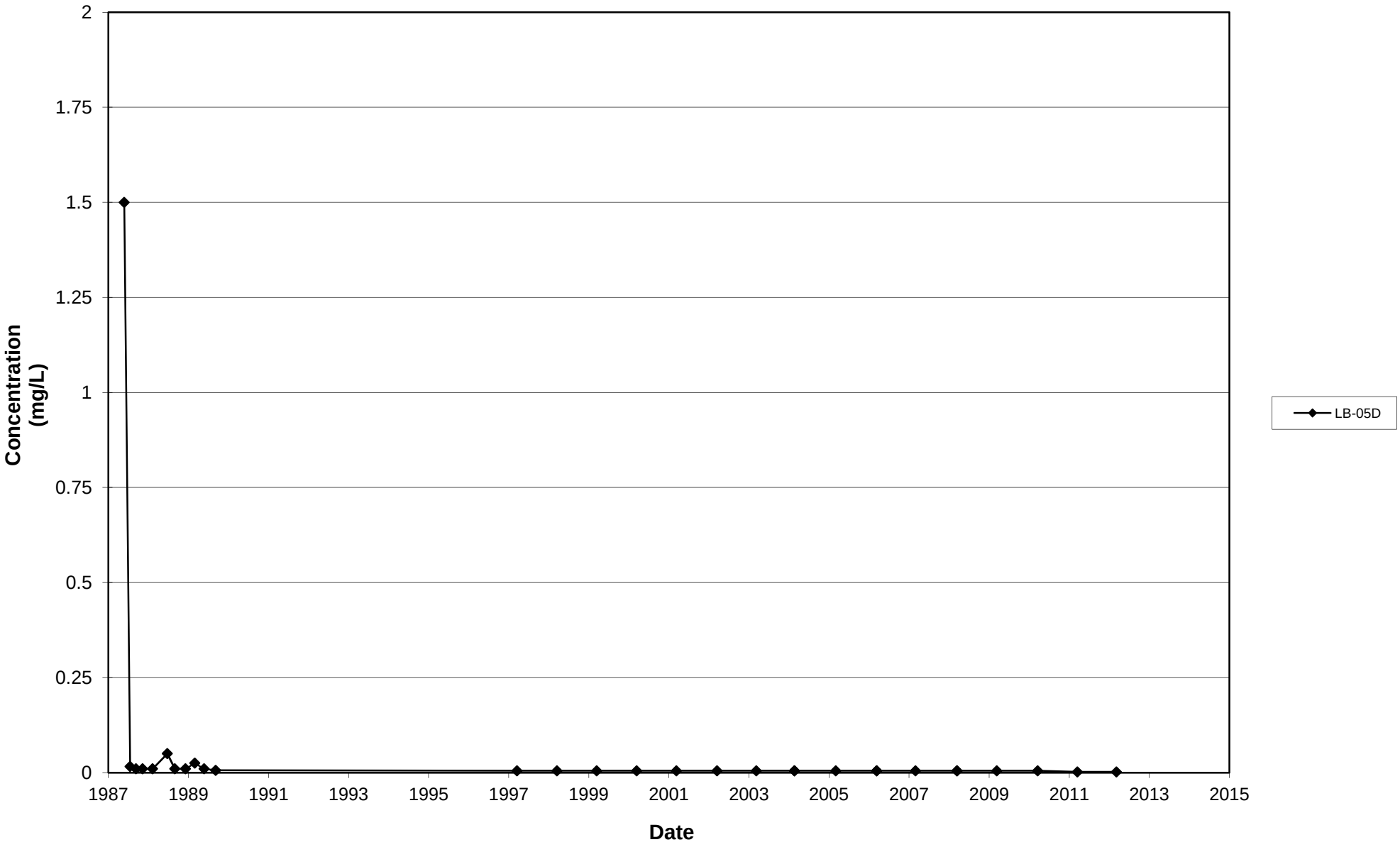
Leichner Landfill
Dissolved Manganese, LB-04D
1987 - 2012



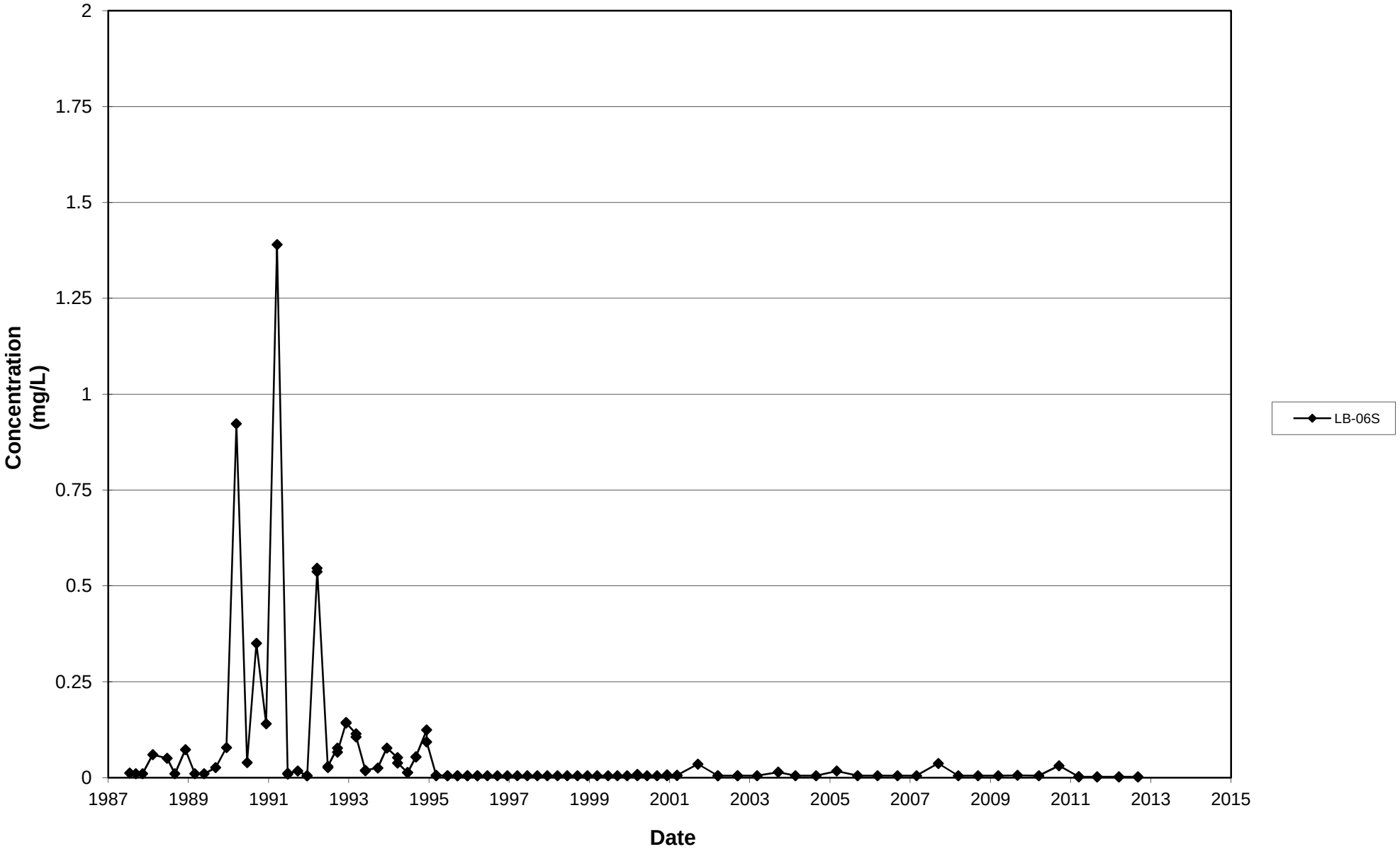
Leichner Landfill
Dissolved Manganese, LB-05S
1987 - 2012



