From:	Joel Geier
To:	Coffin Butte Landfill Appeals
Subject:	Re: LU-24-027 Arsenic issues
Date:	Monday, October 20, 2025 4:18:36 PM
Attachments:	2024-Coffin-Butte-Landfill-Annual-Environmental-Reporting-Report-Republic-Services-—-Part-1.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please also place pages 1 through 80 of the attached Annual Environmental Monitoring Report for 2024 into the record for LU-24-027, if this has not already been included.

The full document is close to 400 pages long, but the most relevant data referenced in my testimony are in the first 80 pages. If there's a way to remove the other pages, that could avoid unnecessary bloat of the packet for the Commissioners.

I would also like to correct a statement in my preceding testimony regarding total dissolved solids (TDS) in landfill leachate.

I stated that the TDS in samples from the L-Pond was 2400 mg/L. The actual value given in Table 4-9 of this report was 9700 mg/L. This means that the density-dependent flow effects from a leak, causing a plume to angle downward, would be even stronger than the example I cited from Post & Simmons (2022).

Also, for a direct comparison to the Post & Simmons (2022) model, just in terms of chloride, it can be noted that the chloride concentration in Table 4-9 is 3600 mg/L (so 50% higher than case b of the Post & Simmons figure).

Thanks again,
Joel Geier
38566 Hwy 99W / Corvallis 97330

From: "Joel Geier" <clearwater@peak.org>
To: "landfillappeals" <landfillappeals@bentoncountyor.gov>
Sent: Monday, October 20, 2025 3:50:39 PM
Subject: LU-24-027 Arsenic issues

Please add the attached PDF document, discussing arsenic anomalies at the Coffin Butte landfill site and possible explanations, to the public record for LU-24-027. My address is included in the PDF.

Thank you again,
Joel Geier, Ph.D.

Coffin Butte Landfill (Company 4125)
28972 Coffin Butte Road Corvallis OR 97330
(O) 541.230.5546 www.republicservices.com

March 31, 2025

Oregon Department of Environmental Quality
Attention: Denise Miller
Manager, Western Region Materials Management
165 East 7th Avenue, Suite 100
Eugene, OR 97401

RE: Annual Environmental Monitoring Report, Coffin Butte Landfill, Benton County, Oregon, Solid Waste Permit No. 306

Dear Ms. Miller:

Per the requirements of Section 19.0 of our Solid Waste Permit No. 306, Valley Landfills, Inc. is pleased to present the Annual Environmental Monitoring Report (AEMR). The AEMR provides results of water quality and landfill gas probe monitoring during the 2024 calendar year at the Coffin Butte Landfill in Benton County, Oregon. Please note, per Section 19.4 of the Solid Waste Permit No. 306, this report includes the elements of the annual leachate monitoring report. This submittal includes one hard copy and one electronic copy.

Please feel free to contact me or Aaron Ogorzalek if you have any questions.

Sincerely,

Paul D. Koster II
Environmental Manager - Oregon
Republic Services, Inc.
Phone 541-230-5543

cc: Valley Landfills, Inc.
Hugh Gao (cover letter via email)

Geo-Logic ASSOCIATES

March 31, 2025
JN: AU24.1090

Ms. Denise Miller
Materials Management Permit Coordinator
Oregon Department of Environmental Quality
165 East 7th Avenue, Suite 100
Eugene, Oregon 97401

2024 ANNUAL ENVIRONMENTAL MONITORING REPORT
COFFIN BUTTE LANDFILL
CORVALLIS, OREGON

Geo-Logic Associates (GLA) is pleased to submit this Environmental Monitoring Report for the Coffin Butte Landfill on behalf of Valley Landfills, Inc. (VLI) in accordance with solid waste disposal permit number 306, issued and administered by the Oregon Department of Environmental Quality (DEQ).

Primary Maximum Contaminant Levels (MCLs)

Concerning federal or state primary MCLs (health-based), concentrations for arsenic exceeded the primary MCL of 10 µg/L in samples collected from East Side compliance wells MW-26 and MW-27. The arsenic concentration in samples from detection wells MW-9S and MW-23 also exceeded the primary MCL. Based on knowledge of groundwater quality in this part of the site, the arsenic is naturally occurring at this level.

As for West Side monitoring points, the primary MCL for nitrate + nitrite as nitrogen of 10 µg/L was exceeded in the sample collected from detection well MW-18 during the Fall monitoring event. Also, the primary MCL for the volatile organic compound (VOC) tetrachloroethene (PCE) [5 µg/L] was exceeded in samples collected from well MW-12S. No other primary MCLs were exceeded on the West Side.

Secondary MCLs

Federal and state secondary MCLs (non-health-based) for iron and manganese were exceeded in samples collected from wells MW-26 and MW-27 downgradient of Cell 4, and detection well MW-23. The secondary MCL for total dissolved solids (500 µg/L) was also exceeded in the sample from detection well MW-9S. These concentrations represent natural conditions based on site knowledge.

As for West Side compliance boundary and detection well samples, the secondary MCLs were exceeded as follows:

- Chloride for compliance well MW-10S and detection well MW-19.

- TDS for well pairs MW-10S/10D and MW-11S/11D, MW-20, MW-21, and detection well MW-19.
- Manganese for well pair MW-10S/10D, MW-12S, and MW-21.
- Iron for MW-12S and MW-21.
- Zinc for MW-1D and MW-21

The iron concentration in the sample collected at surface water location S-1 also exceeded its secondary MCL of 300 µg/L during the Spring event, but was measured at only trace concentrations during the Fall event.

Site Specific Limits (SSLs)

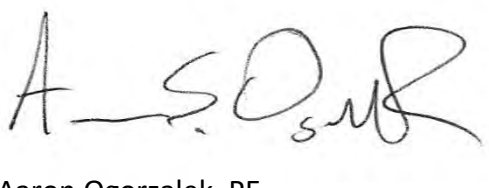
Of the water quality samples collected from East Side Compliance wells in 2024, each was below the SSLs except for manganese, which exceeded its limit at MW-27 during the Spring event. All other indicators were below SSLs during this monitoring period. As anions and cations were inadvertently excluded from analysis during the Fall event, no results are available. For manganese at MW-27, the concentrations are only marginally above the statistically calculated limit. VLI will continue to monitor manganese concentrations in this area.

Landfill Gas Monitoring

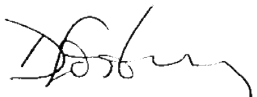
VLI routinely monitors six landfill gas monitoring probes around the perimeter of the landfill and the interior of six site structures. Measured values for the methane lower explosive limit were zero for all twelve monitoring events.

GLA hopes that the information provided herein is sufficient for your records. If you have any questions regarding this report, please do not hesitate to contact me.

Sincerely,
Geo-Logic Associates, Inc.



Aaron Ogorzalek, PE
Senior Professional



DeEtta Fosbury, RG
Senior Hydrogeologist

2024 Annual Environmental Monitoring Report
Coffin Butte Landfill
Benton County, Oregon

Submitted to:

Oregon Department of Environmental Quality
Eugene, Oregon

Submitted by:

Valley Landfills, Inc.
c/o Republic Services
Corvallis, Oregon

Prepared by:

Geo-Logic Associates

PO Box 288
Newport, Oregon 97365
www.geo-logic.com

AU24.1090

March 2025

Certification

This Monitoring Report was prepared in accordance with generally accepted professional hydrogeologic principles and practices. This Monitoring Report makes no other warranties, either expressed or implied as to the professional advice or data included in it. This Monitoring Report has not been prepared for use by parties or projects other than those named or described herein. It may not contain sufficient information for other parties or purposes.

GEO-LOGIC ASSOCIATES

Leigh Symank
Project Geologist
lsymank@geo-logic.com
2777 East Guasti Road, Suite 1
Ontario, CA 91761

DeEtta Fosbury, RG
Senior Geologist
dfosbury@geo-logic.com
4784 SE 17 Avenue, Suite 111
Portland, Oregon 97202

Date signed: March 31, 2025

Table of Contents

Executive Summary 1
1. Introduction 1
   1.1 General 1
   1.2 Background 3
2. Monitoring Activities 4
   2.1 Monitoring Network 5
   2.2 Environmental Sampling 7
      2.2.1 Groundwater Sampling Using Low-Flow Purging Methods 7
      2.2.2 Groundwater Sampling Using Non-Dedicated Equipment 8
      2.2.3 Groundwater Sampling of Private or Domestic Wells 8
      2.2.4 Groundwater Sample Collection and Preparation 8
   2.3 Surface Water and Underdrain Sampling 8
   2.4 Secondary Collection System Sampling 9
   2.5 Landfill Leachate Sampling 9
   2.6 Landfill Gas Perimeter Probe Sampling 9
3. Laboratory Analyses and QA/QC 10
   3.1 Analyses 10
   3.2 QA/QC 10
   3.3 DEQ Split Sampling 12
4. Monitoring Results 12
   4.1 Groundwater Potentiometric Surface 12
      4.1.1 Groundwater Elevation 12
      4.1.2 Groundwater Flow 13
   4.2 Analytical Results 13
      4.2.1 Groundwater Detections 13
      4.2.2 Surface Water Detections 16
      4.2.3 Underdrain Detections 16
      4.2.4 Secondary Leachate Collection System (SLCS) 17
   4.3 Leachate Production 19
      4.3.1 Overview of Leachate Management 20
      4.3.2 Primary Leachate Management 20
   4.4 Landfill Gas Monitoring Results 23
5. Data Analysis and Discussion 23
   5.1 Statistical Analysis of Groundwater Quality Data 24

5.1.1 West: RACL Comparisons....24
5.1.2 East: SSL/PSCL Comparison....25
5.1.3 MCL Comparison....26
5.2 Non-Statistical Data Analysis....27
5.2.1 Source Control Effectiveness....27
5.2.2 Plume Stabilization....28
5.2.3 Prevention/Protectiveness Monitoring....28
6. Summary and Recommendations....29

List of Figures

1-1 Site Location
2-1 Monitoring Locations
4-1 Hydrographs for East Side Wells
4-2 Hydrographs for Cell 1A Area Wells
4-3 Hydrographs for Cell 1 Area Wells
4-4 Groundwater Contours, April 2024
4-5 Groundwater Contours, October 2024

List of Tables

2-1 Well Construction Summary
2-2 Environmental Monitoring Program
2-3 Landfill Gas Monitoring
3-1A Laboratory Analytical Methods – April 2024
3-1B Laboratory Analytical Methods – October 2024
3-1C Laboratory Analyical Methods – Detection Limits
3-2 QA/QC – Blank Results
3-3A QA/QC – Duplicate Sample Analyses – April 2024
3-3B QA/QC – Duplicate Sample Analyses – October 2024
4-1 Groundwater and Surface Water Elevations
4-2 Monitoring Results – West Wells – April 2024
4-3 Monitoring Results – West Wells – October 2024
4-4 Monitoring Results – East Wells – April 2024

4-5 Monitoring Results – East Wells – October 2024
4-6 Monitoring Results – Surface Water – April 2024
4-7 Monitoring Results – Surface Water – October 2024
4-8 Monitoring Results – SLCS, Leachate, and Underdrain – April 2024
4-9 Monitoring Results – SLCS, Leachate, and Underdrain – October 2024
4-10 Historical Water Year Summary for Cell 2 SLCS Volume Data
4-11 Summary of 2023-2024 Leachate Volumes
5-1 Comparison of Sampling Results with RACLs, Compliance Wells - West Side
5-2 Comparison of Sampling Results with SSLs, Compliance Wells - East Side
5-3 Summary of VOC Detections

List of Appendices

A Tabular Historical Water Quality (included in flash drive)
B Water Quality Time-Series Plots
C Facility SLCS and LCRS Data and Time-Series Plots
D Field Sampling Data Sheets and Laboratory Reports

Acronyms and Abbreviations

AL	Action Limit
BOD	Biological Oxygen Demand
CBL	Coffin Butte Landfill
CLV	Concentration Limit Variance
COPC	Chemical of Potential Concern
DCA	Dichloroethane
DCE	Dichloroeth[yl]ene
DEQ	Oregon Department of Environmental Quality
EGC	Exposed Geomembrane Cover
EMP	Environmental Monitoring Plan
EMR	Environmental Monitoring Report
EPA	U.S. Environmental Protection Agency
LDS	Leak Detection System
LEL	Lower Explosive Limit
LFG	Landfill Gas

MCL	Maximum Contaminant Level
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
PCE	Tetrachloroeth[yl]ene
PSCL	Permit-Specific Concentration Limit
QA/QC	Quality Assurance/Quality Control
RACL	Remedial Action Concentration Limit
SLCS	Secondary Leachate Collection System
SSL	Site-Specific Concentration Limit
SWDP	Solid Waste Disposal Permit
TCE	Trichloroeth[yl]ene
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
VOC	Volatile Organic Compound
VLI	Valley Landfills, Inc.
WWTP	Wastewater Treatment Plant

Executive Summary

This annual report provides a summary of the water quality monitoring activities at Coffin Butte Landfill during the 2024 monitoring year. Coffin Butte Landfill, located in Benton County, Oregon, is a municipal solid waste landfill owned and operated by Valley Landfills, Inc. (VLI). Environmental monitoring and reporting is regulated by the landfill's solid waste disposal permit number 306, issued and administered by the Oregon Department of Environmental Quality (DEQ).

During 2024, no significant changes in water quality were observed. Quantifiable volatile organic compound (VOC) concentrations were measured in wells along the West Side compliance boundary at wells MW-12S and MW-12D. The tetrachloroethene (PCE) measurement in the sample collected from MW-12S during the Fall monitoring event Exceeded the primary drinking water standard. However, the long term trend for PCE concentrations continues downward. VOCs were detected at trace concentrations in other West Side compliance wells, and several inorganic parameters were present above screening levels. As the Fall monitoring event was a 5-year event, VOCs were also analyzed in the sample from well MW-19, and the measured concentrations were similar to historical results.

In wells on the West Side downgradient of the former Closed Landfill (from which the source removal was completed in 2022), Cell 1, and Cell 1A, groundwater quality trends are stable but elevated concentrations of inorganic constituents and metals continue to be measured in samples from wells in this area of the site. West Side Remedial Action Concentration Limits (RACL) were exceeded for chloride, TDS, iron, and manganese in samples from several wells during both monitoring events, and the concentration of PCE measured in the samples from MW-12S exceeded the RACL during both events.

At the compliance boundary for Cells 4 and 5 on the East Side, the primary drinking water standard for arsenic was exceeded in samples from several monitoring wells, but the measured concentrations are similar to natural background conditions. Sampling results at MW-26 and MW-27 were below statistically-calculated site specific limits (SSLs) for most of the indicator parameters during the Spring monitoring event. Manganese was marginally above the limit at MW-27. As dissolved metals were inadvertently excluded from analysis by the laboratory, these will be resampled during the Spring 2026 monitoring event.

Other than resampling for dissolved metals during the next monitoring event, no action is required on the basis of these RACL and SSL exceedances.

The volume of leachate generated by Cells 1 through 5 for the 2023-2024 water year ending on September 30, 2024 was estimated at approximately 40 million gallons. VLI continues to monitor the secondary leachate collection systems (SLCS) beneath Cells 2, 3, 4, and 5.

1. Introduction

1.1 General

This Annual Environmental Monitoring Report (AEMR) presents the results of groundwater elevation measurements, analytical laboratory results for groundwater samples collected, and landfill gas probe monitoring during the 2024 monitoring period at the at the Coffin Butte Landfill (CBL) in Benton County, Oregon (Figure 1-1). Monitoring was performed by Geo-Logic Associates (GLA) from April 22 to 25, 2024 during the Spring monitoring event and from October 10 to 14, 2024 during the Fall event. All monitoring was performed and is reported in accordance with the procedures included in the facility's Environmental Monitoring Plan (EMP) (TC, 2014). This report has been prepared in accordance with the landfill's solid waste disposal permit number 306, issued by Oregon Department of Environmental Quality (DEQ) on July 28, 2020. The monitoring program at the CBL includes semi-annual groundwater elevation measurements, sampling and analysis of groundwater monitoring wells, surface water and underdrain sampling points, secondary leachate control system (SLCS) sampling points, and field screening of soil-pore gas monitoring probes and on-site structures.

In addition to reporting analytical data for the past year, the EMP (TC, 2014) requirements for the annual report include:

1. The assessment of remedial goals for the West Side cells regarding groundwater quality and the protection of potential human health receptors; and
2. The evaluation of detection monitoring data for East Side cells as it relates to performance of the engineered liner systems for the active waste management units.

To address these evaluation goals, data evaluation in this report focuses on the following:

- Aquifer restoration and contaminant removal rates based on concentration trends.
- Effectiveness of source control.
- Plume stabilization based on the extent and concentration of volatile organic compounds (VOCs).
- Preservation monitoring at domestic wells and at early warning detection wells.

West Side objectives are the Remedial Action Concentration Limits (RACLs) for monitoring wells downgradient of the inactive Closed Landfill and Cells 1 and 1A. These concentration limits are in place to help maintain groundwater quality as it migrates away from the landfill. For the East Side, the report compares analytical results to site specific limits (SSLs) and permit specific concentration limits (PSLCS) and examines the data for any indications of significant change. Results are also compared to relevant water quality standards.

Consistent with solid waste permit requirements, municipal solid waste guidance (DEQ, 1996), and the EMP (TC, 2014), the annual report contains the following:

- A cover letter comparing the analytical results with relevant monitoring standards including any exceedances and/or changes in water quality.
- An executive summary.
- Assessment of the current status of the environmental monitoring network and recommendations for improvements.
- Data analysis and evaluation, based on the following:
    - Updated groundwater elevation information for each sampling event and monitored unit, depicting groundwater flow velocities and direction, and piezometric water contours.
    - Data evaluation tools (e.g., time-series plots) for selected constituents of concern to be used in assessing data.
    - Results of a major ion balance for each groundwater monitoring well that was sampled for major anions and cations during split sampling events (performed in October 2024).
    - Summary of results of monitoring for the year, including a table that compares results with relevant water quality standards.
- Description of activities resulting from exceeding a relevant standard or significant change in water quality, such as resampling or additional investigation.
- Results of landfill gas (LFG) probe monitoring (monitoring related to operations of the gas-to-electric plant are not reported as part of the environmental monitoring program).

- Findings from the leachate management program.
- Summary of sampling and analysis, field quality assurance and quality control (QA/QC), and laboratory QA/QC techniques implemented during the year.
- Copies of applicable information, including field data, laboratory analytical reports, and chain-of-custody reports; data are cross-referenced and labeled with the designated field sampling location.

In addition to these elements, the Western Region of the DEQ has requested that facilities provide an historical database for the landfill each year to be archived at the DEQ. For the Coffin Butte Landfill, this database will be updated into GLA's format over the next year and will be available via thumb drive or data download.

1.2 Background

Coffin Butte Landfill (CBL) is located approximately 10 miles north of the city of Corvallis, in Benton County, Oregon (Figure 1-1) at 28972 Coffin Butte Road. The landfill is owned and operated by Valley Landfills, Inc. (VLI). VLI's parent company is Republic Services, Inc. The CBL site encompasses approximately 178.1 acres inside of the site's landfill zoning boundary. The landfill operates under the Oregon Department of Environmental Quality (DEQ) Solid Waste Permit No. 306, which requires water quality monitoring. The permit was renewed on July 28, 2020 and will expire June 30, 2030.

As described in previous characterization reports of the site (EMCON 1999, TC 2011, and GLA 2024), Coffin Butte forms the northern boundary of the CBL, and the topography of the site forms a radial drainage pattern around the butte. Ground surface elevations range from 740 feet above mean sea level (msl) on the western summit of the butte to approximately 226 feet above msl in Toretie Marsh near the site entrance at the eastern property boundary. The area surrounding the landfill is zoned for farming, forest conservation, and rural residential, with the nearby areas mainly used as farmland.

Landfilling began in 1945 on the southwest flank of Coffin Butte and has continued to the east along the southern flank of the butte (Figure 1-1). The first area of landfilling (referred to as the Closed Landfill) was initially quarried for crushed rock. In 1945, this area was used as a landfill until it reached capacity. The area was closed in 1977 after receiving a soil cap. Subsequent landfill operations generally progressed from west to east, beginning with Cells 1 and 1A through Cell 5A. Subsequent Cells 5B through 5E were constructed against the south flank of

Coffin Butte to the north of existing landfill Cells 2 and 3. Future Cell 6 is located on the southwestern flank of Coffin Butte, northeast of the Closed Landfill and north of Cells 1 and 1A.

Cell 1A is approximately 4 acres and accepted waste primarily from Teledyne Wah Chang. This small cell stopped accepting wastes in 1988, and has undergone final closure. Cell 1, which originally included the area underlying Cell 3D and the "piggyback" area of Cell 6A, is approximately 30 acres to the west of Cell 1A, and is the first cell to include a clay liner on the floor of the cell and a leachate collection system that conveyed the leachate to an adjacent holding pond. Wastes were accepted in Cell 1 until 1993, when the first stage of Cell 2 (Cell 2B) was constructed. The southern, central and western portions of Cell 1 were formally closed in 1991 and 1996; however, the eastern portion of Cell 1 was fitted with a "piggyback" liner system to allow future landfilling as part of the development of Cell 3D. Cell 2 was constructed in four stages: 2A, 2B, 2C, and 2D, and the final stages of filling Cell 2 ended in 2004. Cell 3 was also developed in four stages (3A, 3B, 3C, and 3D), and has been completely filled. Final closure of the lowermost portions of the south faces of Cells 2 and 3 have been constructed in phases starting in 2003, with the last phase of construction completed in 2011. The remainder of Cells 2 and 3 have interim cover only. Cell 4 was constructed in summer 2011 with operations moving into the northern half of that cell in fall 2011. In summer 2012, the remaining features of Cell 4 were completed, including moving the primary and secondary leachate sumps to their locations on the southern perimeter of the cell. Cell 5A was excavated north of Cell 4 in summer 2012 with construction completed in 2013. Cells 5B through 5E were constructed between 2017 and 2023, and waste placement in these cells is ongoing.

Between 2019 and 2022, wastes in the Closed Landfill were removed and relocated to active fill areas as part of a clean closure project to prepare this area of the site for the Cell 6 development, which is currently underway. The clean closure project and confirmation sampling of subgrade materials were documented by GLA (2022).

2. Monitoring Activities

Semi-annual 2024 monitoring at the CBL was completed by GLA during April 22-25 and October 14-18, 2024. Monitoring is performed in accordance with the site's EMP as follows:

- Monthly perimeter LFG probe monitoring by VLI personnel;

- Semi-annual monitoring of all compliance monitoring wells, surface water, underdrains, and the secondary leachate collection system (SLCS) during the second and fourth quarters;
- Annual monitoring of detection wells, the Phillips domestic well, and leachate during the fourth quarter of each year;
- Annual (March) reporting of monitoring results;
- Testing for COCs in groundwater once every five years in all compliance and detection wells as well as select observation wells (performed during the fourth quarter of 2024).

2.1 Monitoring Network

As summarized below and depicted on Figure 2-1, the monitoring network at the CBL includes 5 perimeter gas probes, 32 groundwater monitoring locations (including piezometers), 4 domestic wells, 6 quarry piezometers, 6 wetland piezometers, 3 surface water collection locations, 6 underdrains, 6 SLCS monitoring points, and 6 leachate collection locations.

CBL Groundwater Monitoring Program

MONITORING FREQUENCY	MONITORING POINT	USE
Monthly Monitoring	GP-2, GP-3, GP-4, GP-5, GP-5A GP-6, Site Structures/Buildings (see Table 2-3)	Landfill Gas (LFG)
Semi-Annual Monitoring	MW-1D, MW-3D, MW-12S, MW-12D, MW-10S, MW-10D, MW-11S, MW-11D, MW-20, MW-21, MW-26, MW-27	Compliance Well
	P-8	Detection Piezometer
	S-1	Upstream Surface Water
	S-2, S-4	Downstream Surface Water
	S-U2, S-U3, S-U4, S-U5, S-U6, S-U7	Underdrain
	LDS-2B, LDS-3, LDS-4, LDS-5, LDS-WLP (formerly LDS-SP), LDS-ELP	SLCS
Semi-Annual Water Levels Only*	QP-2S, QP-3S, QP-4S, QP-5N, QP-6N, QP-7N	Quarry Piezometer
	WP-1, WP-2, WP-5, WP-6, WP-8, WP-9	Wetland Piezometer
Annual Monitoring	MW-8S, MW-15, MW-17, MW-18, MW-19, MW-23, MW-24	Detection Well
	Phillips	Private/Domestic Detection Well
	L-1, L-2B, L-3, L-4, L-5, L-Pond	Leachate
5-year Monitoring	*Split Samples at all Compliance and Detection wells and select Observation Wells*	
	MW-1S, MW-3S, MW-8D, MW-9S, MW-14S, MW-14D, PW-2, P-9, P-10, P-19, P-20, P-21	Observation Wells/Piezometers
	Duplex, Merril, Berkland	Private/Domestic Observation Well

* Water level elevation to be collected from all site monitoring wells semi-annually
Note: 5-year split sampling occurred during Fall 2024 Monitoring event

Table 2-1 includes monitoring network well survey data as well as construction and lithology data. The CBL monitoring parameters and schedule is summarized by monitoring point type in Table 2-2. During the Fall 2024 monitoring event, groundwater samples were analyzed for

routine monitoring parameters as wells as the critical landfill parameters listed in the Comprehensive Analytical Groups on Table 2-2.

2.2 Environmental Groundwater Sampling

Sampling protocols are described in the site sampling and analysis plan in the EMP (TC, 2014). Upon arrival to the site, water levels are collected from all monitoring wells and piezometers using an electronic sounding reel. When possible, all water level elevation data is collected on the same day. Well sounding and all liquid and gas collection procedures were performed by GLA field technicians and samples submitted to Eurofins Denver in Arvada, Colorado.

In 2024, samples were not collected as follows:

- Second Quarter: S-U7, LDS-WLP, and LDS-ELP were dry and not sampled. S-U6 was inaccessible due to heavy vegetation along the creek.
- Fourth Quarter: S-U3, S-U7, and LDS-WLP were dry and not sampled. S-U6 was inaccessible due to heavy vegetation growth along the creek.

Copies of field sampling data sheets are included in Appendix D.

2.2.1 Groundwater Sampling Using Low-Flow Purging Methods

Most groundwater monitoring wells at the CBL are equipped with dedicated sampling equipment and bladder pumps. The methods for sampling using this equipment is detailed below.

- A water level meter is used during purging to measure changes in water level to permit operation of submersible pumps at discharge rates that minimized water level decline.
- Discharged water is routed through a calibrated multi-meter flow cell equipped with probes for measuring dissolved oxygen, electrical conductivity, oxidation-reduction potential (ORP or redox), pH, temperature, and turbidity. When three consecutive readings of these field parameters stabilize to within 10 percent of each other, with no discernable upward or downward trend, the water quality is determined to be stable and samples are collected.

2.2.2 Groundwater Sampling Using Non-Dedicated Equipment

Wells that are shallow and sampled less than annually are generally purged and sampled by bailing. When following standard purging procedures, these monitoring wells are purged until one of the following occurs:

- At least three well casing volumes of water have been removed from the well with one casing volume being defined as the amount within the casing measured from static water level to the total depth of the well;
- The well has been purged dry.

Following completion of purging, wells are allowed to recharge until the water level is sufficient for sample collection. If a sufficient volume of water has not recharged following 24 hours, the monitoring well is recorded as dry for the sampling event.

2.2.3 Groundwater Sampling of Private or Domestic Wells

Groundwater samples from private or domestic well systems are collected directly from the sample tap, which is opened and allowed to discharge 5 to 10 minutes to flush the piping system prior to sampling. Field-measured water quality parameters (pH, specific conductance, temperature) are recorded and sample bottles are filled immediately after recording water quality measurements.

2.2.4 Groundwater Sample Collection and Preparation

Collected samples are poured directly into approved containers provided by the laboratory, and each container is filled completely and immediately capped. Samples for VOC analysis are filled by pouring the sample down the sides of the container to minimize aeration and capped with no airspace. Samples are then placed immediately in an ice-filled cooler for transport to Eurofins for laboratory analyses.

2.3 Surface Water and Underdrain Sampling

Grab samples are collected from the surface water and underdrain sampling locations at the CBL. During sampling, field-measured water quality parameters (pH, specific conductance, temperature) are recorded, and then grab samples are collected. Generally, a sample bottle will be dipped directly into the stream or into flow from the underdrain pipe, capped, and stored according to approved protocols. As an alternative, a clean, unpreserved extra sample bottle can be used to dip and transfer water from the flow to the sample container. In instances where

access is unsafe, surface water samples can be collected by lowering a single-use or decontaminated bucket or bailer into the creek or drain.

2.4 Secondary Collection System Sampling

The SLCS system (formerly leak detection system [LDS]) consists of six discharge points, each equipped with a submersible pump for discharge and sampling. When sampling, field personnel activate the pump and collect field measurements of water quality parameters (pH, specific conductance, temperature). A leachate grab sample is then collected directly from a stopcock connected in-line with the discharge line while the pump is operating.

2.5 Landfill Leachate Sampling

Cells 1 through 5 of the CBL are equipped with leachate sumps, however, annual leachate sampling is conducted from the west pond (L-Pond) via a sampling port in accordance with the approved EMP. Leachate samples are collected after field-measured water quality parameters (pH, specific conductance, temperature) are recorded. Similar to the SLCS sample collection, leachate is collected from a stopcock connected in-line to the pump discharge line.

2.6 Landfill Gas Perimeter Probe Sampling and Interior Building Sampling

VLI monitors the six landfill gas monitoring probes around the perimeter of the landfill (GP-2 through GP-6) and the interior of six site buildings (Quarry Scale House, Office, LTF, Scale House, Pump House, and Lock-up #1) monthly. Landfill gas is monitored using a combustible gas detector (Landtech GEM), which is attached to each probe when monitoring LFG in-situ, and allowed to intake ambient air in specified locations of structures when monitoring indoor air quality. Monitored parameters include lower explosive limit (LEL), methane, and oxygen. Levels of percent LEL were zero for all monitoring events. Results of 2024 gas monitoring are shown in Table 2-3.

3. Laboratory Analyses and QA/QC

3.1 Analyses

This section presents a summary of laboratory analyses and QA/QC results for groundwater samples collected at the CBL during the annual 2024 monitoring period. Groundwater samples were delivered to Eurofins Denver, a NELAP-certified laboratory located in Arvada, Colorado.

As shown in Tables 3-1A through 3-1C, groundwater samples obtained from routine (semi-annual) monitoring points were tested for indicator parameters including chloride, bicarbonate, total dissolved solids (TDS), calcium, iron, magnesium, manganese, sodium, arsenic, and volatile organic compounds (VOCs). Surface water samples were analyzed for chloride, calcium, iron, magnesium, manganese, sodium, biologic oxygen demand (BOD), total Kjeldahl nitrogen (TKN), total phosphorus, and orthophosphate. Underdrain samples were tested for the same routine parameters as groundwater samples with the exception of arsenic. Field measurements of pH, temperature, ORP, specific conductance, turbidity, and dissolved oxygen were recorded at all liquid sample locations.

Soil-pore gas probes are field-monitored by VLI for the percentage by volume (%V) of LEL, oxygen, and methane. Copies of laboratory certificates of analyses, supporting field documentation, and chain-of-custody records for samples collected are included in Appendix A.

3.2 QA/QC

The QA/QC program followed for CBL sampling events is consistent with U.S. Environmental Protection guidance documents for evaluating solid waste (EPA, 1983 and 1986a, known as SW-846), for technical enforcement of groundwater monitoring (EPA, 1986b), and for preparing quality assurance plans (EPA, 1987, 1990).

When reviewing field sample collection and laboratory analytical testing dates, it is important to recognize the holding times for the particular constituents. General chemistry constituents should be analyzed typically between 2 and 28 days of sample collection, although BOD and orthophosphate analyses for surface water samples must be completed within 48 hours of sample collection. The volatile organic analysis sample vials contain hydrochloric acid preservative, and the samples must be analyzed within 14 days after collection.

The QA/QC components completed as part of the water quality monitoring program also included collection and analyses of trip/travel blanks (QCTB), field/ambient blanks (QCAB), duplicate samples, and laboratory analytical method blank analyses. Field QA/QC samples were analyzed only for VOCs using U.S. Environmental Protection Agency (EPA) Method 8260. Laboratory method blanks were analyzed for all monitored constituents. A listing of the analytes detected in blank samples is presented in Table 3-2.

Duplicate groundwater and surface water samples were collected during both monitoring events. Duplicates were collected from S-1, MW-10D, and MW-12S during the Spring monitoring event and from MW-18, MW-21, and MW-26 during the Fall monitoring event. Primary and duplicate sample analytical results are presented in Tables 3A and 3B, and are evaluated quantitatively using a relative percent difference (RPD) calculation. The RPD control limit is 30 percent. RPD is not calculated if a trace concentration is measured in one or both samples, or if an analyte was not detected in one or both samples. Three analyte pairs exceeded the RPD control limit (manganese in S-1, calcium and magnesium in MW-12S) during the Spring monitoring event and one exceedance (TSS in MW-21) was recorded for the Fall monitoring event. These RPD exceedances amount to 15 percent and 3 percent, respectively, of the total constituents evaluated as duplicates during the April and October 2024 events.

The QA/QC efforts completed during the 2024 monitoring period yielded the following results:

- Based on review of the chain-of-custody documentation and conversations with the analytical laboratory, all groundwater samples received by the laboratory were properly preserved, sealed, and chilled in accordance with EPA guidelines.
- Based on a review of the chain-of-custody documentation and sample collection and analysis dates, all monitored constituents were analyzed within EPA recommended holding times.
- As summarized on Table 3-2, no analytes were detected in the trip blanks or the field/ambient blank samples submitted for analysis during both sampling events in 2024.
- Several inorganic constituents were detected at trace concentrations in the laboratory method blanks prepared for the April and October 2024 sampling events. The concentrations were far below the concentrations measured in primary samples, and as a result, the presence of these inorganic constituents in the method blanks did not affect the interpretation of the primary sample results. .

- As shown in Tables 3-3A and 3-3B, the RPD control limit of 30 percent was exceeded in 15 percent of duplicate analyses during the April 2024 sampling event, and 3 percent exceeded the control limit during the October 2024 sampling event.

Based on the results of the QA/QC program, the 2024 analytical results presented herein are considered acceptable for their intended purposes.

3.3 DEQ Split Sampling

During the 5-year COC monitoring event in October, split sampling was conducted by the Department of Environmental Quality (DEQ) in order to perform an additional layer of QC. Samples split during the fourth quarter event were collected from monitoring wells: MW-8S, MW-9S, MW10S, MW12S, MW-12D, and MW-27 for critical landfill parameters from the Comprehensive Analytical Groups listed in Table 2-2.

Of note, after several attempts to obtain DEQ split sample data, GLA did not receive a response; therefore, no QC analysis was able to be performed on this data.

4. Monitoring Results

4.1 Groundwater Potentiometric Surface

4.1.1 Groundwater Elevation

Historical groundwater elevations data measured at the CBL site monitoring wells indicate seasonal fluctuations, with higher water levels measured during the winter and spring months, decreasing during the summer and fall. Current groundwater elevation data for the CBL are summarized in Table 4-1. Historical groundwater elevations data are available electronically as indicated in Appendix A. Groundwater elevations decreased slightly at most wells between October 2023 and October 2024. Groundwater levels during the April 2024 monitoring event were similar to historical values.

The hydrographs presented in Figures 4-1 through 4-3 depict the seasonality of groundwater levels at the CBL. Mean variability of groundwater elevations across the site between April and October 2024 was 4.4 feet. Wells MW-8S, MW-15, MW-17, MW-26, P-9R, P-19, QP-3S, QP-5N, WP-5, WP-6 experienced historical low water level elevations during the October 2024 monitoring event, and well MW-1S was dry during this monitoring event.

4.1.2 Groundwater Flow

The groundwater equipotential surface at the CBL suggests two flow regimes. Groundwater potentiometric surface elevation data obtained from the during the April 2024 monitoring event were used to generate the groundwater equipotential contours shown on Figure 4-4. These data indicate that groundwater flows to the west and southwest beneath the western side of the landfill at a hydraulic gradient of about 0.03 feet per foot (ft/ft). Groundwater beneath the eastern half of the site flows to the southeast and east at a hydraulic gradient of about 0.07 ft/ft. Using literature estimates of hydraulic conductivity of approximately 2.7 ft/day (EMCON, 1994), and effective porosity ranging from 5 to 25 percent for aquifer material underlying the site (Morris and Johnson, 1967), a groundwater flow velocity ranging from 0.32 to 1.6 feet per day (ft/day) was calculated for the western flow regime using Darcy's Law. For the eastern flow regime, previous investigations found hydraulic conductivity of the alluvium to be approximately 0.22 ft/day and estimated an effective porosity of 25 percent. Using these values, a groundwater flow velocity in alluvium is estimated to be about 22 feet per year (ft/year), whereas groundwater moving through the basalt has an estimated velocity ranging from 3.8 to 276 ft/year.

Groundwater elevation data measured during the October 2024 monitoring event depict flow conditions similar to the April 2024 monitoring event. As shown on Figure 4-5, groundwater in the western half of the site flows to the west and southwest at a hydraulic gradient of about 0.03 ft/ft. Groundwater in the eastern half of the site flows to the east and southeast at a hydraulic gradient of about 0.06 ft/ft. Using the same estimates of hydraulic conductivity and effective porosity for aquifer material both flow regimes, the same groundwater flow velocity ranging from 0.32 to 1.6 ft/day was calculated for the western flow regime; and in the east about 19 ft/year in the alluvium and from 3.8 to 276 ft/year for the basalt in the eastern flow regime.

4.2 Analytical Results

4.2.1 Groundwater Detections

This section summarizes 2024 water quality monitoring results at CBL. The CBL is monitored using groundwater monitoring wells, subdrain, leachate, and surface water sampling locations. This section summarizes the results of each of those monitoring networks developed to ensure regulatory compliance, source control effectiveness, and relatively low risk to downgradient water sources. Tables 4-2 through 4-9 summarize the second quarter and fourth quarter monitoring results discussed in further detail below. Time-series plots of historical results are included in Appendix B.

4.2.1.1 West Side

Groundwater in the hydrogeologic area southwest of the recently removed Closed Landfill is monitored by two wells designated as compliance wells in the solid waste permit: one completed in the alluvium (MW-20) and one completed in bedrock (MW-21). These wells are sampled in the fourth quarter annually. Historical groundwater chemistry data indicate that indicator parameter concentrations are relatively stable or are decreasing, and VOCs are rarely detected and have not exceeded their respective MCLs.

Groundwater in the area south and southwest of Cell 1A is monitored primarily by wells MW-10S, MW-10D, MW-11S, and MW-11D. Groundwater samples collected from these wells are generally characterized by higher inorganic constituent concentrations, but low concentrations of trace metals (Tables 4-2 and 4-3). VOCs were not detected in samples from these four wells during the second quarter monitoring event; however, trace concentrations of 1,1-dichloroethane (1,1-DCA) were detected in the fourth quarter 2024 samples from wells MW-10S and MW-10D.

Monitoring wells MW-1S, MW-3S, MW-12S, and MW-12D monitor groundwater downgradient of Cell 1. Groundwater samples collected from these wells typically have low concentrations of inorganic compounds and trace metals. Although the tetrachloroethene (PCE) in samples from MW-12S exceeded the MCL (8.0 µg/L during second quarter 2024 and 12 µg/L during fourth quarter), concentrations of this VOC have continued to decrease since 2005. Furthermore, low level detections of trichloroethene (TCE) and cis-1,2-dichlorethene (cis-1,2-DCE) measured in samples from this well indicate that PCE continues to break down to daughter products (TC, 2024). In deeper well MW-12D, PCE was detected at concentrations of 2.1 and 1.6 µg/L during the 2024 monitoring period.

Former leachate irrigation in Field C, located south of Cell 1A and Cell 1, appears to have affected the concentrations of some inorganic parameters in the downgradient monitoring well MW-19. Since irrigation stopped in 1998, levels have generally recovered to pre-irrigation conditions. More recent increases in several parameters in MW-19 (chloride, TDS, calcium, magnesium, and sodium) are likely related to slow migration from upgradient sources. However, since approximately 2018, the increasing trend for each of these parameters appears to have stabilized.

With the exception of vanadium, trace metals were either not detected in MW-19, or were detected at low to trace concentrations. VOCs were detected at trace and quantifiable concentrations in monitoring well MW-19, that were consistent with results from the last several

years. No VOC exceeded its respective MCL during the last year. Time-series charts for MW-19 VOCs can be found in Appendix B

4.2.1.2 East Side

Detection well MW-24 monitors groundwater conditions downgradient of Cell 3 and is completed in shallow weathered bedrock as the alluvium is not saturated in this area. Historically, results for indicator parameters in MW-24 have been stable and reflect natural water quality in the area (TC, 2024).

Groundwater conditions southeast of Cell 2 are monitored by detection wells MW-8S and MW-23. Indicator parameters bicarbonate, chloride, TDS, calcium, iron, magnesium, manganese, sodium, and arsenic reached historical high concentrations around 2010 and most are now within or just above the range of background concentrations in samples collected historically from MW-23 (TC, 2024). Arsenic concentrations in this well are generally more variable with concentrations that range from 9.1 µg/L up to 32 µg/L. Both 2024 monitoring events produced an arsenic concentration of 20 µg/L (Tables 4-4 and 4-5) in samples from this well.

Compliance Wells MW-26 and MW-27 are the primary indicators of groundwater quality conditions downgradient of Cell 4. Examination of the water quality results from these two monitoring wells indicates relatively lower and stable inorganic chemistry concentrations at MW-26 than at MW-27. Variability of constituent concentrations analyzed in samples from MW-27 may be caused by low permeability, which typically requires the well to be purged one day and then sampled the following; or due to the mineral composition of the formation opposite the screened interval, which is composed of mostly organic clay from an ancient bog located at the base of the Cell 4 excavation (TC, 2024).

Former leachate irrigation Field B was located in the eastern portion of the property, south of Cell 4. For monitoring wells MW-8S and MW-15 located near the former Field B, concentrations of inorganic indicators measured during the last year continue longer-term trends of past years. At MW-8S, an earlier increasing trend for chloride peaked in 2001 and has been relatively static since 2015. At well MW-15, chloride concentrations have generally increased since 2010; however, bicarbonate and TDS concentrations have been relatively stable. Dissolved metals were not reported during the 5-year October 2024 event. With the exception of barium and vanadium, trace metals in Field B wells were detected at low to trace concentrations, or were not detected in 2024. Neither of the wells shows a trace metals increasing trend that could indicate effects of past leachate irrigation. No VOCs were detected in samples from either well during the last year.

4.2.2 Surface Water Detections

Soap Creek is monitored upstream (S-1) and downstream (S-2 and S-4) to test for potential impacts from the West Side of the facility. Surface water on the East Side of the landfill is routed through sedimentation ponds and a bioswale and is tested under the facility's stormwater permit.

Results for biochemical oxygen demand (BOD), total Kjeldahl nitrogen, total phosphorus, and orthophosphate in samples from the three monitoring locations were either non-detect or had trace detections that are similar to past monitoring results. During the April 2024 monitoring event, the iron concentration at S-1 upstream was unusually high at 380 µg/L, exceeding the federal secondary MCL of 300 µg/L. Iron was detected at trace concentrations at downstream monitoring points. During the Fall monitoring event, iron was detected at trace concentrations in samples from all three surface water monitoring locations.

Other dissolved metals (chloride, calcium, magnesium, manganese, and sodium) showed seasonal variability in concentration, with low concentrations in April (high stream flow) and higher concentrations in October (low stream flow). Results for surface water monitoring are included in Tables 4-6 and 4-7.

4.2.3 Underdrain Detections

Water quality from the Cell 3 underdrain (S-U3) represents baseline conditions for groundwater from beneath Cell 3. Samples were only collected from S-U3 during the April 2024 event during this monitoring period, as it was observed to be dry during the October 2024 event. During the April 2024 monitoring event, the concentration of manganese slightly exceeded the Federal secondary MCL of 50 µg/L, but is well within historical concentration range for this parameter at this location. Inorganic constituent concentrations (chloride TDS, calcium, magnesium, and sodium) have been increasing slowly since 2018. The concentration variability in redox-sensitive parameters iron and manganese may have more to do with lack of oxygenated recharge (i.e., infiltration of rainwater) below the liners than leakage of constituents through the primary liner (TC, 2024). As a result, concentrations of these parameters are more similar to the concentrations of those parameters in the SLCS monitoring points. Of note, operations in upgradient cells (e.g. Cell 5 construction) may be affecting water quality of S-U3, which drains groundwater from just below the liner system.

Water quality from underdrain location S-U4 represents baseline concentrations for groundwater water flowing north from the East Leachate Pond. Samples were collected at S-U4

during both monitoring events in 2024 and were similar to historical concentrations from this location. Concentrations of inorganic compounds and dissolved metals from the underdrain have been consistently lower than those measured from the East Leachate Pond SLCS (LDS-ELP) and are more similar to groundwater conditions previously measured in decommissioned well MW-16. Since monitoring began, concentrations for indictor parameters have been consistent and do not suggest leakage from the overlying pond.

Underdrain monitoring point S-U5 drains from below the West Leachate Pond to the southwest. The drain pipe also connects with another pipe that drains from below the concrete pad of the non-operational Leachate Treatment Plant building. Similar to water quality results at S-U4, the water quality of inorganic indicator parameters at S-U5 suggest no leakage from the overlying liner system for the West Leachate Pond. Tables 4-8 and 4-9 summarize subdrain monitoring point results and time-series plots are included in Appendix C.

4.2.4 Secondary Leachate Collection System (SLCS)

The SLCS is monitored by riser pipes at four locations: the sump in the southeast corner of Cell 2 (LDS-2B), the sump in the southeast corner of Cell 3 (LDS-3), the sump just south of Cell 4 (LDS-4), and the sump on the east end of Cell 5 (LDS-5). The west leachate pond (LDS-WLP) was dry and no samples could be collected during either event, but the East Leachate Pond (LDS-ELP) was able to be sampled during the October 2024 monitoring event.

Leachate volumes reported below are calculated using weekly flow meter readings of volume purged from the SLCS systems. Results for liquid quantity for LDS-2B, LDS-3, LDS-4, and LDS-5 presented in Tables 4-8 and 4-9 and historical values are shown graphically in Appendix C, as are the liquid level data for the primary and secondary sumps in Cells 2, 3, 4, and 5.

4.2.4.1 Cell 2

Historical concentrations of indicator parameters measured for LDS-2B vary seasonally as the amount of leachate, runoff, and groundwater levels fluctuate. Concentrations also vary from year to year as sources are added or eliminated as a result of landfill operations. Increased concentrations of inorganic parameters detected in samples from LDS-2B when compared to those detected in the Leachate Pond (L-Pond) are common during times of greater leachate production. During the 2024 monitoring period, three VOCs were detected at trace concentrations and arsenic was detected in exceedance of the Federal Primary MCL of 10 µg/L in samples from LDS-2B.

The volume of liquid that infiltrated into the Cell 2 SLCS for the water years since 1995 is shown in Table 4-10. Cumulative water purged from the system is illustrated in Appendix C. Historical volumes managed from the LDS-2B secondary system have declined since approximately 2020. The current volume since late December 2022 could not be tracked because of a faulty automatic pumping system and flow meter and is, therefore, currently being pumped manually.

Liquid levels measurements in the primary and secondary leachate collection systems in 2024 are illustrated in Appendix C. Measured levels of LDS-2B during 2024 were within performance goals.

4.2.4.2 Cell 3

For Cell 3, indicator parameter concentrations have been just above or comparable to the respective parameter concentrations in underdrain S-U3 since around 2017. The water quality in samples from LDS-3 indicates seasonal variability in concentrations for most compounds, which is likely related to infiltration of rainwater to the system; this is shown as higher concentrations in the dry season and lower concentrations in the winter/spring. One VOC was detected at a trace concentration in samples from LDS-3 during the 2024 monitoring period.

Between October 2023 and September 2024, the total volume of liquid infiltrating to the Cell 3 LDS was approximately 109,000 gallons, approximately 45% more than the volume recorded for 2023. This corresponds to an infiltration rate of approximately 9.4 gallons per acre per day (gpad) as calculated over the Cell 3 area of 31.9 acres. As seen on plots in Appendix C when compared to rainfall events, the volume of water removed is most likely stormwater seeping into the system rather than leakage through the primary liner, given the seasonal nature of the infiltration that correlates with rainfall. Because the system is above the groundwater table, it is unlikely groundwater intrusion to the SLCS is a contributing source of leachate volume.

4.2.4.3 Cell 4

The Cell 4 (LDS-4) water quality has been the most consistently similar to groundwater quality out of all the SLCS monitoring points. For samples collected during the most recent monitoring events, water quality is similar to that of MW-27 for several of the indicator parameters. There has been no indication of leachate release from Cell 4 when considering water quality of samples from LDS-4.

The liquid volume recorded for LDS-4 during the last year was approximately 70,000 gallons, 24% less than the volume measured during the 2023 monitoring season. The average rate of infiltration was calculated to be 14.5 gpad for 2024. Similar to Cell 3, the leakage frequency

correlates with periods of rainfall, indicating that most of the leakage is from stormwater runoff seeping into the system.

4.2.4.4 *Cell 5*

Cell 5 LDS water quality has fluctuated historically due to construction and rainwater entering the system in the years after its implementation. Concentrations of indicator parameters are similar to or slightly higher than those measured in LDS-4. As so, there has also been no indication of leachate release from Cell 5 when considering water quality of samples from LDS-5.

The volume pumped from the system during the last water year was 5,697 gallons which, in terms of infiltration rate equates to approximately 2.11 gpad over the 7.4 acres of the liner. This rate is higher than usually observed for the Cell 5 system and should continue to be monitored closely.

4.2.4.5 *Leachate Ponds*

Water quality for the East and West Leachate Ponds is monitored via the East Leachate Pond SLCS monitoring point (LDS-ELP) and the West Leachate pond sump (L-Pond). Pond liner integrity is also evaluated based on trends of inorganic parameters in the underdrain for each pond, as discussed previously. Summary tables of 2024 monitoring results for leachate and SLCS liquid are provided in Tables 4-8 and 4-9. Samples were unable to be collected from the leachate sampling points during the April 2024 event, however, both were able to be sampled during the October 2024 event. Analyses of samples from both locations measured high concentrations of inorganic parameters as well as heavy metals. Conversely, while many VOCs were detected in samples from L-Pond, some at quantifiable concentrations; only one trace VOC was detected in the sample from LDS-ELP, suggesting that VOCs are attenuating in the SLCS.

Both West and East Leachate Ponds were used to store leachate this past year, although at times, operations required transfer of liquid from one pond to the other. Records from automated pumping of liquid from the secondary systems show that liquid was not pumped from the West Pond's secondary system in 2024 and only 50 gallons were pumped from the East Pond's SLCS in November 2024. This indicates a relatively low amount of leakage through the primary liner into the secondary leachate collection layer.

4.3 Leachate Production

This AEMR includes information and data from the leachate management program as required by Sections 19.4 and 19.5 of the Solid Waste Permit. Facility-provided data is presented

according to the water year that extends from October 2023 to September 2024 in a format consistent with elements described in Section 4.7 of the EMP (TC, 2014).

4.3.1 Overview of Leachate Management

During the 2023-24 water year, leachate was generated from Cells 1 through 5 and pumped into the West Leachate Pond south of Coffin Butte Road. Slightly less than half (48.1 percent) of the calculated leachate generated was trucked to the waste-water treatment plant (WWTP) in the City of Salem, with another 48.5 percent trucked to the WWTP in the City of Corvallis. Details of volumes sent offsite to these two facilities can be found in Appendix C.

4.3.2 Primary Leachate Management

Leachate management reporting for this EMP includes the following six elements:

4.3.2.1 Annual Totals by Month

Monthly totals are reported by the facility for (a) leachate volume generated from the landfill sumps and (b) leachate volume treated. The two ways of estimating the volume of leachate generated are: 1) the use of flow meters on the discharge lines from the leachate sumps and pumps that collect leachate from the landfill gas system (vertical landfill gas well pumps, condensate sumps, and horizontal gravity drains), and also to use the volume treated (volumetric), and 2) the volume of leachate generated is calculated by adding the difference in pond volume at the beginning and end of the water year to the volume of leachate treated. These values should be similar as both ponds are covered so rain falling into the pond is not considered in the calculation.

Results of both calculations of leachate volume generated are presented in Table 4-11. The flow meters recorded an estimated 40.1 million gallons (MG) and the volumetrics calculation approximately 39.6 MG, a relative percent difference of 1.14 percent. Raw data on volumes of leachate treated, flow-meter data, and rainfall records are provided in Appendix C.

The volume of leachate from the SLCS is not itemized separately by the facility because this liquid is generally pumped directly into the primary sumps. From the point of view of leachate management, the total volume of leachate managed from the primary Cells 2, 3, 4, and 5 sumps are inclusive of the SLCS volume. The volume that was extracted from the SLCS is discussed in Section 4.2.4.

4.3.2.2 *Review of Significant Leachate Management Events That Occurred During the Last Water Year*

Significant events for the 2023-24 water year are noted below:

- Rainfall total for this water year was recorded at 41.97 inches from the landfill's weather station. The long-term calendar year average over the past century recorded for Hyslop in Corvallis is just under 41 inches.
- Leachate volumes were greater than last year by approximately 7.66 million gallons. The rate of leachate produced per inch of rainfall was comparable to the previous water year.
- Approximately 25 acres of Griffolyn® tarping material were removed to allow for continued waste placement operations. After waste placement was completed, the tarping was redeployed.

4.3.2.3 *Review of Leachate Monitoring Procedures*

Leachate monitoring includes the following elements:

- Volume is estimated using a range of techniques such as flow meters, visual monitoring of liquid height against calibrated marks on the side of the ponds, and truck counts.
- VLI maintains an NPDES permit for monitoring effluent quality of the on-site treatment plant; however, the plant has been dismantled and no monitoring was required or performed in 2024.
- Leachate quality is monitored for the WWTPs (Corvallis and Salem); it is also tested as part of environmental monitoring and reported in Appendix C.
- Head liquid levels were monitored in the landfill primary sumps (for Cells 2, 3, 4, and 5) using transducers and dataloggers throughout 2024. Plots of the data are included in Appendix C. Head levels in the primary and secondary sumps exceeded permit requirements on several occasions during 2024 as detailed below:
  - Cell 2B primary on January 23 and June 24
  - Cell 2B LDS/SLCS:
    - Mid-January
    - March 23-25
    - May 26-28
  - Cell 3 primary:

        - November 14
        - Spikes at the beginning and end of December
    - Cell 5 primary:
        - Spikes in January 2024
        - Spikes in November and December

- Both pond volumes are calculated using flow meters. Volumes are verified weekly using vertical depth markers located on the floating covers. The inventory of both ponds combined is included in Table 4-11.
- Maintenance of the leachate sumps (pumping sediment well, pump, check valves, and flowmeters) was performed quarterly.

4.3.2.4 Summary of Site Conditions and Compilation of Monitoring and Analysis Data

The following matrix summarizes the monitoring and analysis data references.

Monitoring and Analysis Summary Data References

Monitoring or Analysis Item	Reference
Flow meters from landfill sumps	Significant amounts of useful data over the reporting period, raw data sheets in Appendix D.
Volumes handled by various methods	Table 4-11
Gas production changes, waste saturation, and sideslope seeps in waste irrigation areas	Leachate irrigation was last performed in July 2011; no effects from past years' irrigation were noted.
Effluent quality from treatment plant	Plant is in shut-down mode. Beginning in September 2019, DEQ required electronic reporting via NetDMR; monthly reports for the system show that the plant is not in operation.
Leachate quality	Provided in Appendix A water quality tables and Appendix C plots.
Head levels in Cell 2, Cell 3, Cell 4, Cell 5 primary leachate sumps	Provided in Appendix C. Permanent bubblers installed in all primary and secondary sumps.
Rainfall	Recorded automatically by site weather station.
Pond levels (volumes)	Summary on Table 4-11; monitored weekly.

4.3.2.5 Summary of Reports for Monitoring Irrigation on Waste

No leachate irrigation was performed during the 2023-2024 water year.

4.3.2.6 Proposed Plans/Changes for Upcoming Leachate Management

The strategy for future leachate management is as follows:

- Continue with landfill operations and cover procedures to reduce leachate generation from precipitation to the extent possible.
- Maintain exposed geomembrane covers (EGC) on the top of Cells 2 and 3, and those parts of Cells 4/5 as they achieve intermediate or final grades.
- Continue to maintain all management options for treating leachate.

4.4 Landfill Gas Monitoring Results

VLI monitors a total of six landfill gas monitoring probes around the perimeter of the landfill (GP-2 through GP-6) as well as the interior of six site structures monthly for landfill gas. Monitored parameters include lower explosive limit (LEL), methane, and oxygen percentages. LEL and methane percentage levels were zero for all monitoring events. Results of 2024 gas monitoring are shown in Table 2-3.

5. Data Analysis and Discussion

Monitoring wells at Coffin Butte Landfill are sited to assess a number of different areas around the landfill. For areas that have undergone a focused risk assessment and feasibility study (TC, 2003a), such as the current and former cells on the West Side of the landfill, monitoring is used to evaluate the performance of controls and other efforts, such as waste removal, that protect potential receptors and help to restore groundwater quality. Groundwater data that monitors conditions in the east landfill cells determine if engineering controls (e.g., the landfill liner, cover, leachate and landfill gas collection and removal systems) and operations are effective in preventing a release of landfill-derived compounds to the environment.

With these two sets of objectives, the approach to evaluating monitoring data is slightly different for each area. In the older West Side areas, monitoring assesses the performance of the remedy in restoring groundwater quality to below Remedial Action Concentration Limits (RACLs) and in protecting potential receptors. For the active landfill on the East Side, monitoring is classified as detection monitoring, which compares monitoring results of indicator parameters

with Site-Specific Limits (SSLs) and Permit-Specific Concentration Limits (PSLCS) and evaluates the data for significant change.

5.1 Statistical Analysis of Groundwater Quality Data

The analytical results obtained for the 2024 sampling event were compared with statistically-determined RACLs, SSLs, and PSLCS (SWDP 306). The West Side RACLs established for the CBL were determined according to the Oregon Administrative Code (OAR) 340-040-0050(2) and are defined in the site's 2004 Record of Decision (ROD, 2004). The East Side SSLs, which are based on calculated concentration limits (CLs) over a period of time, are usually calculated every five years. The next update to concentration limits will be calculated in 2025 using the 5-year monitoring event performed in October of this monitoring year. There is only one PSCL at the CBL, which is the Practical Quantitation Limit (PQL) of vinyl chloride, currently at a concentration of 0.5 µg/L. A summary of these data comparisons is presented in Tables 5-1 and 5-2.

5.1.1 West: RACL Comparisons

Areas downgradient of the landfill on the West Side rely on containment and control of the source with natural attenuation in groundwater downgradient in order to attain the goals of aquifer restoration and contaminant removal from the groundwater system. Contaminant removal generally occurs through natural processes and is measured with respect to concentration comparisons with RACLs and trends of constituent concentrations with time. The RACLs are the long-term cleanup level goals of aquifer restoration.

5.1.1.1 Cells 1/1A

Water quality downgradient of Cells 1 and 1A is monitored by wells MW-1D, MW-3D, MW-10S/D, MW-11S/D, MW-12S/D, MW-17 through MW-19). During the 2024 monitoring period measured concentrations of TDS, chloride, iron, and manganese exceeded their respective RACLs in wells MW-10S, MW-10D, MW-11S, MW-11D, MW-12S, and MW-19. Concentrations continue to decline as illustrated in time concentration plots in Appendix B. Though most VOCs are now non-detect at standard MRLs, the PCE concentration measured in samples collected from both 2024 monitoring events exceeded its RACL (5 µg/L; Table 5-1). Vinyl chloride has not been detected at concentrations above its MCL since October 2004, nor was it detected at any monitoring well in 2024 above its PQL of 0.5 µg/L. Detection Wells MW-17 and MW-18 are located approximately 300 to 400 feet downgradient of the compliance boundary, therefore groundwater quality at these two locations approximates background conditions, indicating that

contaminants continue to attenuate significantly as groundwater migrates downgradient of the landfill. Results for MW-19 are discussed in Section 4.2.1.1.

5.1.1.2 Former Closed Landfill

Groundwater monitoring wells MW-20 and MW-21 monitor groundwater quality downgradient of the former "Closed Landfill" area. The contents of the landfill were completely removed by 2022 and there is currently no potential for leachate generation. Results of most of the indicator parameters downgradient of the former Closed Landfill are stable and reflect a steady improvement in groundwater quality. With the exception of manganese, iron, and TDS, each constituent having a remedial cleanup level associated was below its respective RACL. Results are summarized in Table 5-1.

5.1.2 East: SSL/PSCL Comparison

As presented in the EMP (TC, 2014a), the East Side multiunit cells are evaluated primarily with site-specific limits (SSLs) developed for seven site-specific indicator parameters. These SSLs were calculated as prediction limits consistent with EPA's Unified Guidance (EPA, 2009) and are based on intrawell statistics. In addition to the SSLs, hazardous compounds are compared to their primary drinking water maximum contaminant levels (MCLs). For vinyl chloride, a detection at or above the PQL (currently at 0.5 µg/L) is considered exceeding the action limit (AL) requiring further action, such as resampling. In July 2018 (TC, 2018), VLI re-evaluated the prediction limits at both of the East Side compliance wells recalculate the prediction limits for parameters at both wells.

Sampling results for MW-26 and MW-27 are compared with the recalculated 2018 SSLs in Table 5-2, however, due to lab error, dissolved metals were not reported for the October 2024 monitoring period. Of the water quality samples collected in 2024, each was below the SSLs except manganese at MW-27 in October. All other indicators including trace metals were below SSLs and do not show increasing trends that could suggest landfill impacts. For manganese at MW-27, the concentrations are only marginally above the statistically calculated limit and may represent natural variation or lower oxygen levels due to the proximity of the well to the landfill liner, limiting recharge of rainfall to the aquifer at this location (TC, 2024). Manganese concentrations will continue to be monitored in this area.

5.1.3 MCL Comparison

This section discusses results at detection and compliance wells for the east and West Side with regard to Federal and State water quality standards. The water quality summary Tables 4-2 through 4-9 identify relevant water quality standards at the end of each row.

5.1.3.1 Primary Maximum Contaminant Levels (MCLs).

Of federal or state primary MCLs (health-based), concentrations for arsenic exceeded the primary MCL of 10 µg/L in samples collected from East Side compliance wells MW-26 and MW-27 and at detection well MW-23 during both sampling events. The primary MCL for arsenic was also exceeded in the sample from well MW-9S during the 5-year monitoring event in October 2024. Based on knowledge of groundwater quality in this part of the site, the arsenic is naturally occurring at this level.

On the West Side, the primary MCL for nitrate+nitrite of 10 µg/L was exceeded in the sample collected from MW-18 during the 5-year monitoring event and the primary MCL for PCE (5 µg/L) was exceeded in the samples collected from MW-12S during both monitoring events. The last time the MCL/RACL for PCE was exceeded in this well was 2013. No other primary MCLs were exceeded at West Side wells.

5.1.3.2 Secondary MCLs.

Federal and state secondary MCLs (non-health-based) for iron and manganese were exceeded in samples from MW-26 and MW-27 downgradient of Cell 4, and at detection well MW-23 during the April 2024 event. Dissolved metals were inadvertently not analyzed by the lab during the October 2024 monitoring event; however, based on site knowledge, the concentrations at MW-26 and MW-27 represent natural conditions. During the October 2024 monitoring event, TDS in the sample collected from MW-9S and zinc in the samples collected from MW-23 and MW-27 also exceeded their respective secondary MCLs.

For the West Side compliance boundary and detection wells, the secondary MCLs were exceeded as follows:

- Chloride at compliance well MW-10S where the short-term trend has been increasing since 2020; and detection well MW-19 where the trend is stable after increasing since 2005.
- TDS at well pairs MW-10S/10D and MW-11S/11D, MW-20, MW-21, and detection well MW-19.

- Manganese at wells MW-10S/10D, MW-12S, and MW-21 (inadvertently not analyzed by lab for MW-20).
- Iron at MW-12S and MW-21.
- Zinc at wells MW-1D, MW-3D (trace concentration), and MW-21.

5.2 Non-Statistical Data Analysis

Trend analysis has become one of the primary non-statistical methods of data evaluation for the CBL. Time-series plots of inorganic constituents, dissolved and total (trace) metals, and VOCs have been plotted over the 40-year history of monitoring this landfill. In evaluating short and long-tern trends in conjunction with any unusual concentration spikes of indicator parameters, one may see early signs of any issues within the controls currently in place for the landfill. Relevant plots have been included in this report as Appendix D and are discussed in further detail in the next sections.

5.2.1 Source Control Effectiveness

Source controls in place for the CBL include the final cover at the landfill, leachate removal, and active landfill gas recovery to control the migration of LFG that contains methane and VOCs. More recent source control involved the physical removal of waste as described above for the former Closed Landfill. Effectiveness of these measures of control can be measured qualitatively by examining (1) the trends and number of VOCs at downgradient monitoring wells and (2) whether landfill gas is migrating to perimeter gas probes. Table 5-3 summarizes VOC detections during the 2024 monitoring year.

5.2.1.1 Groundwater Quality.

Since LFG extraction wells were installed in Cell 1 in 1994 and the landfill cover was installed on Cells 1/1A in 1996, the number and concentrations of VOCs have decreased in compliance wells. Most concentrations are at very low concentrations and continue to decrease or have stabilized in each of the wells. At MW-12S, PCE concentrations have decreased since 2000, but during the current monitoring period, the PCE concentrations increased to exceed the RACL/MCL. The initial decrease in detections and concentration of VOCs can be attributed to removal of landfill gas and the installation of cover to reduce infiltration. PCE will continue to be closely monitored in MW-12S.

Another source control measure for Cell 1 is leachate removal. A leachate removal system is not in place for Cell 1A, however, as the base elevation of that cell is above the groundwater table, it

is unlikely to generate leachate from groundwater upwelling since it is a covered cell and seepage would also be minimal.

5.2.1.2 LFG Probe Results.

Probe monitoring has shown that methane very likely does not migrate laterally away from the landfill, but is being contained by the gas recovery wells. Gas recovery rates for Cell 1 are monitored routinely by Pacific Northwest Generating Cooperative as part of optimizing flow and maximizing methane recovery for the gas-to-energy plant.

5.2.2 Plume Stabilization

As described by the EMP (TC, 2014), the stability of the VOC plume is evaluated qualitatively through examining whether concentrations at impacted wells are increasing and/or whether samples from monitoring wells downgradient of the VOC plume, in downgradient wells MW-17, MW-18, and MW-19 have VOC detections. To date, both criteria suggest a stable to shrinking plume as concentrations are declining within the plume and, with the exception of MW-19, wells outside the plume have not detected VOCs. Trace to low concentrations of PCE, TCE and 1,1-DCA have been detected since 2011 and appear to have stabilized. Additionally, these VOC detections are more associated with residual leachate irrigation effects than a landfill release. Significant increases in VOCs in MW-19 are not expected since PCE and TCE in samples from MW-11S/11D upgradient of MW 19 have been non-detect since 1999 and 1,1-DCA has been non-detect or detected at trace concentrations since 2006.

Continued retraction of the extent of VOCs is also indicated by concentration declines to non-detect (at MRL of 0.5 µg/L) or trace levels below the MRL within the last few years for:

- 1,1-DCA in MW-10D and MW-11S/MW-11D
- Chloroethane in MW-10S/10D and MW-11S/11D
- Cis-1,2-DCE in MW-10S/10D and MW-11S/11D
- Vinyl chloride in MW-10S/10D and MW-11S/11D

Time-series plots of these trends are included in Appendix B.

5.2.3 Prevention/Protectiveness Monitoring

Prevention/protectiveness is assessed at two locations: at the Phillips domestic well and at well P-8, which was installed between the domestic well and the landfill. Trend plots for indicator parameters for these wells can be found in Appendix B.

Early warning detection monitoring well P-8 is located near the hydrogeologic divide that separates the eastern and western flow regimes, and likely protects the domestic well from migration of landfill impacted groundwater. None of the historical indicator parameter trends for this well suggest significant changes in groundwater quality, and no VOCs were detected in 2024.

Similarly, analytical results for samples collected from the Phillips well during the October 2024 monitoring period were either non-detect or significantly below safe drinking water standards for inorganics and dissolved metals (see Tables 4-2 and 4-3). No VOCs were detected and trends of indicator parameters do not show significant increasing concentrations suggestive of impacts from the landfill.

6. Summary and Recommendations

Monitoring results obtained during the April and October monitoring results in 2024 are consistent with historical results. No new VOCs were detected in any site wells. Primary MCLs were exceeded for PCE in samples from MW-12S during both monitoring events and for nitrate+nitrite as nitrogen in the sample collected from MW-18. Additionally, West Side RACLs were exceeded in samples from wells MW-10S/10D, MW-11S/11D, and MW-19 through MW-21 for TDS; MW-10S and MW-19 for chloride; MW-12S and MW-21 for iron; and MW-10S/10D, MW-12S, and MW-21 for manganese. East Side SSLs were exceeded for manganese in samples collected from MW-27. Other items of concern were quantifiable concentrations of VOCs measured in the samples collected from wells MW-12S/12D and MW-19 as has been the case historically. Field screening of soil-pore gas samples indicated that no methane was detected in any of the monitoring probes or on-site structures. Considering the similarity between recent and historical monitoring results, it is concluded that no significant changes have occurred since the previous monitoring event and landfill source controls are effective.

No changes are planned for the monitoring network in 2025, however, GLA is in the process of submitting an updated Environmental Monitoring Plan (GLA, 2025), which will be put into effect after approval by the State of Oregon Department of Environmental Quality. As reported, some parameters were inadvertently not reported by the lab during the October 5-year monitoring event. In order to maintain compliance, those wells will be resampled in the second quarter of 2025 for the parameters necessary to complete the 5-year dataset. Also, VLI is continuing construction of Cell 6, which should be in operation in 2026. As described in the 2025 EMP, the

current West Side monitoring wells will continue as compliance wells for Cells 1 and 1A, but will double as detection wells once Cell 6 is in operation.

References

Department of Environmental Quality (DEQ). 2004. *Solid Waste Disposal Site Permit No. 306 Addendum*. Issued by the Oregon Department of Environmental Quality, Hazardous and Solid Waste, Permitting and Compliance, Western Region. Signed by Gil Hargreaves, November 4, 2004.

DEQ. 1996. Solid waste guidance, municipal solid waste landfills. Oregon Department of Environmental Quality. September 1.

DEQ. 2004. *Record of decision for Coffin Butte Landfill, Corvallis, Oregon*. Prepared by the Oregon Department of Environmental Quality, Western Region. October 2004.

DEQ. 2020. *Solid Waste Disposal Site Permit No. 306* for Coffin Butte Landfill. Oregon Department of Environmental Quality. Issued July 28.

EMCON. 1994. Remedial investigation and additional hydrogeologic investigation report, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON Northwest, Inc., Portland, Oregon. February 4.

EMCON. 1999. Site Characterization – Cell 3, Coffin Butte Landfill, Prepared for Valley Landfills, Inc., June 1999.

U.S. Environmental Protection Agency (USEPA). 1983. Methods for chemical analysis of water and wastes. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio. EPA-600/4-79-020.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA-530/SW-846.

USEPA. 1986b. RCRA Ground Water Monitoring Technical Enforcement Guidance Document. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. OSWER-9950. September

USEPA. 1987. Generic Quality Assurance Project Plan for Land Disposal Restrictions Program, Office of Solid Waste and Emergency Response. EPA/530-SW 87-011. March.

USEPA. 1990. Quality Assurance/Quality Control Guidance for Removal Activities, Office of Solid Waste and Emergency Response. OSWER Directive 9360.4-01. April

USEPA. 2009. *Statistical analysis of groundwater monitoring data at RCRA facilities*, Unified Guidance EPA 530/R-09-007. March 2009.

Geo-Logic Associates, Inc. 2022. *Construction Certification Report*, Coffin Butte Landfill, "Burn Dump" Clean Closure (Phases I-IV), Project # AU22.1129.00, October.

GLA. 2024. *Letter Report: Site Characterization, Cell 6 Coffin Butte Landfill*, Project No. AU24.1090.00, July 17.

GLA. 2025. *Environmental Monitoring Plan, Coffin Butte Landfill, Benton County Oregon*. Project # AU24.1090. March.

Morris, D.A. and Johnson, A I. 1967. *Summary of hydrologic and physical properties of rock and soil materials, as analyzed by the hydrologic laboratory of the U.S. Geological Survey, 1948-60*. U.S. Geological Survey Water-Supply Paper 1839-D. 1967.

Tuppan Consultants, LLC (TC). 2003a. *Focused risk assessment and feasibility study, Coffin Butte Landfill, Benton County, Oregon.* Prepared for Valley Landfills, Inc. Corvallis. September 23, 2003.

TC. 2003b. Letter from E. Tuppan to G. Hargreaves, Oregon Department of Environmental Quality re: Permit-Specific Concentration Limits for Coffin Butte Landfill, Solid Waste Permit 306, Benton County, Oregon. November 5, 2003.

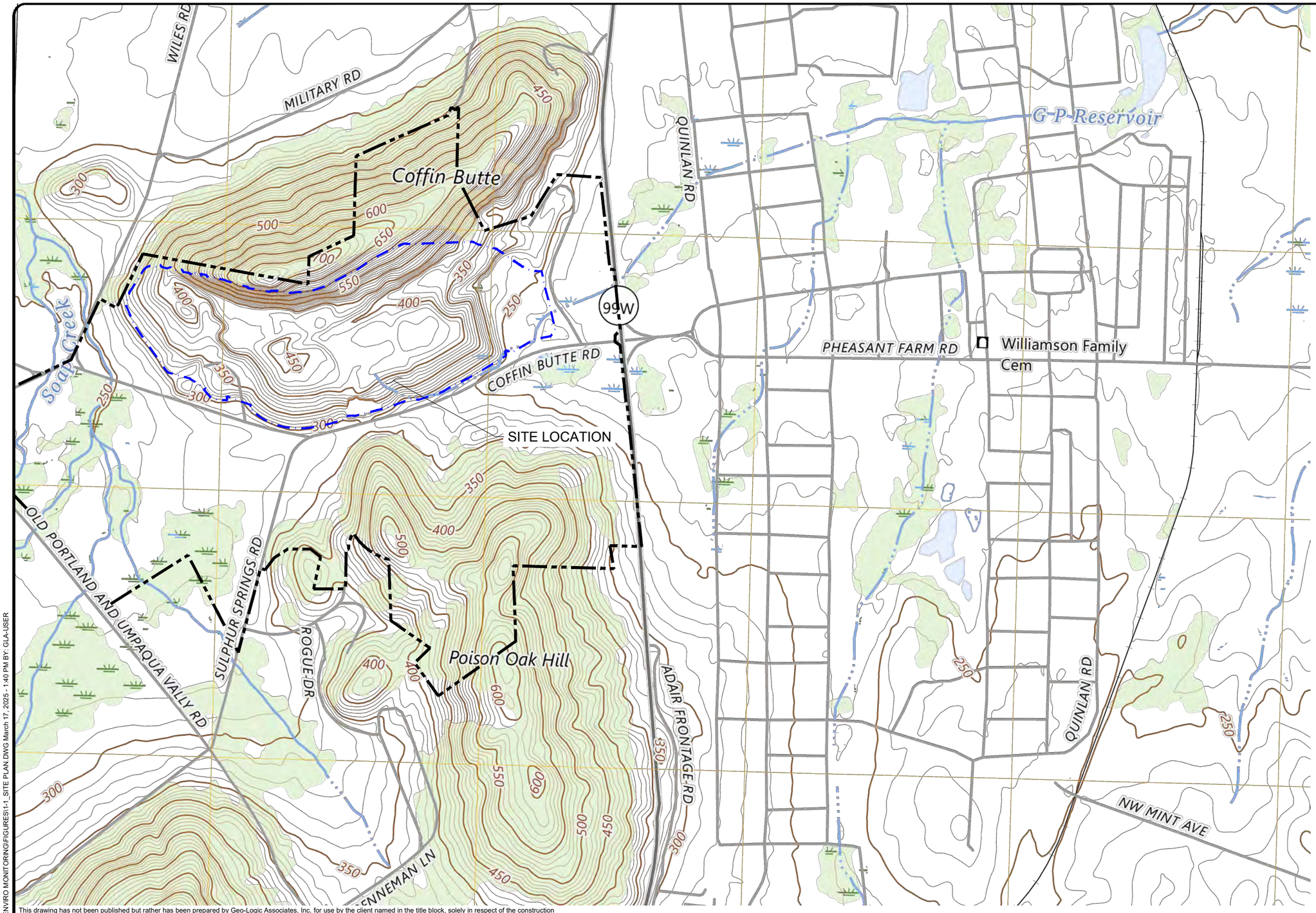
TC. 2011. Site Characterization, Cell 4 Coffin Butte Landfill, March 2011.

TC. 2014. *Environmental monitoring plan, Coffin Butte Landfill, Benton County, Oregon*. Prepared for Valley Landfills, Inc. June 27 (Rev. 3).

TC. 2018. *Memorandum (re: Updated Statistical Summary for Compliance Wells MW-26 and MW-27: Coffin Butte Landfill)* from E. Tuppan, Tuppan Consultants LLC, Lake Oswego, Oregon, to S. Sadofsky, Oregon Department of Environmental Quality, Salem, Oregon. July 30.

TC. 2024. *2023 Annual Environmental Monitoring Report, Coffin Butte Landfill, Benton County, Oregon*, Prepared for Valley Landfills, Inc. March 19.

Figures



NOTES

1. MAP OVERLAY FROM USGS 2024 LEWISBURG QUADRANGLE OREGON 7.5- MINUTE SERIES NAD83 WGS84.

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

REV. NO.	DATE	DESCRIPTION	APPROVED BY
0	03/12/2025	2024 AEMR	

DATE OF ISSUE: 03/12/2025
DESIGNED BY: RPB/ASO
DRAWN BY: JGB
CHECKED BY:
APPROVED BY:

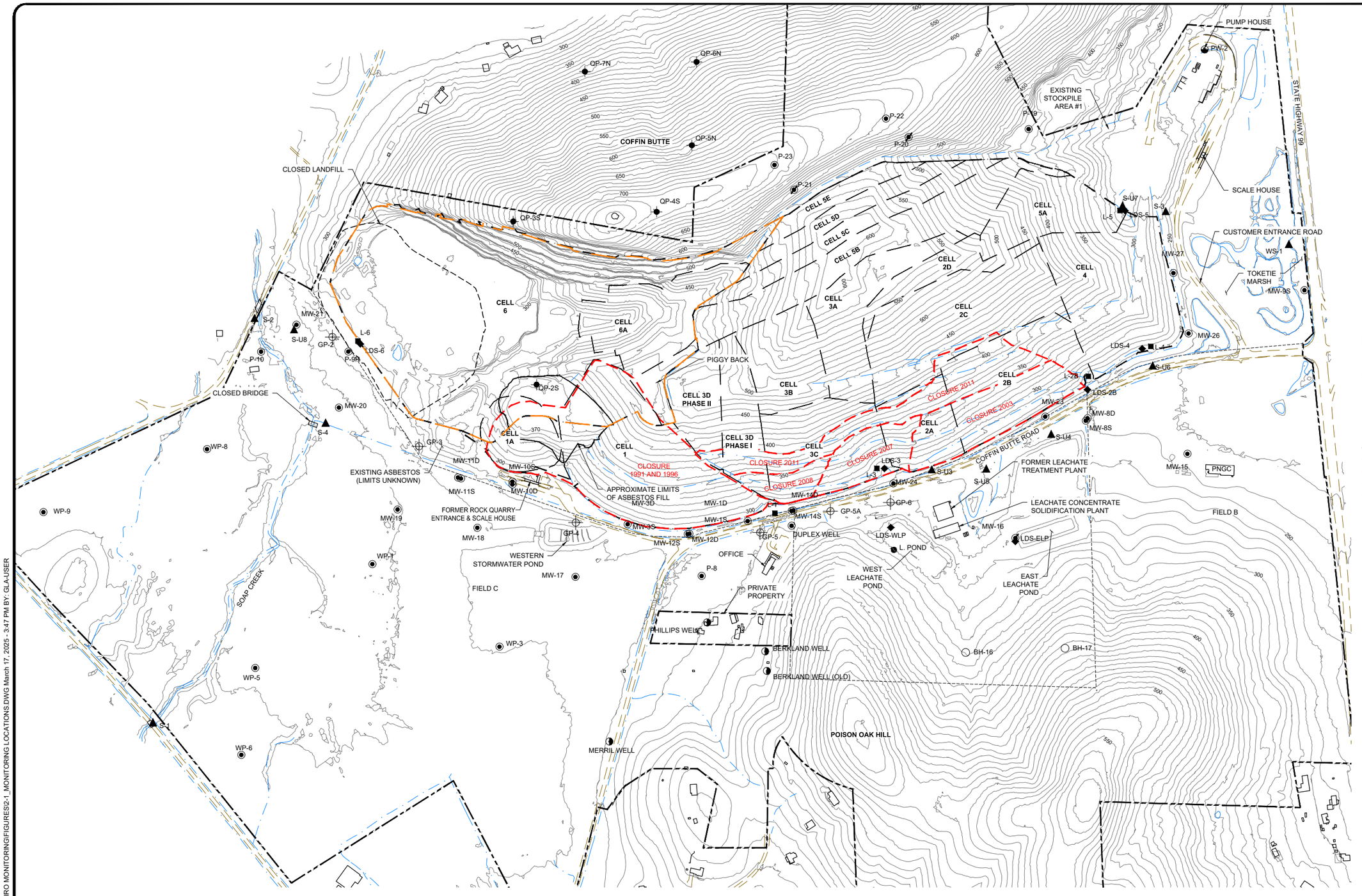
Geo-Logic ASSOCIATES
PO Box 288, Newport, OR 97365
geo-logic.com | 541.848.8859

VALLEY LANDFILLS, INC.

COFFIN BUTTE LANDFILL
2024 ENVIRONMENTAL MONITORING REPORT
BENTON COUNTY, OREGON
SITE LOCATION

FIGURE NO. **1-1**
PROJECT NO. AU24.1090.00

P:\SITES\COFFIN BUTTE\ENVIRO MONITORING\FIGURES\1-1_SITE PLAN.DWG March 17, 2025 - 1:40 PM BY: GLA-USER



LEGEND

- 300 — EXISTING 10' CONTOUR(1)
- EXISTING LINER LIMITS
- EXISTING PAVED ROAD
- EXISTING WATER
- EXISTING DRAINAGE
- EXISTING BUILDING
- EXISTING ZONING BOUNDARY
- EXISTING LANDFILL FOOTPRINT
- PROPERTY LINE
- EXISTING CLOSURE LIMIT
- ASBESTOS LIMITS
- APPROXIMATE LIMITS OF CELL 6
- MW-22 — PIEZOMETER/ OBSERVATION WELL
- PW-2 — WATER SUPPLY WELL
- QP-3S — OBSERVATION WELL
- WELL — PRIVATE WELL
- S-1 — SURFACE WATER SAMPLING LOCATION
- S-U3 — UNDERDRAIN SAMPLING LOCATION
- L-3 — LEACHATE SUMP
- MW-16 — DECOMMISSIONED WELL
- P-2 — DECOMMISSIONED OBSERVATION POINT
- GP-4 — GAS PROBE
- BH-16 — TEMPORARY OBSERVATION POINT
- LDS-3 — SECONDARY LEACHATE CONTROL SYSTEM (FORMALLY LEAK DETECTION SYSTEM)

NOTES

1. EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY FIRMATEK LLC. ON DECEMBER 09, 2024 COMBINED WITH OCTOBER 21, 2024 TOPOGRAPHY.

P:\SITES\COFFIN BUTTE\ENVIRO MONITORING\FIGURES\2-1_MONITORING LOCATIONS.DWG March 17, 2025 - 3:47 PM BY: GLA-USER

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

DRAFT

REV. NO.	DATE	DESCRIPTION	APPROVED BY
0	03/12/2025	2024 AEMR	

DATE OF ISSUE: 03/12/2025
DESIGNED BY: RPB/ASO
DRAWN BY: JGB
CHECKED BY:
APPROVED BY:

Geo-Logic ASSOCIATES
PO Box 288, Newport, OR 97365
geo-logic.com | 541.848.8859

VALLEY LANDFILLS, INC.