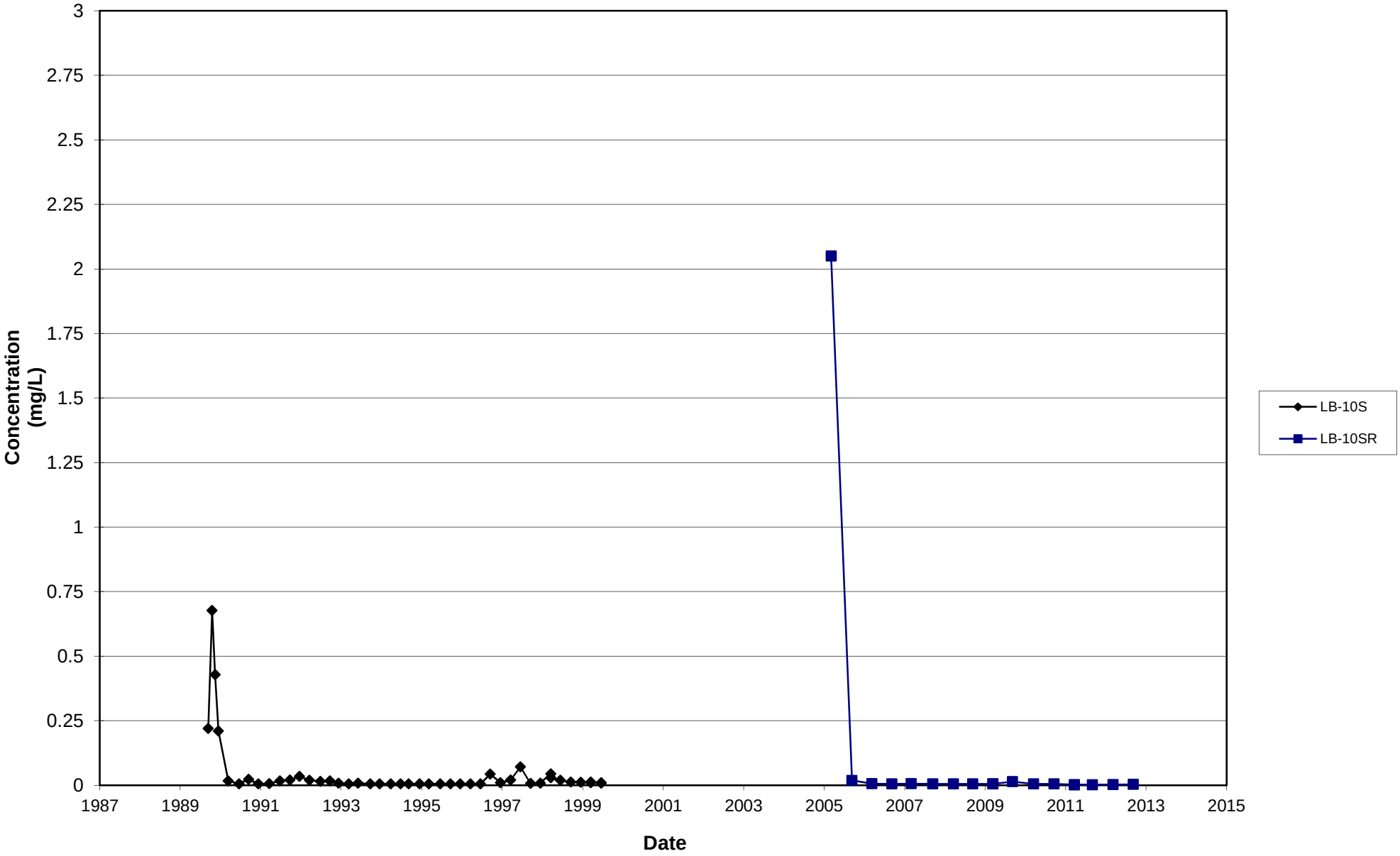
Leichner Landfill
Dissolved Manganese, LB-05D
1987 - 2012



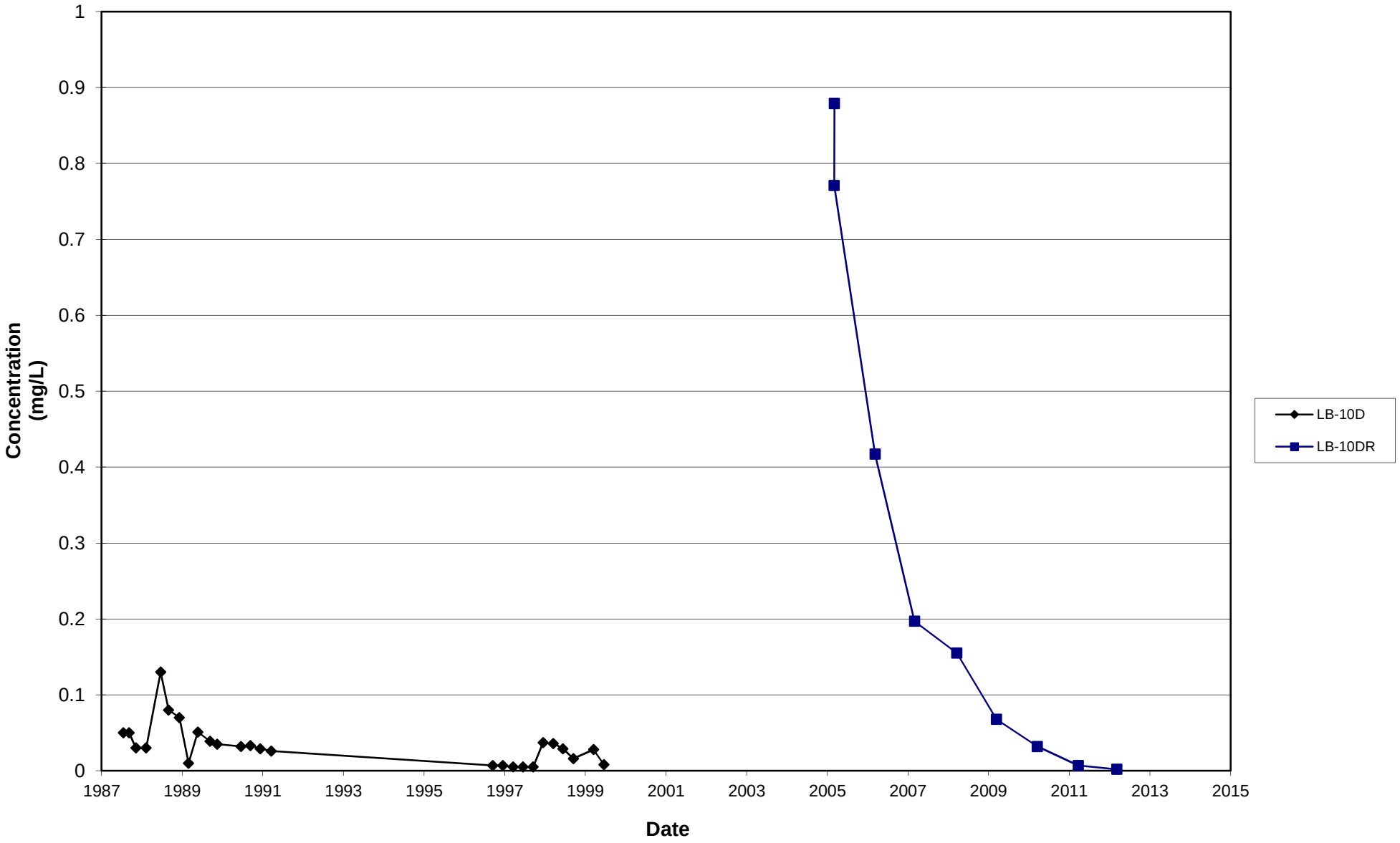
Leichner Landfill
Dissolved Manganese, LB-06S
1987 - 2012



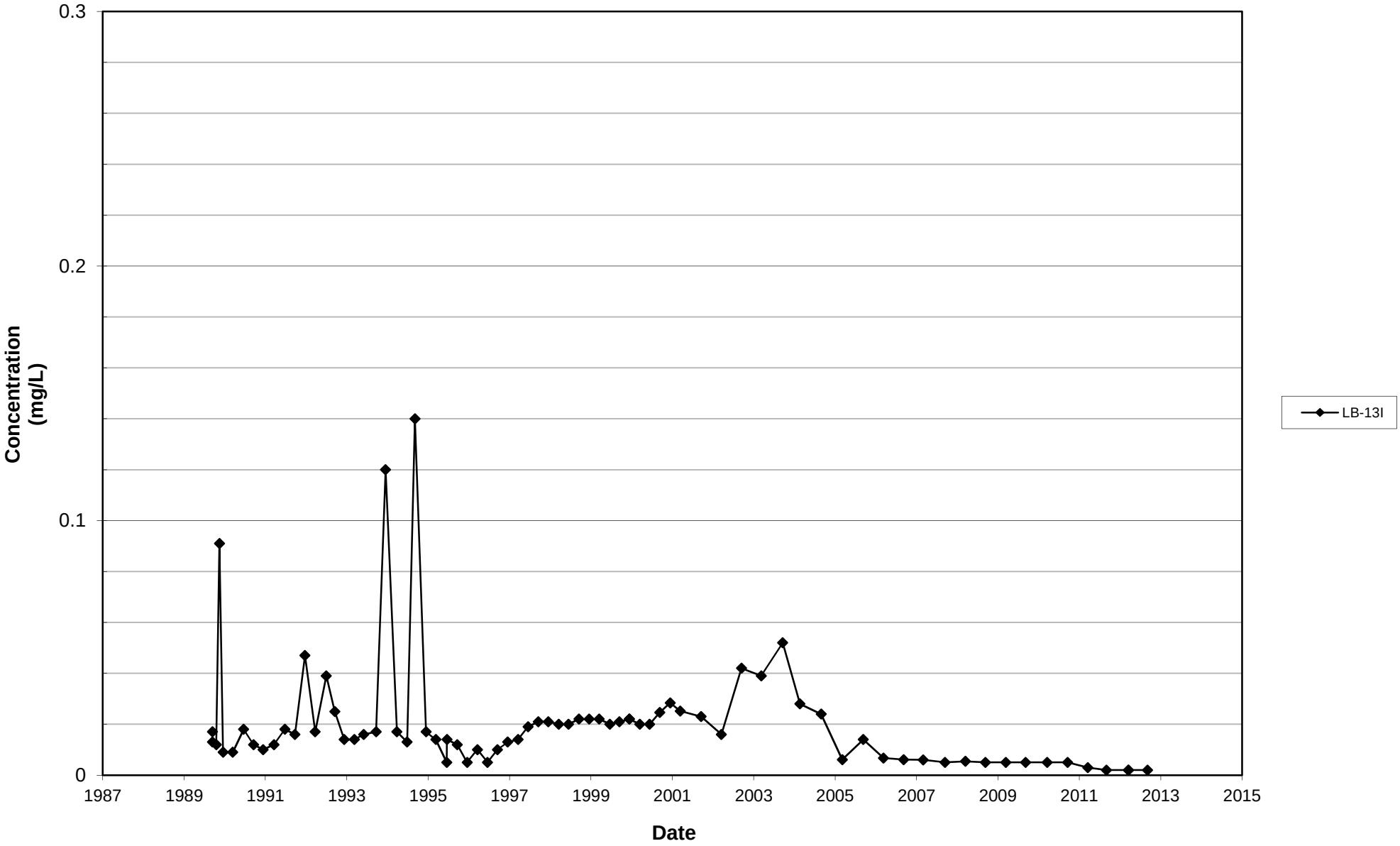
Leichner Landfill
Dissolved Manganese, LB-10S and LB-10SR
1987 - 2012



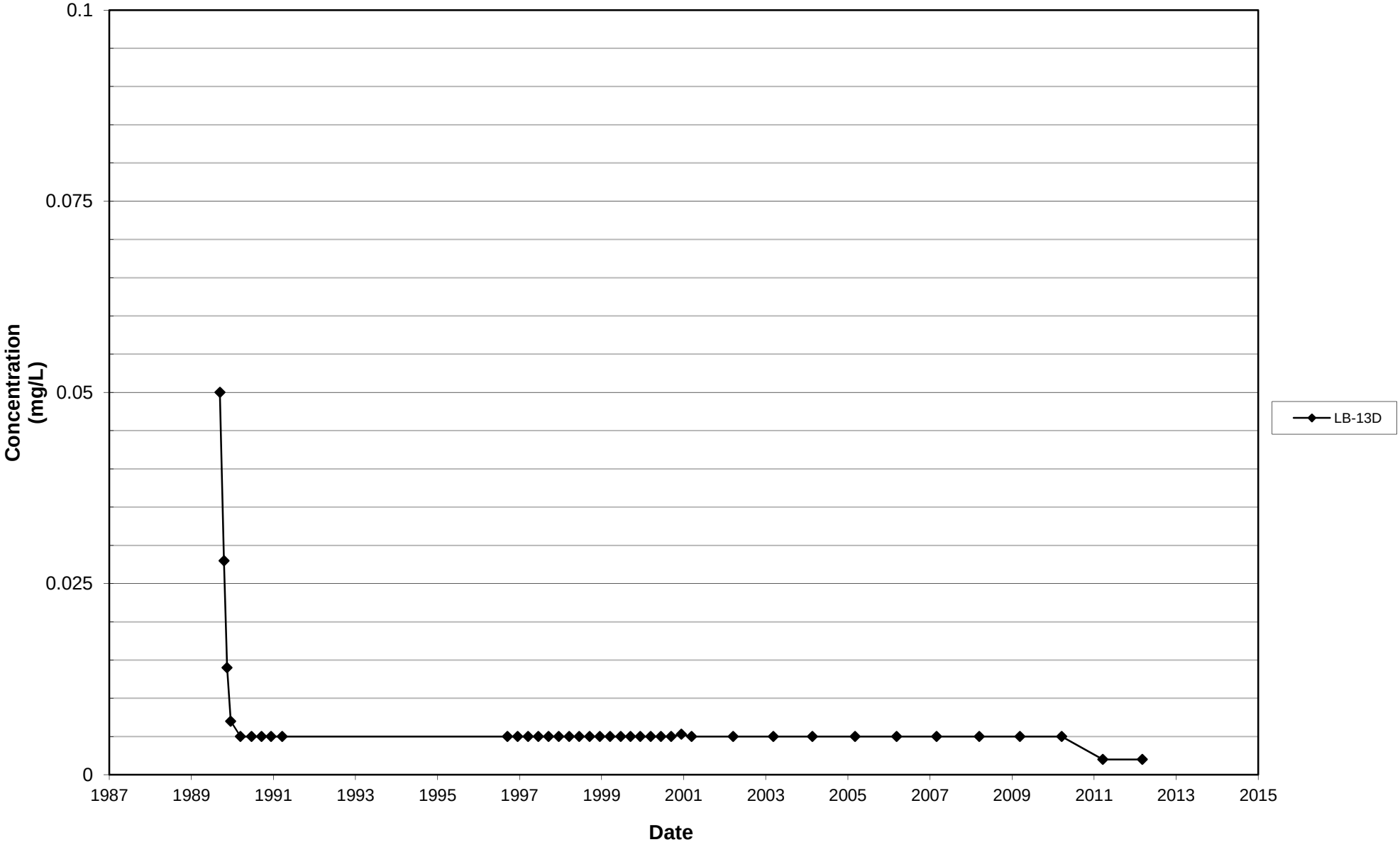
Leichner Landfill
Dissolved Manganese, LB-10D and LB-10DR
1987 - 2012



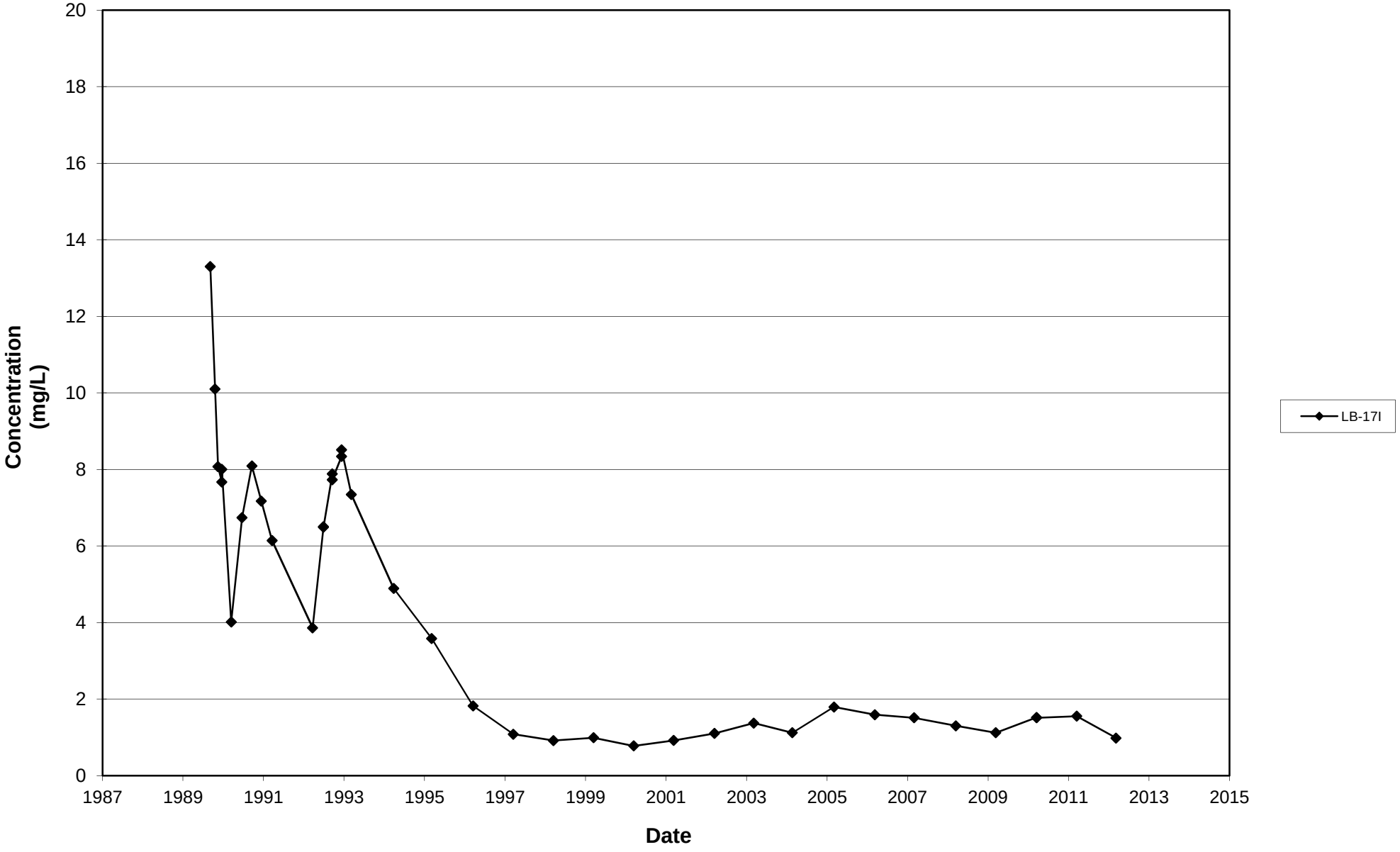
Leichner Landfill
Dissolved Manganese, LB-13I
1987 - 2012