COFFIN BUTTE LANDFILL

2024 ENVIRONMENTAL MONITORING REPORT

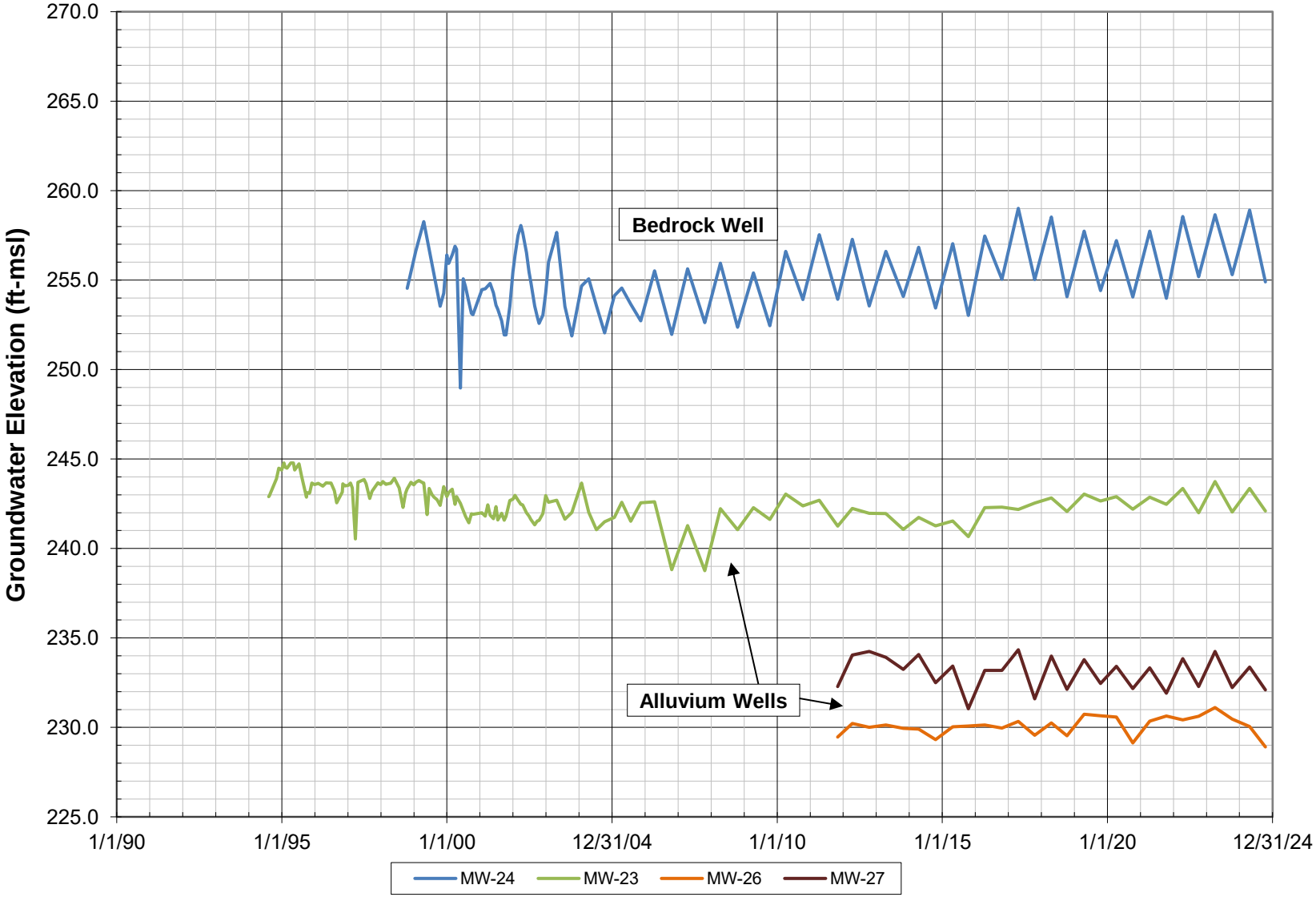
BENTON COUNTY, OREGON

MONITORING LOCATIONS

FIGURE NO. 2-1

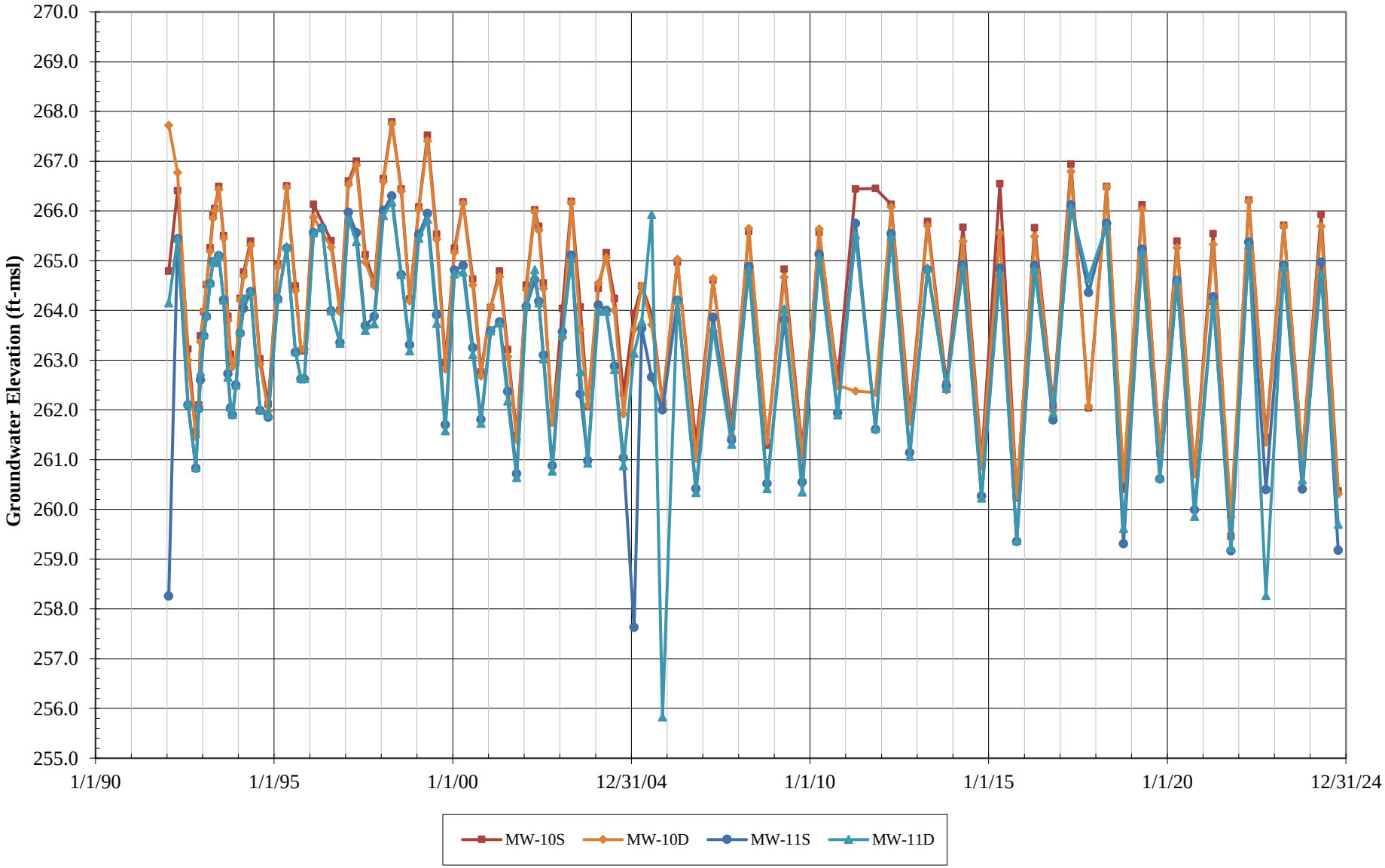
PROJECT NO. AU24.1090.00

Figure 4-1
Hydrographs for East Side Wells
Annual Environmental Monitoring Report
Coffin Butte Landfill



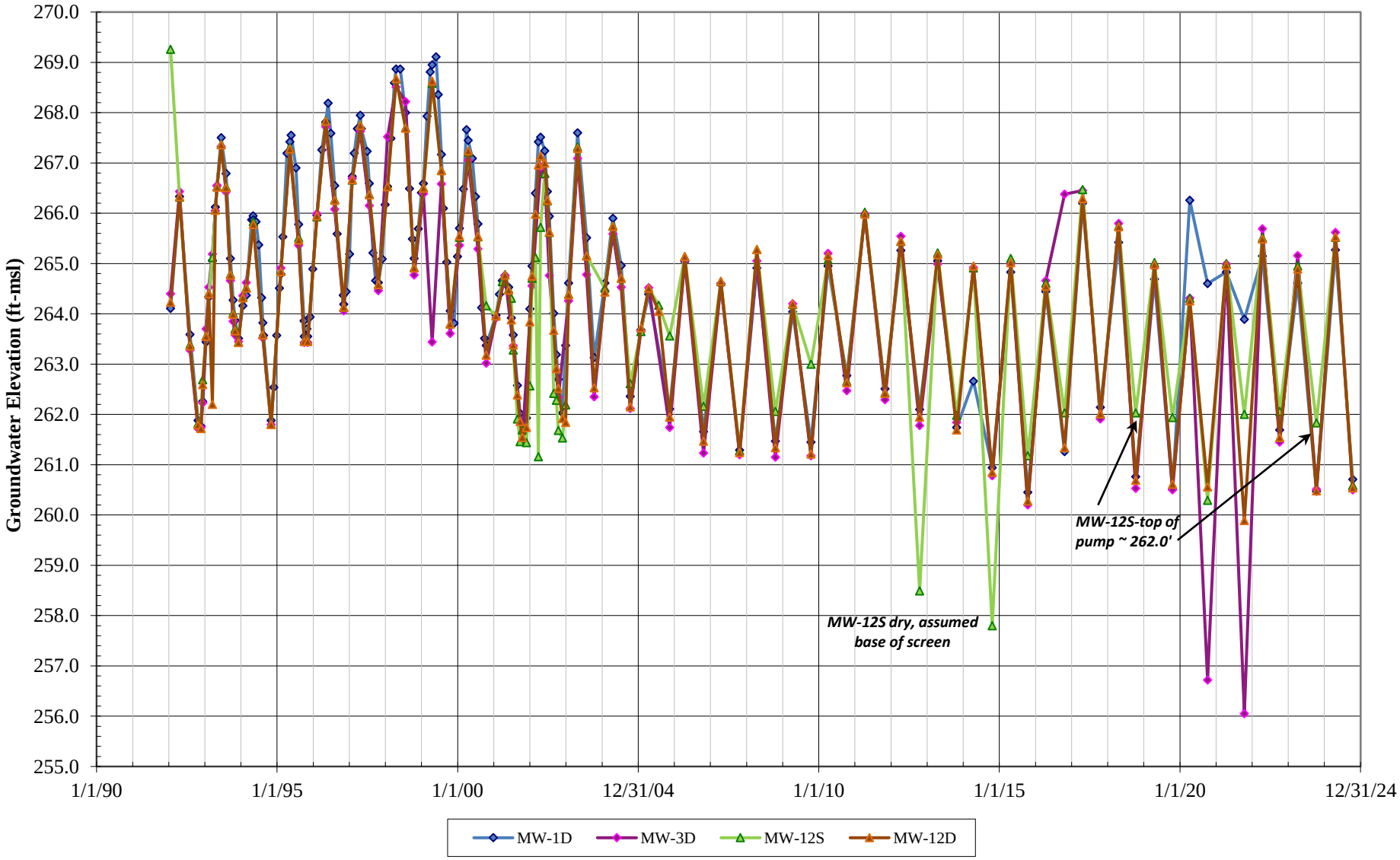
VLI\H20MASTER_0318-2024\East-S F4-1

Figure 4-2
Hydrographs for Cell 1A Area Wells
Annual Environmental Monitoring Report
Coffin Butte Landfill

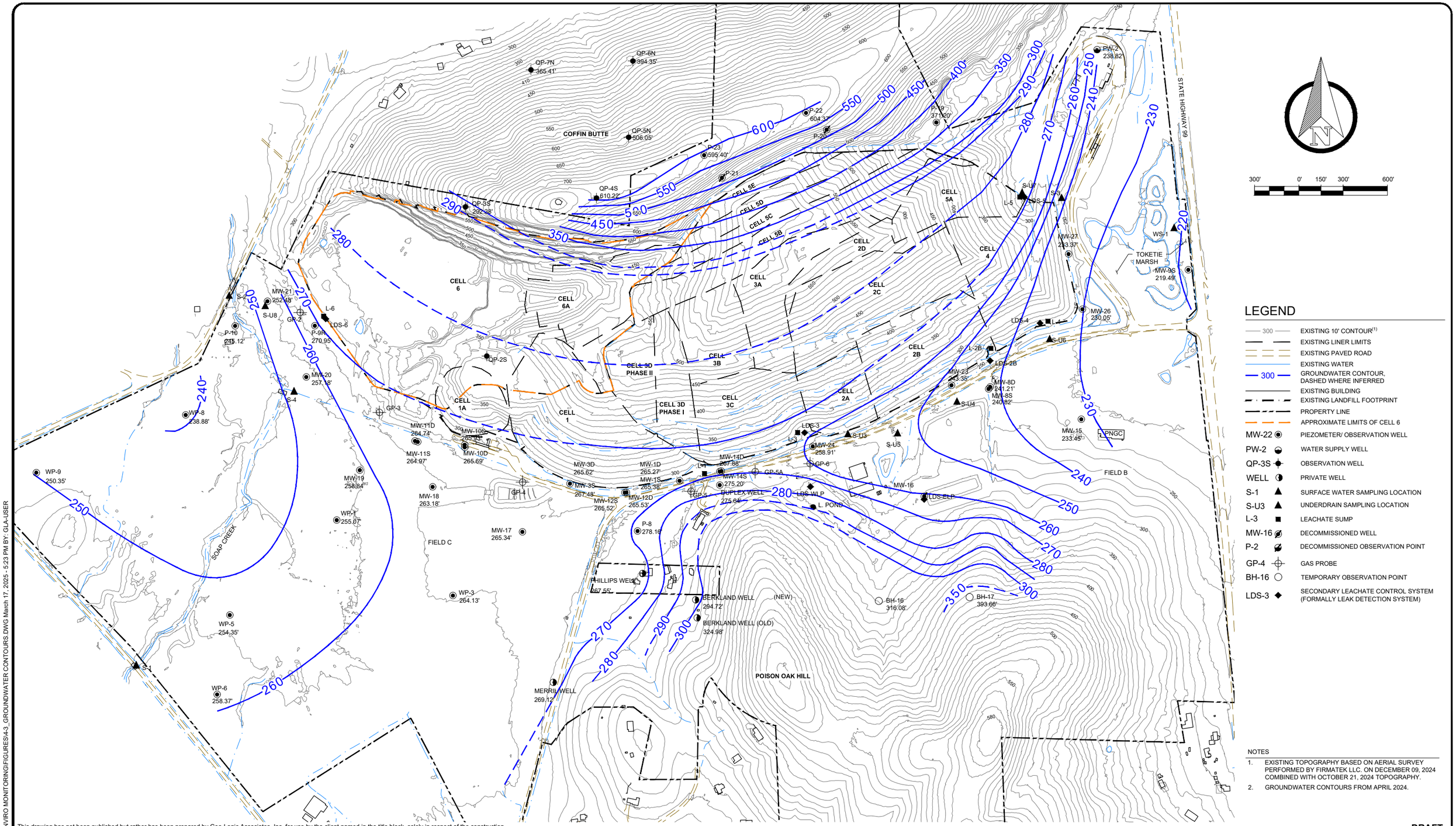


VLI\H20MASTER_0318-2024\Cell1A_MW-11S,10S,18,19_F4-2

Figure 4-3
Hydrographs for Cell 1 Area Wells
Annual Environmental Monitoring Report
Coffin Butte Landfill



VLI\H20MASTER_0318-2024\Cell1_MW-1D,3D,12_F4-3



300' 0' 150' 300' 600'

LEGEND

- 300 — EXISTING 10' CONTOUR(1)
- EXISTING LINER LIMITS
- EXISTING PAVED ROAD
- EXISTING WATER
- 300 — GROUNDWATER CONTOUR, DASHED WHERE INFERRED
- EXISTING BUILDING
- EXISTING LANDFILL FOOTPRINT
- PROPERTY LINE
- APPROXIMATE LIMITS OF CELL 6
- MW-22 — PIEZOMETER/ OBSERVATION WELL
- PW-2 — WATER SUPPLY WELL
- QP-3S — OBSERVATION WELL
- WELL — PRIVATE WELL
- S-1 — SURFACE WATER SAMPLING LOCATION
- S-U3 — UNDERDRAIN SAMPLING LOCATION
- L-3 — LEACHATE SUMP
- MW-16 — DECOMMISSIONED WELL
- P-2 — DECOMMISSIONED OBSERVATION POINT
- GP-4 — GAS PROBE
- BH-16 — TEMPORARY OBSERVATION POINT
- LDS-3 — SECONDARY LEACHATE CONTROL SYSTEM (FORMALLY LEAK DETECTION SYSTEM)

NOTES

1. EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY FIRMATEK LLC. ON DECEMBER 09, 2024 COMBINED WITH OCTOBER 21, 2024 TOPOGRAPHY.
2. GROUNDWATER CONTOURS FROM APRIL 2024.

P:\SITES\COFFIN BUTTE\ENVIRO MONITORING\FIGURES\4-3_GROUNDWATER CONTOURS.DWG March 17, 2025 - 5:23 PM BY: GLA-USER

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

DRAFT

REV. NO.	DATE	DESCRIPTION	APPROVED BY
0	03/12/2025	2024 AEMR	

DATE OF ISSUE: 03/12/2025
DESIGNED BY: RPB/ASO
DRAWN BY: JGB
CHECKED BY:
APPROVED BY:

Geo-Logic ASSOCIATES
PO Box 288, Newport, OR 97365
geo-logic.com | 541.848.8859

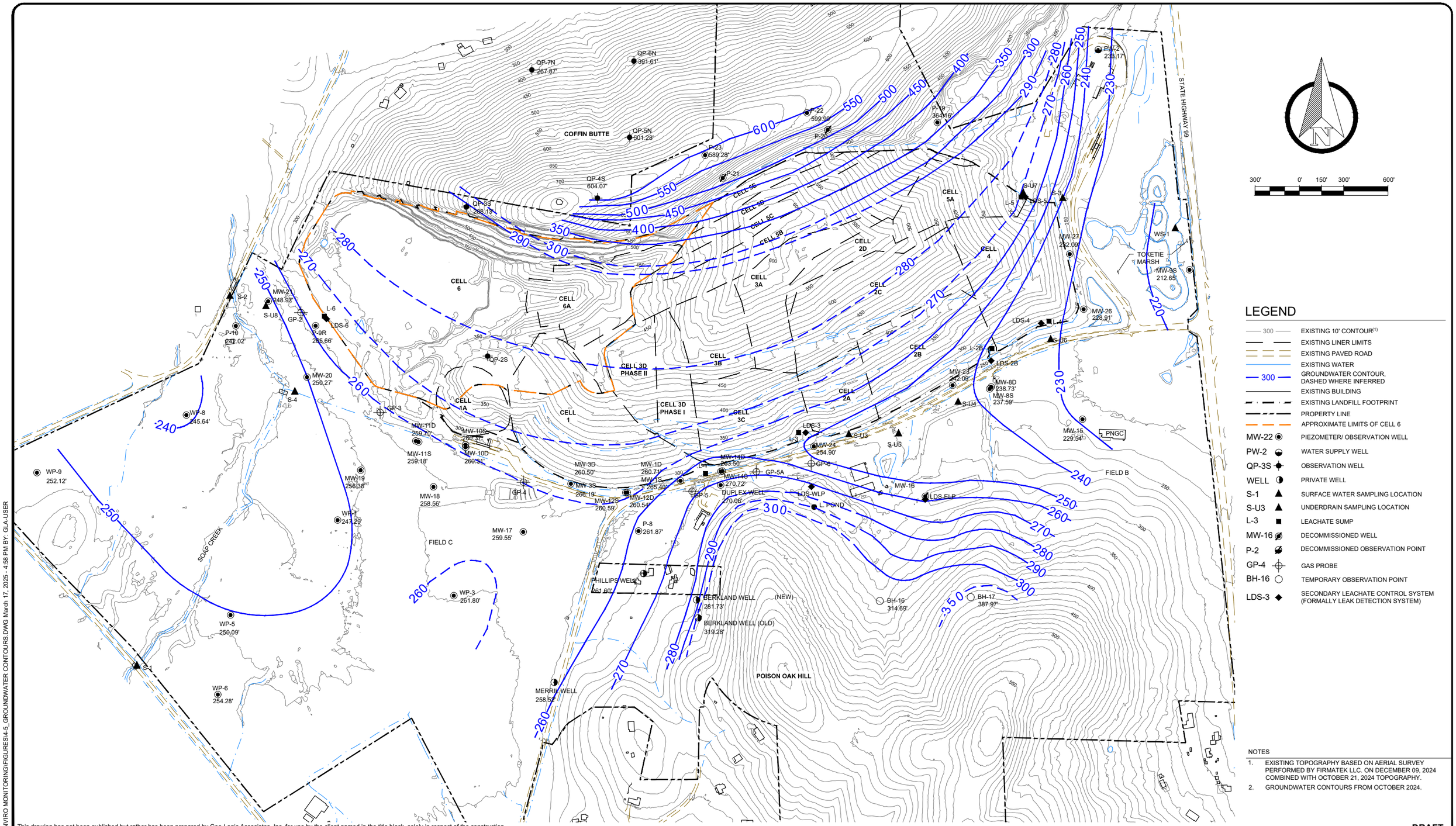
VALLEY LANDFILLS, INC.

COFFIN BUTTE LANDFILL
2024 ENVIRONMENTAL MONITORING REPORT
BENTON COUNTY, OREGON

APRIL 2024 GROUNDWATER EQUIPOTETIAL SURFACE CONTOURS

FIGURE NO. 4-4

PROJECT NO. AU24.1090.00



LEGEND

- 300 — EXISTING 10' CONTOUR(1)
- EXISTING LINER LIMITS
- EXISTING PAVED ROAD
- EXISTING WATER
- 300 — GROUNDWATER CONTOUR, DASHED WHERE INFERRED
- EXISTING BUILDING
- EXISTING LANDFILL FOOTPRINT
- PROPERTY LINE
- APPROXIMATE LIMITS OF CELL 6
- MW-22 — PIEZOMETER/ OBSERVATION WELL
- PW-2 — WATER SUPPLY WELL
- QP-3S — OBSERVATION WELL
- WELL — PRIVATE WELL
- S-1 — SURFACE WATER SAMPLING LOCATION
- S-U3 — UNDERDRAIN SAMPLING LOCATION
- L-3 — LEACHATE SUMP
- MW-16 — DECOMMISSIONED WELL
- P-2 — DECOMMISSIONED OBSERVATION POINT
- GP-4 — GAS PROBE
- BH-16 — TEMPORARY OBSERVATION POINT
- LDS-3 — SECONDARY LEACHATE CONTROL SYSTEM (FORMALLY LEAK DETECTION SYSTEM)

NOTES

1. EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY FIRMATEK LLC. ON DECEMBER 09, 2024 COMBINED WITH OCTOBER 21, 2024 TOPOGRAPHY.
2. GROUNDWATER CONTOURS FROM OCTOBER 2024.

DRAFT

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

REV. NO.	DATE	DESCRIPTION	APPROVED BY
0	03/12/2025	2024 AEMR	

DATE OF ISSUE: 03/12/2025
DESIGNED BY: RPB/ASO
DRAWN BY: JGB
CHECKED BY:
APPROVED BY:

Geo-Logic ASSOCIATES
PO Box 288, Newport, OR 97365
geo-logic.com | 541.848.8859

VALLEY LANDFILLS, INC.

COFFIN BUTTE LANDFILL
2024 ENVIRONMENTAL MONITORING REPORT
BENTON COUNTY, OREGON

OCTOBER 2024 GROUNDWATER EQUIPOTETIAL SURFACE CONTOURS

FIGURE NO. 4-5

PROJECT NO. AU24.1090.00

P:\SITES\COFFIN BUTTE\ENVIRO MONITORING\FIGURES\4-5_GROUNDWATER CONTOURS.DWG March 17, 2025 - 4:58 PM BY: GLA-USER

Tables

Geo-Logic ASSOCIATES

KEY TO TABLES
Coffin Butte Landfill Environmental Monitoring

Blank Analyses Table

#.#	- Value listed (right-justified) indicates analyte detected above Practical Quantitation Limit (PQL).
#.#	- Indicates not detected above PQL. Value listed is Method Detection Limit (MDL) (left-justified)
#.#	- Estimated trace concentration (**BOLDED, right-justified**).

(1) - Indicates probable field/laboratory contaminant.
(2) - Matrix spike recovery not within established limits.

Duplicate Analyses and Summary Results Tables

IW	- Insufficient liquid to sample
NA	- Constituent not required to be analyzed during this event
NS	- Location not sampled during this monitoring event
NR	- Analysis not run/reported by lab
NV	- No value established.
OR	- Measured reading is out of range of the field instruments.
#.#	- Value listed (right-justified) indicates analyte detected above Practical Quantitation Limit (PQL).
#.#	- Indicates not detected above PQL. Value listed is Method Detection Limit (MDL) (left-justified)
#.#	- Estimated trace concentration (**BOLDED, right-justified**).
	- Indicates exceeds respective Control Limit or Maximum Concentration Level (MCL).

MCL = Maximum Contaminant Limit

** - Matrix spike recovery not within established limits.
(1) Federal Primary Maximum Contaminant Limit (MCL).
(2) Federal Secondary MCL.
(3) Oregon Primary MCL

Table 2-1
Well Construction Summary
Coffin Butte Landfill

MONITORING STATION Location	Status	Northings	Eastings	Ground Surface Elevation (ft msl)	Surveyed Reference Elevation (ft msl)	Total Depth (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Seal (ft bgs)	Well Diameter (Inches)	Drilling Method	Date Well Installed	Lithology Screened
MONITORING/OBSERVATION WELLS													
MW-1S[a]		387416.66	7491201.90	288.50	289.87	28	23-28	21-28	0-21	2	Air Rotary	1977	Weathered basalt
MW-1D[a]		387416.66	7491201.90	288.50	289.89[b]	40	35-40	34-40	28-34	2	Air Rotary	1977	Weathered/fresh basalt
MW-3S[a]		387396.95	7490459.59	284.70	285.86	26	21-26	20-26	0-20	2	Air Rotary	1977	Weathered basalt
MW-3D[a]		387396.95	7490459.59	284.70	285.94[b]	55	50-55	48-55	26-48	2	Air Rotary	1977	Weathered/fresh basalt
MW-8S		388,038.13	7,493,295.09	240.63	244.01[b]	32	22-32	17-32	0-17	2	Air Rotary	07/30/85	Weathered basalt
MW-8D		388,052.73	7,493,306.08	240.50	244.04	75	65-75	60-75	0-60	2	Air Rotary	07/30/85	Fresh basalt
MW-9S		388,845.65	7,494,648.37	221.50	223.27	35	25-35	20-35	0-20	2	Air Rotary	08/02/85	Clay
MW-10S[c]		387,660.77	7,489,746.08	289.03	291.42[b]	38.1	28.4-38.4	23.4-38.4	0-23.1	2	Air Rotary	08/02/85	Weathered basalt
MW-10D[c]		387,643.53	7,489,746.11	289.02	291.38[b]	82.9	73.2-83.2	60.2-83.2	0-59.9	2	Air Rotary	08/02/85	Fresh basalt
MW-11S		387,680.08	7,489,428.44	274.80	274.71[b]	32	22-32	20-32	0-20	2	Air Rotary	08/05/85	Weathered basalt
MW-11D		387,686.42	7,489,409.28	274.80	274.96[b]	75	65-75	55-75	0-55	2	Air Rotary	08/05/85	Fresh basalt
MW-12S		387,336.24	7,490,830.96	283.80	285.59[b]	26.2	21-26	18.9-26.2	2-18.9	2	Air Rotary	09/19/91	Weathered and fresh basalt
MW-12D		387,334.96	7,490,848.71	283.80	285.43[b]	61.3	55-60	52.6-61.3	1.5-52.6	2	Air Rotary	09/19/91	Fresh basalt
MW-14S		387,482.52	7,491,484.81	287.50	289.58	35	19.5-29.5	16.5-30	1.5-16.5	4	Air Rotary	07/27/92	Weathered basalt
MW-14D		387,479.36	7,491,474.42	287.80	290.27	75	60-70	57.5-71	1-57.5	2	Air Rotary	07/24/92	Fresh basalt
MW-15		387,833.16	7,493,923.82	233.45	235.66[b]	29	19.0-28.0	16.5-29.0	0-16.5	2	HSA	07/14/93	Silt and gravel
MW-17		387,070.74	7,490,136.83	277.45	279.67[b]	27	16.7-26.2	15.0-27.0	0-15.0	2	HSA	07/15/93	Weathered basalt and silt
MW-18		387,375.30	7,489,529.13	267.70	269.90[b]	21.4	11.2-20.8	9.0-21.4	0-9.0	2	HSA	07/15/93	Weathered basalt
MW-19		387,488.50	7,489,035.48	261.00	263.29[b]	24.1	13.5-23.0	11.7-24.1	0-11.7	2	HSA	07/16/93	Weathered basalt
MW-20		388,119.00	7,488,673.03	256.81	259.22[b]	39	11.3-20.7	9.5-22.5	0-9.5	2	HSA	07/15/93	Clay and gravel
MW-21		388,628.80	7,488,408.71	254.25	256.67[b]	17	11.0-16.7	9.0-17.0	0-9.0	2	HSA	07/15/93	Fresh basalt
MW-23		388,063.30	7,493,044.16	242.81	244.76[b]	22.7	12.4-22.1	9.6-22.7	0-9.6	2	HSA	08/02/94	Silt, clay, and gravel
MW-24		387,649.83	7,492,104.33	273.94	276.76[b]	35.0	19.5-34.5	18.0-35.0	0-18.0	2	HSA	08/31/98	Weathered basalt
MW-26		388,531.15	7,493,967.51	235.18	237.91	28.0	17.1-26.9	15.5-28.0	0-15.5	2	Sonic	10/17/11	Silt
MW-27		388,887.59	7,493,881.47	252.12	254.76	35.5	25.0-34.8	23.5-35.5	0-23.5	2	Sonic	10/17/11	Clay with organics
LANDFILL WATER SUPPLY													
PW-2		390,336.45	7,494,030.76	248.90	250.27	199	95-199 OH	none	0-95	8	Air Rotary	07/30/92	Fresh basalt
PRIVATE WATER SUPPLY													
Duplex Well		387,387.70	7,491,474.23	289.01	289.01	74	26-74 OH	none	0-20	6	Rotary	07/17/72	Basalt (?)
Berkland well (old)		-749.95	545.36	~327.6	327.63	400	40-400 OH	none	0-39	6	Rotary	09/18/71	Basalt/weathered basalt
Berkland well (surv. 2/21/20)		386,610.24	7,491,311.09	~321.7	321.72	220	20-220 OH	none	0-20	6	Rotary	05/01/78	Basalt/weathered basalt
Phillips Well		386,788.95	7,490,951.64	291.00	291.00	--	--	--	--	--	--	--	(?)

Table 2-1 (cont'd)
Well Construction Summary
Coffin Butte Landfill

MONITORING STATION Location	Status	Northings	Eastings	Ground Surface Elevation (ft msl)	Surveyed Reference Elevation (ft msl)	Total Depth (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Seal (ft bgs)	Well Diameter (Inches)	Drilling Method	Date Well Installed	Lithology Screened
PIEZOMETERS													
P-8		387,080.97	7,490,932.94	282.40	284.02	29.0	18.7-27.6	16.4-29.0	0-16.4	2	HSA	07/13/93	Weathered basalt
P-9R		388,474.80	7,488,729.18	273.36	276.09	24.9	20.0-24.4	17.2-24.9	3.0-17.2	2	Sonic	07/26/23	Fresh basalt
P-10		388,460.45	7,488,223.46	243.00	245.12	26.5	7.7-17.2	5.7-18.5	0-5.7	2	HSA	07/20/93	Weath. basalt, gravel and silt
P-19		389,840.33	7,492,921.45	383.15	385.65	106.5	96.3-106.1	94.2-106.5	0-94.2	2	Air Rotary	08/17/12	Fresh basalt
P-22		389,903.79	7,492,050.39	636.87	638.60	77.5	57.5-77.1	53.9-77.5	0-53.9	2	Air Rotary	09/10/15	Fresh basalt
P-23		389,618.74	7,491,365.81	690.96	693.11	183.5	163.5-183.2	160.0-183.5	0-160.0	2	Air Rotary	09/10/15	Fresh basalt
QUARRY PIEZOMETERS													
QP-2S		976.12	-939.27	355.40	355.66	100.1	79.6-99.6	74.6-100.1	--	2	--	--	--
QP-3S		1,980.90	-1,117.76	601.70	602.02	354.4	333.4-353.8	330.5-354.4	--	2	--	--	--
QP-4S		2,070.90	-232.91	717.15	718.95	403.1	363.1-403.1	none	--	2	--	--	--
QP-5N		2,489.07	-29.98	601.48	601.53	230.9	200.3-230.3	197.7-230.9	--	2	--	--	--
QP-6N		3,003.81	-22.69	445.39	445.82	150.0	119.4-149.4	117.3-150.0	--	2	--	--	--
QP-7N		2,925.42	-706.21	374.43	374.50	119.6	89.0-119.0	85.2-119.6	--	2	--	--	--
WETLAND PIEZOMETERS													
WP-1		387,199.43	7,488,891.35	257.33	259.83	13.8	8.56-13.11	Prepack	0-1	2	push probe	01/18/08	Clay
WP-3		386,661.80	7,489,643.80	271.01	273.39	9.8	4.61-9.16	Prepack	0-1	2	push probe	01/18/08	Clay-sandy silt
WP-5		386,542.49	7,488,194.58	258.94	261.55	12.0	6.76-11.31	Prepack	0-2	2	push probe	01/18/08	Sandy clay - clay
WP-6		385,925.20	7,487,996.18	262.17	264.85	13.0	7.77-12.32	Prepack	0-1	2	push probe	01/19/08	Silty clay - clay
WP-8		387,861.89	7,487,856.57	253.15	255.80	10.3	5.11-9.66	Prepack	0-1	2	push probe	01/19/08	Silty clay
WP-9		387,470.03	7,486,845.01	255.21	257.90	10.1	4.89-9.44	Prepack	0-1	2	push probe	01/19/08	Clay
BORINGS													
BH-16		--	--	310.00	--	20.0	10-20	7.5-20	1-7.5	2	push probe	11/22/22	Basalt/weathered basalt
BH-17		--	--	400.00	--	100.0	30-100	27-100	1-27	2	push probe	11/23/22	Basalt/weathered basalt

NOTE: msl = mean sea level; bgs = below ground surface; OH= open hole; na = not available.
Drilling methods: HSA = hollow stem auger; SSA = solid stem auger

[a] Multiple well completion in single borehole.

[b] Measuring point is 0.02' higher than surveyed reference elevation shown due to installation of bladder pump enclosure. Groundwater elevations calculated from corrected elevation.

[c] Ground level and casing elevation raised in June 1996 as part of regrading for truck scale. Wells and ground level elevation resurveyed by Darryl Harms of Corvallis, Oregon.

-- Phillips Well completion information unknown.

Table from 2023 Annual Groundwater Monitoring Report (Tuppan, 2024)

Table 2-2
Environmental Monitoring Program
Coffin Butte Landfill

Parameter Group	Sampling Frequency							
	Compliance Wells	Detection Wells	Other	Obsv/Piez	Secondary Leachate Collection System	Leachate	Under-Drain	Surface Water
	MW-1D, MW-3D, MW-10S, MW-10D, MW-11S, MW-11D, MW-12S, MW-12D, MW-26, MW-27, MW-23[a], P-8[a]	MW-8S, MW-15, MW-17, MW-18, MW-19, MW-20[b], MW-21[b], MW-24, Phillips	MW-9S	(Listed on Table 2-1)	LDS-2B, LDS-3, LDS-4, LDS-5 LDS-WLP, LDS-ELP	L-Pond	S-U3 S-U4 S-U5	S-1, S-2, S-4
Site-Specific Parameters								
Indicator Parameters Cl, HCO_3, TDS, Ca, Fe, Mg, Mn, Na, As, TSS*	2Q, 4Q	4Q	—	—	2Q, 4Q	—	—	—
Annual Scan As, Sb, Ba, Cr, Ni, Se, Pb, Zn	4Q	4Q	—	—	—	—	—	—
Field Parameters	2Q, 4Q	4Q	—	—	2Q, 4Q	4Q	—	2Q, 4Q
Water Levels	2Q, 4Q	2Q, 4Q	2Q, 4Q	2Q, 4Q	—	—	—	2Q, 4Q
Comprehensive Analytical Groups								
1b: Laboratory Indicator Parameters TDS, TOC, NH_3, COD, TSS	5Y	5Y	5Y	—	5Y	4Q (5Y)	—	—
2a: Common Anions and Cations Ca, Mg, Fe, Mn, Na, K, Si, NO_3 SO_4, HCO_3, Cl	5Y	5Y	5Y	—	5Y	4Q (5Y)	—	—
2b, 2c: Trace Metals Sb, As, Ba, Be, Cd, Co, Cr, Cu, Pb, Ni, Se, Ag, Tl, V, Zn	5Y	5Y	5Y	—	5Y	4Q (5Y)	—	—
3: VOCs	2Q, 4Q	4Q (5Y)	5Y	—	2Q, 4Q	4Q (5Y)	—	—
Surface Water Parameters Cl, Ca, Fe, Mg, Mn, Na, BOD TKN, TPhos, PO_4	—	—	—	—	—	—	—	2Q, 4Q
Underdrain Parameters Cl, HCO3, TDS, Ca, Fe, Mg, Mn, Na	—	—	—	—	—	—	2Q, 4Q	—

NOTE:

1Q, 2Q, 3Q, 4Q = quarterly sampling events; 5Y = quinquenniel (every 5 years; to be scheduled with the DEQ as split sampling event-tentative for 2024).

[a] Detection monitoring well that is sampled at frequency listed for compliance wells.

[b] Compliance monitoring well that is sampled at frequency listed for detection wells.

* TSS not required by permit; if TSS > 100mg/L an additional suite of dissolved trace metals should be analyzed for that monitoring point.