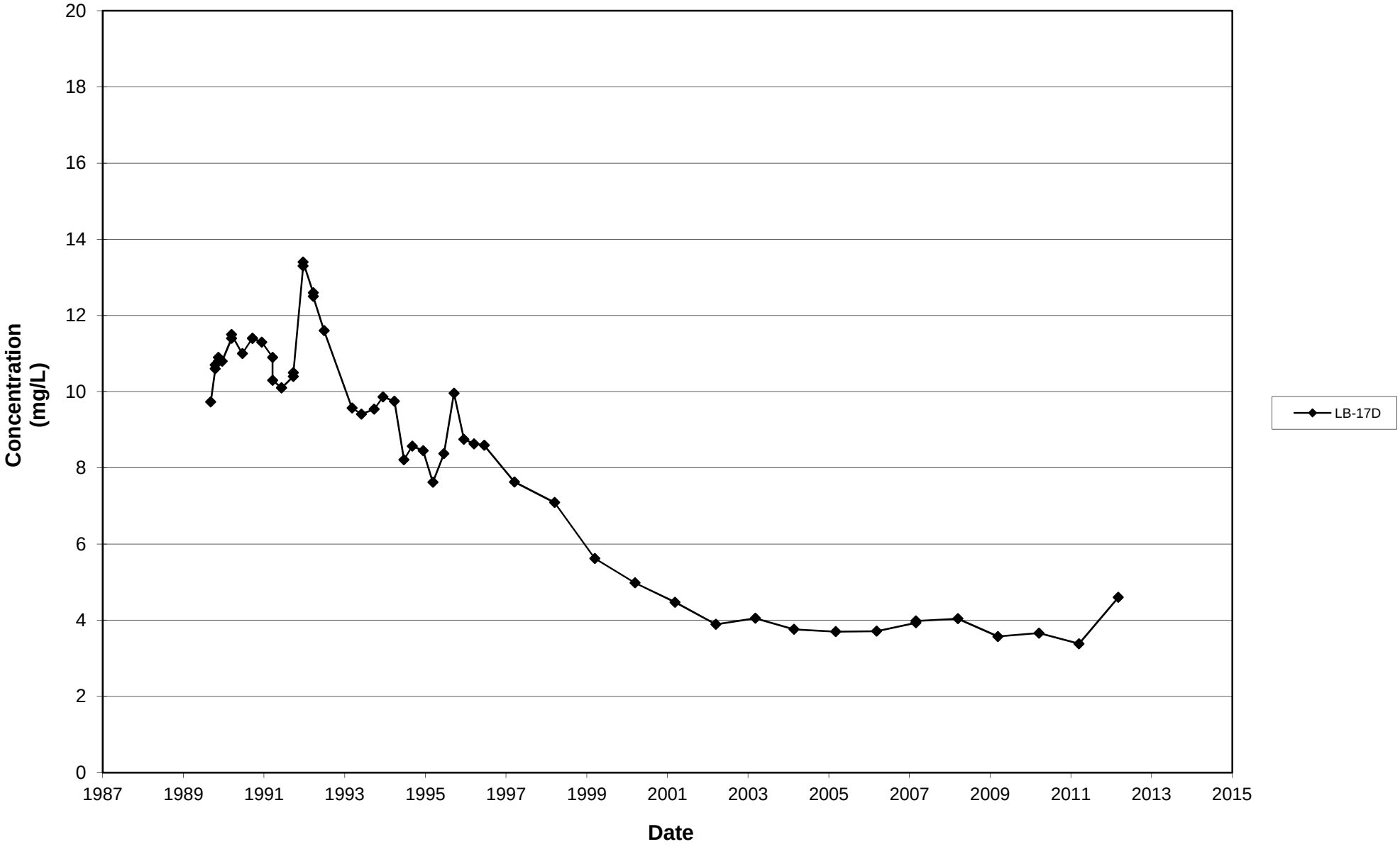
Leichner Landfill
Dissolved Manganese, LB-13D
1987 - 2012



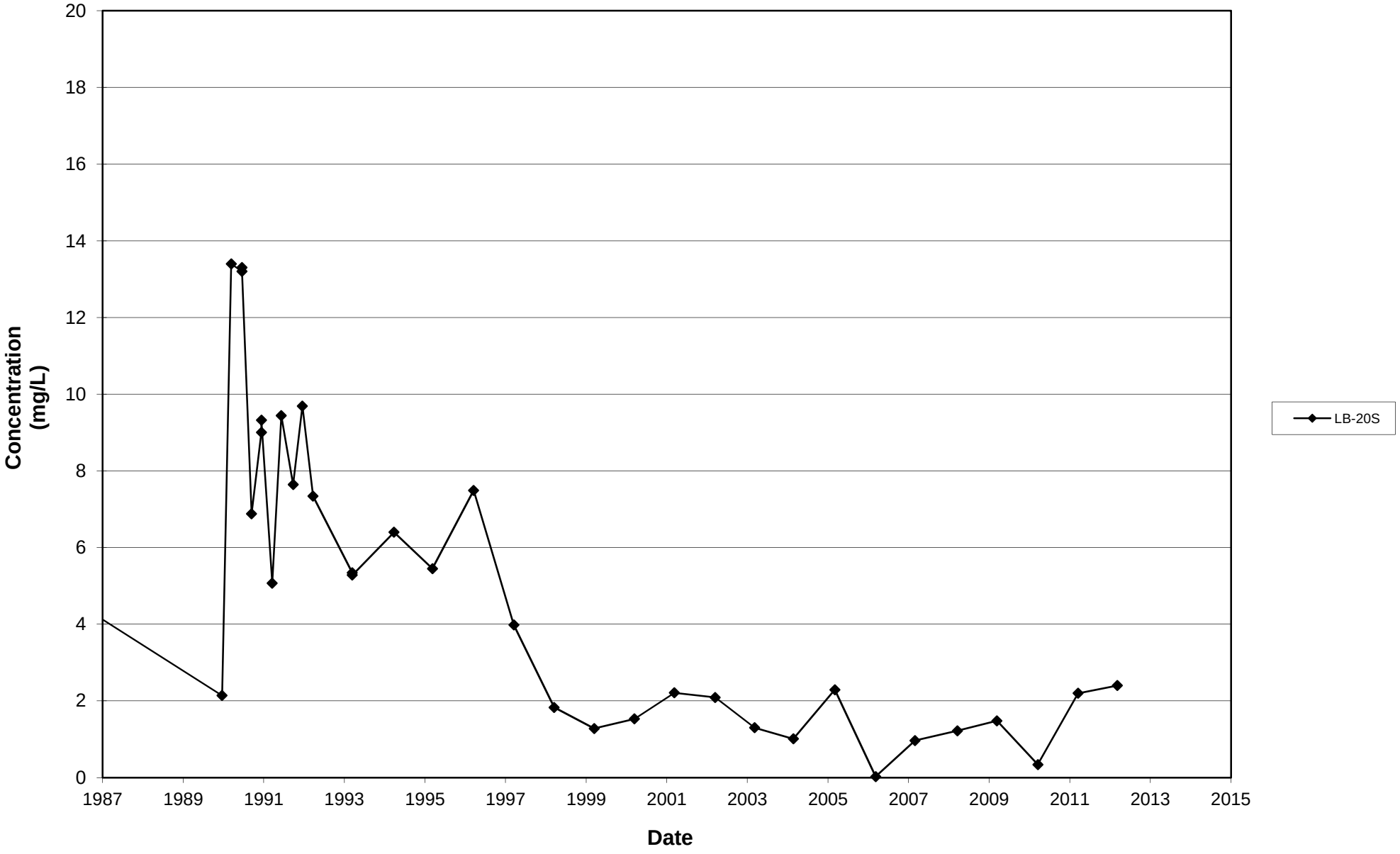
Leichner Landfill
Dissolved Manganese, LB-17I
1987 - 2012



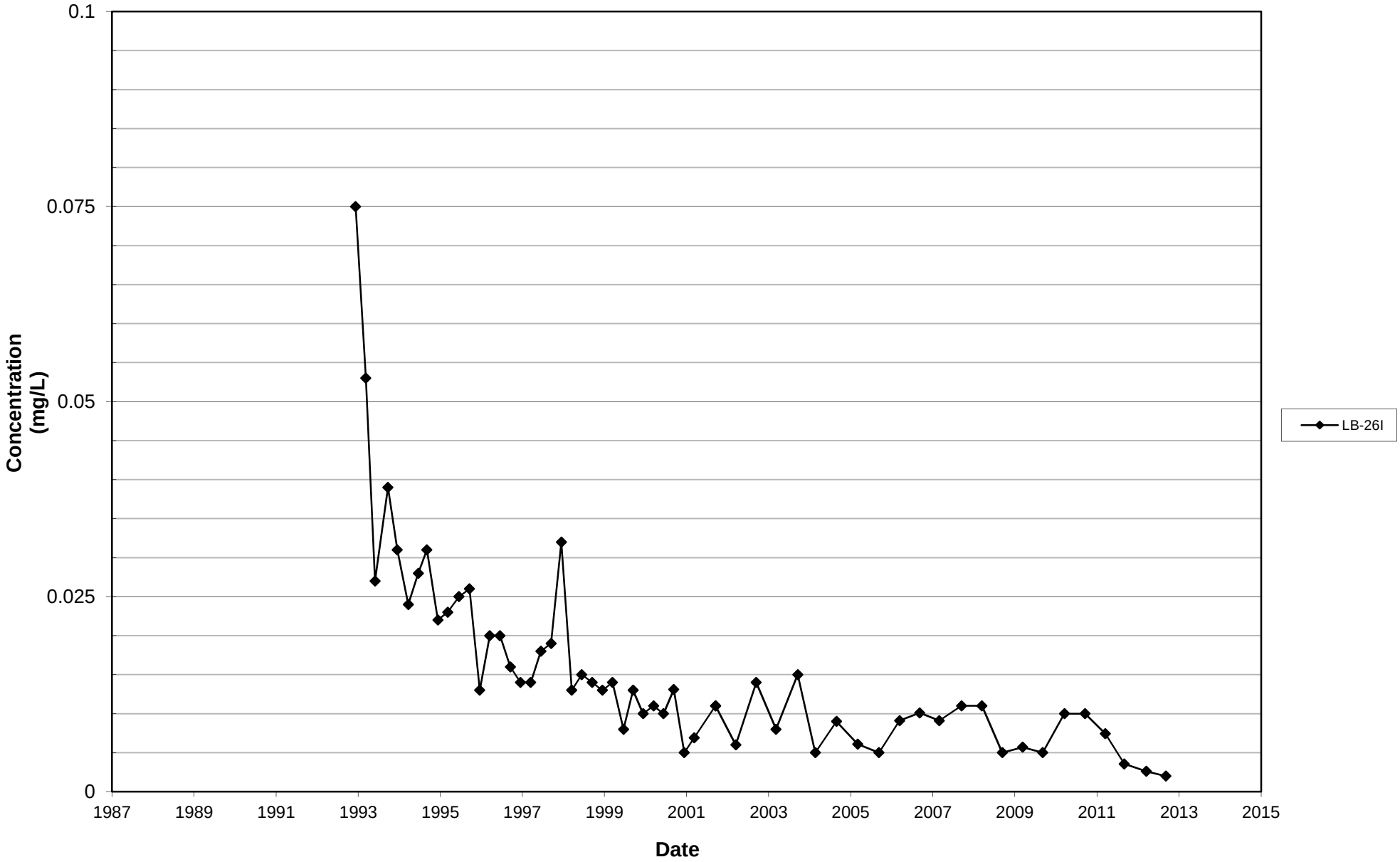
Leichner Landfill
Dissolved Manganese, LB-17D
1987 - 2012



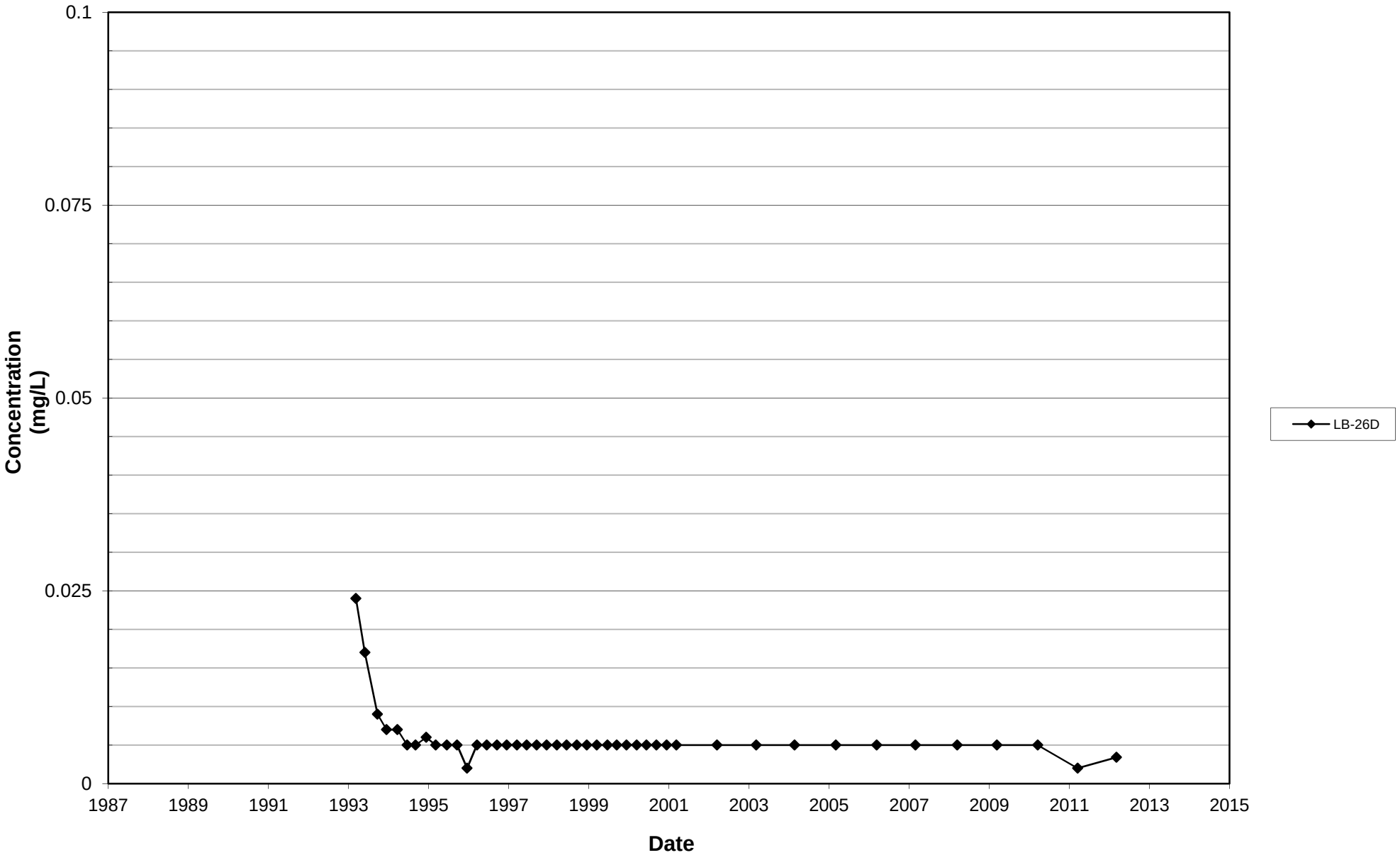
Leichner Landfill
Dissolved Manganese, LB-20S
1987 - 2012