Table from 2023 Annual Groundwater Monitoring Report (Tuppan, 2024)

Table 2-3
Landfill Gas Monitoring
2024 Annual Environmental Monitoring Report
Coffin Butte Landfill

			Monitoring Location											
			Landfill Perimeter						Buildings					
Date	Time	Levels	GP2	GP3	GP4	GP5	GP5A	GP6	Quarry Scalehouse	Office	LTF	Scale House	Pump House	Lock-up #1
01/30/24	13:38	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	2.2	8.2	4.5	20.9	10.5	20.9	20.9	20.9	20.9	20.9	20.9
02/20/24	10:27	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	6.3	4.5	6.1	20.9	11.6	20.9	20.9	20.9	20.9	20.9	20.9
03/29/24	11:26	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	20.9	2.8	8.1	19.7	11.3	20.9	20.9	20.9	20.7	20.9	20.9
04/30/24	10:55	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	10.3	4.4	9.0	20.9	8.4	20.9	20.9	20.9	20.9	20.9	20.9
05/30/24	2:20	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05/31/24	9:23	CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	11.8	1.2	20.9	20.0	6.9	20.9	20.9	20.9	20.9	20.9	20.9
06/27/24	10:13	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	9.2	1.5	8.6	20.9	7.8	20.9	20.9	20.9	20.9	20.9	20.9
07/30/24	10:25	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	18.1	2.5	16.0	20.9	10.5	20.9	20.9	20.9	20.9	20.9	20.9
08/28/24	13:47	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	19.2	8.7	19.6	19.8	14.9	20.9	20.9	20.9	20.9	20.9	20.9
09/26/24	10:53	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	20.4	13.2	19.2	20.7	17.8	20.9	20.9	20.9	20.9	20.9	20.9
10/24/24	13:21	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	20.9	15.3	20.6	20.9	18.9	20.9	20.9	20.9	20.9	20.9	20.9
11/26/24	9:40	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	20.9	20.9	20.9	20.9	20.1	20.9	20.9	20.9	20.9	20.9	20.9
12/30/25	12:30	LEL %	0.0	0.0	0.0	0.0	0.0	0.0	No	0.0	0.0	0.0	0.0	0.0
		CH4 %	0.0	0.0	0.0	0.0	0.0	0.0	access,	0.0	0.0	0.0	0.0	0.0
		O2 %	20.9	20.9	20.4	20.9	20.9	20.9	quarry closed	20.9	20.9	20.9	20.9	20.9

TABLE 3-1A
LABORATORY ANALYTICAL METHODS
Coffin Butte Landfill
April 2024

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
Field Parameters (Global)					
Dissolved Oxygen	mg/L	1.0	1.0	Field	DO meter
Electric Conductivity	µS/cm	1.0	1.0	Field	Electrometric
pH	-	0.04	0.01	Field	pH meter
ORP	mV	15	1	Field	Platinum Electrode Method
Eh	mV	15	1	Calculation	ORP + 200mV
Groundwater Indicator Parameters					
Bicarbonate (HCO_3) Alkalinity as $CaCO_3$	mg/L	10	3.1	SM 2320B	Titration
Total Dissolved Solids (TDS)	mg/L	100**	47.0	SM 2540C	Gravimetric
Calcium	µg/L	200	24	6010B	ICP
Chloride	mg/L	150**	5.1	300.0	Ion Chromatography
Iron	µg/L	100	9.1	6010B	ICP
Magnesium	µg/L	200	4.2	6010B	ICP
Manganese	µg/L	10	0.45	6010B	ICP
Sodium	µg/L	1000	97	6010B	ICP
Arsenic	µg/L	5.0	0.50	200.8	ICP/MS
Volatile Organic Compounds (VOCs)	µg/L	Var.*	Var.*	8260B	GC/MS
Total Suspended Solids (TSS)	mg/L	4.0	1.1	SM 2540D	Gravimetric
Surface Water Specific Parameters					
Biochemical Oxygen Demand	mg/L	5.0	0.59	SM5210B	Titration
Total Kjeldahl Nitrogen	mg/L	1.0	0.69	351.2	Colorometric
Phosphorus, Total	mg/L	0.050	0.025	365.1	Colorometric
Phosphorus, Ortho	mg/L	0.050	0.018	365.1	Colorometric

NOTES:
* VOC detection limits on Table 3-1C
**MDLs/PQLs listed are the most conservative values used by the laboratory
by the analytical laboratory (e.g. matrix interference, etc.)
ORP - Oxidation-Reduction Potential
Eh - Redox Potential.
DO - Dissolved Oxygen.
GC - Gas Chromatography
ICP - Inductively Coupled Plasma.
MDL - Method Detection Limit: the lowest concentration at which a compound can be detected.
MS - Mass Spectroscopy
PQL - Practical Quantitation Limit: the lowest concentration at which a detected compound can be quantified.
SAC - Semi-Automated Colorimetry

TABLE 3-1B
LABORATORY ANALYTICAL METHODS
Coffin Butte Landfill
October 2024

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
Field Parameters (Global)					
Dissolved Oxygen	mg/L	1.0	1.0	Field	DO meter
Electric Conductivity	µS/cm	1.0	1.0	Field	Electrometric
pH	-	0.04	0.01	Field	pH meter
ORP	mV	15	1	Field	Platinum Electrode Method
Eh	mV	15	1	Calculation	ORP + 200mV
Groundwater Indicator Parameters					
Bicarbonate (HCO_3) Alkalinity as $CaCO_3$	mg/L	10	3.1	SM 2320B	Titration
Total Dissolved Solids (TDS)	mg/L	20	9.4	SM 2540C	Gravimetric
Calcium	µg/L	200	24	6010B	ICP
Chloride	mg/L	15**	5.1	300.0	Ion Chromatography
Iron	µg/L	100	9.1	6010B	ICP
Magnesium	µg/L	200	4.2	6010B	ICP
Manganese	µg/L	10	0.45	6010B	ICP
Sodium	µg/L	1000	97	6010B	ICP
Arsenic	µg/L	5.0	0.50	200.8	ICP/MS
Volatile Organic Compounds (VOCs)	µg/L	Var.*	Var.*	8260B	GC/MS
Additional Annual Scan Parameters					
Antimony	µg/L	2.0	0.40	200.8	ICP/MS
Barium	µg/L	3.0	0.38	200.8	ICP/MS
Chromium, Total	µg/L	3.0	0.50	200.8	ICP/MS
Lead	µg/L	1.0	0.23	200.8	ICP/MS
Nickel	µg/L	3.0	0.83	200.8	ICP/MS
Selenium	µg/L	5.0	1.0	200.8	ICP/MS
Zinc	µg/L	10	2.0	200.8	ICP/MS
Additional Comprehensive/Leachate Analytical Parameters					
Ammonia as N	mg/L	0.10	0.029	350.1	SAC
Chemical Oxygen Demand	mg/L	20	8.7	410.4	Titration
Nitrate + Nitrite as Nitrogen	mg/L	0.10	0.044	300.0	Ion Chromatography
Sulfate as SO_4	mg/L	5.0	1.0	300.0	Ion Chromatography
Total Suspended Solids (TSS)	mg/L	4.0	1.1	SM 2540D	Gravimetric
Total Organic Carbon	mg/L	1.0	0.35	SM 5310B	Combustion/Oxidation
Beryllium	µg/L	1.0	0.30	200.8	ICP/MS
Cadmium	µg/L	1.0	0.19	200.8	ICP/MS
Cobalt	µg/L	1.0	0.33	200.8	ICP/MS
Copper	µg/L	2.0	0.71	200.8	ICP/MS
Potassium	µg/L	3000	240	6010B	ICP
Silicon	µg/L	500	16	6010B	ICP
Silver	µg/L	1.0	0.045	200.8	ICP/MS
Thallium	µg/L	1.0	0.21	200.8	ICP/MS
Vanadium	µg/L	5.0	1.1	200.8	ICP/MS
Surface Water Specific Parameters					
Biochemical Oxygen Demand	mg/L	5.0	0.59	SM5210B	Titration
Total Kjeldahl Nitrogen	mg/L	1.0	0.69	351.2	Colorometric
Phosphorus, Total	mg/L	0.050	0.025	365.1	Colorometric
Phosphorus, Ortho	mg/L	0.050	0.018	365.1	Colorometric

NOTES:
* VOC detection limits on next page
**MDLs/PQLs listed are the most conservative values used by the laboratory
by the analytical laboratory (e.g. matrix interference, etc.)
ORP - Oxidation-Reduction Potential
DO - Dissolved Oxygen.
GC - Gas Chromatography
ICP - Inductively Coupled Plasma.
MDL - Method Detection Limit: the lowest concentration at which a compound can be detected.
MS - Mass Spectroscopy
PQL - Practical Quantitation Limit: the lowest concentration at which a detected compound can be quantified.
SAC - Semi-Automated Colorimetry

TABLE 3-1C
LABORATORY ANALYTICAL METHODS
Coffin Butte Landfill
Detection Limits

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
1,1,1,2-Tetrachloroethane	µg/L	4.0	2.30	8260B	GC/MS
1,1,1-Trichloroethane	µg/L	4.0	1.60	8260B	GC/MS
1,1,2,2-Tetrachloroethane	µg/L	4.0	0.84	8260B	GC/MS
1,1,2-Trichloroethane	µg/L	4.0	1.10	8260B	GC/MS
1,1-Dichloroethane	µg/L	4.00	0.88	8260B	GC/MS
1,1-Dichloroethene	µg/L	4.0	0.92	8260B	GC/MS
1,1-Dichloropropene	µg/L	4.00	1.70	8260B	GC/MS
1,2,3-Trichlorobenzene	µg/L	8.00	2.80	8260B	GC/MS
1,2,3-Trichloropropane	µg/L	10.00	3.40	8260B	GC/MS
1,2,4-Trichlorobenzene	µg/L	4.00	2.30	8260B	GC/MS
1,2,4-Trimethylbenzene	µg/L	4.00	0.600	8260B	GC/MS
1,2-Dibromo-3-Chloropropane	µg/L	20.00	7.00	8260B	GC/MS
1,2-Dibromoethane	µg/L	4.00	1.60	8260B	GC/MS
1,2-Dichlorobenzene	µg/L	4.00	1.50	8260B	GC/MS
1,2-Dichloroethane	µg/L	4.00	2.20	8260B	GC/MS
1,2-Dichloropropane	µg/L	4.00	2.10	8260B	GC/MS
1,3,5-Trimethylbenzene	µg/L	4.00	1.50	8260B	GC/MS
1,3-Dichlorobenzene	µg/L	4.0	1.30	8260B	GC/MS
1,3-Dichloropropane	µg/L	4.00	1.50	8260B	GC/MS
1,4-Dichlorobenzene	µg/L	4.00	1.60	8260B	GC/MS
2,2-Dichloropropane	µg/L	4.00	1.50	8260B	GC/MS
2-Butanone (MEK)	µg/L	60.00	24.00	8260B	GC/MS
2-Chlorotoluene	µg/L	4.00	1.40	8260B	GC/MS
2-Hexanone	µg/L	20.00	6.80	8260B	GC/MS
4-Chlorotoluene	µg/L	4.00	0.84	8260B	GC/MS
4-Isopropyltoluene	µg/L	4.00	1.70	8260B	GC/MS
4-Methyl-2-pentanone (MIBK)	µg/L	20.00	3.90	8260B	GC/MS
Acetone	µg/L	60.00	26.00	8260B	GC/MS
Benzene	µg/L	4.00	1.20	8260B	GC/MS
Bromobenzene	µg/L	4.00	1.60	8260B	GC/MS
Bromochloromethane	µg/L	4.00	1.60	8260B	GC/MS
Bromoform	µg/L	8.00	4.80	8260B	GC/MS
Bromomethane	µg/L	20.00	9.40	8260B	GC/MS
Carbon disulfide	µg/L	8.00	2.50	8260B	GC/MS
Carbon tetrachloride	µg/L	4.00	2.300	8260B	GC/MS
Chlorobenzene	µg/L	4.00	1.700	8260B	GC/MS
Chloroethane	µg/L	16.00	5.50	8260B	GC/MS
Chloroform	µg/L	4.00	1.40	8260B	GC/MS
Chloromethane	µg/L	8.00	3.00	8260B	GC/MS
cis-1,2-Dichloroethene	µg/L	4.0	1.30	8260B	GC/MS
cis-1,3-Dichloropropene	µg/L	8.00	2.50	8260B	GC/MS
Dibromochloromethane	µg/L	8.00	2.50	8260B	GC/MS
Dibromomethane	µg/L	4.00	1.40	8260B	GC/MS
Dichlorodifluoromethane	µg/L	12.00	3.800	8260B	GC/MS
Ethylbenzene	µg/L	4.00	1.20	8260B	GC/MS
Hexachlorobutadiene	µg/L	8.00	4.70	8260B	GC/MS
Isopropylbenzene	µg/L	4.00	1.50	8260B	GC/MS
Methylene Chloride	µg/L	8.00	3.800	8260B	GC/MS
m-Xylene & p-Xylene	µg/L	8.00	1.40	8260B	GC/MS
Naphthalene	µg/L	8.00	1.40	8260B	GC/MS
n-Butylbenzene	µg/L	4.00	2.10	8260B	GC/MS
N-Propylbenzene	µg/L	4.00	2.10	8260B	GC/MS
o-Xylene	µg/L	4.00	1.30	8260B	GC/MS
sec-Butylbenzene	µg/L	4.00	1.80	8260B	GC/MS
Styrene	µg/L	4.00	1.40	8260B	GC/MS
tert-Butylbenzene	µg/L	4.00	1.700	8260B	GC/MS
Tetrachloroethene	µg/L	4.00	1.60	8260B	GC/MS
Toluene	µg/L	4.0	1.30	8260B	GC/MS
trans-1,2-Dichloroethene	µg/L	4.0	1.50	8260B	GC/MS
trans-1,3-Dichloropropene	µg/L	8	2.6	8260B	GC/MS
Trichloroethene	µg/L	4.0	1.2	8260B	GC/MS
Trichlorofluoromethane	µg/L	8.00	2.30	8260B	GC/MS
Vinyl chloride	µg/L	8	2.0	8260B	GC/MS

NOTES:
GC/MS - Gas Chromatography/Mass Spectroscopy.

TABLE 3-2
QA/QC BLANK RESULTS
Coffin Butte Landfill Annual Environmental Monitoring Report
2024

LAB JOB ID	BLANK TYPE	BATCH	LAB SAMPLE ID	ANALYTE(S) DETECTED	SAMPLE/ANALYSIS DATE
April 2024					
280-190593-1	Method Blank(s)	6010B - Dissolved Metals	MB 280-651469/1-A	sodium (186j µg/L)	5/03/24
		6010B - Dissolved Metals	MB 280-653385/1-A	sodium (137j µg/L)	5/16/24
		SM5210B - BOD, 5 Day	SCB 280-651066/1	BOD (1.07j mg/L)	4/26/24
		SM5210B - BOD, 5 Day	SCB 280-651066/2	BOD (0.330j mg/L)	4/26/24
280-190622-1	Field Blank	NA	280-190622-15	None Detected	4/23/24
	Trip Blank	NA	280-190622-16	None Detected	NA
	Method Blank(s)	6010B - Dissolved Metals	MB 280-651496/1-A	calcium (31.9j µg/L)	5/03/24
				iron (20.8j µg/L)	
280-190735-1	Method Blank(s)	6010B - Dissolved Metals	MB 280-651656/1-A	magnesium (8.41j µg/L)	5/06/24
				manganese (0.485j µg/L)	
280-190736-1	Trip Blank	NA	280-190736-6	None Detected	4/25/24
	Method Blank(s)	6010B - Dissolved Metals	MB 280-651656/1-A	magnesium (8.41j µg/L)	5/06/24
				manganese (0.485j µg/L)	
October 2024					
280-198148-1	Field Blank (QCAB)	NA	280-198148-4	None Detected	10/15/24
	Trip Blank (QCTB)	NA	280-198148-5	None Detected	NA
	Method Blank(s)	NA	NA	None Detected	NA
280-198296-1	Method Blank(s)	6010B - Dissolved Metals	MB 280-671657/1-A	calcium (77.1j µg/L)	10/24/24
				iron (9.80j µg/L)	
				magnesium (10.1j µg/L)	
				sodium (599j µg/L)	
		SM5210B - BOD, 5 Day	SCB 280-671520/1	BOD (0.904j mg/L)	10/18/24
280-198313-1	Field Blank (QCAB)	NA	280-198313-14	None Detected	10/16/24
	Trip Blank (QCTB)	NA	280-198313-15	None Detected	NA
	Method Blank(s)	8260B - VOCs (GC/MS)	MB 280-672423/9	acetone (8.13j µg/L)	10/25/24
280-198319-1	Method Blank(s)	8260B - VOCs (GC/MS)	MB 570-494969/7	chloroform (0.0886j µg/L)	10/24/24
		200.8 - Metals (ICP/MS)	MB 280-671652/1-A	barium (0.570j µg/L)	10/22/24
280-198364-1	Method Blank(s)	6010B - Dissolved Metals	MB 280-672220/1-A	calcium (29.7j µg/L)	10/24/24
				iron (23.1j µg/L)	
				magnesium (4.39j µg/L)	
280-198366-1	Field Blank (QCAB)	NA	280-198366-7	None Detected	10/18/24
	Trip Blank (QCTB)	NA	280-198366-8	None Detected	NA
	Method Blank(s)	8260B - VOCs (GC/MS)	MB 280-673139/9	acetone (7.03j µg/L)	10/30/24
		200.8 - Metals (ICP/MS)	MB 280-672039/1-A	barium (0.452j µg/L)	10/23/24
		SM 2320B - Alkalinity	MB 280-672859/6	bicarbonate (5.90j µg/L)	10/28/24

A "j" denotes a trace concentration (between the Method Detection Limit and the Practical Quantitation Limit).
µg/L - micrograms per liter.
mg/L - milligrams per liter.
BOD = Biochemical Oxygen Demand
VOC = Volatile Organic Compounds

TABLE 3-3A
QA/QC DUPLICATE SAMPLE ANALYSES
Coffin Butte Landfill
April 2024

Surface Water			
ANALYTE	**S-1 4/23/2024**	**DUPLICATE 4/23/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Calcium	19000	18000	*5.4*
Iron	380	**35**	*Not Calculated*
Magnesium	7900	7400	*6.5*
Manganese	21	11	*62.5*
Sodium	7400	7800	*5.3*
GENERAL CHEMISTRY (mg/L):			
Chloride	7.1	7.0	*1.4*
ortho-Phosphate	**0.019**	0.018	*Not Calculated*
Biochemical Oxygen Demand	**3.6**	**1.1**	*Not Calculated*
Groundwater			
ANALYTE	**MW-10D 4/23/2024**	**DUPLICATE 1 4/23/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Calcium	130000	120000	*8.0*
Iron	**14**	**13**	*Not Calculated*
Magnesium	42000	40000	*4.9*
Manganese	64	55	*15.1*
Sodium	35000	34000	*2.9*
GENERAL CHEMISTRY (mg/L):			
Chloride	68	68	*0.0*
Bicarbonate Alkalinity as CaCO3	400	400	*0.0*
Total Dissolved Solids	590	570	*3.4*
ANALYTE	**MW-12S 4/23/2024**	**DUPLICATE 2 4/23/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Arsenic	**0.68**	**0.74**	*Not Calculated*
Calcium	53000	31000	*52.4*
Iron	520	**9.2**	*Not Calculated*
Magnesium	26000	14000	*60.0*
Manganese	690	0.45	*Not Calculated*
Sodium	36000	29000	*21.5*
GENERAL CHEMISTRY (mg/L):			
Chloride	31	33	*6.3*
Bicarbonate Alkalinity as CaCO3	240	240	*0.0*
Total Dissolved Solids	340	340	*0.0*
VOCs (µg/L):			
cis-1,2-Dichloroethee	**0.67**	**0.70**	*Not Calculated*
Tetrachloroethene	8.0	7.7	*3.8*
Trichloroethene	3.1	3.2	*3.2*

TABLE 3-3B
QA/QC DUPLICATE SAMPLE ANALYSES
Coffin Butte Landfill
October 2024

Groundwater			
ANALYTE	**MW-18 10/16/2024**	**DUPLICATE 1 10/16/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Barium	**0.43**	0.38	*Not Calculated*
Chromium	**1.1**	**0.92**	*Not Calculated*
Vanadium	13	13	*0.0*
GENERAL CHEMISTRY (mg/L):			
Chloride	3.1	3.0	*3.3*
Sulfate	7.1	6.3	*11.9*
Ammonia	0.029	0.14	*Not Calculated*
Nitrate Nitrite as N	15	15	*0.0*
Chemical Oxygen Demand	8.7	**11**	*Not Calculated*
Bicarbonate Alkalinity as CaCO3	79	70	*12.1*
Total Dissovled Solids	200	200	*0.0*
ANALYTE	**MW-21 10/16/2024**	**DUPLICATE 2 10/16/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Antimony	**0.42**	0.40	*Not Calculated*
Lead	**0.45**	**0.44**	*Not Calculated*
Nickel	17	17	*0.0*
Barium	12	12	*0.0*
Chromium	4.7	4.8	*2.1*
Cobalt	13	13	*0.0*
Copper	41	40	*2.5*
Silver	**0.19**	**0.18**	*Not Calculated*
Vanadium	15	15	*0.0*
Zinc	17	16	*6.1*
Calcium	120000	120000	*0.0*
Iron	600	450	*28.6*
Magnesium	56000	56000	*0.0*
Manganese	990	940	*5.2*
Potassium	**770**	**790**	*Not Calculated*
Silicon	18000	16000	*11.8*
Sodium	27000	27000	*0.0*
GENERAL CHEMISTRY (mg/L):			
Chloride	79	85	*7.3*
Sulfate	**2.7**	**3.6**	*Not Calculated*
Ammonia	1.4	1.3	*7.4*
Nitrate Nitrite as N	0.26	0.29	*10.9*
Chemical Oxygen Demand	30	30	*0.0*
Bicarbonate Alkalinity as CaCO3	420	420	*0.0*
Total Dissovled Solids	550	570	*3.6*
Total Suspended Solids	330	160	*69.4*
Total Organic Carbon	6.8	6.8	*0.0*
ANALYTE	**MW-26 10/17/2024**	**DUPLICATE 10/17/2024**	***RELATIVE PERCENT DIFFERENCE (RPD)***
DISSOLVED METALS (µg/L):			
Arsenic	13	14	*7.4*
Barium	25	27	*7.7*
Chromium	0.50	**0.77**	*Not Calculated*
Vanadium	1.1	**1.3**	*Not Calculated*
Zinc	2.0	**3.1**	*Not Calculated*
GENERAL CHEMISTRY (mg/L):			
Chloride	5.7	5.7	*0.0*
Ammonia	1.2	1.2	*0.0*
Nitrate Nitrite as N	0.044	4.7	*Not Calculated*
Chemical Oxygen Demand	**15**	**13**	*Not Calculated*
Bicarbonate Alkalinity as CaCO3	150	150	*0.0*
Total Dissovled Solids	200	200	*0.0*
Total Suspended Solids	6.4	6.0	*6.5*
Total Organic Carbon	1.7	1.7	*0.0*

Table 4-1
Groundwater and Surface Water Elevations
2024 Annual Environmental Monitoring Report
Coffin Butte Landfill

Monitoring Point	Measuring Point Elev. (ft-MSL)	Water Elevation	
		4/22/2024	10/14/2024
Groundwater			
MW-1S	289.87	265.38	<265.4
MW-1D[a]	289.91	265.27	260.71
MW-3S	285.86	267.48	266.19
MW-3D[a]	285.96	265.62	260.50
MW-8S[a]	244.03	240.82	237.59
MW-8D	244.04	241.21	238.73
MW-9S	223.27	219.49	212.65
MW-10S[a]	291.44	265.93	260.37
MW-10D[a]	291.40	265.69	260.31
MW-11S[a]	274.73	264.97	259.18
MW-11D[a]	274.98	264.74	259.70
MW-12S[a]	285.61	265.52	260.59
MW-12D[a]	285.45	265.53	260.54
MW-14S	289.58	275.20	270.72
MW-14D	291.27	267.88	263.50
MW-15[a]	235.68	233.45	229.54
MW-17[a]	279.69	265.34	259.55
MW-18[a]	269.92	263.18	258.56
MW-19[a]	263.31	258.84	256.38
MW-20[a]	259.24	257.18	250.27
MW-21[a]	256.69	252.50	248.97
MW-23[a]	244.80	243.35	242.09
MW-24[a]	276.78	258.91	254.90
MW-26[a]	237.93	230.05	228.91
MW-27[a]	254.78	233.37	232.09
P-8	282.40	278.16	261.87
P-9R	276.01	270.95	265.66
P-10	245.12	245.12	242.02
P-19	385.65	371.20	364.16
P-22	638.60	604.37	599.99
P-23	693.11	595.40	589.28
BH-16	318.00	316.08	314.69
BH-17	410.00	393.66	387.97
QP-3S	602.02	292.38	288.13
QP-4S	718.95	610.22	604.07
QP-5N	601.53	506.05	501.28
QP-6N	445.82	394.35	391.61
QP-7N	374.50	365.41	362.87
WP-1	259.83	255.07	247.29
WP-3	273.39	264.13	261.80
WP-5	261.55	254.35	250.09
WP-6	264.85	258.37	254.28
WP-8	255.80	238.88	245.64
WP-9	257.90	250.35	252.12
PW-2	250.27	238.82	233.17
Duplex	289.01	275.64	270.06
Phillips	291.00	267.55	261.60
Berkland (New)	321.72	294.72	281.73
Berkland (old)	327.63	324.98	319.28
Merril	283.34	269.12	258.52
Surface Water			
S-2	251.50	236.48	236.48
S-4	255.24	239.50	238.87

NOTE: nm: not measured; <265.4: well dry, water level below base screens.
[a] Measuring point is 0.02' higher than surveyed elevation because of the bladder pump casing enclosure.

TABLE 4-2
SUMMARY OF MONITORING RESULTS - WEST WELLS
COFFIN BUTTE LANDFILL
APRIL 2024

	West Wells									
	MW-1D	MW-3D	MW-10S	MW-10D	MW-11S (VLF240422-2)	MW-11D (VLF240422-1)	MW-12S	MW-12D	P-8	MCL
ANALYTE	4/24/2024	4/23/2024	4/23/2024	4/23/2024	4/22/2024	4/22/2024	4/23/2024	4/23/2024	4/23/2024	
GENERAL CHEMISTRY (mg/l):										
Bicarbonate Alkalinity (as CaCO3)	140	140	610	400	590	820	240	140	170	NV
Chloride	6.4	44	500	68	33	83	31	9.6	8.8	250(2)
Dissolved Oxygen	3.23	2.59	2.33	2.49	1.98	2.10	2.01	2.90	4.20	NV
Redox Potential [Eh*] (mV)	336	356	362	303	345	167	150	367	333	NV
Electrical Conductivity (µS/cm)	239	360	2650	803	900	1610	475	241	290	NV
pH (units)	8.15	8.10	7.85	7.88	7.33	7.50	7.77	8.19	8.28	6.5-8.5(2)
Total Dissolved Solids (TDS)	190	280	1500	590	690	1100	340	200	230	500(2)
Total Suspended Solids	1.1	1.1	1.1	1.1	18	1.1	1.1	1.1	1.1	NV
METALS (µg/l):										
Arsenic	**0.58**	0.5	0.5	0.5	0.5	0.5	**0.68**	0.5	0.5	10(1), 50(2)
Calcium	26000	43000	330000	130000	150000	240000	53000	26000	31000	NV
Iron	**20**	**11**	**11**	**14**	9.1	**23**	520	9.1	9.1	300(2)
Magnesium	11000	19000	150000	42000	64000	100000	26000	12000	14000	NV
Manganese	**0.66**	**1.9**	91	64	4.6	29	690	0.45	0.45	50(2)
Sodium	25000	20000	36000	35000	24000	39000	36000	24000	29000	NV
VOLATILE ORGANIC COMPOUNDS (µg/L):										
cis-1,2-Dichloroethene	0.32	0.32	0.32	0.32	0.32	0.32	**0.67**	0.32	0.32	70(1)(3)
Tetrachloroethene	0.4	0.4	0.4	0.4	0.4	0.4	8.0	2.1	0.4	5(1)(3)
Trichlorethene	0.3	0.3	0.3	0.3	0.3	0.3	3.1	0.3	0.3	5(1)(3)

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-3
SUMMARY OF MONITORING RESULTS - WEST WELLS
COFFIN BUTTE LANDFILL
OCTOBER 2024

ANALYTE	West Wells															MCL
	MW-1D 10/16/2024	MW-3D 10/16/2024	MW-10S 10/15/2024	MW-10D 10/16/2024	MW-11D 10/16/2024	MW-11S 10/16/2024	MW-12S 10/15/2024	MW-12D 10/15/2024	MW-17 10/16/2024	MW-18 10/16/2024	MW-19 10/16/2024	MW-20 10/16/2024	MW-21 10/16/2024	P-8 10/12/2024	Phillips 10/17/2024	
GENERAL CHEMISTRY (mg/l):																
Bicarbonate Alkalinity (as CaCO3)	160	160	580	350	830	750	120	62	85	79	37	120	420	150	130	NV
Ammonia as N	0.15	**0.062**	**0.033**	0.029	0.029	0.029	0.23	**0.043**	**0.037**	0.029	0.029	**0.086**	1.4	**0.039**	**0.052**	NV
Chloride	6.7	49	580	85	100	49	38	8.0	8.3	3.1	270	120	76	10	7.6	250(2)
Dissolved Oxygen	1.75	2.43	2.37	0.00	0.00	0.00	0.87	2.49	8.36	10.01	8.08	2.00	1.84	3.64	6.86	NV
Redox Potential [Eh*] (mV)	160	317	317	386	204	381	106	289	334	406	290	231	93	381	389	NV
Electrical Conductivity (µS/cm)	348	456	2770	933	1850	1500	561	310	341	263	1070	890	1040	341	268	NV
Nitrate Nitrite (as N)	0.50	0.15	0.86	3.0	0.044	0.13	0.11	0.52	3.1	15	0.23	**0.096**	0.26	0.73	0.45	10(1)(3)
pH (units)	7.48	7.17	7.05	6.81	6.92	6.91	7.05	7.25	7.27	7.05	7.16	7.19	7.42	7.35	7.71	6.5-8.5(2)
Sulfate	7.9	**3.3**	44	22	77	43	**4.2**	6.8	7.3	7.1	30	150	**2.7**	10	5.7	250(2)
Total Dissolved Solids (TDS)	210	270	1600	540	1100	880	320	210	250	200	550	520	550	220	190	500(2)
Total Suspended Solids	2.8	**1.2**	2	1.1	**1.2**	**3.6**	**1.6**	1.1	4.0	1.1	1.1	1.1	330	1.1	0.35	NV
Non-Volatile Organic Carbon (TOC)	**0.45**	**0.55**	3.5	1.9	3.2	3.2	**0.82**	**0.73**	0.35	0.35	1.2	1.1	6.8	0.35	**0.42**	NV
Chemical Oxygen Demand	**11**	**9.8**	26	**12**	**16**	**18**	8.7	8.7	**11**	8.7	**11**	**13**	**30**	8.7	**11**	NV
METALS (µg/l):																
Antimony	0.40	0.40	0.40	0.40	0.40	0.40	**0.50**	0.40	0.40	0.40	0.40	0.40	**0.42**	0.40	0.40	6(1)(3)
Arsenic	0.50	0.50	0.50	0.50	0.50	0.50	**0.53**	**0.59**	0.50	0.50	0.50	0.50	0.50	0.50	**0.52**	10(1), 50(2)
Barium	4.1	5.7	11	8.3	6.4	8.5	5.1	**0.47**	**0.75**	**0.43**	**0.65**	4.1	12	**0.64**	0.19	2000(1)(3)
Beryllium	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	4(1)(3)
Cadmium	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	5(1)(3)
Calcium	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	120000	NR	NR	NV
Chromium	0.50	0.50	**2.6**	0.50	0.50	0.50	0.50	**1.1**	4.1	**1.1**	**0.88**	0.50	4.7	**0.57**	**0.64**	100(1)(3)
Cobalt	0.33	0.33	1.3	**0.60**	1.1	**0.56**	3.2	0.33	0.33	0.33	**0.92**	**0.35**	13	0.33	0.33	NV
Copper	27	0.71	0.71	**0.73**	0.71	2.6	0.71	0.71	0.71	0.71	0.71	**0.73**	41	0.71	**0.73**	1300(1)(3), 1000(2)
Iron	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	600	NR	NR	300(2)
Lead	**0.97**	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	**0.45**	0.23	0.23	10(1), 15(3)
Magnesium	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	56000	NR	NR	NV
Manganese	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	990	NR	NR	50(2)
Nickel	0.83	0.83	21	11	9.6	4.5	**1.3**	0.8	**1.4**	0.8	0.8	**0.96**	17	0.83	0.83	NV
Potassium	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**770**	NR	NR	NV
Selenium	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	50(1)(3)
Silicon	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	18000	NR	NR	NV
Sllver	0.045	0.045	0.045	0.045	0.045	0.045	**0.070**	0.045	0.045	0.045	0.045	0.045	**0.19**	0.045	0.045	100(2)
Sodium	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	27000	NR	NR	NV
Thallium	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	2(1)(3)
Vanadium	56	47	49	16	46	43	**2.0**	58	56	13	25	12	15	**41**	45	NV
Zinc	17	**5.4**	2.0	2.0	2.0	**2.8**	2.0	2.0	2.0	2.0	2.0	2.0	17	2.0	**4.5**	5(2)

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

(Continued on Next Page)

TABLE 4-3 (cont'd)
SUMMARY OF MONITORING RESULTS - WEST WELLS
COFFIN BUTTE LANDFILL
OCTOBER 2024

ANALYTE	West Wells															MCL
	MW-1D 10/16/2024	MW-3D 10/16/2024	MW-10S 10/15/2024	MW-10D 10/16/2024	MW-11D 10/16/2024	MW-11S 10/16/2024	MW-12S 10/15/2024	MW-12D 10/15/2024	MW-17 10/16/2024	MW-18 10/16/2024	MW-19 10/16/2024	MW-20 10/16/2024	MW-21 10/16/2024	P-8 10/12/2024	Phillips 10/17/2024	
VOLATILE ORGANIC COMPOUNDS (µg/L):																
1,1-Dichloroethane	0.22	0.22	**0.30**	**0.26**	0.22	0.22	0.22	0.22	0.22	0.22	1.1	0.22	0.22	0.22	0.22	NV
cis-1,2-Dichloroethene	0.32	0.32	0.32	0.32	0.32	0.32	1.2	0.32	0.32	0.32	**0.78**	0.32	0.32	0.32	0.32	70(1)(3)
Dichlorodifluoromethane	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	2.5	0.30	0.30	0.30	0.30	NV
Tetrachloroethene	0.40	0.30	0.30	0.30	0.30	0.30	12	1.6	0.30	0.30	**0.78**	0.30	0.30	0.30	0.30	5(1)(3)
Trichlorethene	0.30	0.30	0.30	0.30	0.30	0.30	2.1	0.30	0.30	0.30	1.2	0.30	0.30	0.30	0.30	5(1)(3)

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-4
SUMMARY OF MONITORING RESULTS - EAST WELLS
COFFIN BUTTE LANDFILL
APRIL 2024

ANALYTE	East Wells			MCL
	MW-23 4/24/2024	MW-26 4/24/2024	M-27 4/24/2024	
GENERAL CHEMISTRY (mg/l):				
Bicarbonate Alkalinity (as CaCO3)	170	150	440	NV
Chloride	17	5.6	11	250(2)
Dissolved Oxygen	3.21	4.33	4.10	NV
Redox Potential [Eh*] (mV)	108	79	117	NV
Electrical Conductivity (µS/cm)	303	245	687	NV
pH (units)	7.97	8.44	7.51	6.5-8.5(2)
Total Dissolved Solids (TDS)	230	200	490	500(2)
Total Suspended Solids	31	12	32	NV
METALS (µg/l):				
Arsenic	20	14	35	10(1), 50(2)
Calcium	33000	25000	87000	NV
Iron	1300	410	6100	300(2)
Magnesium	14000	9400	38000	NV
Manganese	1200	570	9500	50(2)
Sodium	25000	27000	37000	NV
VOLATILE ORGANIC COMPOUNDS (µg/L): None Detected				

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-5
SUMMARY OF MONITORING RESULTS - EAST WELLS
COFFIN BUTTE LANDFILL
OCTOBER 2024

ANALYTE	East Wells							MCL
	MW-8S 10/15/2024	MW-9S 10/15/2024	MW-15 10/17/2024	MW-23 10/17/2024	MW-24 10/17/2024	MW-26 10/17/2024	MW-27 10/15/2024	
GENERAL CHEMISTRY (mg/l):								
Bicarbonate Alkalinity (as CaCO3)	140	310	180	160	160	150	330	NV
Ammonia as N	0.029	1.1	**0.046**	0.32	**0.092**	1.2	0.66	NV
Chloride	25	190	63	19	5.6	5.7	13	250(2)
Dissolved Oxygen	1.10	1.09	1.85	2.30	0.00	0.00	0.94	NV
Redox Potential [Eh*] (mV)	220	78	352	66	314	61	89	NV
Electrical Conductivity (µS/cm)	362	1200	539	373	333	293	847	NV
Nitrate Nitrite (as N)	0.70	0.044	0.19	**0.056**	0.41	0.044	0.044	10(1)(3)
pH (units)	7.38	7.54	6.64	7.34	7.25	7.37	6.81	6.5-8.5(2)
Sulfate	9.7	**2.1**	**2.1**	**1.2**	7.5	1.0	1.0	250(2)
Total Dissolved Solids (TDS)	230	710	320	220	220	200	460	500(2)
Total Suspended Solids	4	11	1.1	16	**1.2**	6.4	48	NV
Non-Volatile Organic Carbon (TOC)	**0.45**	2.3	**0.44**	1.2	**0.37**	1.7	5.1	NV
Chemical Oxygen Demand	8.7	**15**	**9.4**	**15**	**10**	**15**	**19**	NV
METALS (µg/l):								
Antimony	0.40	0.40	0.40	0.40	0.40	0.40	0.40	6(1)(3)
Arsenic	0.50	27	0.50	20	**0.5**	13	35	10(1), 50(2)
Barium	**1.1**	91	11	50	**0.44**	25	110	2000(1)(3)
Beryllium	0.30	0.30	0.30	0.30	0.30	0.30	0.30	4(1)(3)
Cadmium	0.19	0.19	0.19	0.19	0.19	0.19	0.19	5(1)(3)
Calcium	NR	NR	NR	NR	NR	NR	NR	NV
Chromium	**1.1**	0.50	0.50	0.50	0.50	0.50	**0.95**	100(1)(3)
Cobalt	0.33	0.33	0.33	**0.38**	0.33	0.33	16	NV
Copper	**1.7**	0.71	0.71	**1.4**	0.71	0.71	2.8	1300(1)(3), 1000(2)
Iron	NR	NR	NR	NR	NR	NR	NR	300(2)
Lead	0.23	0.23	0.23	**0.44**	0.23	0.23	2.1	10(1), 15(3)
Magnesium	NR	NR	NR	NR	NR	NR	NR	NV
Manganese	NR	NR	NR	NR	NR	NR	NR	50(2)
Nickel	**2.0**	**0.95**	0.83	0.83	0.83	0.83	4.9	NV
Potassium	NR	NR	NR	NR	NR	NR	NR	NV
Selenium	1.0	1.0	1.0	1.0	1.0	1.0	1.0	50(1)(3)
Silicon	16	16	16	16	16	16	16	NV
Sllver	0.045	0.045	0.045	0.045	0.045	0.045	0.045	100(2)
Sodium	NR	NR	NR	NR	NR	NR	NR	NV
Thallium	0.21	0.21	0.21	0.21	0.21	0.21	0.21	2(1)(3)
Vanadium	48	1.1	6.5	**2.3**	33	1.1	**3.8**	NV
Zinc	2.0	2.0	**2.6**	**6.6**	2.0	2.0	**8.7**	5(2)
VOLATILE ORGANIC COMPOUNDS (µg/l): None Detected								

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-6
SUMMARY OF SURFACE WATER MONITORING RESULTS
COFFIN BUTTE LANDFILL
APRIL 2024

ANALYTE	Surface Water Samples			MCL
	S-1 4/23/2024	S-2 4/23/2024	S-4 4/23/2024	
GENERAL CHEMISTRY (mg/l):				
Chloride	7.1	8.0	7.6	250(2)
Dissolved Oxygen	10.22	10.36	11.76	NV
Redox Potential [Eh*] (mV)	361	381	339	NV
Electrical Conductivity (µS/cm)	136	141	138	NV
Total Kjeldahl Nitrogen	0.69	0.69	0.69	NV
pH (units)	8.86	8.77	8.77	6.5-8.5(2)
Total Phosphorus	0.025	**0.028**	0.025	NV
Ortho-Phosphate	**0.019**	0.018	0.018	NV
Biochemical Oxygen Demand	**3.6**	**0.93**	**1.2**	NV
METALS (µg/l):				
Calcium	19000	18000	18000	NV
Iron	380	**13**	**16**	300(2)
Magnesium	7900	7300	7400	NV
Manganese	21	**9.2**	**9.3**	50(2)
Sodium	7400	8000	7800	NV
VOLATILE ORGANIC COMPOUNDS (µg/l): None Detected				

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-7
SUMMARY OF SURFACE WATER MONITORING RESULTS
COFFIN BUTTE LANDFILL
OCTOBER 2024

ANALYTE	Surface Water Samples			MCL
	S-1 10/17/2024	S-2 10/17/2024	S-4 10/17/2024	
GENERAL CHEMISTRY (mg/l):				
Chloride	17	19	17	250(2)
Dissolved Oxygen	7.07	6.98	6.14	NV
Redox Potential [Eh*] (mV)	484	416	400	NV
Electrical Conductivity (µS/cm)	264	268	264	NV
Total Kjeldahl Nitrogen	0.69	0.69	0.69	NV
pH (units)	6.38	7.19	7.53	6.5-8.5(2)
Total Phosphorus	**0.028**	**0.033**	**0.032**	NV
Ortho-Phosphate	**0.045**	**0.043**	**0.043**	NV
Biochemical Oxygen Demand	**1.2**	**1.8**	**2.8**	NV
METALS (µg/l):				
Calcium	31000	31000	31000	NV
Iron	**79**	**60**	**31**	300(2)
Magnesium	12000	12000	12000	NV
Manganese	16	15	11	50(2)
Sodium	12000	13000	12000	NV
VOLATILE ORGANIC COMPOUNDS (µg/l): None Detected				

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-8
SUMMARY OF SLCS, LEACHATE, AND UNDERDRAIN MONITORING RESULTS
COFFIN BUTTE LANDFILL
APRIL 2024

	Secondary Leachate Collection System (SCLS)						Leachate	Subdrain Samples			MCL
ANALYTE	LDS-2B 4/25/2024	LDS-3 4/25/2024	LDS-4 4/25/2024	LDS-5 4/25/2024	LDS-ELP 4/25/2024	LDS-WLP 4/25/2024	L-POND 4/25/2024	S-U3 4/25/2024	S-U4 4/25/2024	S-U5 4/25/2024	
GENERAL CHEMISTRY (mg/l):											
Bicarbonate Alkalinity (as CaCO3)	1600	95	420	130	IW	IW	NS	83	81	130	NV
Chloride	2000	100	130	890	IW	IW	NS	93	3.5	6.7	250(2)
Dissolved Oxygen	6.88	2.90	2.74	2.05	IW	IW	NS	6.72	5.11	5.63	NV
Redox Potential [Eh*] (mV)	327	400	295	417	IW	IW	NS	457	473	471	NV
Electrical Conductivity (µS/cm)	9280	874	1360	4480	IW	IW	NS	504	174	257	NV
pH (units)	6.28	7.42	8.69	6.48	IW	IW	NS	7.05	6.60	7.04	6.5-8.5(2)
Total Dissolved Solids (TDS)	7000	350	720	2600	IW	IW	NS	340	130	200	500(2)
Total Suspended Solids	20	1.1	**1.2**	1.1	IW	IW	NS	NA	NA	NA	NV
METALS (µg/l):											
Arsenic	22	**0.75**	**0.60**	**1.5**	IW	IW	NS	NA	NA	NA	10(1), 50(2)
Calcium	200000	32000	93000	220000	IW	IW	NS	36000	16000	31000	NV
Iron	5100	**30**	**22**	**88**	IW	IW	NS	**28**	9.1	9.1	300(2)
Magnesium	120000	13000	41000	93000	IW	IW	NS	17000	7300	16000	NV
Manganese	3900	220	**0.93**	1400	IW	IW	NS	53	**5.4**	0.45	50(2)
Sodium	1400000	76000	110000	450000	IW	IW	NS	57000	7200	9700	NV
VOLATILE ORGANIC COMPOUNDS (µg/l):											
Isopropylbenzene	**1.5**	1.5	1.5	1.5	IW	IW	NS	NA	NA	NA	NV

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

TABLE 4-9
SUMMARY OF SLCS, LEACHATE, AND UNDERDRAIN MONITORING RESULTS
COFFIN BUTTE LANDFILL
OCTOBER 2024

	Secondary Leachate Collection System (SCLS)						Leachate	Subdrain Samples					MCL
ANALYTE	LDS-2B 10/18/2024	LDS-3 10/18/2024	LDS-4 10/18/2024	LDS-5 10/18/2024	LDS-ELP 10/18/2024	LDS-WLP 10/18/2024	L-POND 10/18/2024	S-U3 10/18/2024	S-U4 10/17/2024	S-U5 10/17/2024	S-U6 10/17/2024	S-U7 10/17/2024	
GENERAL CHEMISTRY (mg/l):													
Bicarbonate Alkalinity (as CaCO3)	1200	400	340	170	2000	IW	5200	IW	87	150	NS	IW	NV
Ammonia as N	130	0.57	1.9	0.61	500	IW	1300	NA	NA	NA	NA	NA	NV
Chloride	2300	910	240	850	3000	IW	3600	IW	3.0	6.9	NS	IW	250(2)
Dissolved Oxygen	2.05	4.16	2.33	2.11	0.54	IW	0.00	IW	2.45	6.05	NS	IW	NV
Redox Potential [Eh*] (mV)	277	470	335	374	357	IW	-95	IW	397	382	NS	IW	NV
Electrical Conductivity (µS/cm)	8740	3350	1500	3270	15300	IW	25900	IW	178	316	NS	IW	NV
Nitrate Nitrite (as N)	3.5	120	23	77	290	IW	0.044	NA	NA	NA	NA	NA	10(1)(3)
pH (units)	7.38	6.34	7.34	7.17	7.54	IW	7.63	IW	6.54	6.89	NS	IW	6.5-8.5(2)
Sulfate	12	320	46	42	1200	IW	**4.1**	NA	NA	NA	NA	NA	250(2)
Total Dissolved Solids (TDS)	5300	2900	890	2000	8200	IW	9700	IW	140	210	NS	IW	500(2)
Total Suspended Solids	**2.8**	**1.6**	1.1	1.1	4.4	IW	70	NA	NA	NA	NA	NA	NV
Non-Volatile Organic Carbon (TOC)	380	53	4.6	28	350	IW	1300	NA	NA	NA	NA	NA	NV
Chemical Oxygen Demand	1000	170	24	99	1100	IW	3900	NA	NA	NA	NA	NA	NV
METALS (µg/l):													
Antimony	3.0	**0.83**	0.40	**0.45**	7.5	IW	17	NA	NA	NA	NA	NA	6(1)(3)
Arsenic	28	**3.2**	0.50	**0.79**	9.2	IW	110	NA	NA	NA	NA	NA	10(1), 50(2)
Barium	480	230	110	210	150	IW	600	NA	NA	NA	NA	NA	2000(1)(3)
Beryllium	0.30	0.30	0.30	0.30	0.30	IW	1.5	NA	NA	NA	NA	NA	4(1)(3)
Cadmium	0.19	**0.19**	0.19	0.19	**0.39**	IW	0.95	NA	NA	NA	NA	NA	5(1)(3)
Calcium	NR	NR	NR	NR	NR	IW	NR	IW	19000	36000	NS	IW	NV
Chromium	59	5.5	**1.0**	4.7	42	IW	160	NA	NA	NA	NA	NA	100(1)(3)
Cobalt	64	17	2.1	11	110	IW	33	NA	NA	NA	NA	NA	NV
Copper	270	42	5.3	46	88	IW	3.6	NA	NA	NA	NA	NA	1300(1)(3), 1000(2)
Iron	NR	NR	NR	NR	NR	IW	NR	IW	**15**	**25**	NS	IW	300(2)
Lead	4.0	**0.29**	0.23	0.23	**0.38**	IW	1.2	NA	NA	NA	NA	NA	10(1), 15(3)
Magnesium	NR	NR	NR	NR	NR	IW	NR	IW	8700	18000	NS	IW	NV
Manganese	NR	NR	NR	NR	NR	IW	NR	IW	**3.0**	**1.2**	NS	IW	50(2)
Nickel	240	130	18	69	280	IW	140	NA	NA	NA	NA	NA	NV
Selenium	1.0	1.0	1.0	1.0	**1.3**	IW	5.0	NA	NA	NA	NA	NA	50(1)(3)
Silicon	NR	NR	NR	NR	NR	IW	NR	NA	NA	NA	NA	NA	NV
Silver	0.045	**0.17**	0.045	0.045	**0.051**	IW	0.23	NA	NA	NA	NA	NA	100(2)
Sodium	NR	NR	NR	NR	NR	IW	NR	IW	8100	11000	NS	IW	NV
Thallium	0.21	0.21	0.21	0.21	0.21	IW	1.1	NA	NA	NA	NA	NA	2(1)(3)
Vanadium	100	5.4	**4.8**	5.1	15	IW	160	NA	NA	NA	NA	NA	NV
Zinc	120	**5.7**	2.0	**3.1**	190	IW	87	NA	NA	NA	NA	NA	5(2)

TABLE 4-9
SUMMARY OF SLCS, LEACHATE, AND UNDERDRAIN MONITORING RESULTS
COFFIN BUTTE LANDFILL
OCTOBER 2024

	Secondary Leachate Collection System (SCLS)						Leachate	Subdrain Samples					MCL
ANALYTE	LDS-2B 10/18/2024	LDS-3 10/18/2024	LDS-4 10/18/2024	LDS-5 10/18/2024	LDS-ELP 10/18/2024	LDS-WLP 10/18/2024	L-POND 10/18/2024	S-U3 10/18/2024	S-U4 10/17/2024	S-U5 10/17/2024	S-U6 10/17/2024	S-U7 10/17/2024	
VOLATILE ORGANIC COMPOUNDS (µg/l):													
Acetone	**37**	6.6	6.6	6.6	6.6	IW	4300	NA	NA	NA	NA	NA	NV
Benzene	0.14	0.14	0.14	0.14	**1.0**	IW	**9.4**	NA	NA	NA	NA	NA	5
Carbon disulfide	**1.3**	0.26	0.26	0.26	0.26	IW	**11**	NA	NA	NA	NA	NA	NV
2-Butanone (MEK)	4.6	4.6	4.6	4.6	4.6	IW	4000	NA	NA	NA	NA	NA	NV
Ethylbenzene	0.14	0.14	0.14	0.14	0.14	IW	**7.1**	NA	NA	NA	NA	NA	700
m-Xylene & p-Xylene	0.36	0.36	0.36	0.36	0.36	IW	**10**	NA	NA	NA	NA	NA	10000
o-Xylene	0.11	0.11	0.11	0.11	0.11	IW	**6.5**	NA	NA	NA	NA	NA	10000
4-Methyl-2-pentanone (MIBK)	0.98	0.98	0.98	0.98	0.98	IW	**80**	NA	NA	NA	NA	NA	NV
4-Isopropyltoluene	0.19	0.19	0.19	0.19	0.19	IW	**5.2**	NA	NA	NA	NA	NA	NV
Trichloroethene	0.3	**2.4**	0.3	0.3	0.3	IW	6.0	NA	NA	NA	NA	NA	5
Toluene	0.32	0.32	0.32	0.32	0.32	IW	32	NA	NA	NA	NA	NA	1000

* Eh calculated using Oxidation-Reduction Potential (ORP) conversion for platinum electrode

Table 4-10
Historical Water Year Summary for Cell 2 SLCS Volume Data
Coffin Butte Landfill

Water Year	Number of Days per Water Year	Rainfall (inches)	Cell 2 Acreage		SLCS Liquid (gallons)	SLCS Liquid per Inch of Rainfall (gal/inch)	SLCS Infiltration Rate (gal/acre/day)
			A,B,C,D	B,C,D			
8/1/95-7/31/96	365	68.95	32	27	189,824	2,753	19.3
8/1/96-7/31/97	364	63.63	32	27	239,707	3,767	24.4
8/1/97-7/31/98	364	64.25	32	27	224,570	3,495	22.9
8/1/98-7/31/99	364	74.50	32	27	147,616	1,981	15.0
10/3/99-10/2/2000	365	45.02	32	27	83,957	1,865	8.5
10/2/00-10/1/2001	364	21.40	32	27	42,596	1,990	4.3
10/2/01-9/30/02	363	45.47	32	27	76,112	1,674	7.8
10/1/02-9/29/03	363	44.52	32	27	136,610	3,069	13.9
9/30/03-9/28/04	364	43.32	32	27	236,780	5,466	24.1
9/29/04-10/3/05	369	28.07	32	27	76,656	2,731	7.7
10/4/05-10/2/06	363	50.47	32	27	227,760	4,513	23.2
10/3/06-10/1/07	363	40.96	32	27	126,030	3,077	12.9
10/2/07-9/29/08	363	38.45	32	27	100,020	2,601	10.2
9/30/08-9/28/09	363	30.46	32	27	144,500	4,744	14.7
9/29/09-9/27/10	363	48.37	32	27	339,850	7,026	34.6
9/28/10-10/3/11	370	49.99	32	27	728,757	14,578	72.8
10/4/11-10/1/12	363	45.73	32	27	863,412	18,881	88.1
10/2/12-9/30/13	363	41.47	32	27	438,701	10,579	44.8
10/1/13-9/29/14	363	30.81	32	27	237,260	7,701	24.2
9/30/14-9/27/15	362	36.97	32	27	336,730	9,108	34.5
9/28/15-10/2/16	370	47.46	32	27	488,230	10,287	48.9
10/3/16-10/2/17	364	59.68	32	27	686,370	11,501	69.8
10/3/17-9/30/18	362	41.62	32	27	148,560	3,569	15.2
10/1/18-10/1/19	365	39.31	32	27	379,790	9,661	38.5
10/2/19-10/1/20	365	28.13	32	27	59,650	2,121	6.1
10/2/20-10/1/21	364	38.39	32	27	54,380	1,417	5.5
10/2/21-10/3/22	366	40.48	32	27	99,990	2,470	10.1
10/4/22 - 10/2/23*	363	35.28	32	27	4,920	139	0.5
10/3/23 - 10/1/24*	364	41.81	32	27	0	0	0.0

Note: * flow meter not operating since 12/27/2022

Table from 2023 Annual Groundwater Monitoring Report (Tuppan, 2024)

Table 4-11
Leachate Volumes
2024 Annual Environmental Monitoring Report
Coffin Butte Landfill

Month	Corvallis WWTP	Salem WWTP	Reported Monthly Pond Volume	Pond Volume Difference*	Rainfall (inches)	Cell 1 Flowmeter	Cell 2 Flowmeter	Cell 3 Flowmeter	Cell 4 Flowmeter	Cell 5 Flowmeter	Downwell Pumps	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity	Public Area	PRC Leachate Handled
Oct-23	1,388,884	1,375,500	1,834,188	2,090,000	2.76	80,270	583,758	296,018	178,114	616,412	513,423	124,949	110,393	26,419	68,591	21,000
Nov-23	1,614,746	1,132,500	2,444,819		5.54	125,040	726,694	352,150	720,306	440,018	553,536	177,428	113,605	25,462	31,876	39,000
Dec-23	2,314,160	1,170,500	3,421,828		6.78	191,366	927,949	412,237	1,170,323	857,939	544,328	97,815	174,983	30,969	64,600	42,000
Jan-24	2,980,956	815,500	5,177,984		9.41	247,464	1,037,578	483,057	1,213,442	1,581,740	564,023	97,241	153,632	31,029	113,450	51,000
Feb-24	2,291,694	1,429,000	5,284,801		5.97	172,630	835,983	353,436	401,980	1,259,501	530,523	83,226	116,237	30,461	88,340	35,000
Mar-24	2,697,264	972,500	5,519,411		4.84	182,670	976,896	371,480	417,571	1,204,082	503,066	91,704	183,532	31,639	41,970	28,000
Apr-24	1,643,877	1,575,000	4,878,574		1.75	113,240	590,902	266,426	233,294	715,385	340,426	136,504	160,323	31,183	64,980	21,000
May-24	1,644,023	1,385,500	4,937,181		2.27	165,205	531,280	320,443	499,378	1,108,145	154,604	182,705	135,375	36,472	-	6,500
Jun-24	715,507	2,310,000	4,922,594		1.13	96,285	553,181	242,505	215,023	1,112,284	391,295	211,275	137,560	52,005	-	-
Jul-24	988,492	1,725,000	4,544,544		0.13	80,130	545,291	226,690	85,351	760,476	420,278	108,726	117,025	59,478	-	7,000
Aug-24	944,853	1,569,000	4,417,880		0.63	71,886	407,222	260,548	323,613	886,663	236,019	115,158	39,919	32,308	-	7,000
Sep-24	1,076,692	2,217,000	3,731,943	3,730,000	0.76	65,784	495,868	222,096	140,814	919,003	379,529	105,201	144,941	29,847	-	-
Totals	20,301,148	17,677,000	---	1,640,000	41.97	1,591,970	8,212,603	3,807,086	5,599,209	11,461,648	5,131,052	1,531,932	1,587,524	417,272	473,807	257,500

2023-24 Leachate Volume (Treated + Volume in Ponds): 37,978,148 + 1,640,000 = **39,618,748**
Leachate Recorded by Flowmeters: **40,071,603**
Percent Difference: Meters vs. Volumetrics: **1.14%**

Notes: All values in gallons unless noted
*Totalizer Readings from: October 1, 2023 to September 30, 2024

TABLE 5-1
COMPARISON OF SAMPLING RESULTS WITH RACLs
WEST SIDE COMPLIANCE WELLS
ANNUAL 2024 MONITORING PERIOD
COFFIN BUTTE LANDFILL

ANALYTE	UNITS	MW-1D		MW-3D		MW-10S		MW-10D		MW-11S		MW-11D		RACL
		04/24/24	10/16/24	04/23/24	10/15/24	04/23/24	10/15/24	04/23/24	10/16/24	04/22/24	10/16/24	04/22/24	10/16/24	
GENERAL CHEMISTRY														
Chloride	mg/L	6.4	6.7	44	49	500	580	68	85	33	49	83	100	*250*
Total Dissolved Solids (TDS)	mg/L	190	210	280	270	1500	1600	590	540	690	1100	1100	880	*500*
METALS														
Antimony	µg/L		<0.40		<0.40		<0.40		<0.40		<0.40		<0.40	*6*
Arsenic	µg/L	0.58J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	*10*
Barium	µg/L		4.1		5.7		11		8.3		8.5		6.4	*1000*
Beryllium	µg/L		<0.30		<0.30		<0.30		<0.30		<0.30		<0.30	*4*
Cadmium	µg/L		<0.19		<0.19		<0.19		<0.19		<0.19		<0.19	*5*
Chromium	µg/L		<0.50		<0.50		2.6J		<0.50		<0.50		<0.50	*50*
Iron	µg/L	20J	NR	11J	NR	11J	NR	14	NR	<9.1	NR	23J	NR	*300*
Lead	µg/L		0.97J		<0.23		<0.23		<0.23		<0.23		<0.23	*50*
Manganese	µg/L	0.66J	NR	1.9J	NR	91	NR	64	NR	4.6J	NR	29	NR	*50*
Nickel	µg/L		<0.83		<0.83		21		11		9.6		4.5	*100*
Selenium	µg/L		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	*10*
Silver	µg/L		<0.045		<0.045		<0.045		<0.045		<0.045		<0.045	*50*
Thallium	µg/L		<0.21		<0.21		<0.21		<0.21		<0.21		<0.21	*2*
VOLATILE ORGANIC COMPOUNDS														
1,1-Dichloroethane	µg/L	<0.22	<0.22	<0.22	<0.22	<0.22	0.30J	<0.22	0.26J	<0.22	<0.22	<0.22	<0.22	*NV*
cis-1,2-Dichloroethene	µg/L	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	*70*
1,4-Dichlorobenzene	µg/L	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	*75*
Dichlorodifluoromethane	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	*NV*
Tetrachloroethene	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	*5*
Trichloroethene	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	*5*
Vinyl Chloride	µg/L	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	*2*

Note: Shaded cells indicate constituent was not analyzed for during monitoring event.
NR = Analysis not run/reported by lab
J = Concentration not detected above the Practical Quantitation Limit (PQL)

TABLE 5-1 (cont'd)
COMPARISON OF SAMPLING RESULTS WITH RACLs
WEST SIDE COMPLIANCE WELLS
ANNUAL 2024 MONITORING PERIOD
COFFIN BUTTE LANDFILL

ANALYTE	UNITS	MW-12S		MW-12D		MW-17	MW-18	MW-19	MW-20	MW-21	P-8	Phillips	RACL
		04/24/24	10/15/24	04/23/24	10/15/24	10/16/24	10/16/24	10/16/24	10/16/24	10/16/24	10/12/24	10/17/24	
GENERAL CHEMISTRY													
Chloride	mg/L	31	38	9.6	8.0	8.3	3.1	270	120	76	10	7.6	*250*
Total Dissolved Solids (TDS)	mg/L	340	320	200	210	250	200	550	520	550	220	190	*500*
METALS													
Antimony	µg/L		0.50J		<0.40	<0.40	<0.40	<0.40	<0.40	0.42J	<0.40	<0.40	*6*
Arsenic	µg/L	0.68J	0.53J	<0.50	0.59J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	*10*
Barium	mg/L		5.1		0.47J	0.75J	0.43J	0.65J	4.1	12	0.64J	<0.19	*1000*
Beryllium	µg/L		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	*4*
Cadmium	µg/L		<0.19		<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	*5*
Chromium	mg/L		<0.50		1.1J	4.1	1.1J	0.88J	<0.50	4.7	0.57J	0.64J	*50*
Iron	µg/L	520	NR	<9.1	NR	NR	NR	NR	NR	600	NR	NR	*300*
Lead	µg/L		<0.23		<0.23	<0.23	<0.23	<0.23	<0.23	0.45J	<0.23	<0.23	*50*
Manganese	µg/L	690	NR	<0.45	NR	NR	NR	NR	NR	990	NR	NR	*50*
Nickel	µg/L		1.3J		<0.83	1.4J	<0.83	<0.83	0.96J	17	<0.83	<0.83	*100*
Selenium	µg/L		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	*10*
Silver	µg/L		0.070J		<0.045	<0.045	<0.045	<0.045	<0.045	0.19J	<0.045	<0.045	*50*
Thallium	µg/L		<0.21		<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	*2*
VOLATILE ORGANIC COMPOUNDS													
1,1-Dichloroethane	µg/L	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	*NV*
cis-1,2-Dichloroethene	µg/L	0.67J	1.2	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	*70*
1,4-Dichlorobenzene	µg/L	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	*75*
Dichlorodifluoromethane	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	2.5	<0.30	<0.30	*NV*
Tetrachloroethene	µg/L	8.0	12	2.1	1.6	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	*5*
Trichloroethene	µg/L	3.1	2.1	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	*5*
Vinyl Chloride	µg/L	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	*2*

Note: Shaded cells indicate constituent was not analyzed for during monitoring event.
NR = Analysis not run/reported by lab
J = Concentration not detected above the Practical Quantitation Limit (PQL)

TABLE 5-2
COMPARISON OF SAMPLING RESULTS WITH SSLs
EAST SIDE COMPLIANCE WELLS
ANNUAL 2024 MONITORING PERIOD
COFFIN BUTTE LANDFILL

		Indicator Parameters							
	Units	Bicarbonate (mg/L)	Chloride (mg/L)	TDS (mg/L)	Calcium (mg/L)	Iron (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Sodium (mg/L)
MW-26	**SSL**	**175**	**6.1**	**246**	**32**	**--**	**9.8**	**0.74**	**29**
4/15/2014		150	5.6	180	23	0.35	8.3	0.46	28
10/21/2014		140	5.5	190	24	0.51	9.8	0.64	29
4/25/2015		140	6.1	190	23	0.29	9.3	0.45	28
10/17/2015		150	5.9	200	26	1.1	9.9	0.66	30
4/16/2016		150	5.8	180	24	0.19	9.1	0.53	27
10/22/2016		150	5.6J	190	24	0.53	9.4	0.65	26
4/21/2017		150	6.0	180	24	0.36	8.6	0.41	27
10/20/2017		150	5.4	210	23	0.51	10.0	0.62	27
4/28/2018		150	6.2	190	24	0.17	8.1	0.37	25
10/12/2018		150	5.7	190	25	0.37	9.3	0.56	25
Updated SSL		**175**	**6.2**	**246**	**32**	**4.5**	**10.1**	**0.74**	**30**
4/19/2019		150	5.2	190	26	0.13	10.0	0.25	27
10/26/2019		160	5.2	200	23	0.44	9.0	0.67	25
4/12/2020		160	4.4	200	26	0.28	9.8	0.69	26
10/9/2020		150	5.3	180	26	0.61	10.0	0.79	27
4/16/2021		150	6.3	200	24	0.21	8.4	0.46	26
10/15/2021		170	5.6	190	26	0.51	10.0	0.71	27
4/16/2022		150	4.7	200	24	0.18	9.2	0.32	26
10/7/2022		160	5.9	180	24	0.50	9.2	0.68	25
4/7/2023		150	5.0	140	28	0.97	11.0	0.87	30
10/14/2023		160	4.9	190	26	0.35	10.0	0.61	27
4/24/2024		150	5.6	200	25	0.41	9.4	0.57	27
10/17/2024		150	5.7	200	NR	NR	NR	NR	NR
MW-27	**SSL**	**483**	**--**	**498**	**98**	**19**	**44**	**8.1**	**46**
4/18/2014		400	11	420	88	16	41	8.1	40
10/21/2014		400	12.0	460	87	13	39	6.8	40
4/25/2015		430	13.0	470	86	13	42	8.2	40
10/17/2015		460	13.0	490	92	13	41	8.2	42
4/16/2016		450	13.0	480	86	5.3	40	7.2	37
10/22/2016		410	12J	440	79	4.9	34	6.8	35
4/21/2017		290	15.0	310	45	0.49	19	3.1	28
10/20/2017		390	14.0	430	61	4.0	29	5.4	32
4/28/2018		450	14.0	460	71	5.1	31	6.8	35
10/12/2018		450	14.0	460	82	9.0	35	7.9	35
Updated SSL		**495**	**15.0**	**499**	**100**	**17.6**	**46**	**8.9**	**44.4**
4/19/2019		450	13.0	470	87	8.9	40	9.1	37
10/26/2019		460	12.0	470	80	3.3	34	7.6	35
4/12/2020		470	10.0	470	91	8.6	38	9.4	36
10/9/2020		460	13.0	480	89	8.7	38	9.7	37
4/16/2021		460	14.0	480	87	7.6	37	9.5	36
10/15/2021		480	13.0	470	89	5.7	39	9.6	37
4/16/2022		450	10.0	480	91	8.1	39	11	38
10/7/2022		440	14.0	460	85	6.3	36	9.6	35
4/7/2023		450	12.0	430	91	2.9	39	9.5	40
10/14/2023		460	13.0	480	94	7.4	41	11	38
4/24/2024		440	11	490	87	6.1	38	9.5	37
10/15/2024		330	13	460	NR	NR	NR	NR	NR

TABLE 5-3
SUMMARY OF VOC DETECTIONS
ANNUAL ENVIRONMENTAL MONITORING REPORT
2024 MONITORING PERIOD

April 2024

		WEST WELLS		SCLS SAMPLES
ANALYTE	**UNITS**	**MW-12S 04/23/24**	**MW-12D 04/23/24**	**LDS-2B 04/25/24**
cis-1,2-Dichloroethene	µg/L	0.67J		
Isopropylbenzene	µg/L			1.5J
Tetrachloroethene	µg/L	**8.0**	**2.1**	
Trichloroethene	µg/L	**3.1**		

October 2024

		WEST WELLS				
ANALYTE	**UNITS**	**MW-10S 10/15/24**	**MW-10D 10/16/24**	**MW-12S 10/15/24**	**MW-12D 10/15/24**	**MW-19 10/16/24**
1,1-Dichloroethane	µg/L	0.30J	0.26J			**1.1**
cis-1,2-Dichloroethene	µg/L			**1.2**		0.78J
Dichlorodifluoromethane	µg/L					**2.5**
Tetrachloroethene	µg/L			**12**	**1.6**	0.78J
Trichloroethene	µg/L			**2.1**		**1.2**

		SCLS SAMPLES			
ANALYTE	**UNITS**	**LDS-2B 10/18/24**	**LDS-3 10/18/24**	**LDS-ELP 10/18/24**	**L-POND 10/18/24**
2-Butanone (MEK)	µg/L				**4000**
4-Isopropyltoluene	µg/L				5.2J
4-Methyl-2-pentanone (MIBK)	µg/L				80J
Acetone	µg/L	37J			**4300**
Benzene	µg/L			1.0J	9.4J
Carbon disulfide	µg/L	1.3J			11J
Ethylbenzene	µg/L				7.1J
Toluene	µg/L				**32**
Trichloroethene	µg/L		2.4J		
m-Xylene & p-Xylene	µg/L				10J
o-Xylene	µg/L				6.5J

Notes:

VOCs were not detected in an any samples not shown in the tables above.
Shaded cells indicate constituent was not detected.
Bold results are quantifiable detections.

Appendix A

Tabular Historical Water Level and Quality Data

Geo-Logic ASSOCIATES

Excel Files Available on Flash Drive

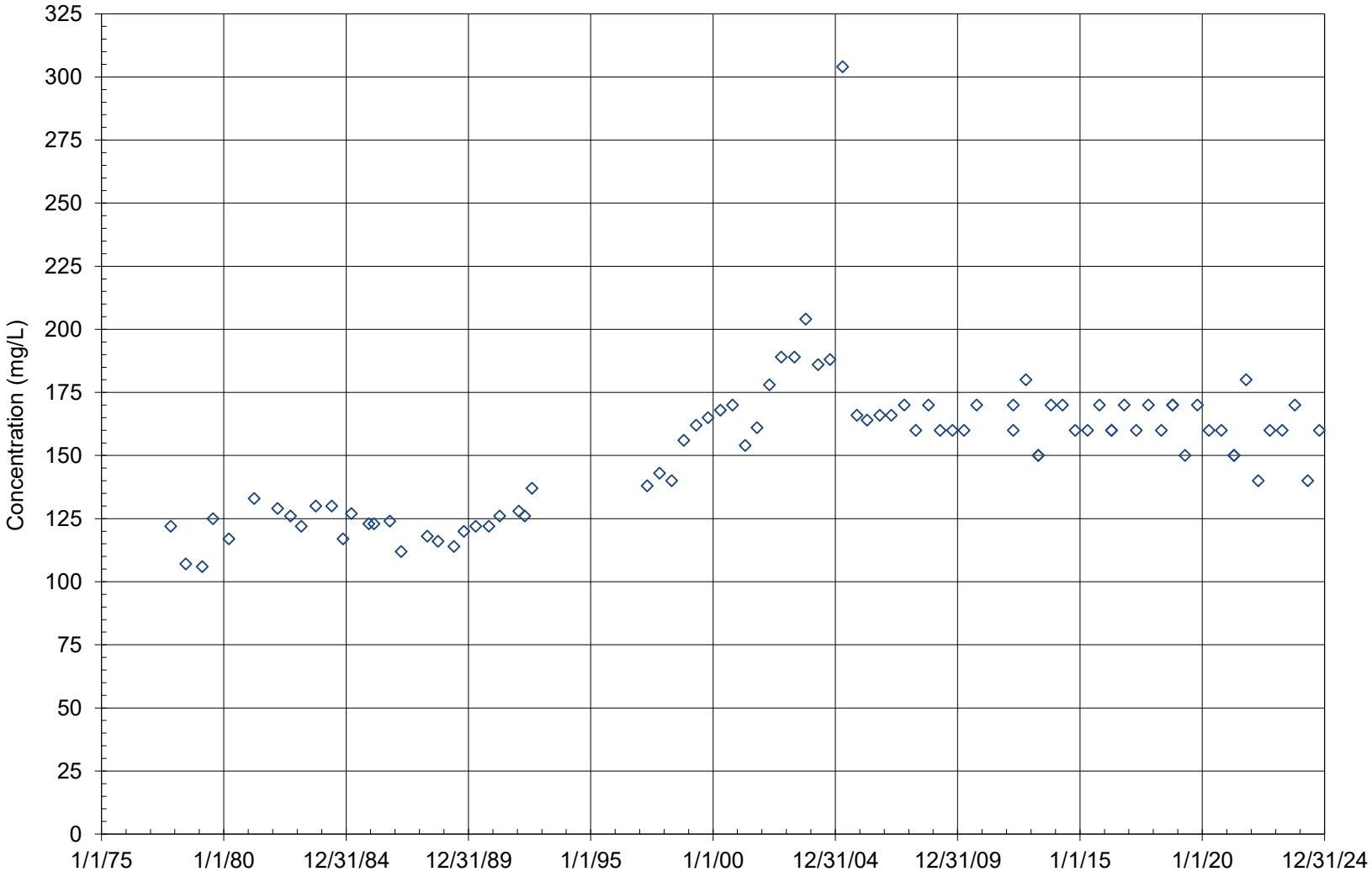
Geo-Logic ASSOCIATES

Appendix B

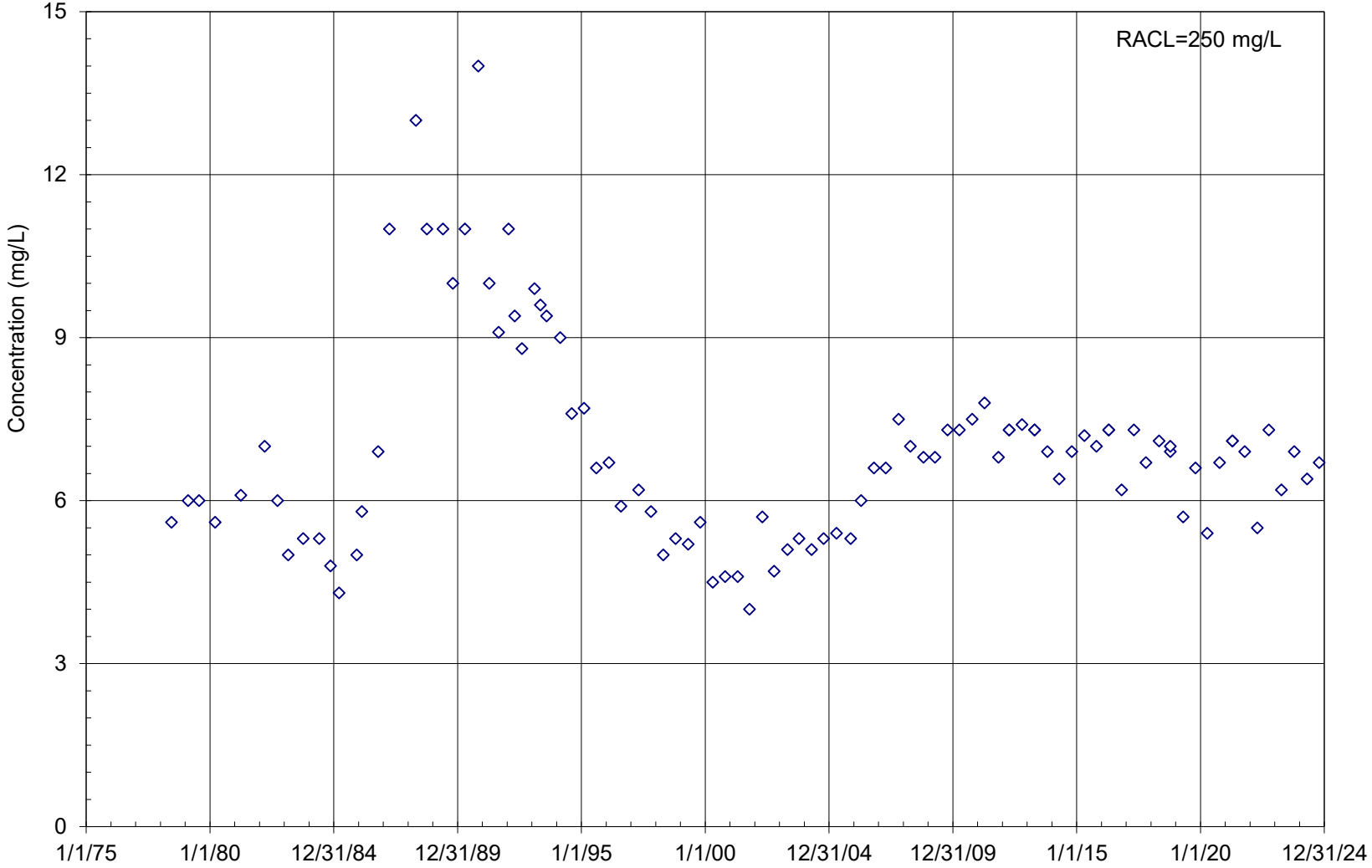
Water Quality Summary Time-Series Plots

Geo-Logic ASSOCIATES

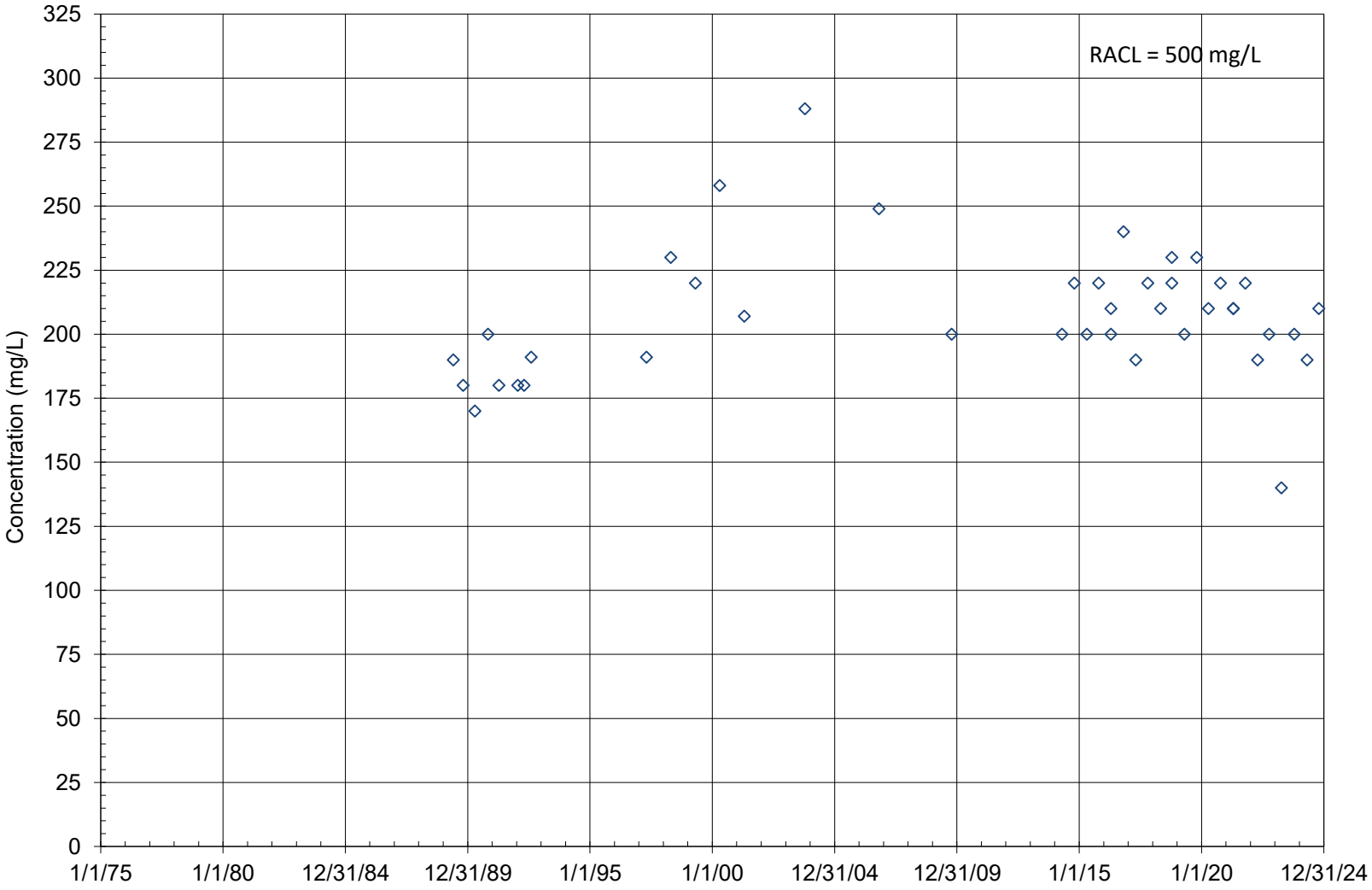
MW-1D:
Bicarbonate
Coffin Butte Landfill