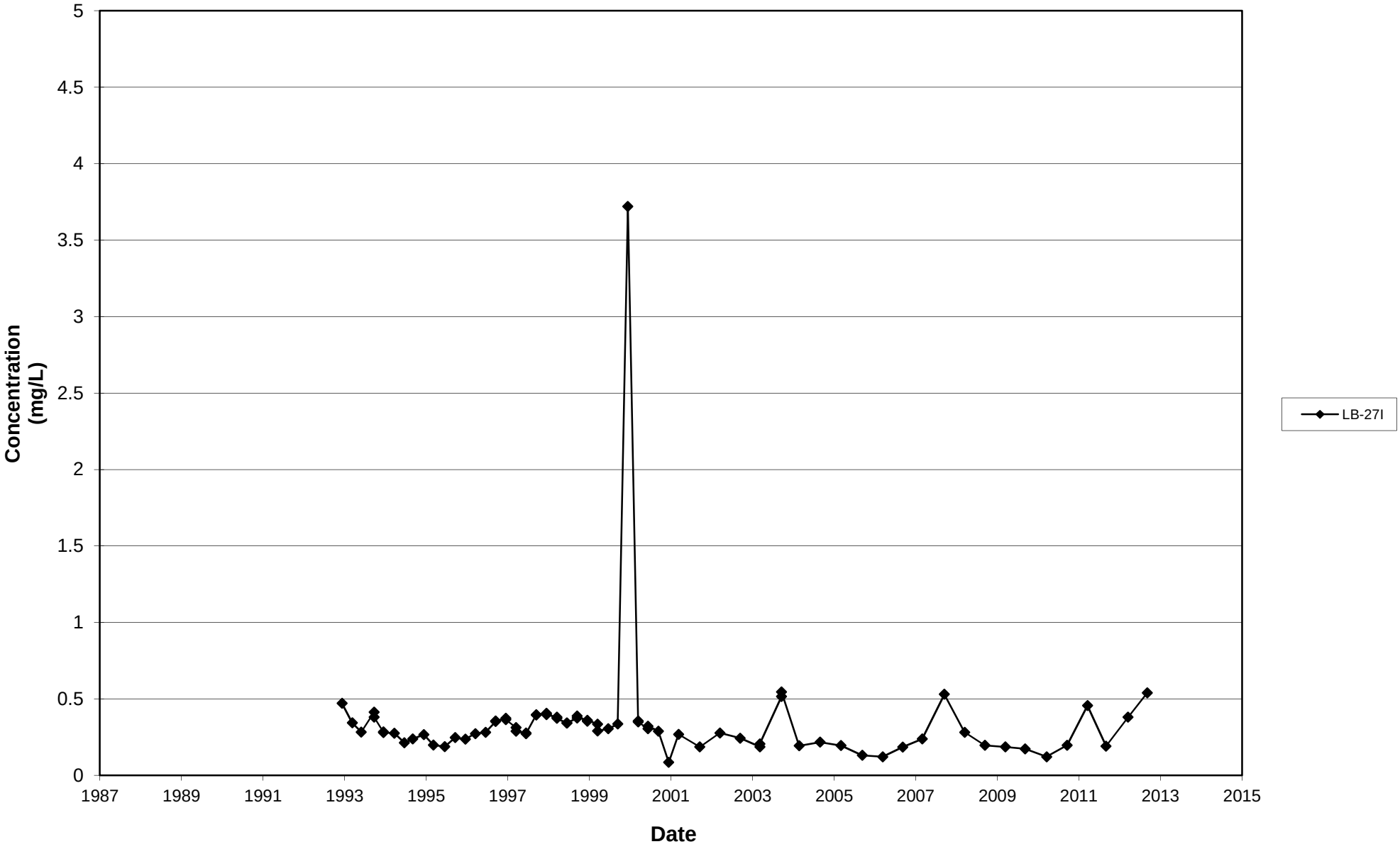
Leichner Landfill
Dissolved Manganese, LB-26I
1987 - 2012



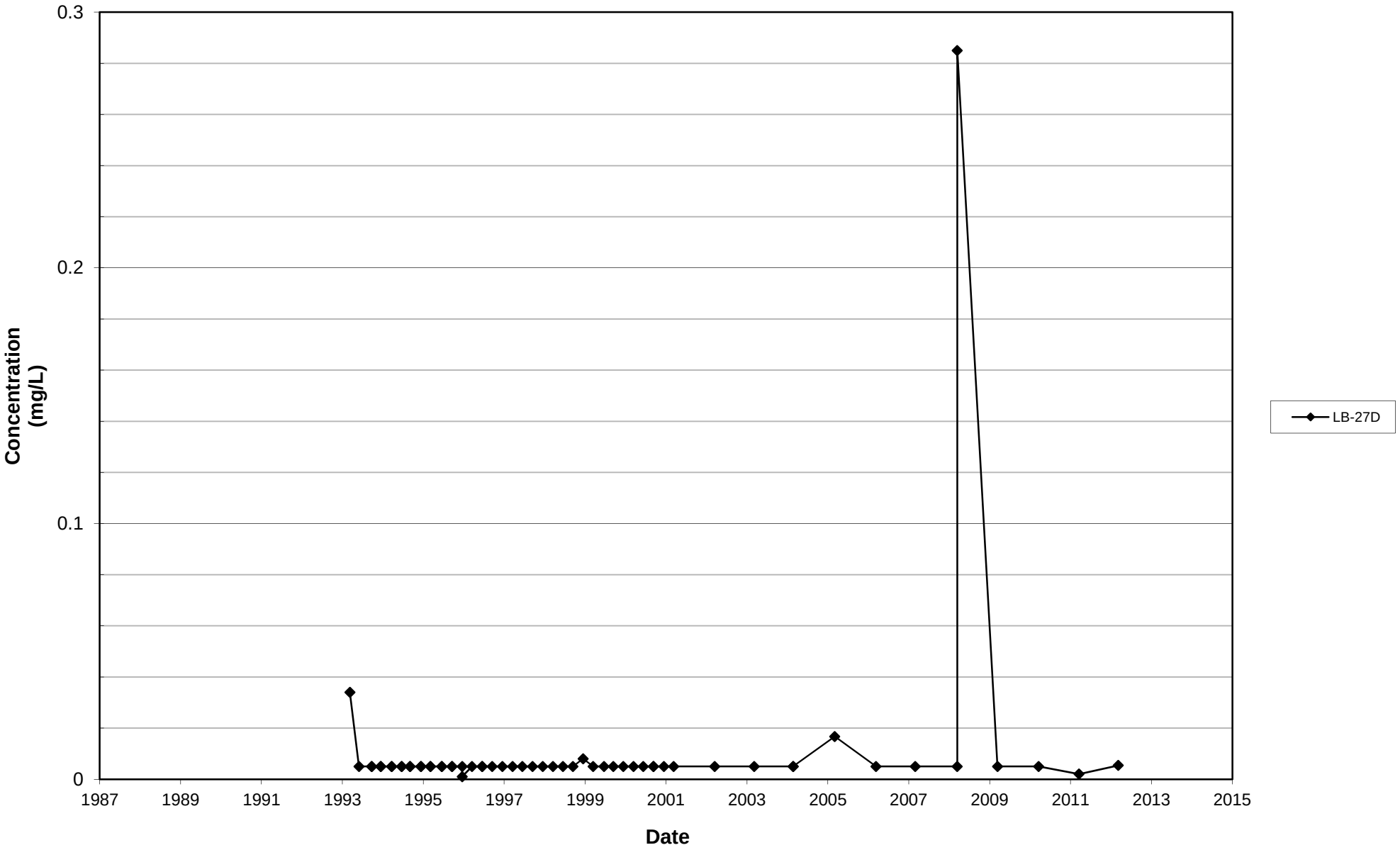
Leichner Landfill
Dissolved Manganese, LB-26D
1987 - 2012