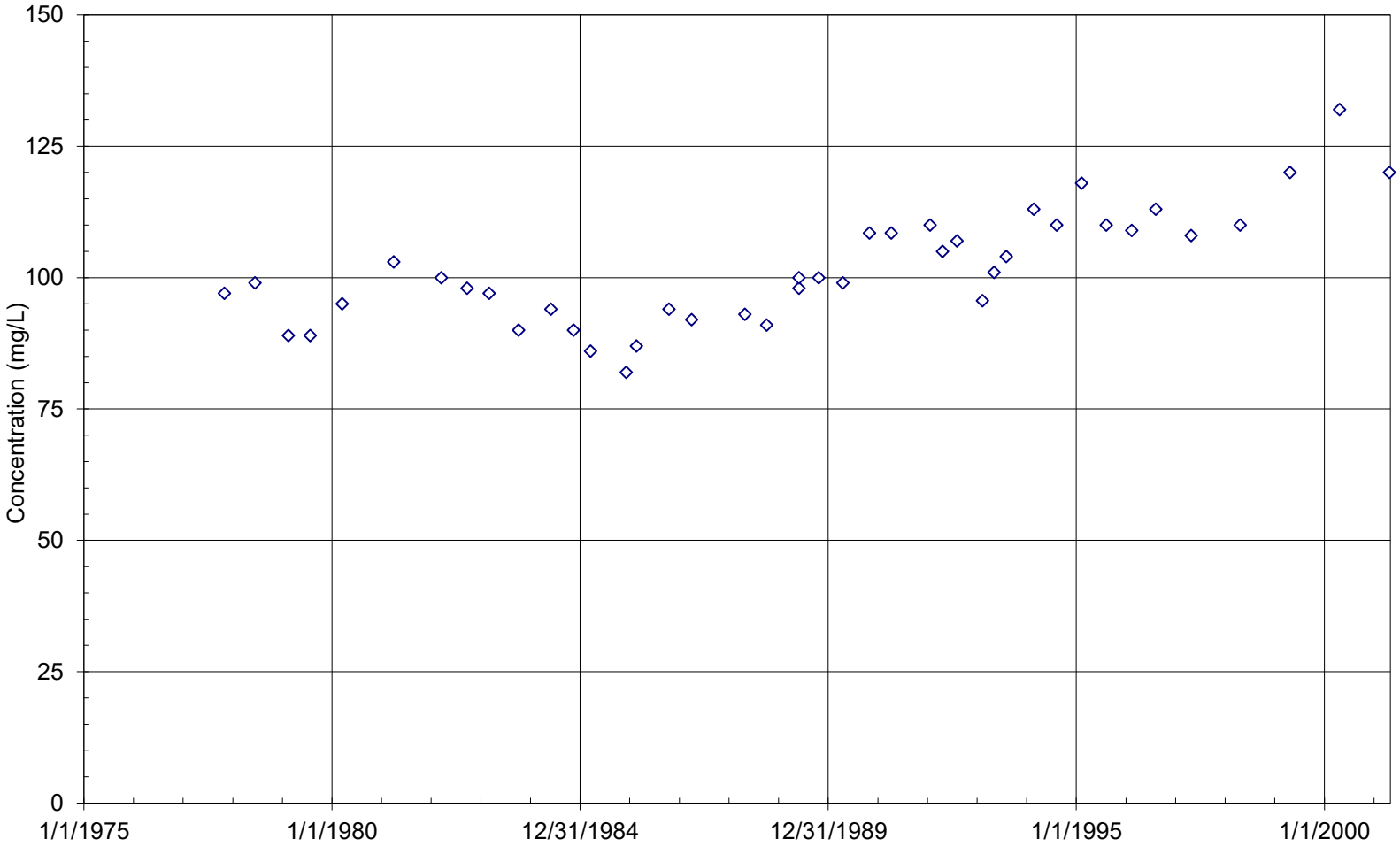
MW-1D:
Chloride
Coffin Butte Landfill



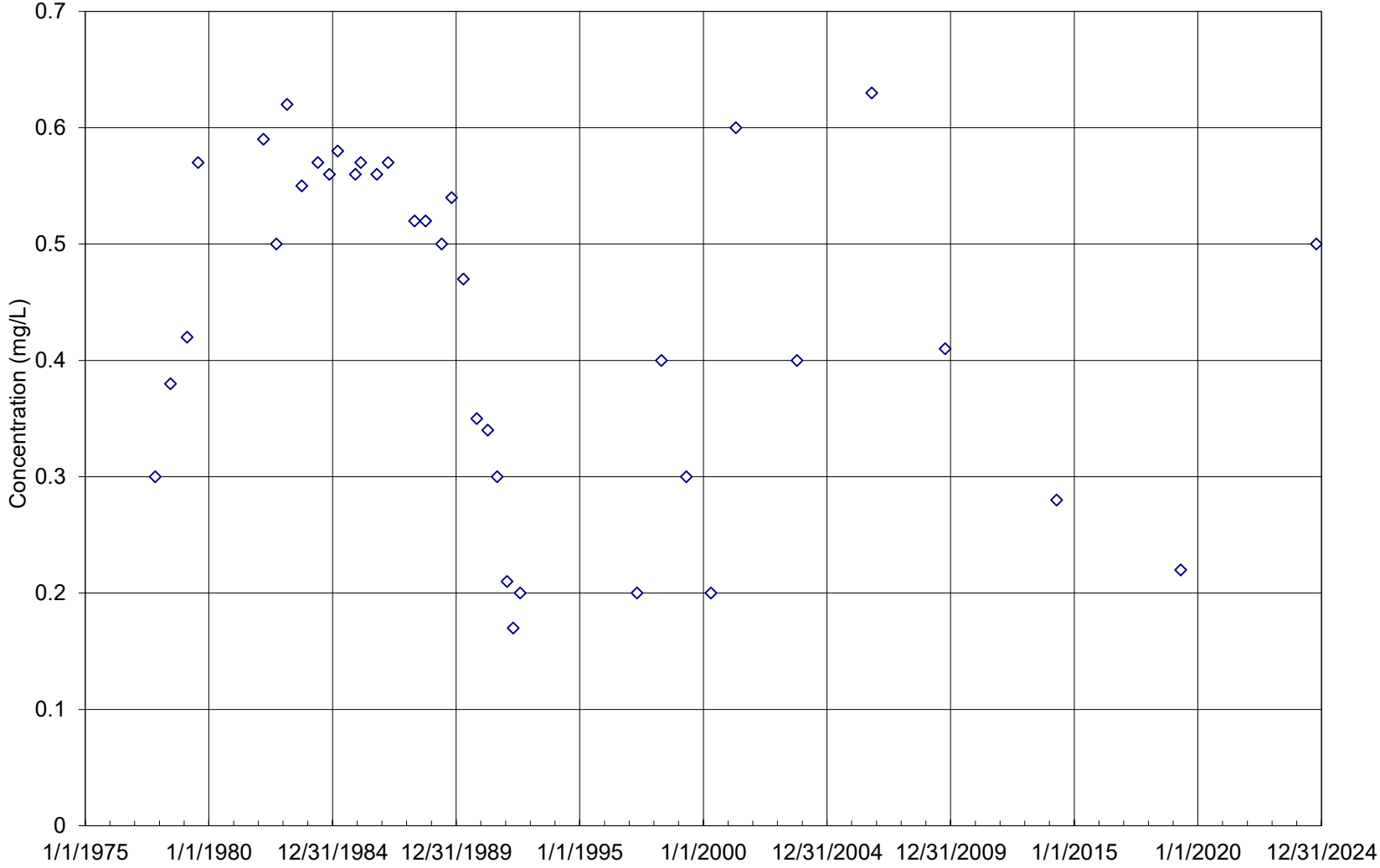
MW-1D:
TDS
Coffin Butte Landfill



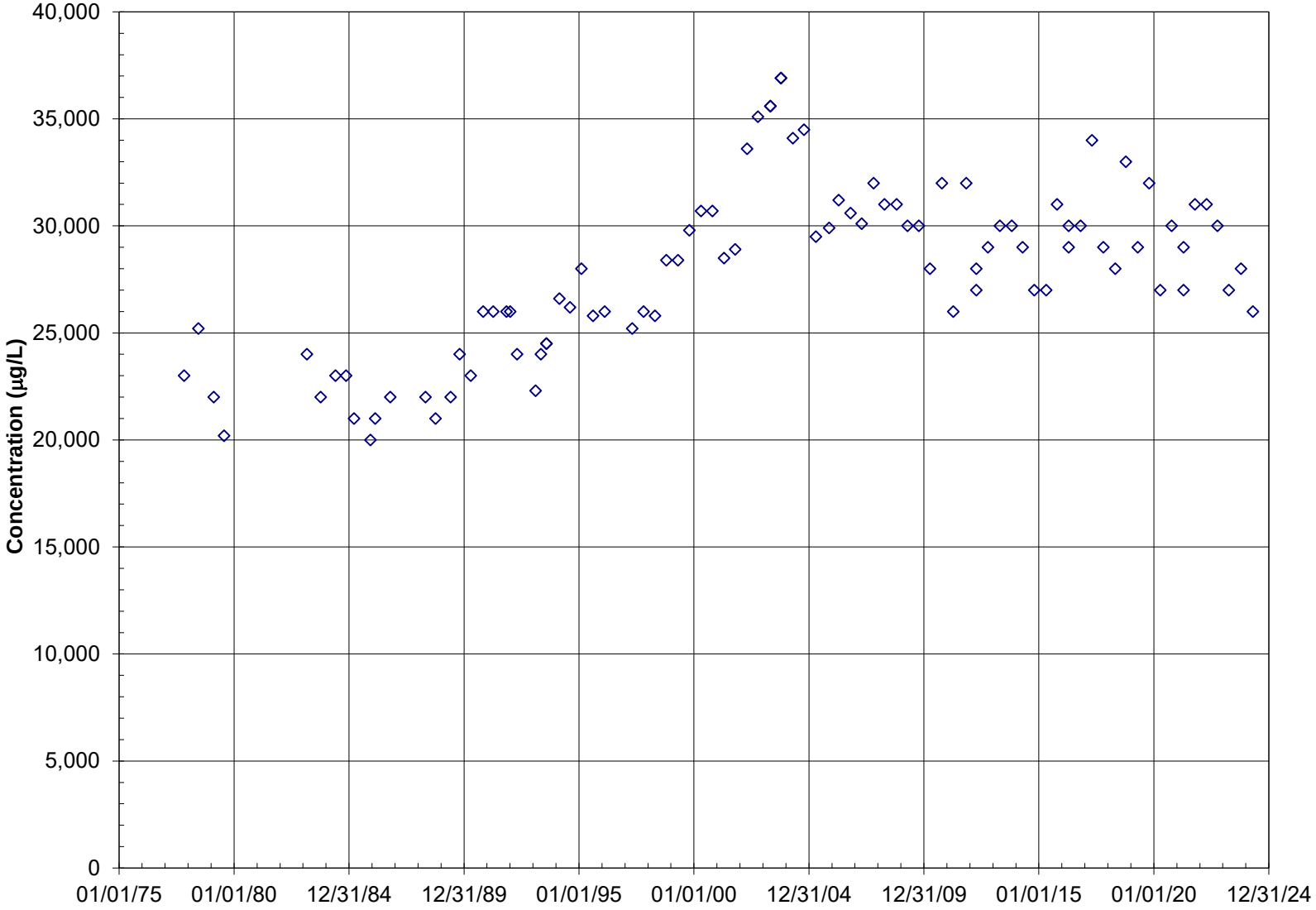
MW-1D:
Hardness
Coffin Butte Landfill



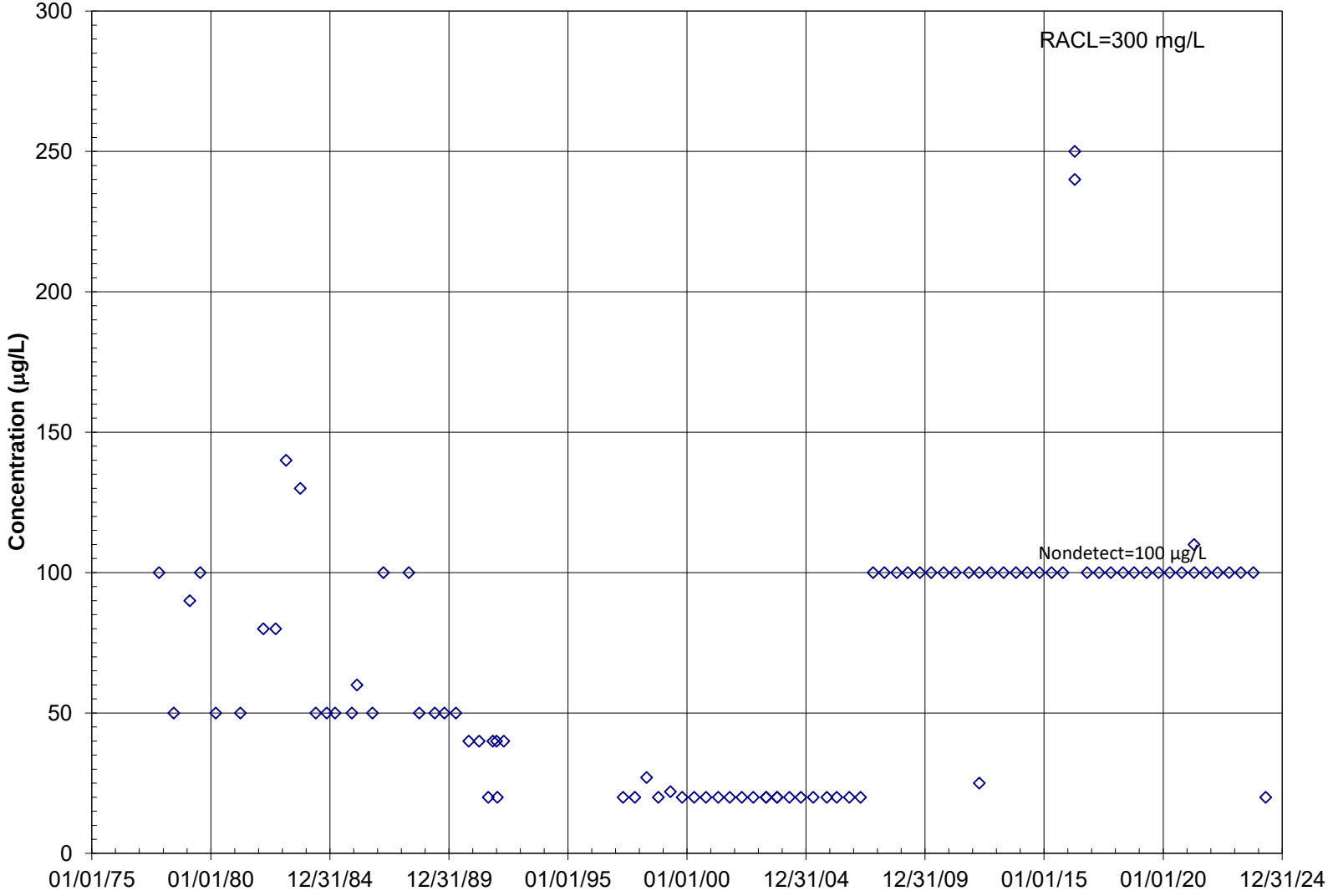
MW-1D:
Nitrate
Coffin Butte Landfill

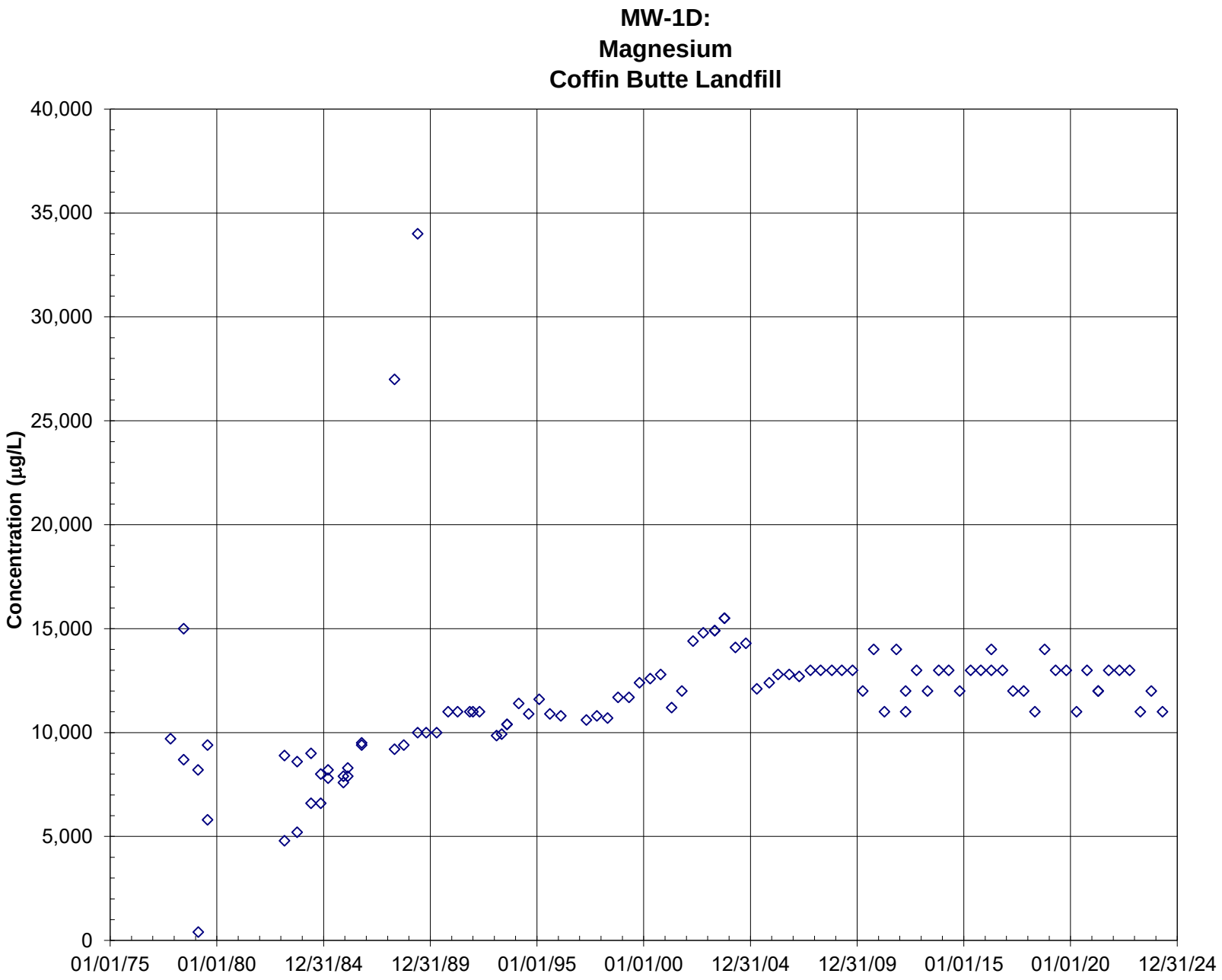


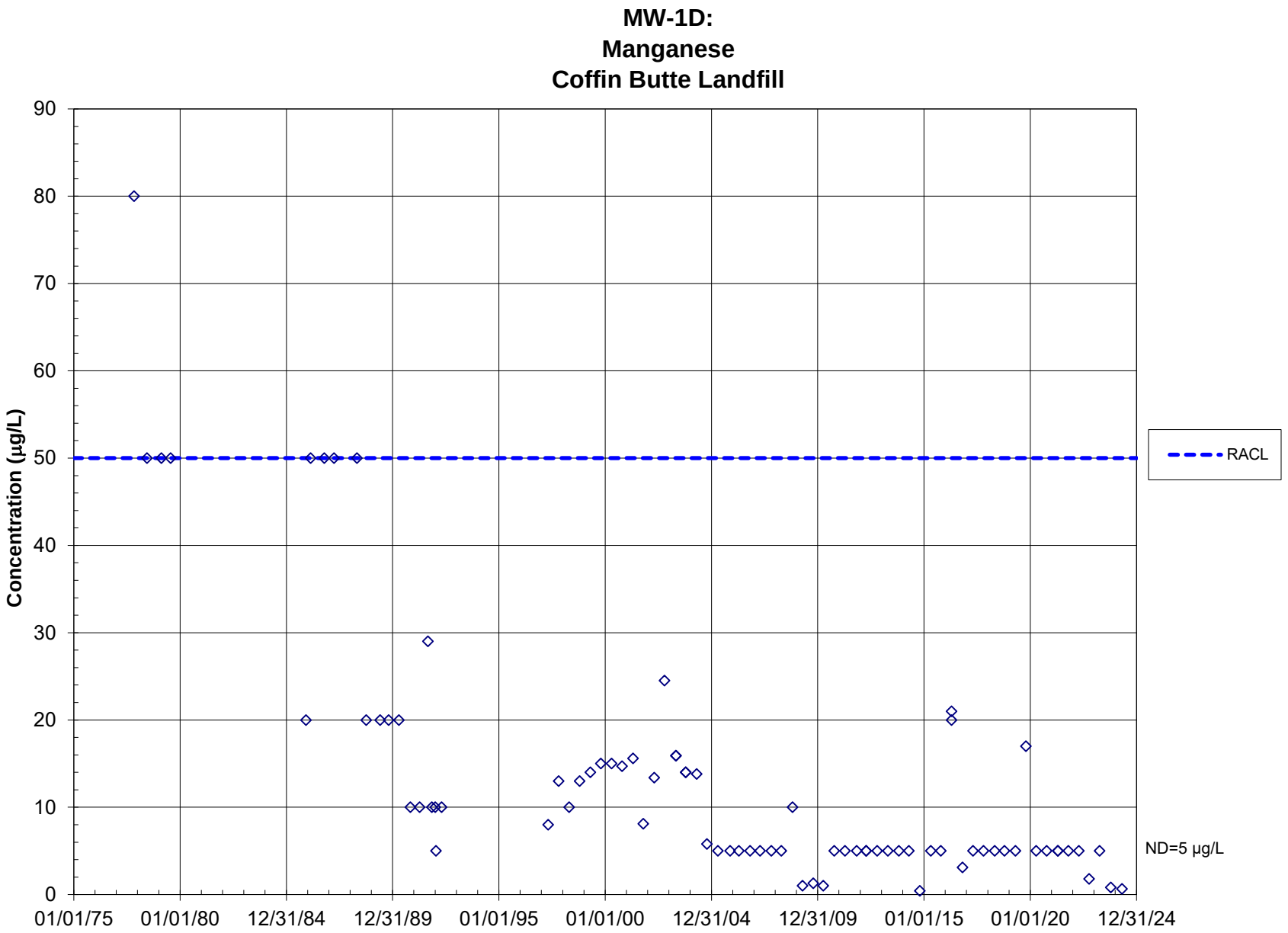
MW-1D:
Calcium
Coffin Butte Landfill



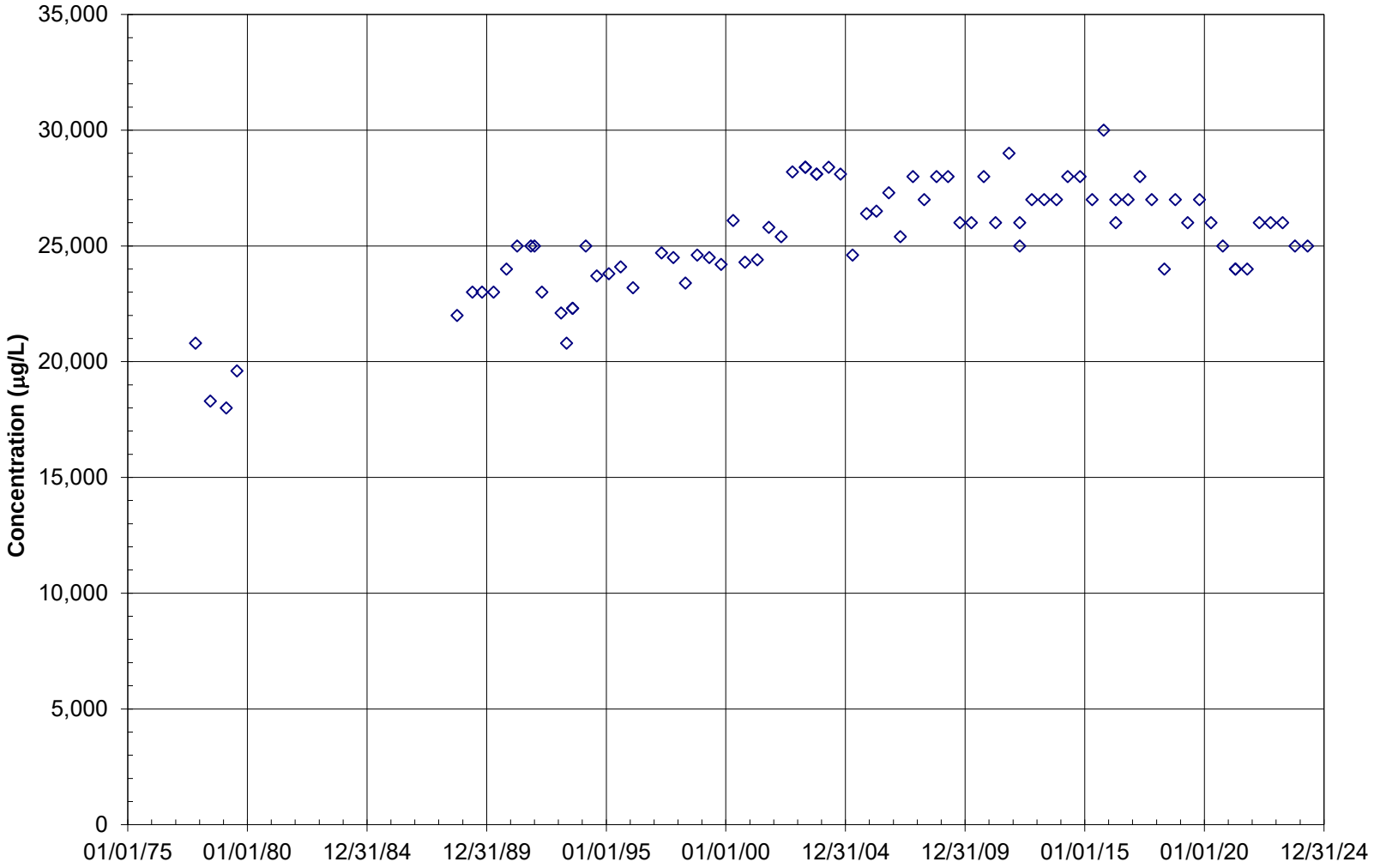
MW-1D:
Iron
Coffin Butte Landfill



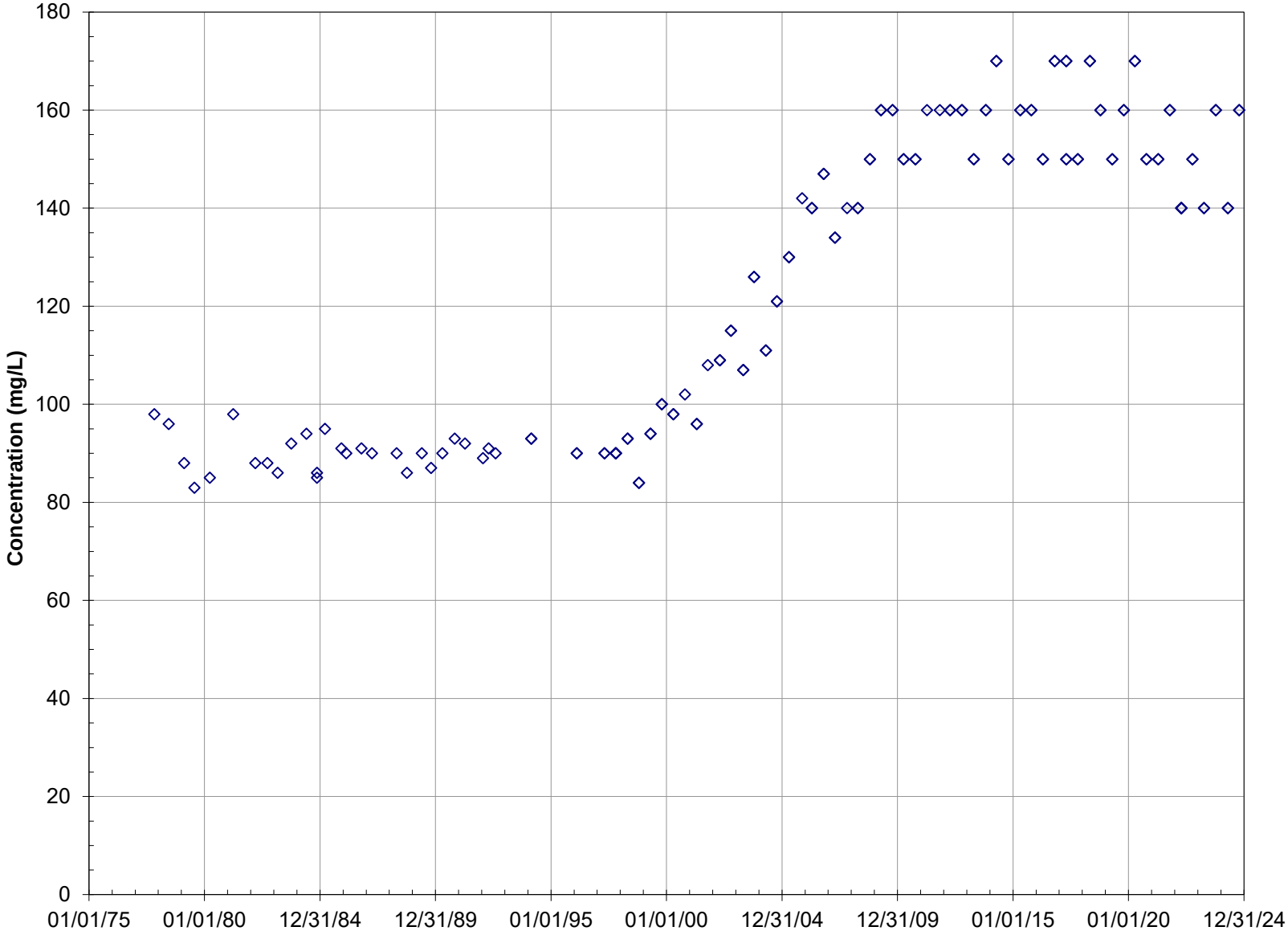

MW-1D:
Magnesium
Coffin Butte Landfill
Concentration (µg/L)
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24


MW-1D:
Manganese
Coffin Butte Landfill
Concentration (µg/L)
90
80
70
60
50
40
30
20
10
0
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24
RACL
ND=5 µg/L

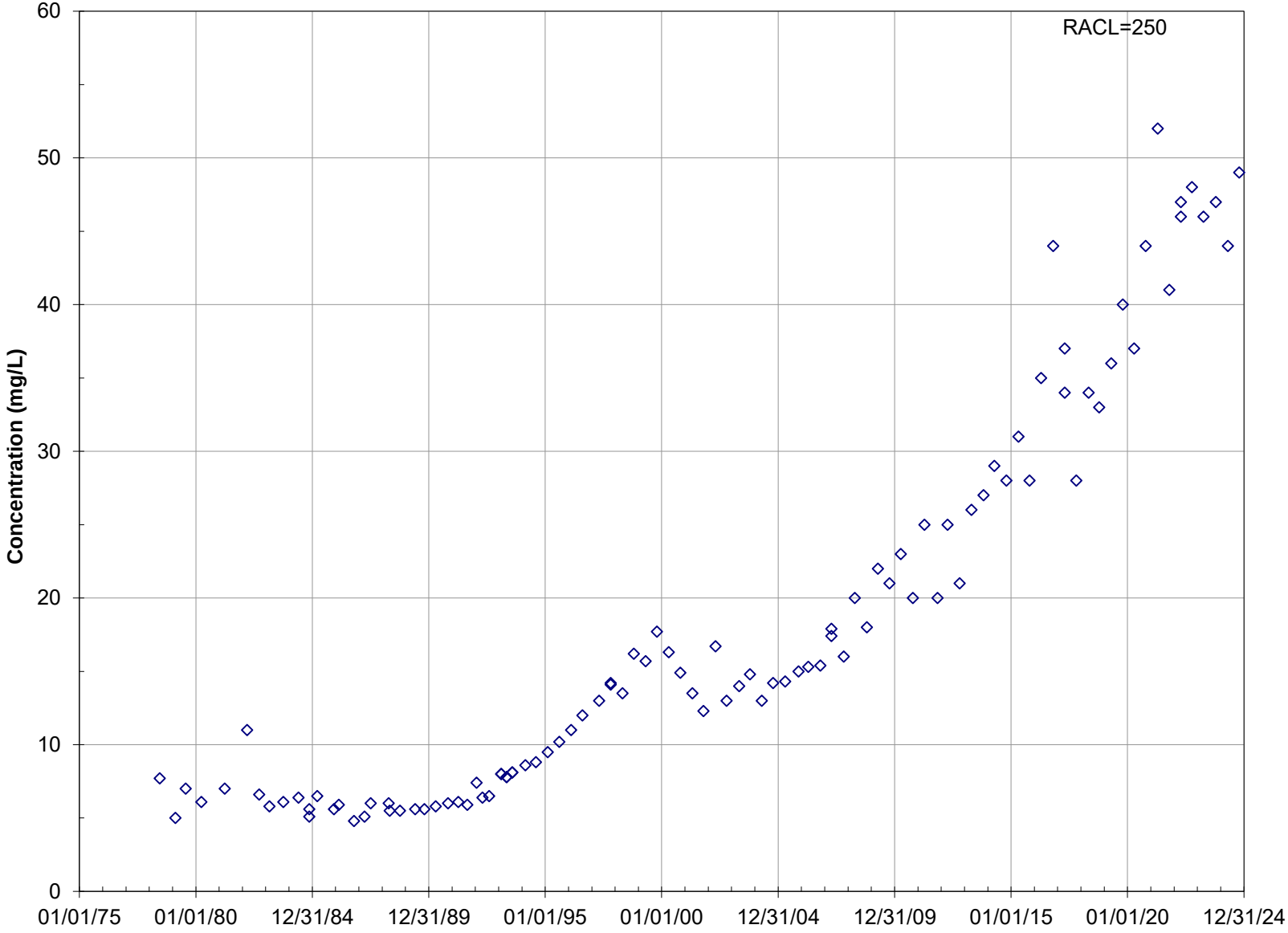
MW-1D:
Sodium
Coffin Butte Landfill



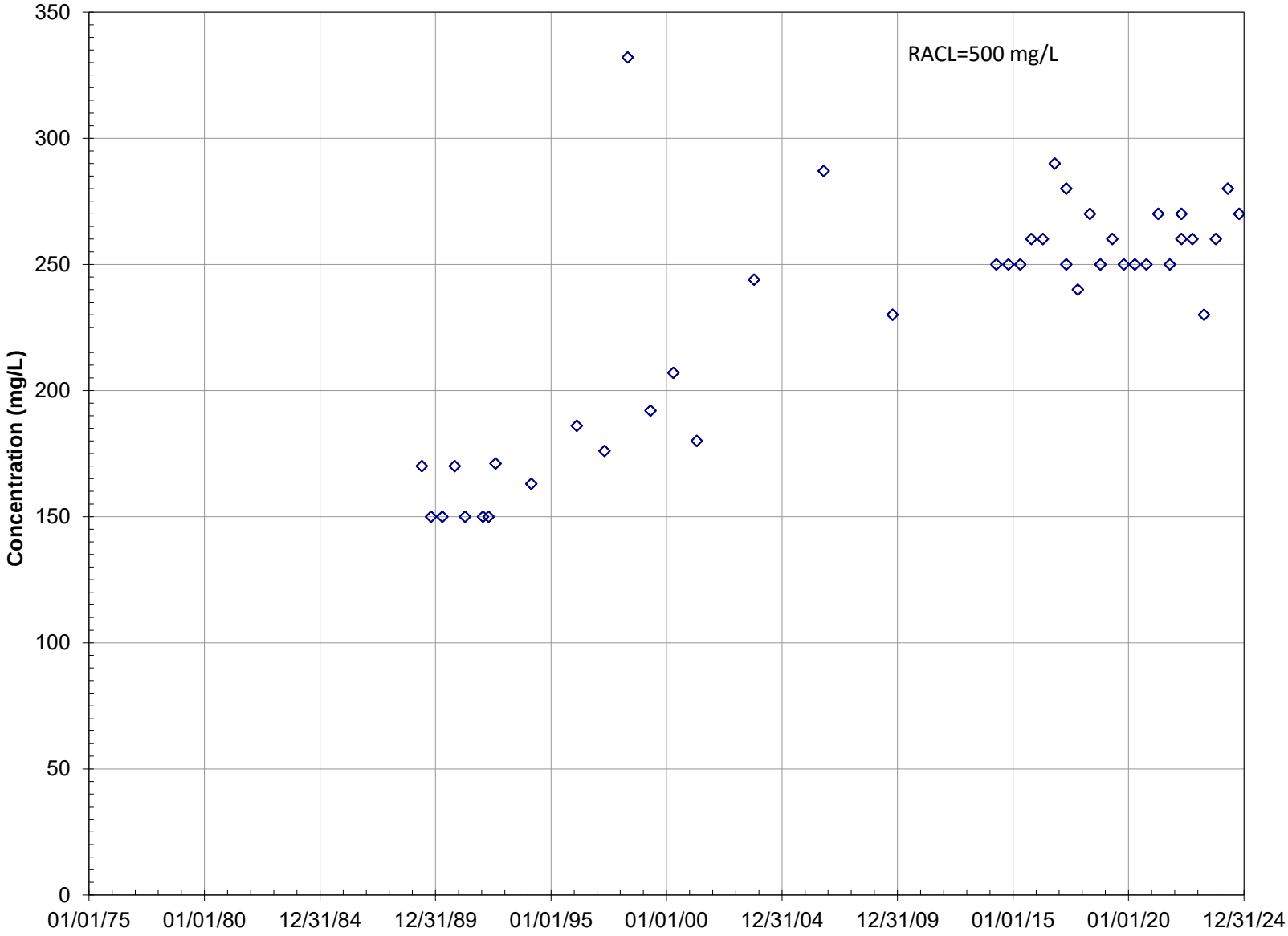
MW-3D:
Bicarbonate
Coffin Butte Landfill