Leichner Landfill
Dissolved Manganese, LB-27I
1987 - 2012



Leichner Landfill
Dissolved Manganese, LB-27D
1987 - 2012



APPENDIX E

2012 Landfill Gas Monitoring Probe Data

Compliance Landfill Gas Monitoring Probe Data
First Quarter (January) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-1A	1/9/2012 11:48	0.0	1.6	20.2	78.2	-0.01
GP-1B	1/9/2012 11:47	0.0	2.0	19.7	78.3	-0.01
GP-02	1/9/2012 11:51	0.0	2.4	19.4	78.2	0
GP-03	1/9/2012 11:43	0.0	2.6	18.3	79.1	0
GP-4A	1/9/2012 11:41	0.0	2.0	18.6	79.4	-0.32
GP-4B	1/9/2012 11:39	0.0	2.5	17.9	79.6	-0.01
GP-05	1/9/2012 11:37	0.0	3.2	17.4	79.4	0.02
GP-06	1/9/2012 11:58	0.0	5.0	13.8	81.2	0
GP-07	1/9/2012 11:55	0.0	9.2	4.2	86.6	0
GP-08	1/9/2012 13:20	0.0	7.1	6.4	86.5	0.01
GP-9A	1/9/2012 13:23	0.0	3.8	14.5	81.7	0.02
GP-9B	1/9/2012 13:22	0.0	12.5	3.2	84.3	0
GP-10A	1/9/2012 13:18	0.0	4.1	15.4	80.5	0.01
GP-10B	1/9/2012 13:17	0.0	1.3	19.1	79.6	0.02
GP-11	1/9/2012 13:15	0.0	0.9	20.0	79.1	-0.03
GP-12	1/9/2012 13:14	0.0	0.7	20.9	78.4	-0.02
GP-13	1/9/2012 13:12	0.0	1.5	18.8	79.7	-0.02
GP-14	1/9/2012 13:08	0.0	0.9	20.6	78.5	-0.02
GP-15	1/9/2012 13:04	0.0	1.9	20.1	78	-0.01
GP-16D	1/9/2012 12:53	0.0	2.5	19.8	77.7	0.01
GP-16S	1/9/2012 12:52	0.0	1.5	20.7	77.8	0
GP-17D	1/9/2012 12:49	0.0	3.0	19.0	78	-0.01
GP-17S	1/9/2012 12:48	0.0	2.9	19.2	77.9	-0.01
GP-18D	1/9/2012 12:45	0.0	3.1	19.2	77.7	0
GP-18S	1/9/2012 12:43	0.0	1.7	20.4	77.9	-0.01
GP-19D	1/9/2012 12:39	0.0	3.1	19.0	77.9	-0.01
GP-19S	1/9/2012 12:38	0.0	2.1	19.8	78.1	-0.01
GP-20	1/9/2012 12:33	0.0	8.3	9.6	82.1	0
GP-21A	1/9/2012 12:26	0.0	0.7	21.3	78	0
GP-21B	1/9/2012 12:24	0.0	0.9	21.0	78.1	0.01
GP-22	1/9/2012 12:22	0.0	0.8	21.2	78	0
GP-23	1/9/2012 12:21	0.0	0.8	21.2	78	0.32
GP-24A	1/9/2012 12:18	0.0	0.9	21.0	78.1	0
GP-24B	1/9/2012 12:17	0.0	1.0	21.0	78	-0.01
GP-25A	1/9/2012 12:10	0.0	1.9	19.7	78.4	-0.01
GP-25B	1/9/2012 12:09	0.0	4.1	17.5	78.4	-0.01
GP-26	1/9/2012 11:21	0.0	0.7	21.3	78	0
GP-27	1/9/2012 11:19	0.0	1.1	20.6	78.3	0

Compliance Landfill Gas Monitoring Probe Data
First Quarter (January) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-28	1/9/2012 12:06	0.0	4.6	16.2	79.2	0
GP-29	1/9/2012 12:01	0.0	5.0	10.9	84.1	0.01
GP-30A	1/9/2012 11:34	0.0	4.0	16.7	79.3	0
GP-30B	1/9/2012 11:32	0.0	3.1	17.8	79.1	-1.64
GP-31	1/9/2012 12:41	0.0	2.1	20.2	77.7	0
GP-32	1/9/2012 12:36	0.0	2.5	19.4	78.1	-0.01
GP-33	1/9/2012 12:34	0.0	3.1	18.1	78.8	0
GP-34	1/9/2012 12:30	0.0	2.9	18.0	79.1	0
GP-35	1/9/2012 12:28	0.0	2.0	18.9	79.1	0.02
GP-36	1/9/2012 12:15	0.0	2.2	19.4	78.4	0
GP-37	1/9/2012 12:13	0.0	2.6	18.8	78.6	-0.01
GP-38	1/9/2012 11:25	0.0	0.9	20.8	78.3	-0.01

Compliance Landfill Gas Monitoring Probe Data
Second Quarter (June) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-1A	6/11/2012 10:57	0.0	2	17.7	80.3	0
GP-1B	6/11/2012 10:59	0.0	1.9	17.9	80.2	-7.79
GP-02	6/11/2012 10:55	0.0	2.7	16.5	80.8	0
GP-03	6/11/2012 11:18	0.0	2.8	16.1	81.1	-0.02
GP-4A	6/11/2012 10:45	0.0	2.2	17.2	80.6	0
GP-4B	6/11/2012 10:47	0.0	2.2	17.1	80.7	0.06
GP-05	6/11/2012 10:41	0.0	3	16.8	80.2	0
GP-06	6/11/2012 11:06	0.0	4.1	15.4	80.5	-0.01
GP-07	6/11/2012 11:03	0.0	8.8	4.7	86.5	0
GP-8R	6/11/2012 11:27	0.0	1.3	17.1	81.6	-0.03
GP-9A	6/11/2012 13:11	0.0	5.1	13.1	81.8	-0.01
GP-9B	6/11/2012 13:13	0.0	8.4	2.8	88.8	-0.01
GP-10A	6/11/2012 13:09	0.0	2.7	14.9	82.4	-0.01
GP-10B	6/11/2012 13:10	0.0	1.5	17.5	81	-0.01
GP-11	6/11/2012 13:07	0.0	1.1	18.6	80.3	-0.01
GP-12	6/11/2012 13:05	0.0	0.4	19.8	79.8	-0.01
GP-13	6/11/2012 13:04	0.0	1.4	17.6	81	-0.01
GP-14	6/11/2012 13:01	0.0	0.6	19.5	79.9	-0.01
GP-15	6/11/2012 12:58	0.0	1.1	18.5	80.4	0
GP-16D	6/11/2012 12:45	0.0	2.9	16.3	80.8	-0.01
GP-16S	6/11/2012 12:47	0.0	1.9	17.7	80.4	-0.02
GP-17D	6/11/2012 12:41	0.0	1.2	19.2	79.6	0.4
GP-17S	6/11/2012 12:39	0.0	3.6	16.5	79.9	-0.01
GP-18D	6/11/2012 12:34	0.0	1.2	18.5	80.3	0
GP-18S	6/11/2012 12:36	0.0	2.4	16.9	80.7	0
GP-19D	6/11/2012 12:24	0.0	2	18.0	80	0
GP-19S	6/11/2012 12:22	0.0	1.1	18.8	80.1	0
GP-20	6/11/2012 12:14	0.0	5.3	11.1	83.6	0
GP-21A	6/11/2012 13:52	0.0	0.8	17.2	82	-0.01
GP-21B	6/11/2012 13:53	0.0	0.9	16.8	82.3	-0.02
GP-22	6/11/2012 11:52	0.0	0.9	19.4	79.7	0
GP-23	6/11/2012 13:50	0.0	1.3	16.7	82	-0.05
GP-24A	6/11/2012 11:47	0.0	1	19.1	79.9	0
GP-24B	6/11/2012 11:48	0.0	0.8	19.2	80	0
GP-25A	6/11/2012 11:39	0.0	2.1	17.6	80.3	-0.01
GP-25B	6/11/2012 11:40	0.0	3.2	16.4	80.4	0
GP-26	6/11/2012 11:34	0.0	0.5	19.4	80.1	0
GP-27	6/11/2012 11:32	0.0	0.7	18.9	80.4	0

Compliance Landfill Gas Monitoring Probe Data
Second Quarter (June) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-28	6/11/2012 11:23	0.0	4.3	13.2	82.5	-0.03
GP-29	6/11/2012 11:10	0.0	0.5	19.6	79.9	-15.77
GP-30A	6/11/2012 10:37	0.0	5.3	14	80.7	-0.13
GP-30B	6/11/2012 10:39	0.0	4.8	14.5	80.7	-0.94
GP-31	6/11/2012 12:29	0.0	0.9	18.8	80.3	0
GP-32	6/11/2012 12:20	0.0	1.4	18.6	80	0
GP-33	6/11/2012 12:17	0.0	1.3	18.7	80	-11.77
GP-34	6/11/2012 12:12	0.0	2	16.9	81.1	0
GP-35	6/11/2012 12:10	0.0	1.4	17.8	80.8	0
GP-36	6/11/2012 11:44	0.0	1.4	18.2	80.4	0
GP-37	6/11/2012 11:43	0.0	2	18	80	-0.09
GP-38	6/11/2012 11:37	0.0	0.6	19	80.4	0

Compliance Landfill Gas Monitoring Probe Data
Third Quarter (July/August) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-1A	7/31/2012 15:48	0.0	2	18.2	79.8	0
GP-1B	7/31/2012 15:46	0.0	2	18	80	-0.01
GP-02	7/31/2012 15:43	0.0	3.2	16.7	80.1	-0.01
GP-03	7/31/2012 15:39	0.0	3.5	15.6	80.9	0.01
GP-4A	7/31/2012 15:34	0.0	2.3	16.8	80.9	-0.1
GP-4B	7/31/2012 15:36	0.0	2.7	15.9	81.4	-0.07
GP-05	7/31/2012 15:32	0.0	3.3	16	80.7	0.32
GP-06	7/31/2012 16:43	0.0	3.6	16.8	79.6	-0.01
GP-07	7/31/2012 16:13	0.5	13.1	0	86.4	-0.01
GP-8R	7/31/2012 16:08	0.0	1.6	17.9	80.5	0
GP-9A	8/1/2012 10:40	0.0	4.9	13.1	82	-0.02
GP-9B	8/1/2012 10:42	0.0	10.1	3.1	86.8	-0.02
GP-10A	8/1/2012 10:37	0.0	3	16.2	80.8	-0.01
GP-10B	8/1/2012 10:39	0.0	2	18.6	79.4	-0.01
GP-11	8/1/2012 10:36	0.0	1.8	18.6	79.6	-0.01
GP-12	8/1/2012 10:34	0.0	0.9	19.9	79.2	0
GP-13	8/1/2012 10:32	0.0	2.4	17.9	79.7	0
GP-14	8/1/2012 10:26	0.0	0.7	20.3	79	0
GP-15	8/1/2012 10:24	0.0	2	18.6	79.4	0
GP-16D	8/1/2012 10:12	0.0	4.8	15.9	79.3	0
GP-16S	8/1/2012 10:10	0.0	2.3	18.7	79	0
GP-17D	8/1/2012 10:07	0.0	0.8	20.4	78.8	-0.47
GP-17S	8/1/2012 10:05	0.0	4.1	17.4	78.5	0
GP-18D	8/1/2012 10:02	0.0	3.7	16.4	79.9	0
GP-18S	8/1/2012 10:00	0.0	2.4	18.2	79.4	0
GP-19D	7/31/2012 18:02	0.0	2.3	17.3	80.4	0
GP-19S	7/31/2012 18:00	0.0	1.3	18.5	80.2	-0.01
GP-20	7/31/2012 17:52	0.0	4.8	12.7	82.5	0
GP-21A	7/31/2012 17:44	0.0	0.9	18.9	80.2	0
GP-21B	7/31/2012 17:45	0.0	1.2	18.7	80.1	0
GP-22	7/31/2012 17:42	0.0	1.1	18.9	80	0
GP-23	7/31/2012 17:40	0.0	1.5	18.5	80	0
GP-24A	7/31/2012 17:36	0.0	0.7	19.6	79.7	0
GP-24B	7/31/2012 17:37	0.0	0.6	19.6	79.8	0
GP-25A	7/31/2012 17:07	0.0	2.6	17.3	80.1	-0.01
GP-25B	7/31/2012 17:09	0.0	3.2	16.3	80.5	-0.03
GP-26	7/31/2012 17:01	0.0	0.4	19.7	79.9	-0.01
GP-27	7/31/2012 16:58	0.0	0.8	19.2	80	-0.01

Compliance Landfill Gas Monitoring Probe Data
Third Quarter (July/August) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-28	7/31/2012 16:54	0.0	4.5	15.1	80.4	0
GP-29	7/31/2012 16:46	0.0	5	9.1	85.9	0
GP-30A	7/31/2012 15:27	0.0	5.4	13.3	81.3	0
GP-30B	7/31/2012 15:29	0.0	5.3	14.4	80.3	-1.38
GP-31	7/31/2012 18:04	0.0	1.1	18.8	80.1	0
GP-32	7/31/2012 17:57	0.0	1.5	18.1	80.4	-0.01
GP-33	7/31/2012 17:55	0.0	1.1	18.3	80.6	0
GP-34	7/31/2012 17:50	0.0	2.1	16.8	81.1	-0.01
GP-35	7/31/2012 17:48	0.0	1.9	17.2	80.9	0
GP-36	7/31/2012 17:34	0.0	1.3	18.5	80.2	0
GP-37	7/31/2012 17:32	0.0	1.3	18.7	80	0
GP-38	7/31/2012 17:04	0.0	0.7	19.1	80.2	0

Compliance Landfill Gas Monitoring Probe Data
Fourth Quarter (October) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-1A	10/19/2012 9:22	0.0	2.3	19.6	78.1	-0.03
GP-1B	10/19/2012 9:23	0.0	2.0	19.6	78.4	0.01
GP-02	10/19/2012 9:19	0.0	3.0	19	78	-0.01
GP-03	10/19/2012 9:06	0.0	3.3	17.5	79.2	0.04
GP-4A	10/19/2012 11:40	0.0	3.0	17.4	79.6	0
GP-4B	10/19/2012 11:41	0.0	2.7	16.6	80.7	0.01
GP-05	10/19/2012 9:31	0.0	4.5	15.8	79.7	0
GP-06	10/19/2012 12:20	0.0	3.9	15.6	80.5	0.01
GP-07	10/19/2012 9:28	0.4	15.2	0.1	84.3	-0.03
GP-8R	10/19/2012 9:10	0.0	1.4	19.7	78.9	-0.01
GP-9A	10/19/2012 10:09	0.0	4.8	13.9	81.3	0
GP-9B	10/19/2012 10:11	0.0	13.4	1.3	85.3	-0.02
GP-10A	10/19/2012 10:06	0.0	3.1	15.8	81.1	0
GP-10B	10/19/2012 10:07	0.0	2.1	19	78.9	0
GP-11	10/19/2012 10:03	0.0	1.3	18.9	79.8	0
GP-12	10/19/2012 10:00	0.0	1.1	20.1	78.8	-0.01
GP-13	10/19/2012 10:19	0.0	2.8	17.9	79.3	-0.01
GP-14	10/19/2012 10:25	0.0	1.3	20.3	78.4	0
GP-15	10/19/2012 10:28	0.0	1.7	19.5	78.8	-0.01
GP-16D	10/19/2012 10:47	0.0	2.9	18.5	78.6	0
GP-16S	10/19/2012 10:46	0.0	2.0	19.6	78.4	0
GP-17D	10/19/2012 10:42	0.0	2.6	18.3	79.1	0
GP-17S	10/19/2012 10:43	0.0	3.0	18.4	78.6	0
GP-18D	10/19/2012 10:52	0.0	3.6	17.8	78.6	0
GP-18S	10/19/2012 10:54	0.0	2.7	19.1	78.2	0
GP-19D	10/19/2012 10:59	0.0	3.0	18	79	0
GP-19S	10/19/2012 11:00	0.0	2.5	18.9	78.6	0
GP-20	10/19/2012 11:06	0.0	6.6	12	81.4	-0.01
GP-22	10/19/2012 11:20	0.0	1.2	20	78.8	-0.01
GP-21A	10/19/2012 11:17	0.0	1.6	19.9	78.5	0
GP-21B	10/19/2012 11:18	0.0	1.3	19.8	78.9	-0.01
GP-23	10/19/2012 8:35	0.0	5.4	16.3	78.3	-3.57
GP-23	10/19/2012 11:22	0.0	1.3	19.6	79.1	-0.02
GP-24A	10/19/2012 11:25	0.0	0.8	20.4	78.8	0
GP-24B	10/19/2012 11:26	0.0	0.8	20.4	78.8	0
GP-25A	10/19/2012 11:34	0.0	1.6	19.6	78.8	0
GP-25B	10/19/2012 11:35	0.0	3.4	17.3	79.3	0
GP-26	10/19/2012 8:46	0.0	0.3	20.7	79	0
GP-27	10/19/2012 8:49	0.0	0.7	20.7	78.6	0
GP-28	10/19/2012 8:35	0.0	5.4	16.3	78.3	-3.57

Compliance Landfill Gas Monitoring Probe Data
Fourth Quarter (October) 2012
Leichner Brothers Landfill

Probe	Date and Time	Methane (Percent by Volume)	Carbon Dioxide (Percent by Volume)	Oxygen (Percent by Volume)	Balance (Percent by Volume)	Relative Pressure (Inches of Water)
GP-29	10/19/2012 9:42	0.0	5.8	10.2	84	0.01
GP-30A	10/19/2012 9:48	0.0	5.3	15.8	78.9	-0.21
GP-30B	10/19/2012 9:49	0.0	5.0	15.8	79.2	-0.18
GP-31	10/19/2012 10:56	0.0	1.9	19.8	78.3	0
GP-32	10/19/2012 11:02	0.0	2.2	18.9	78.9	0.01
GP-33	10/19/2012 11:03	0.0	2.1	18.6	79.3	0
GP-34	10/19/2012 11:09	0.0	3.1	16.3	80.6	-0.01
GP-35	10/19/2012 11:12	0.0	2.7	18.2	79.1	0
GP-36	10/19/2012 11:29	0.0	1.4	19.3	79.3	0
GP-37	10/19/2012 11:32	0.0	1.8	19.2	79	0.01
GP-38	10/19/2012 8:41	0.0	1.4	20.6	78	0