MW-3D:
Chloride
Coffin Butte Landfill

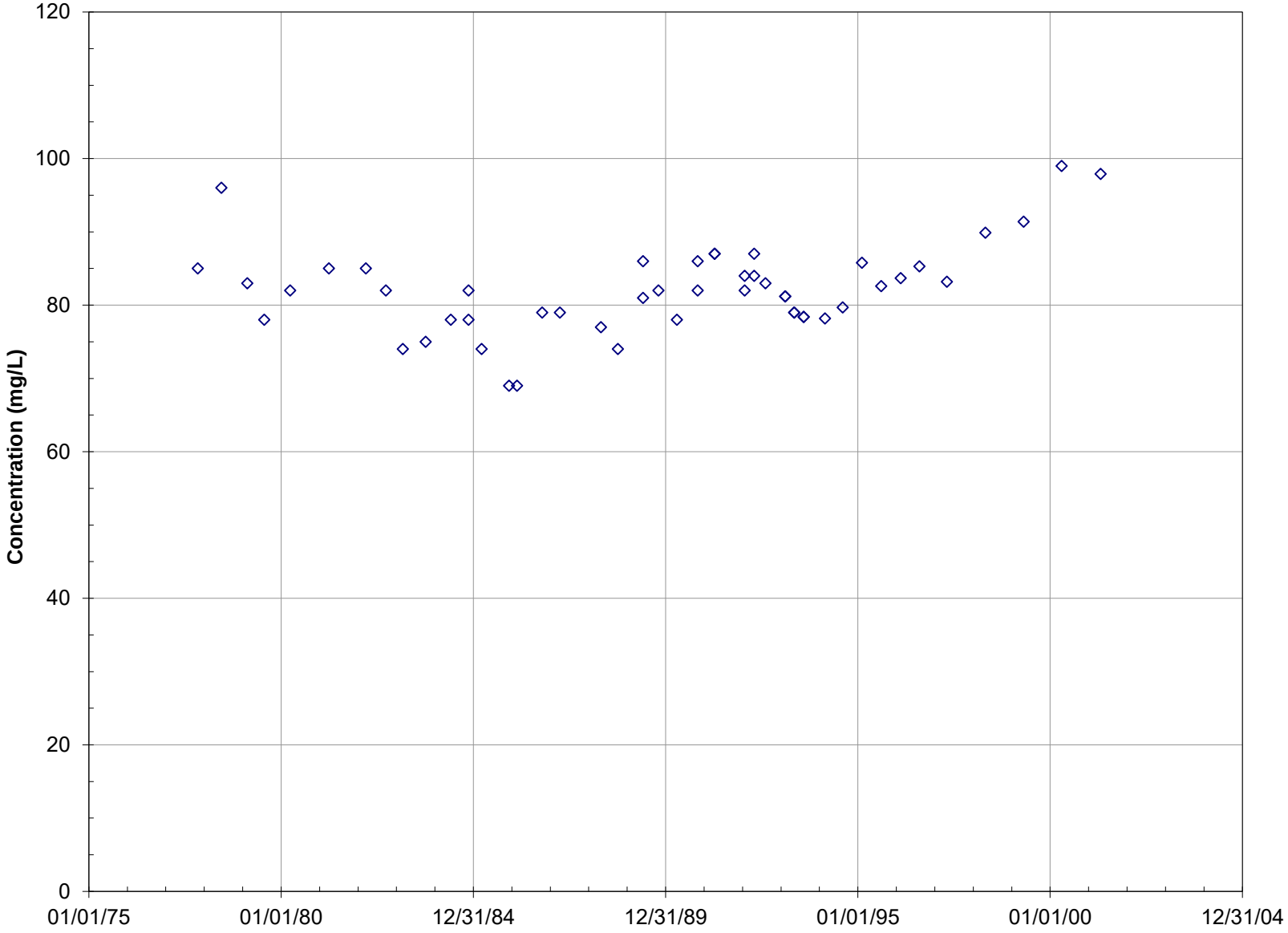


MW-3D:
TDS
Coffin Butte Landfill

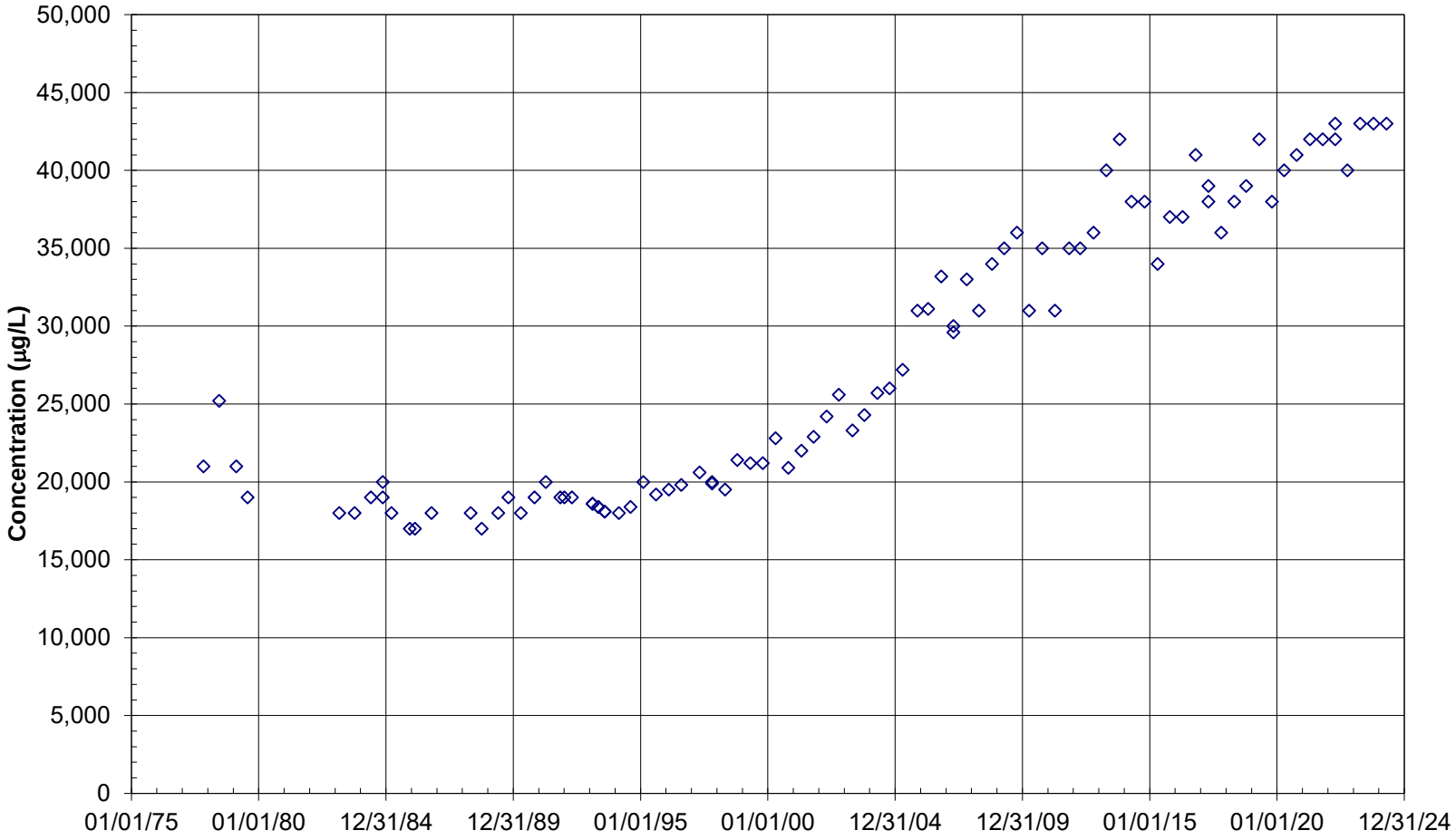


MW-3D/TDS

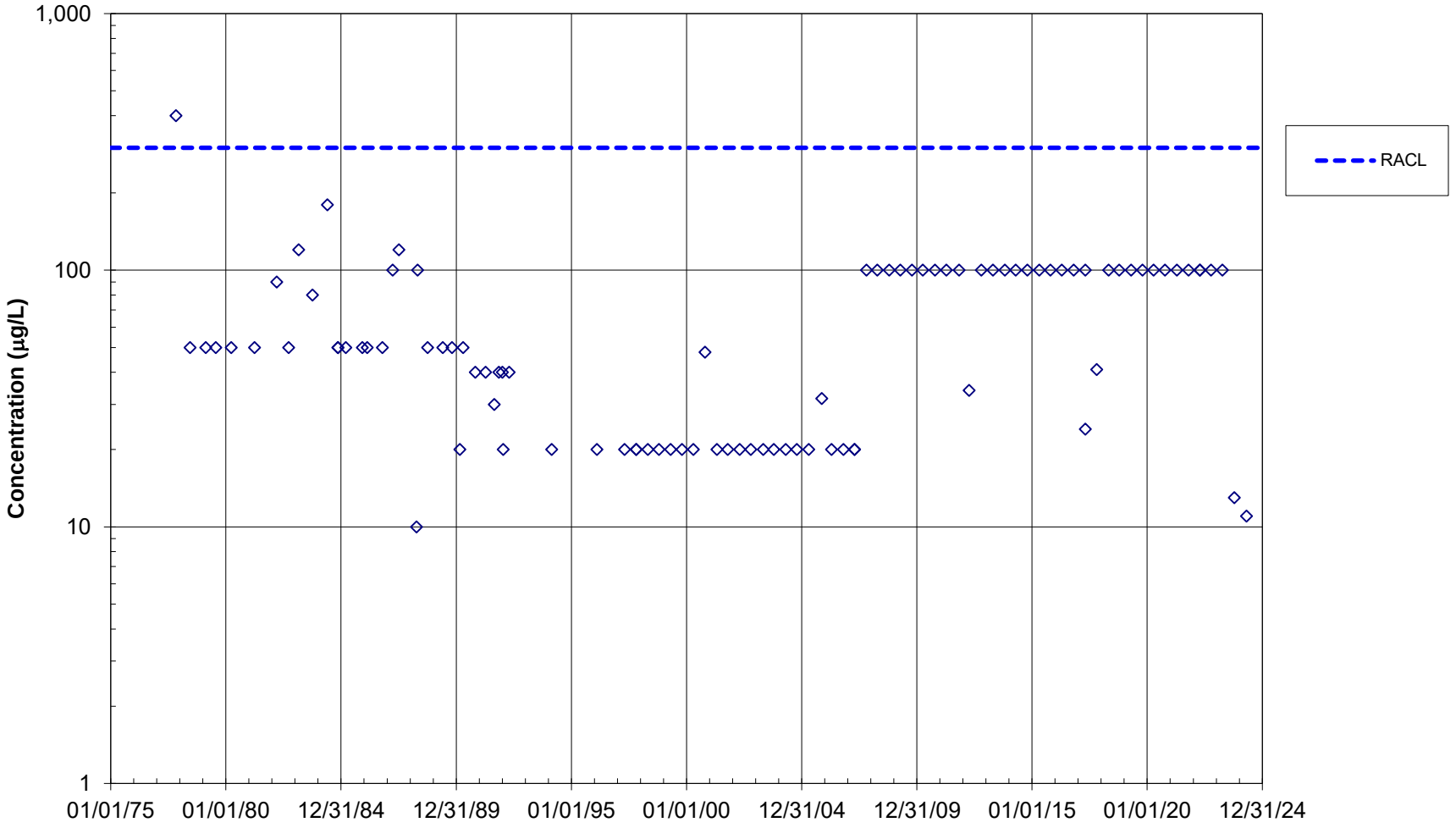
MW-3D:
Hardness
Coffin Butte Landfill



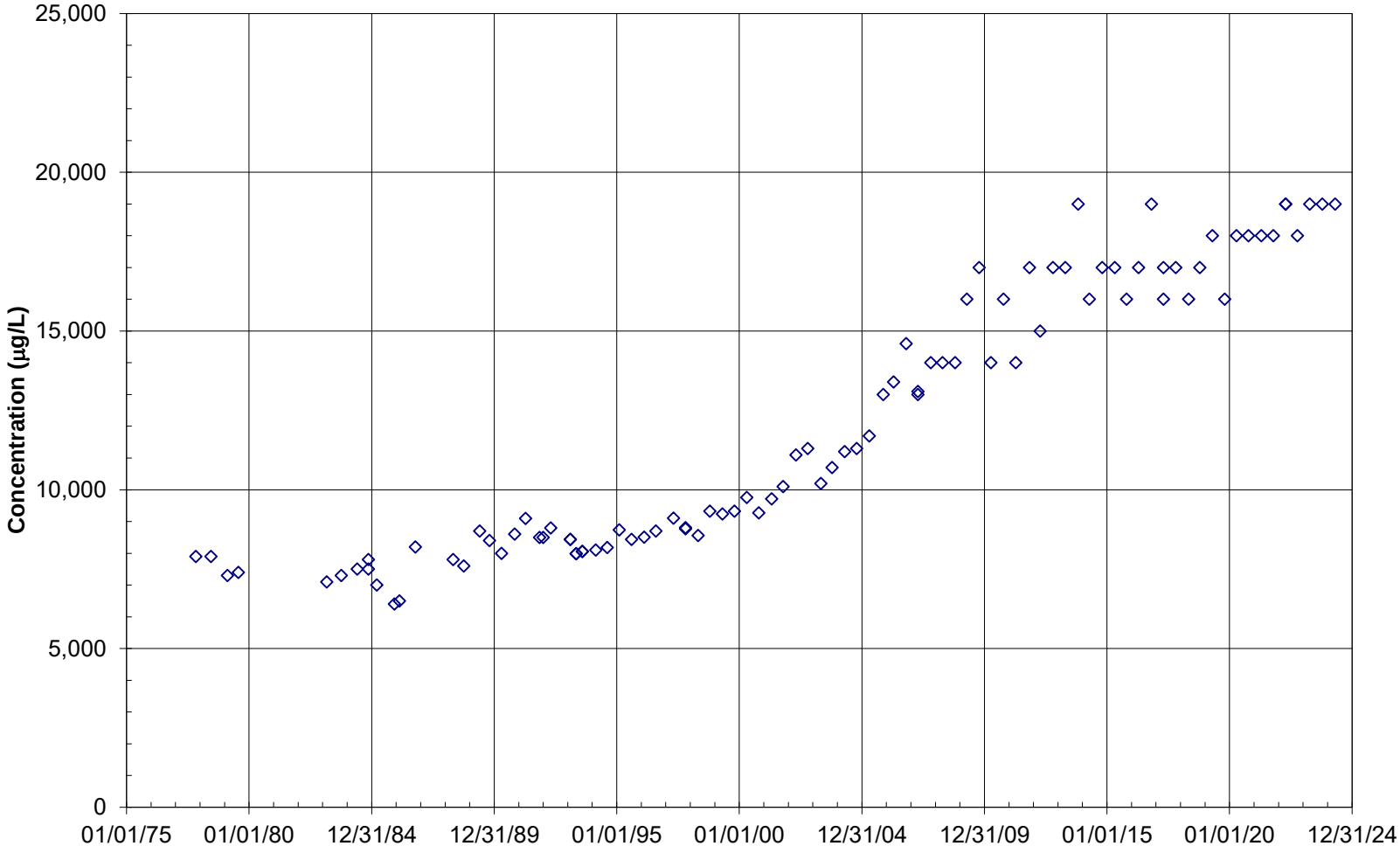
MW-3D:
Calcium
Coffin Butte Landfill



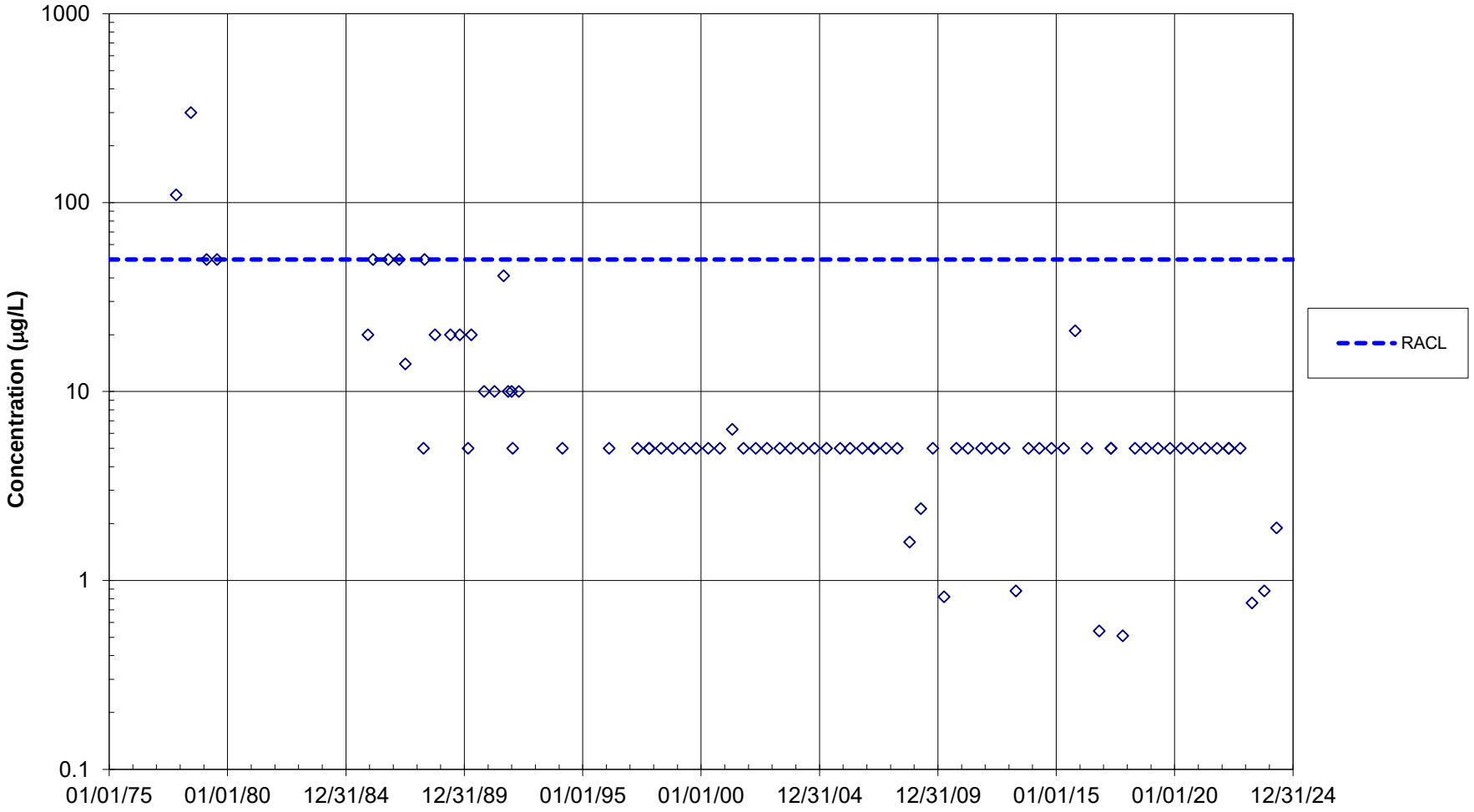
MW-3D:
Iron
Coffin Butte Landfill



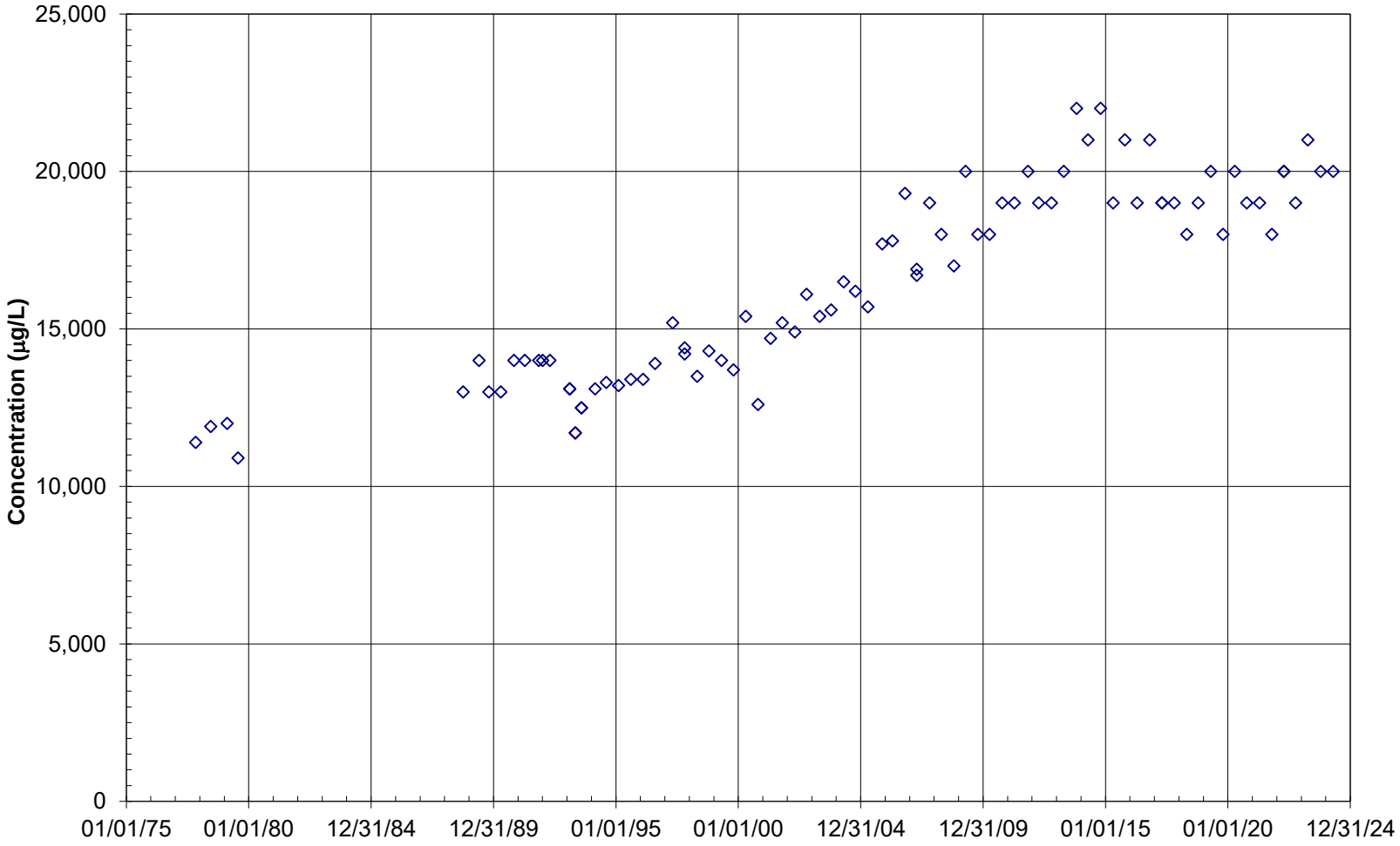
MW-3D:
Magnesium
Coffin Butte Landfill



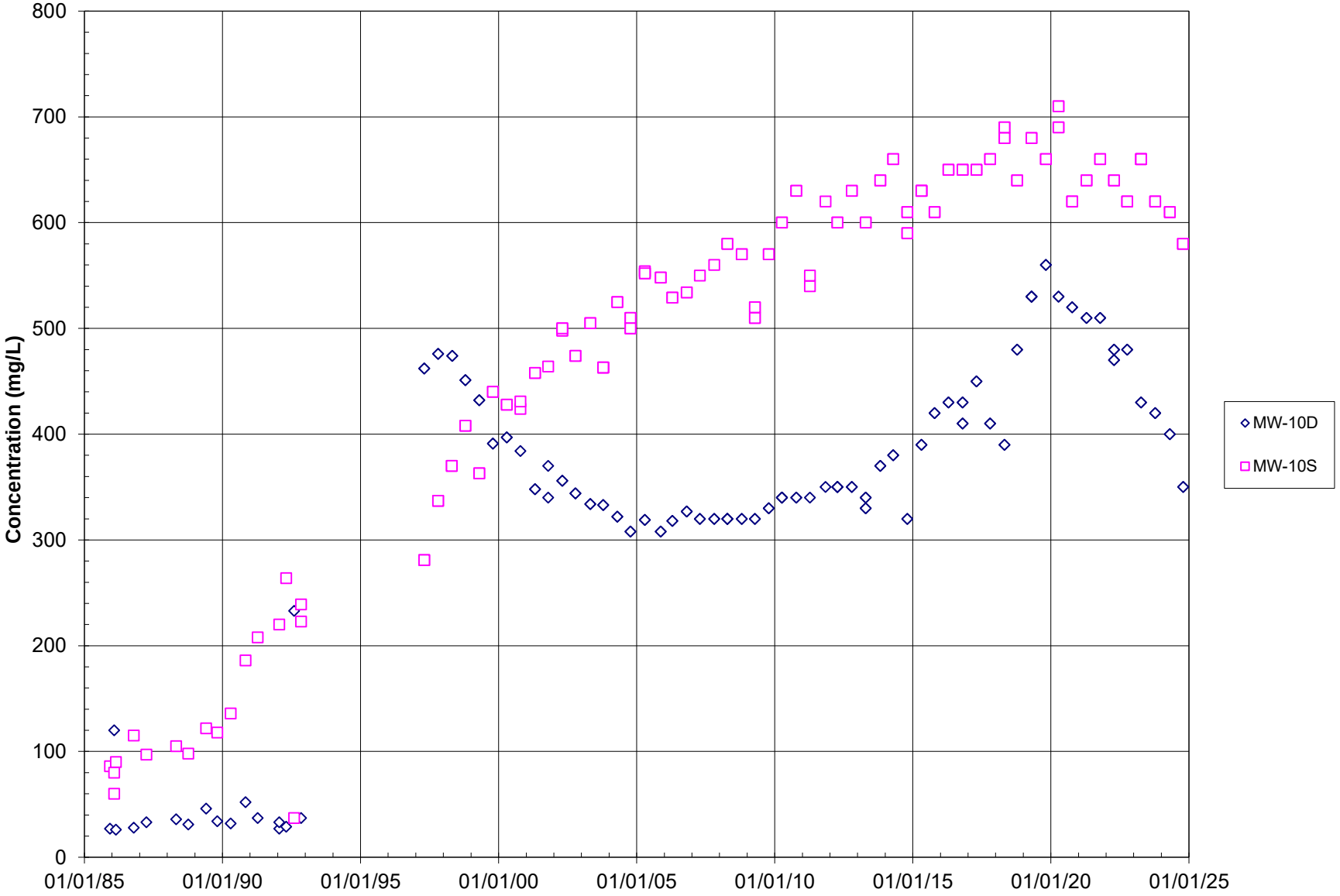
MW-3D:
Manganese
Coffin Butte Landfill



MW-3D:
Sodium
Coffin Butte Landfill

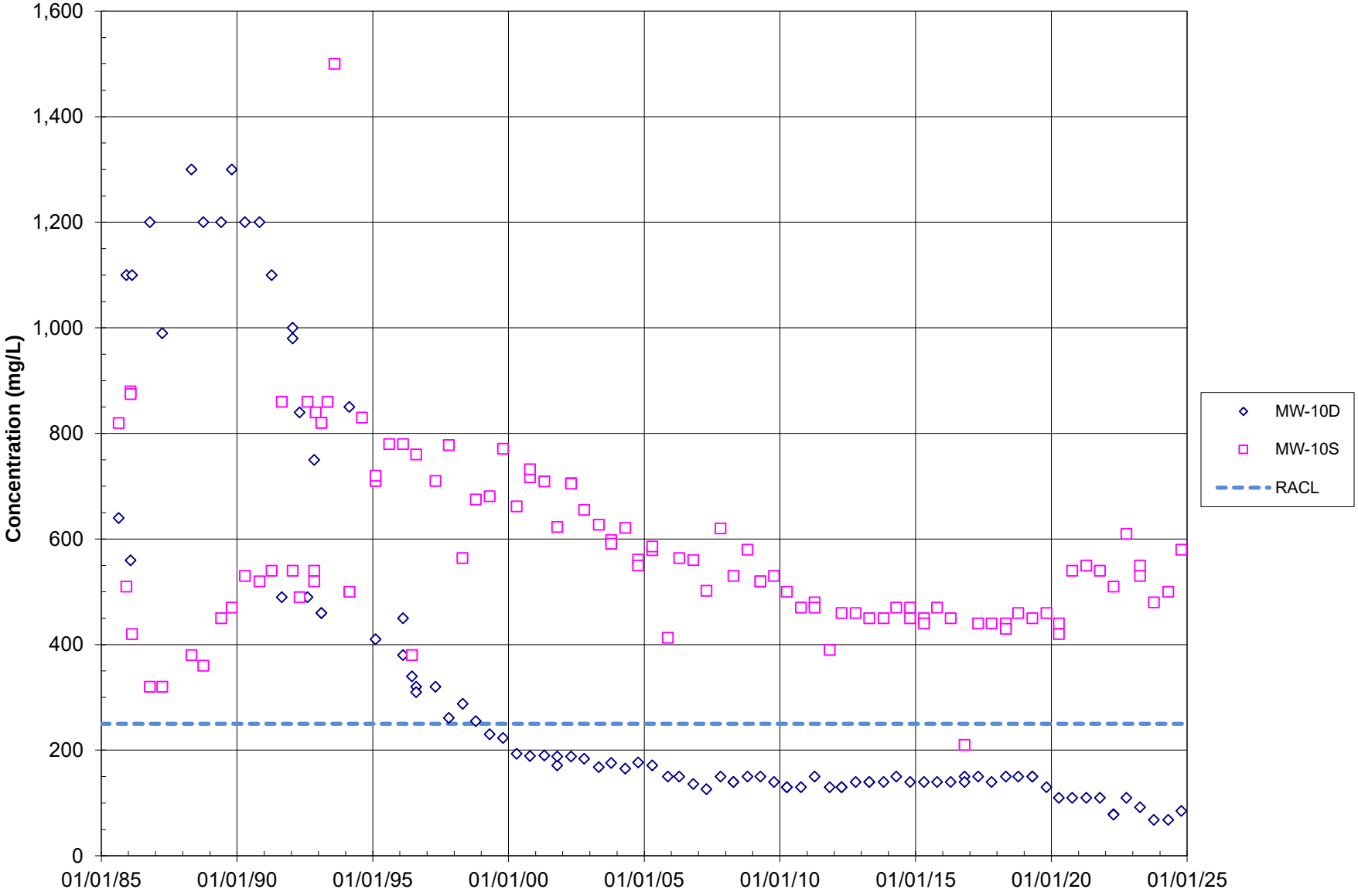


MW-10S and MW-10D:
Bicarbonate
Coffin Butte Landfill



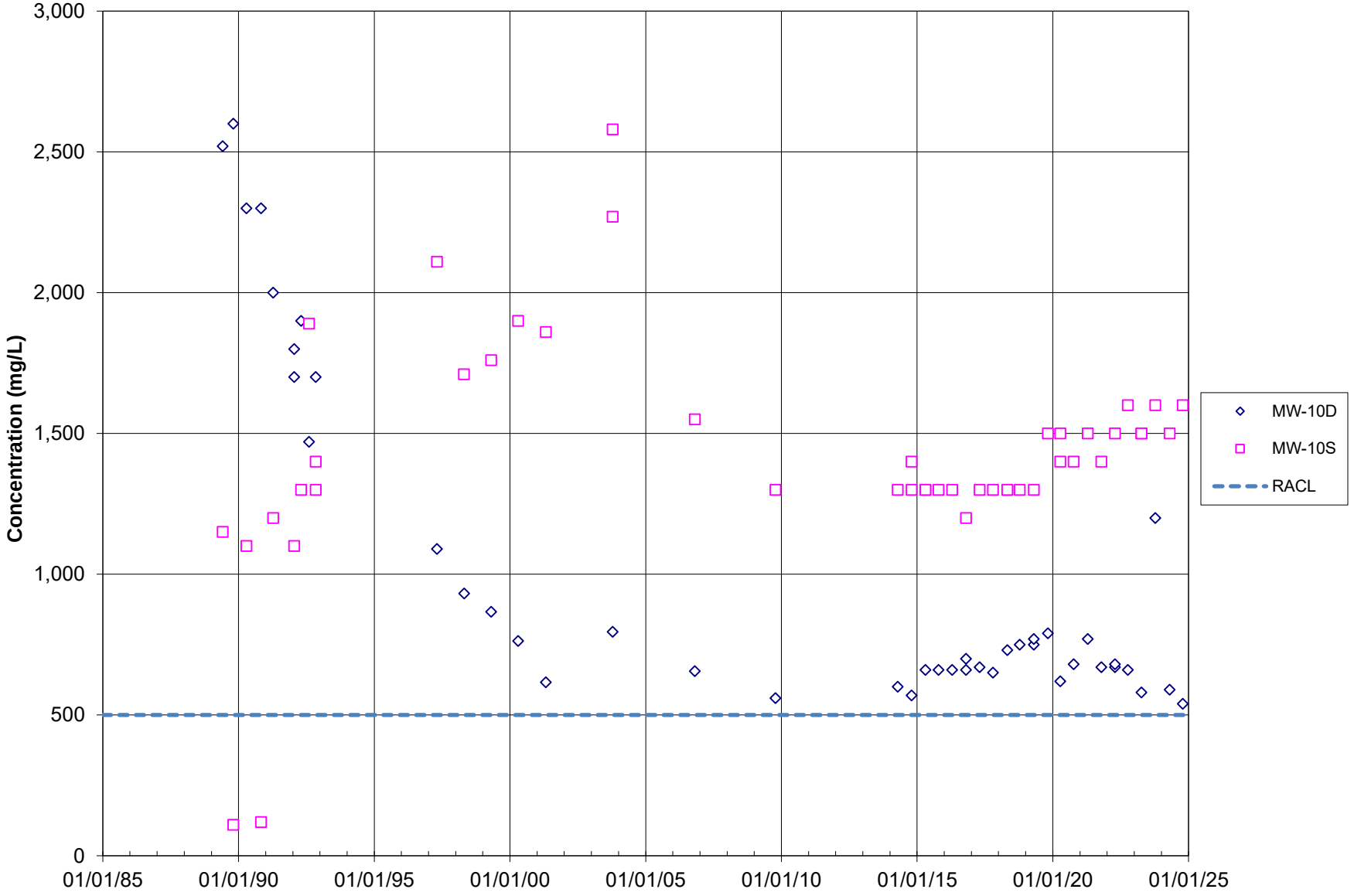
MW-10S&D/Bicarbonate

MW-10S and MW-10D:
Chloride
Coffin Butte Landfill



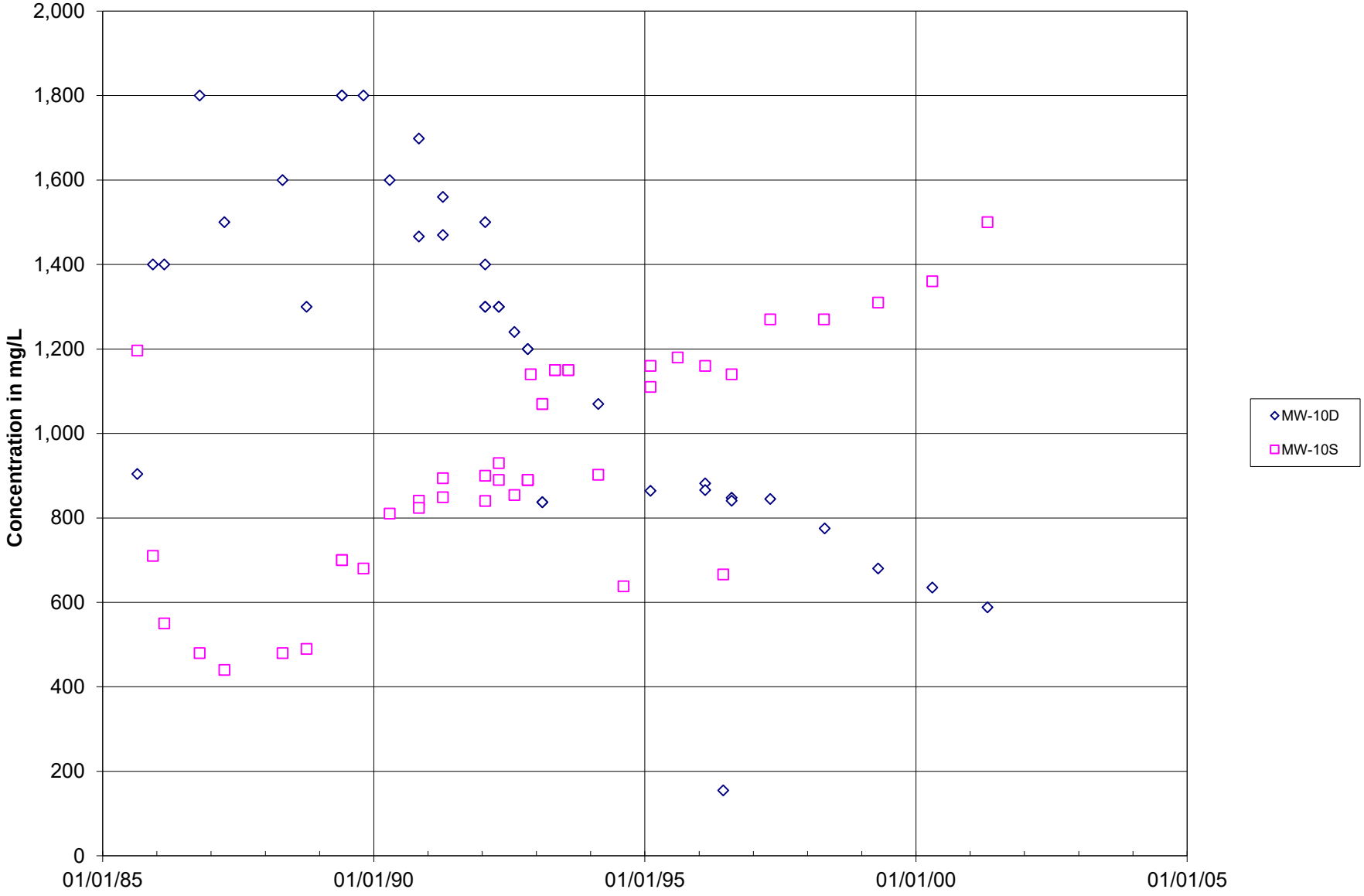
MW-10S&D/Chloride

MW-10S and MW-10D:
TDS
Coffin Butte Landfill



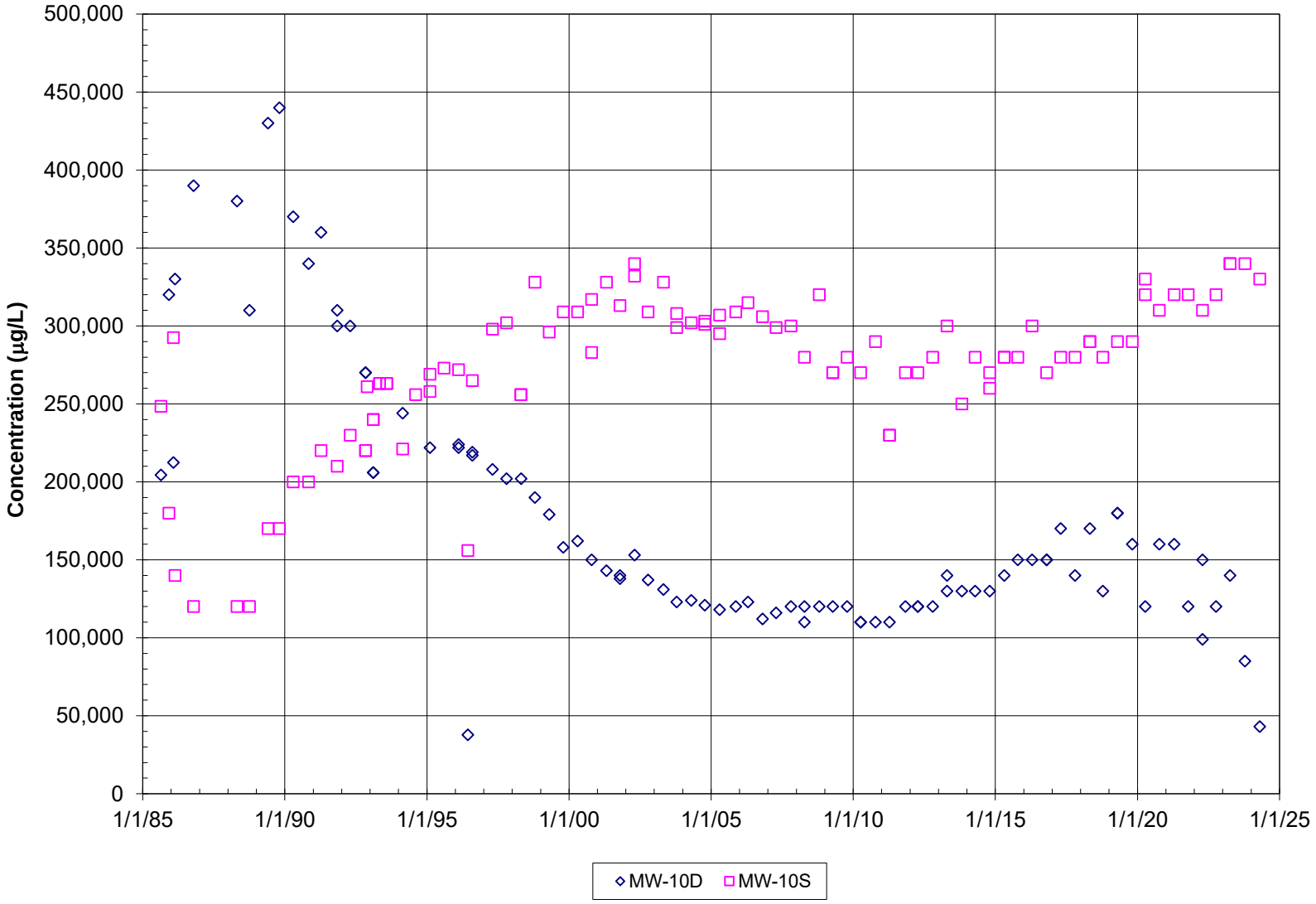
MW-10S&D/TDS

MW-10S and MW-10D:
Hardness
Coffin Butte Landfill

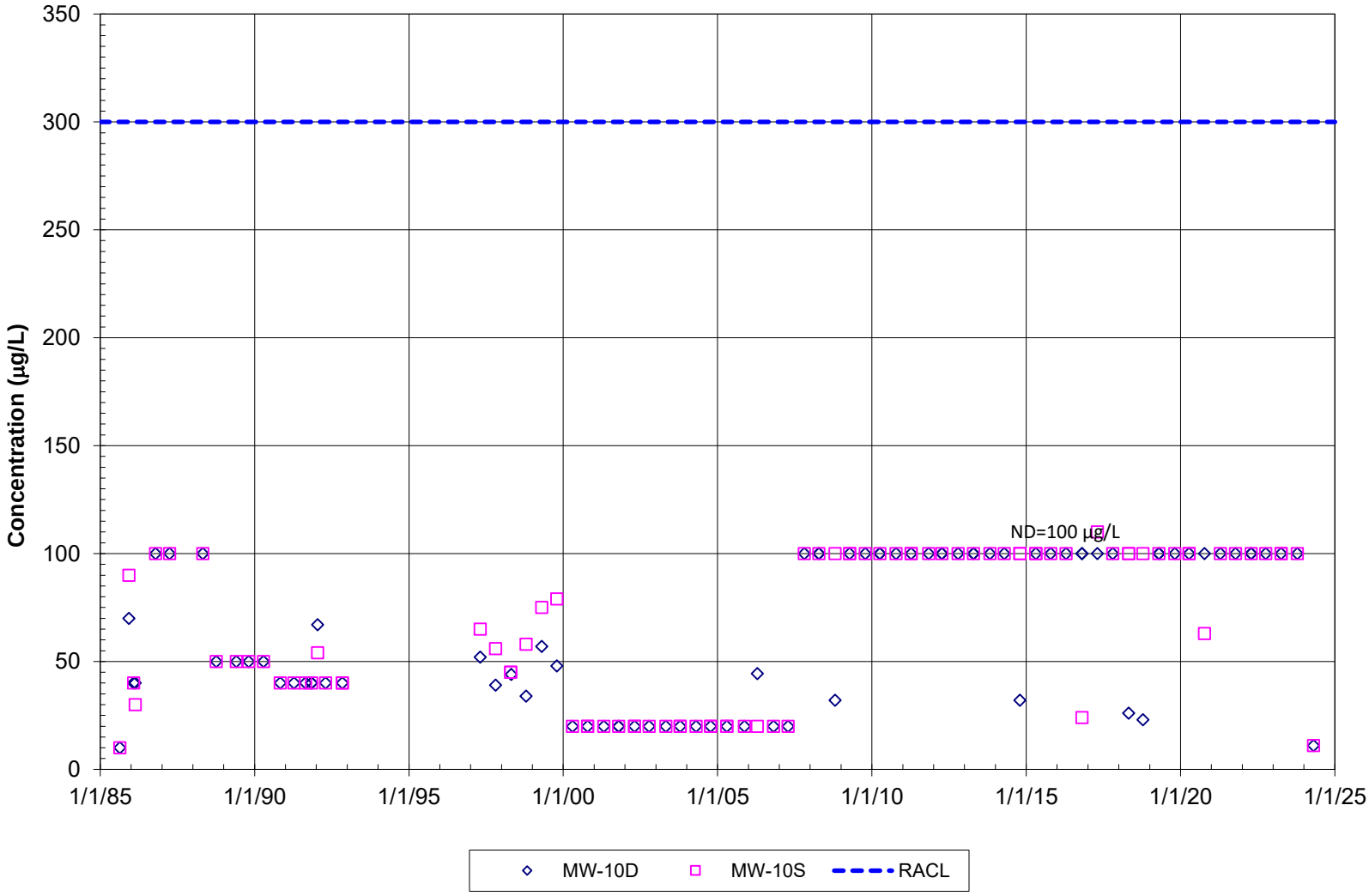


MW-10S&D/Hardness

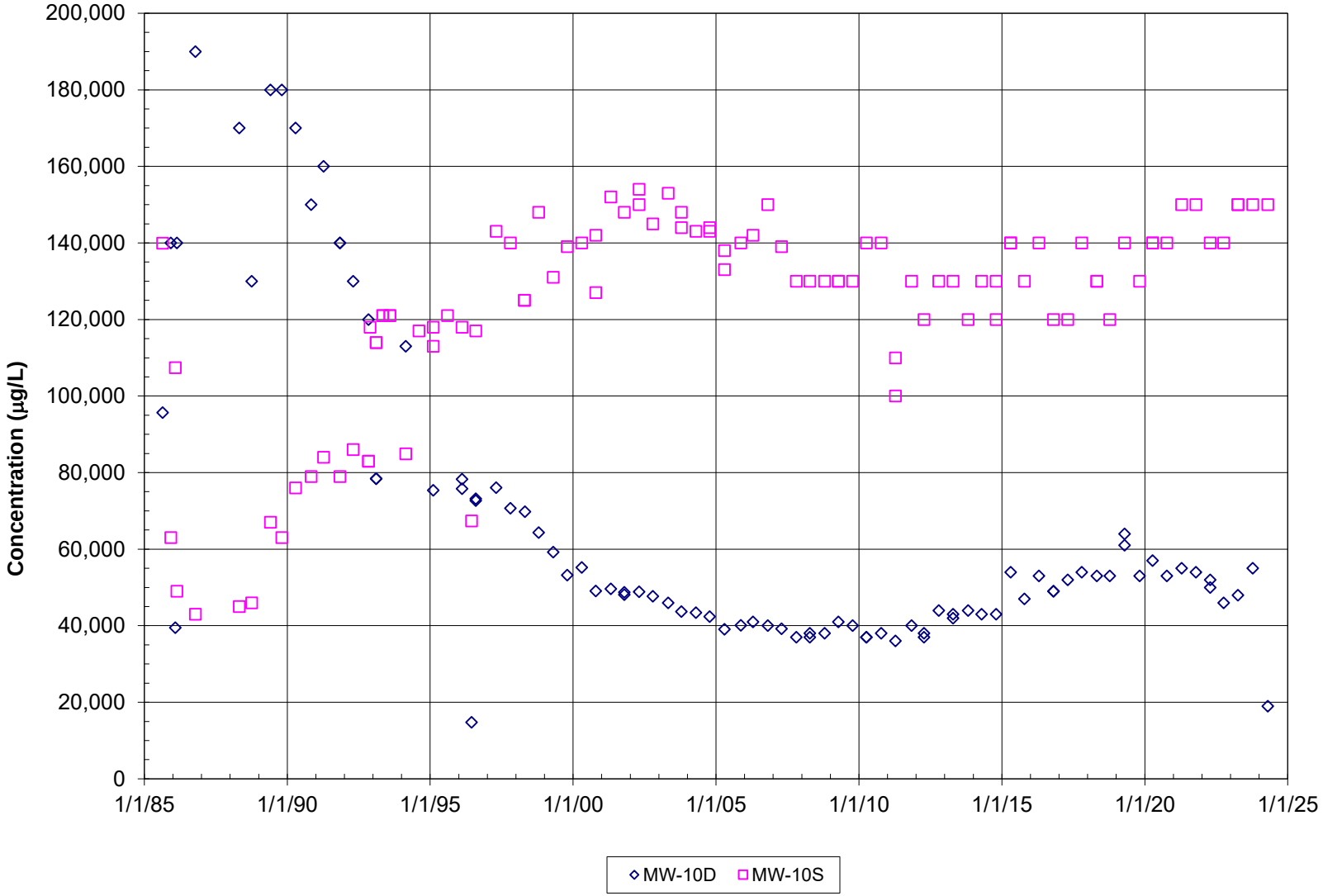
MW10S and MW-10D:
Calcium
Coffin Butte Landfill



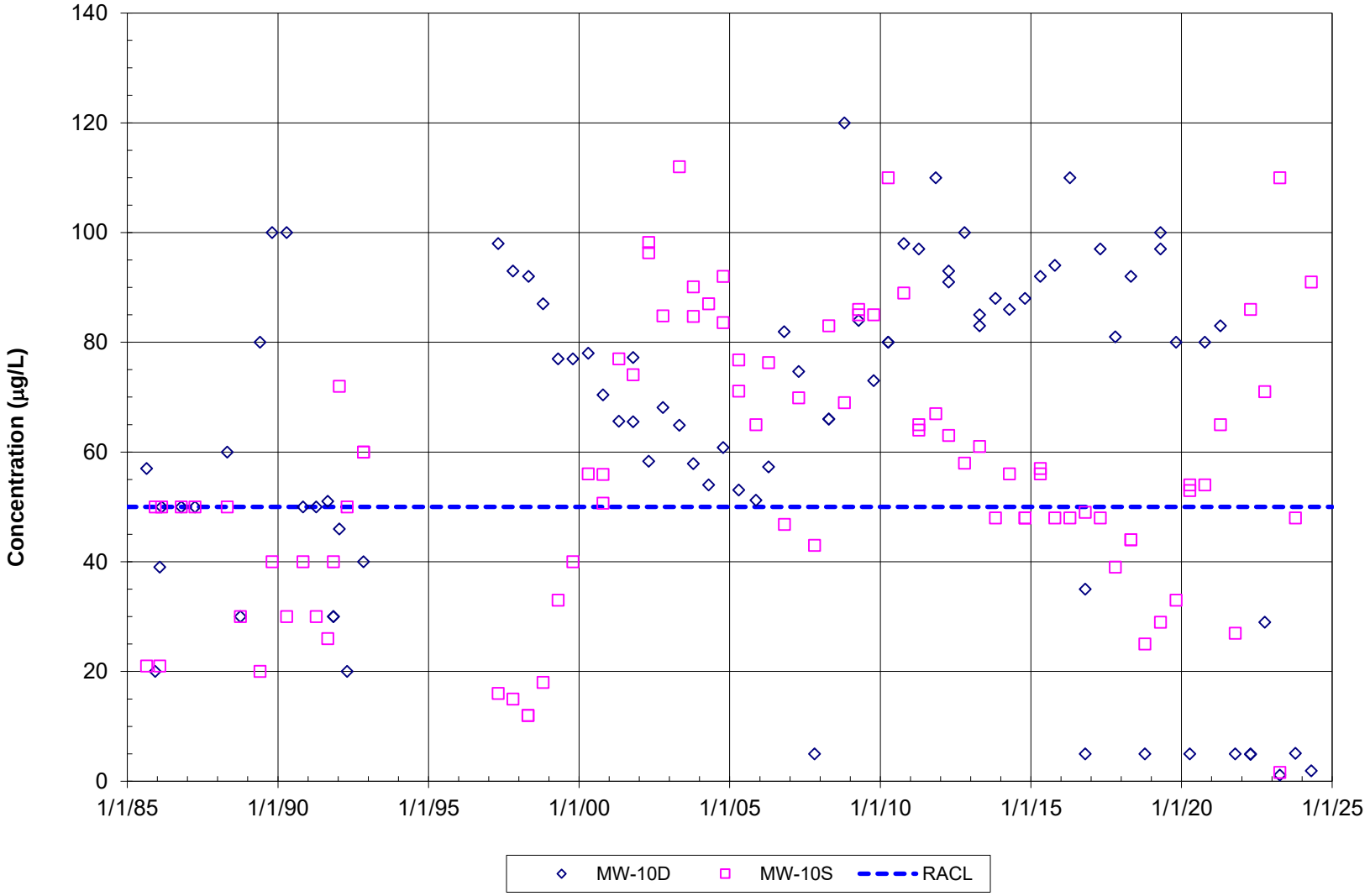
MW10S and MW-10D:
Iron
Coffin Butte Landfill



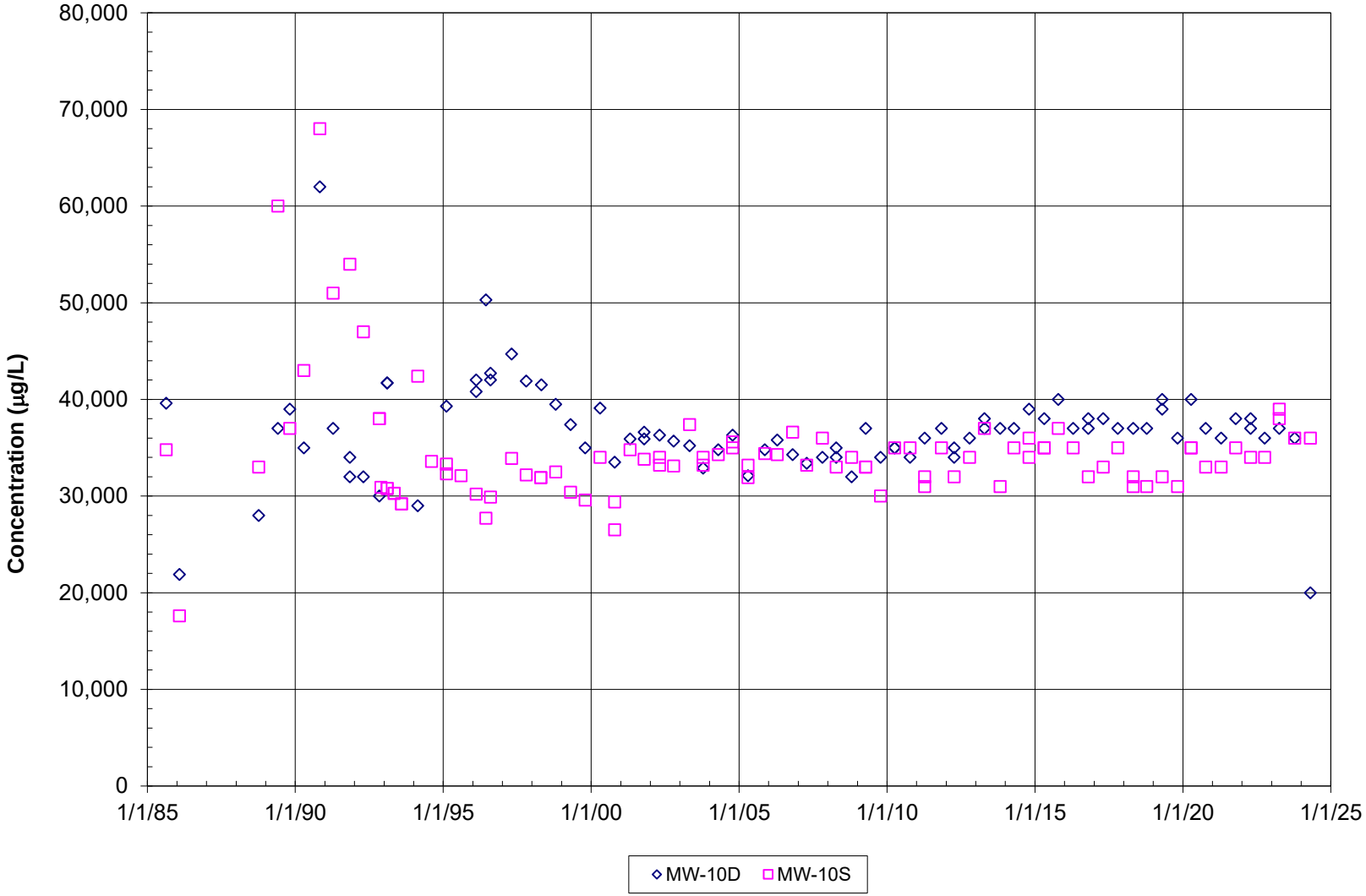
MW10S and MW-10D:
Magnesium
Coffin Butte Landfill

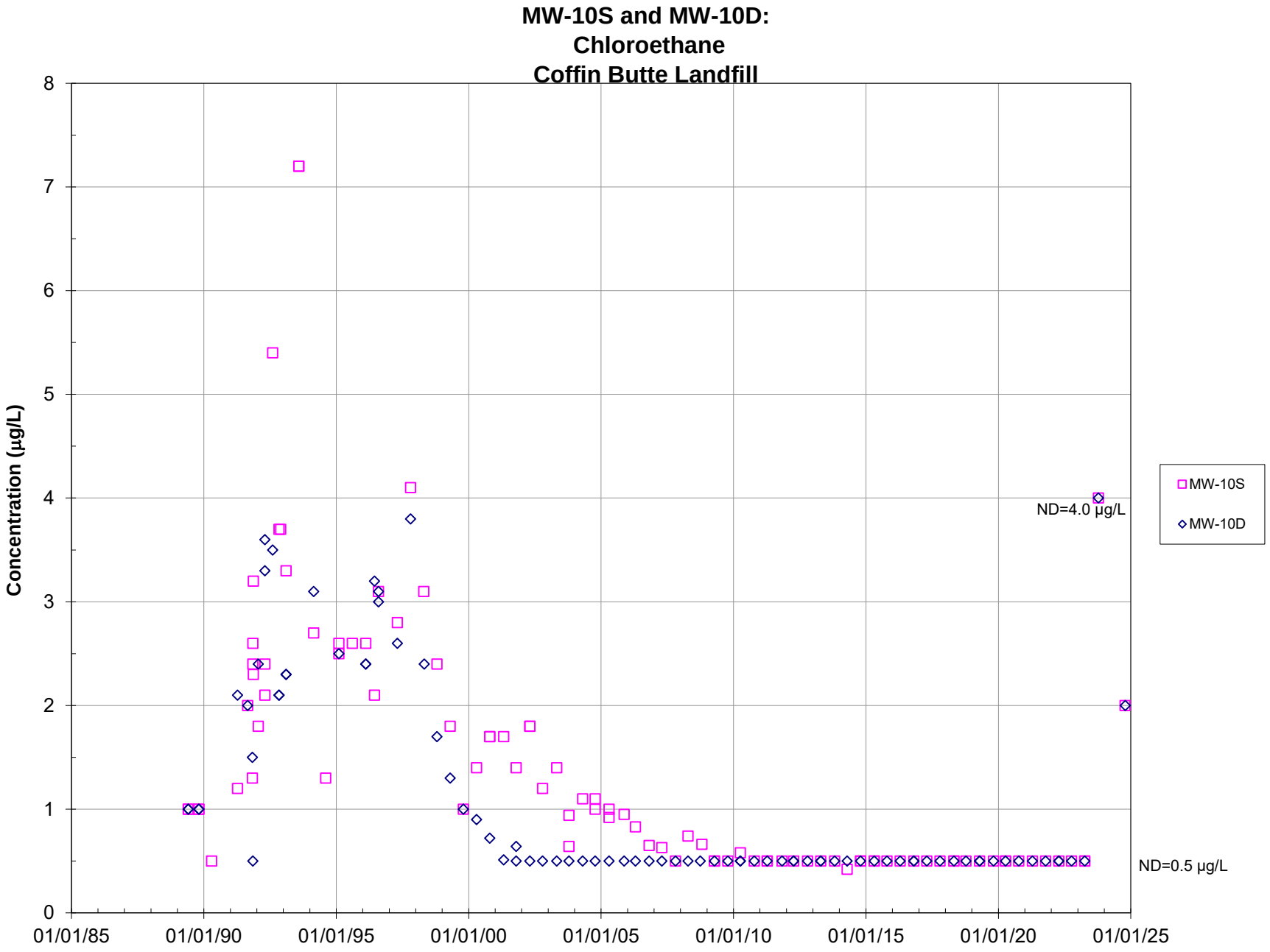


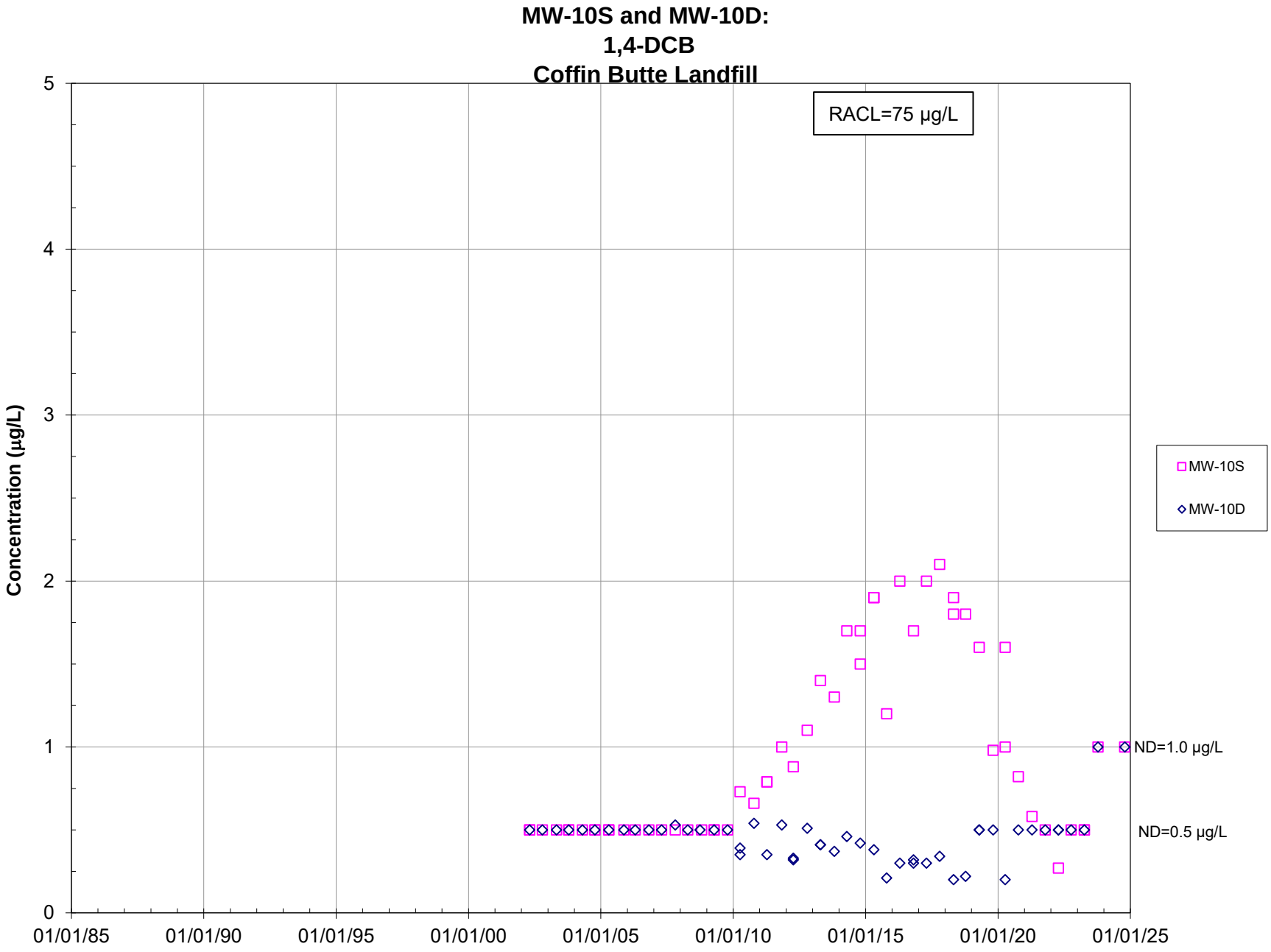
MW10S and MW-10D:
Manganese
Coffin Butte Landfill



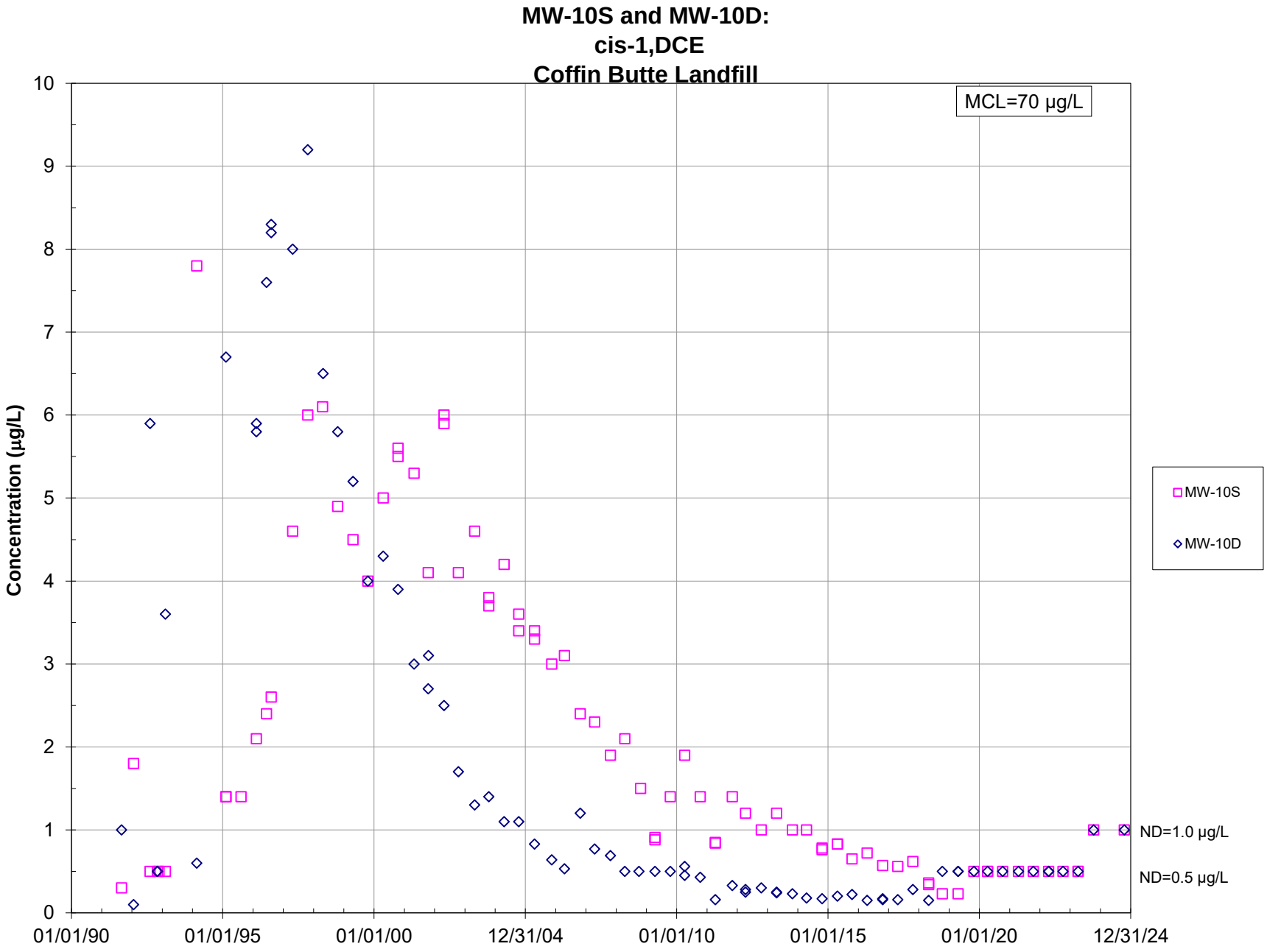
MW10S and MW-10D:
Sodium
Coffin Butte Landfill



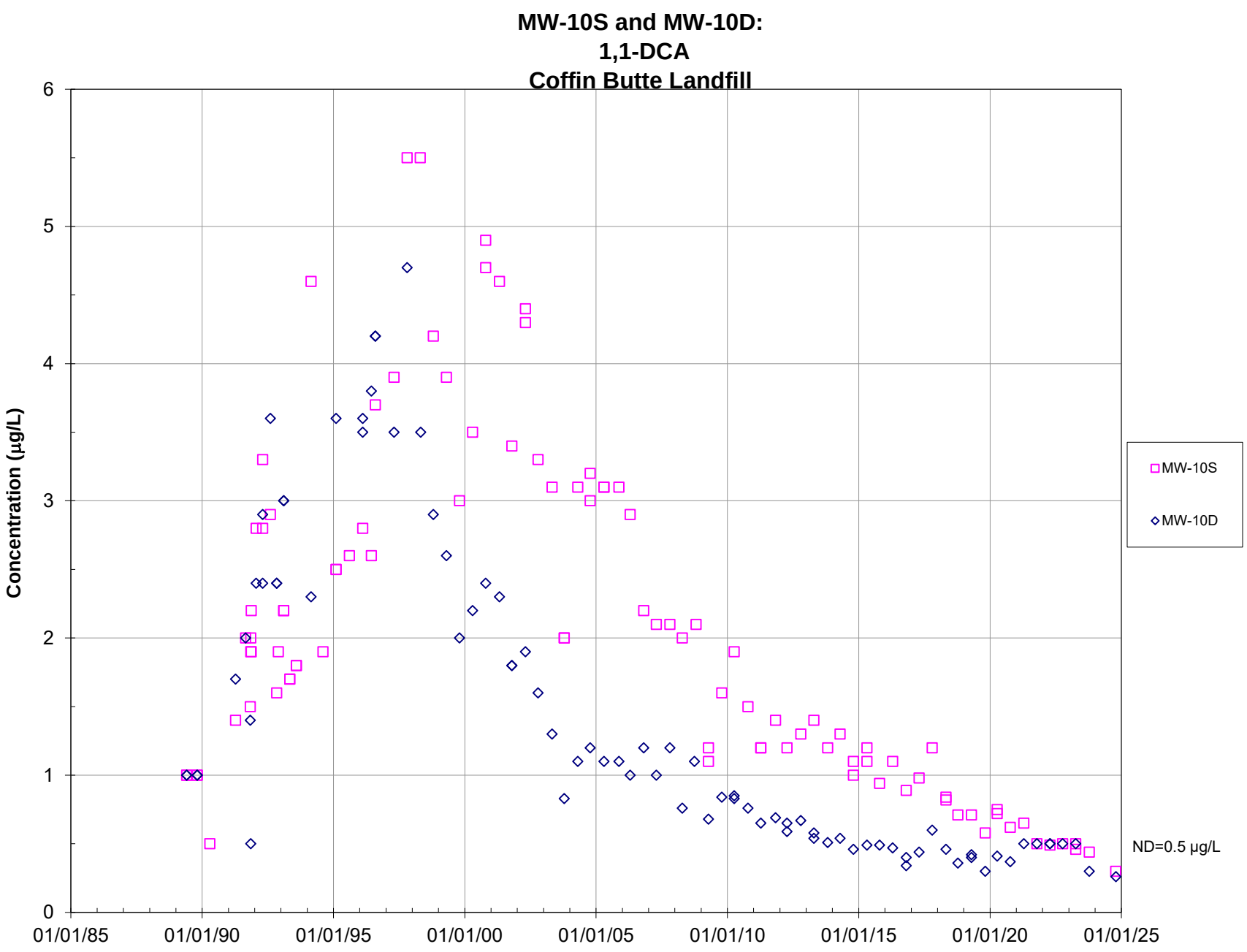

MW-10S and MW-10D:
Chloroethane
Coffin Butte Landfill
Concentration (µg/L)
0
1
2
3
4
5
6
7
8
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25
ND=4.0 µg/L
ND=0.5 µg/L
MW-10S
MW-10D



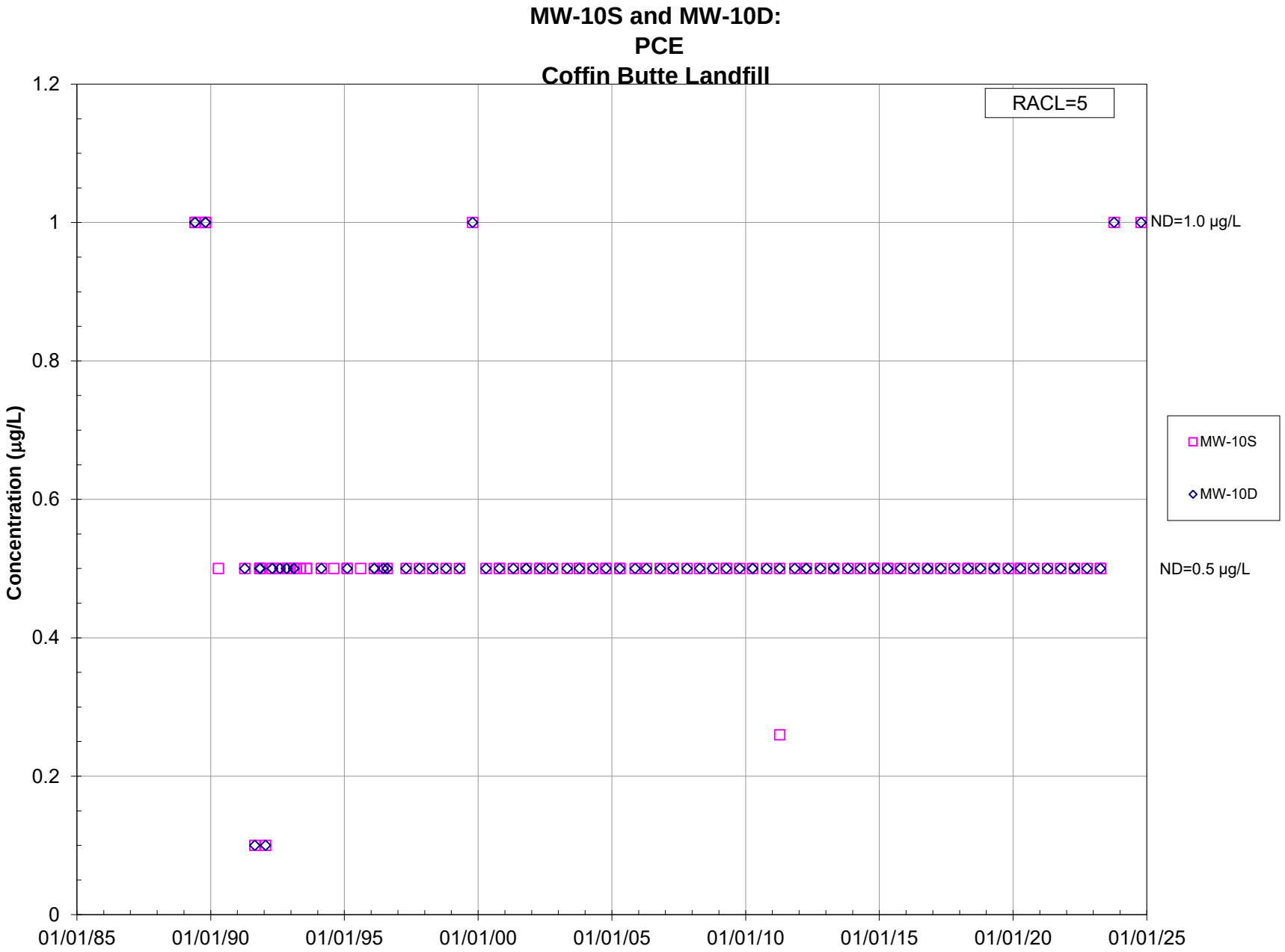
MW-10S&D/1,4-DCB

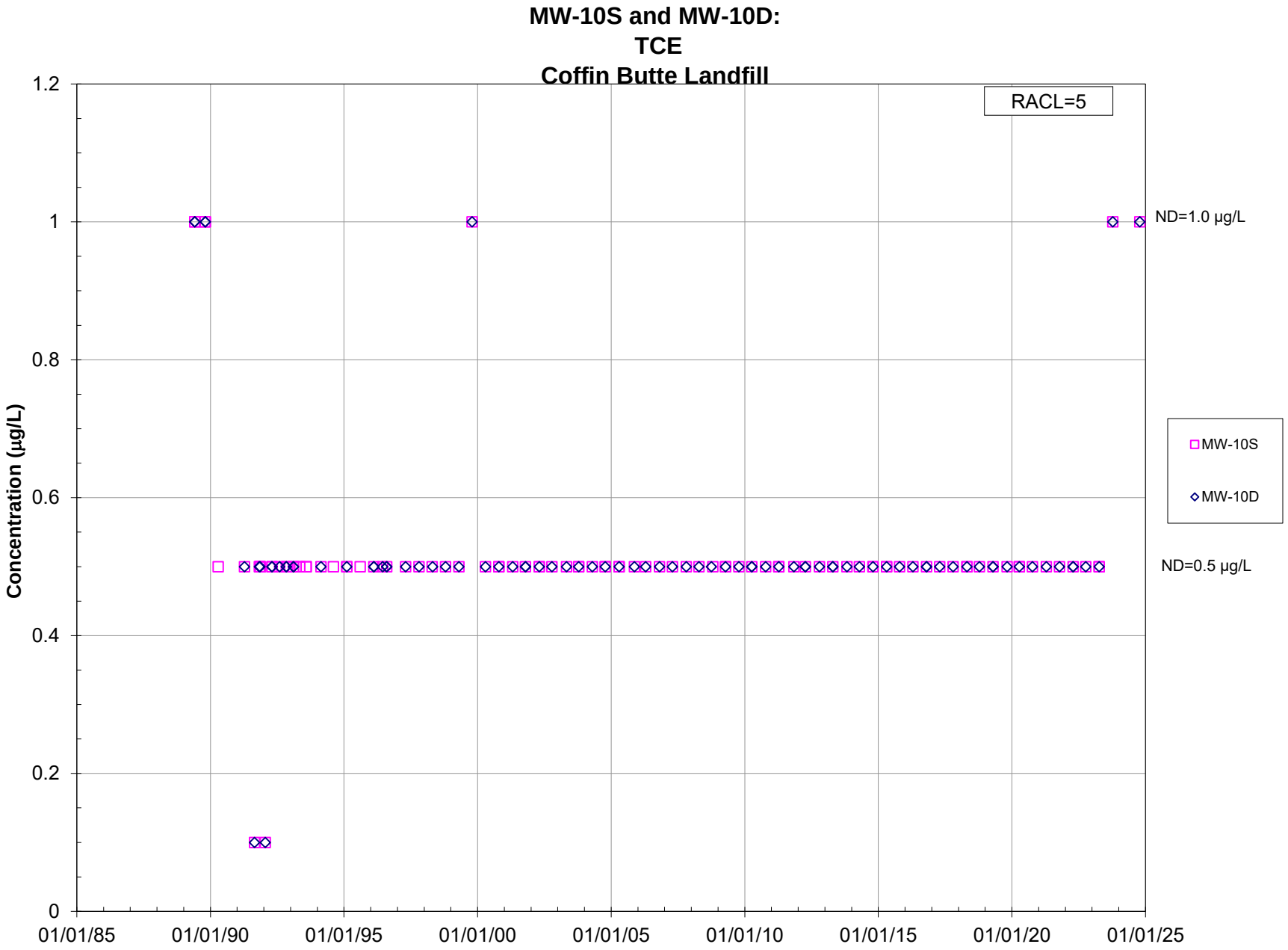


MW-10S&D/cis-1,DCE

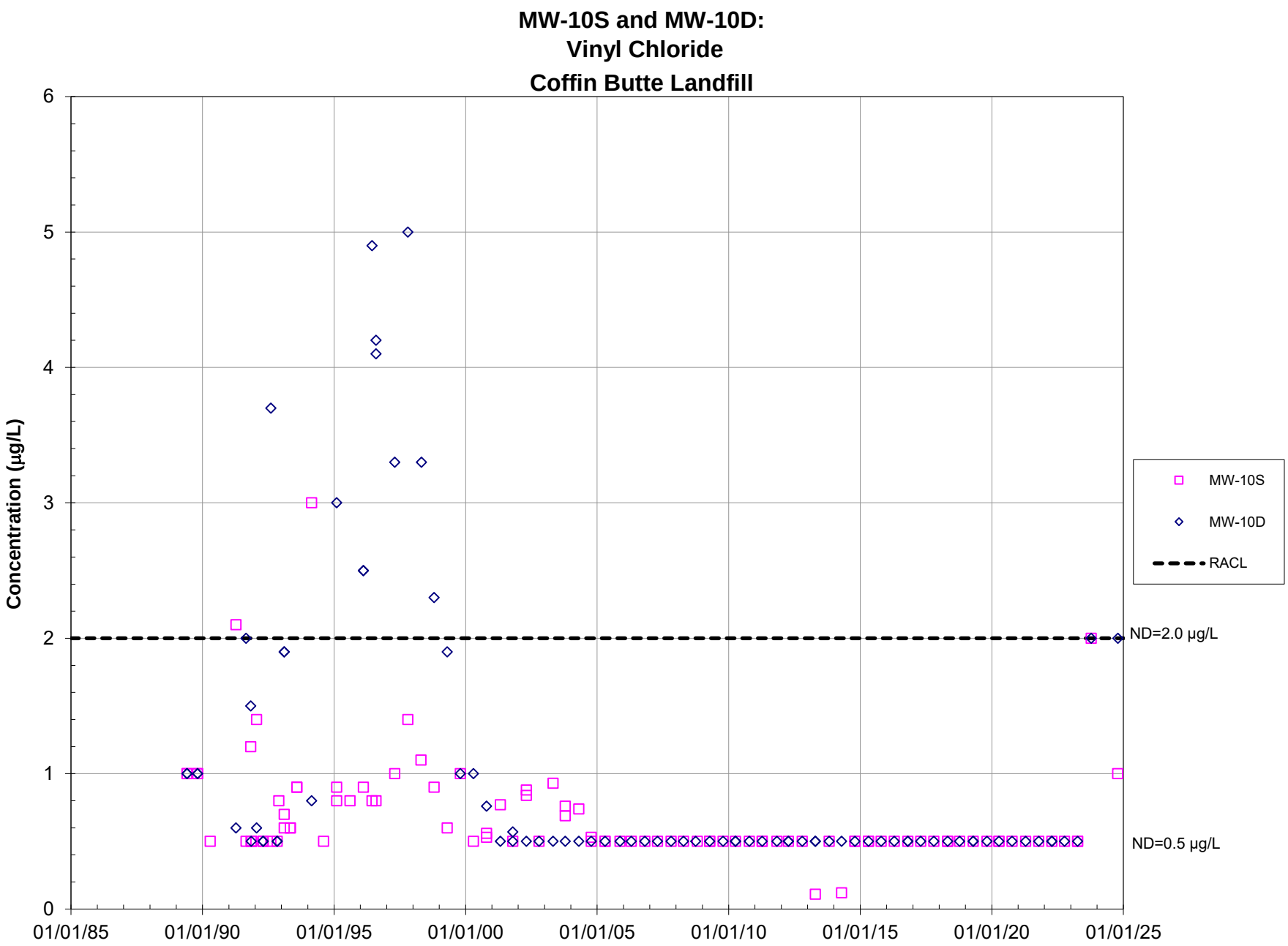


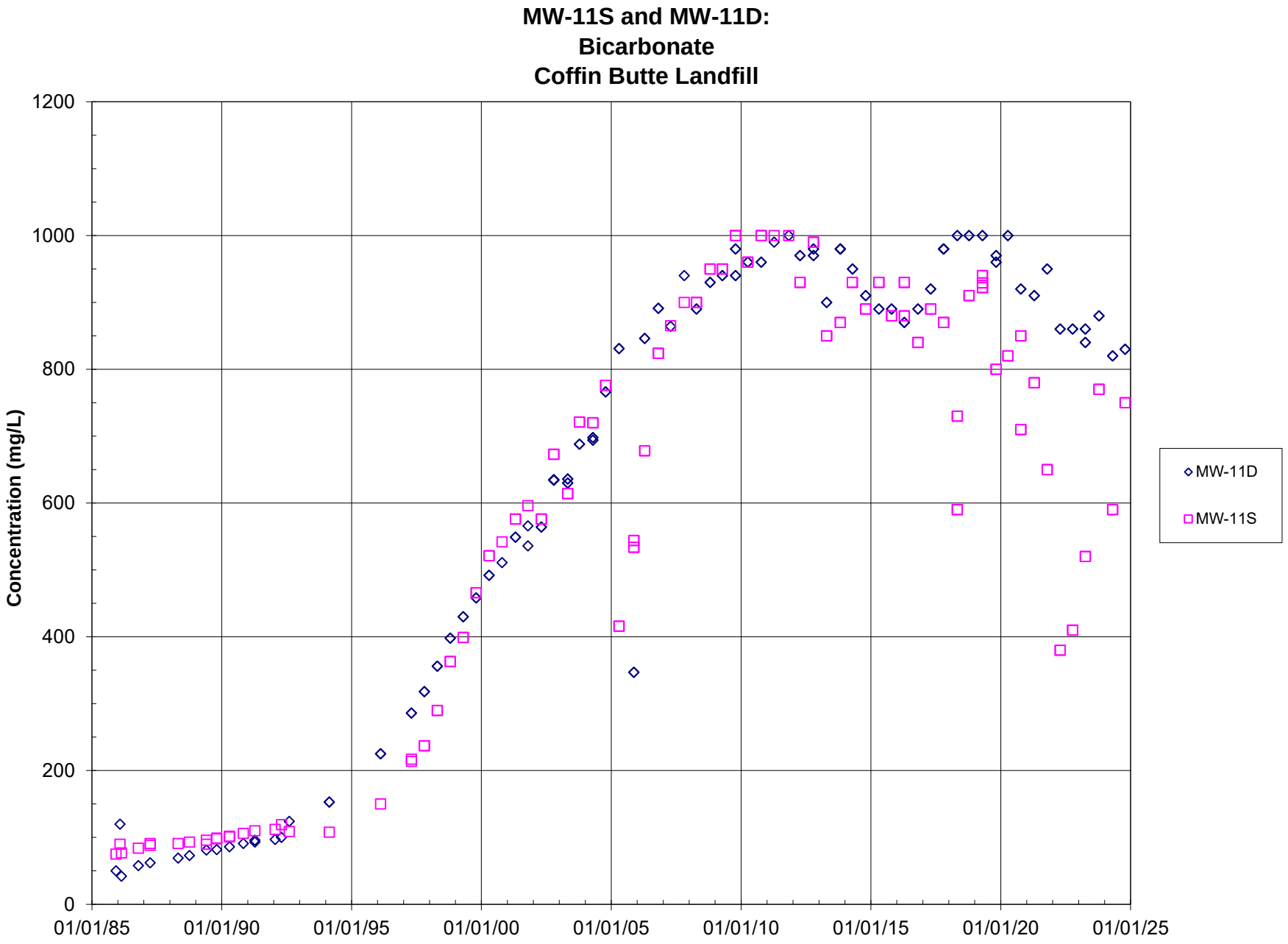
MW-10S&D/1,1-DCA


MW-10S and MW-10D:
PCE
Coffin Butte Landfill
RACL=5
ND=1.0 µg/L
ND=0.5 µg/L
MW-10S
MW-10D
Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25

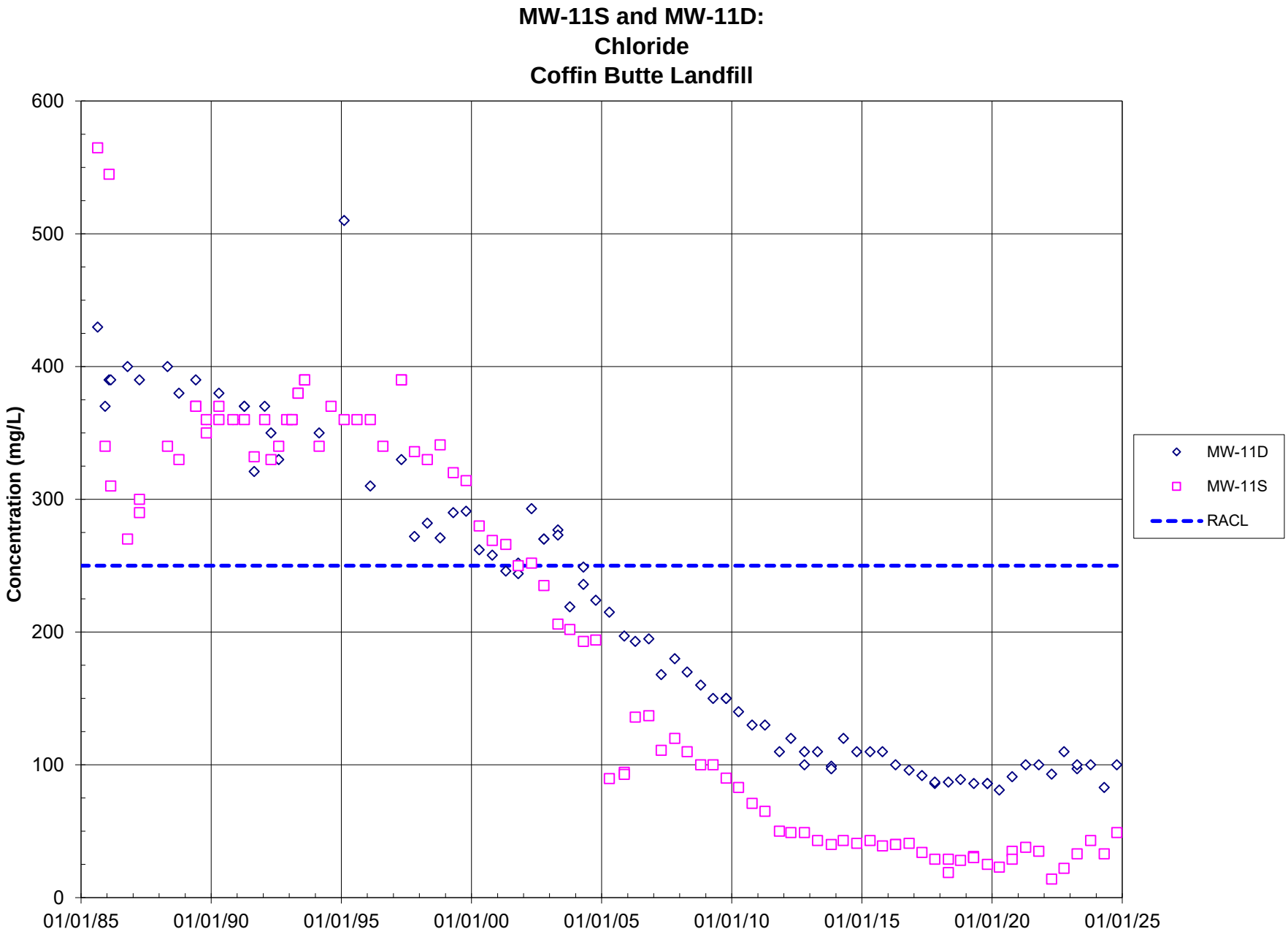

MW-10S and MW-10D:
TCE
Coffin Butte Landfill
RACL=5
ND=1.0 µg/L
ND=0.5 µg/L
MW-10S
MW-10D
Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25

MW-10S&D/TCE

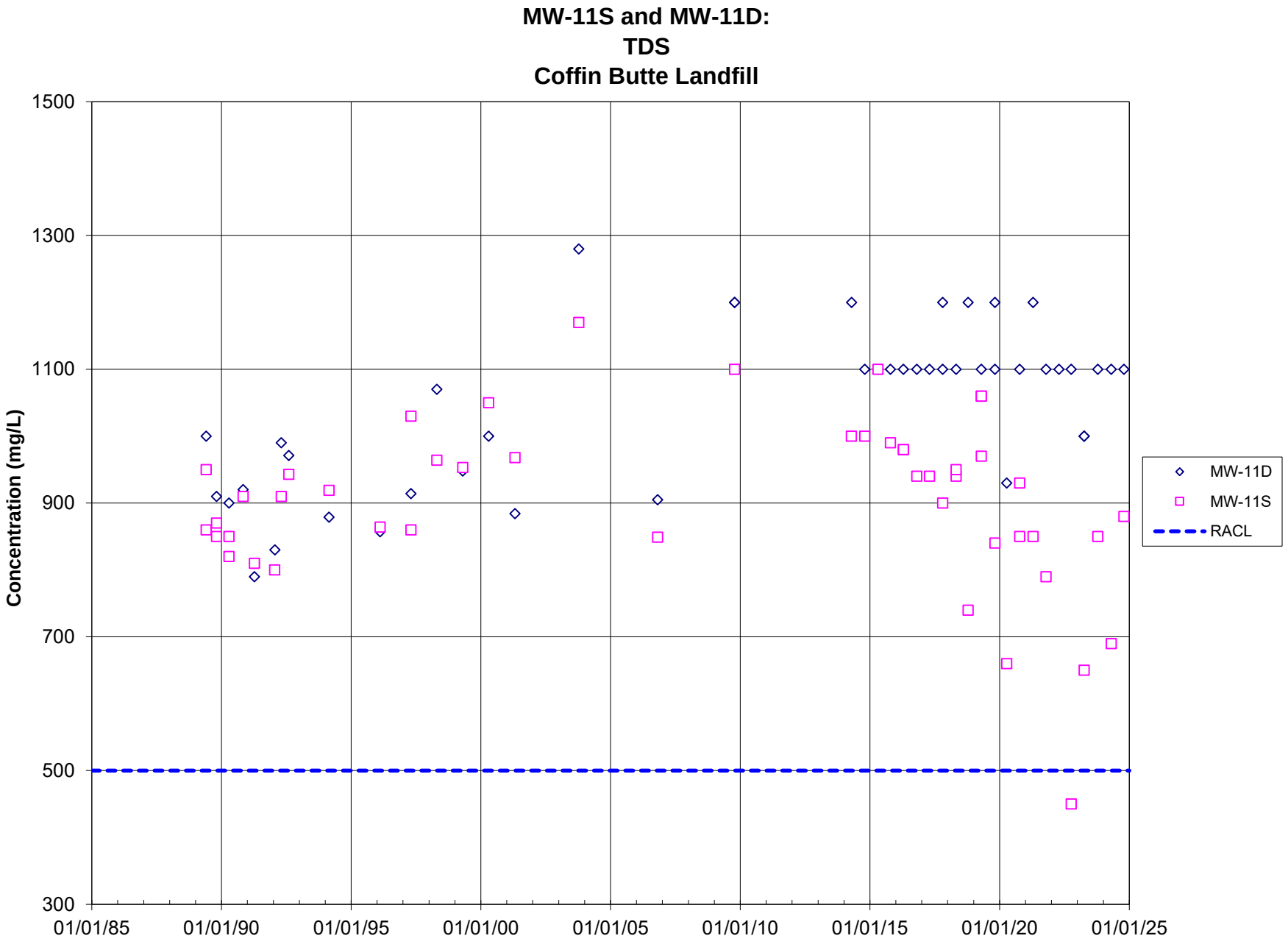

MW-10S and MW-10D:
Vinyl Chloride
Coffin Butte Landfill
Concentration (µg/L)
0
1
2
3
4
5
6
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25
MW-10S
MW-10D
RACL
ND=2.0 µg/L
ND=0.5 µg/L



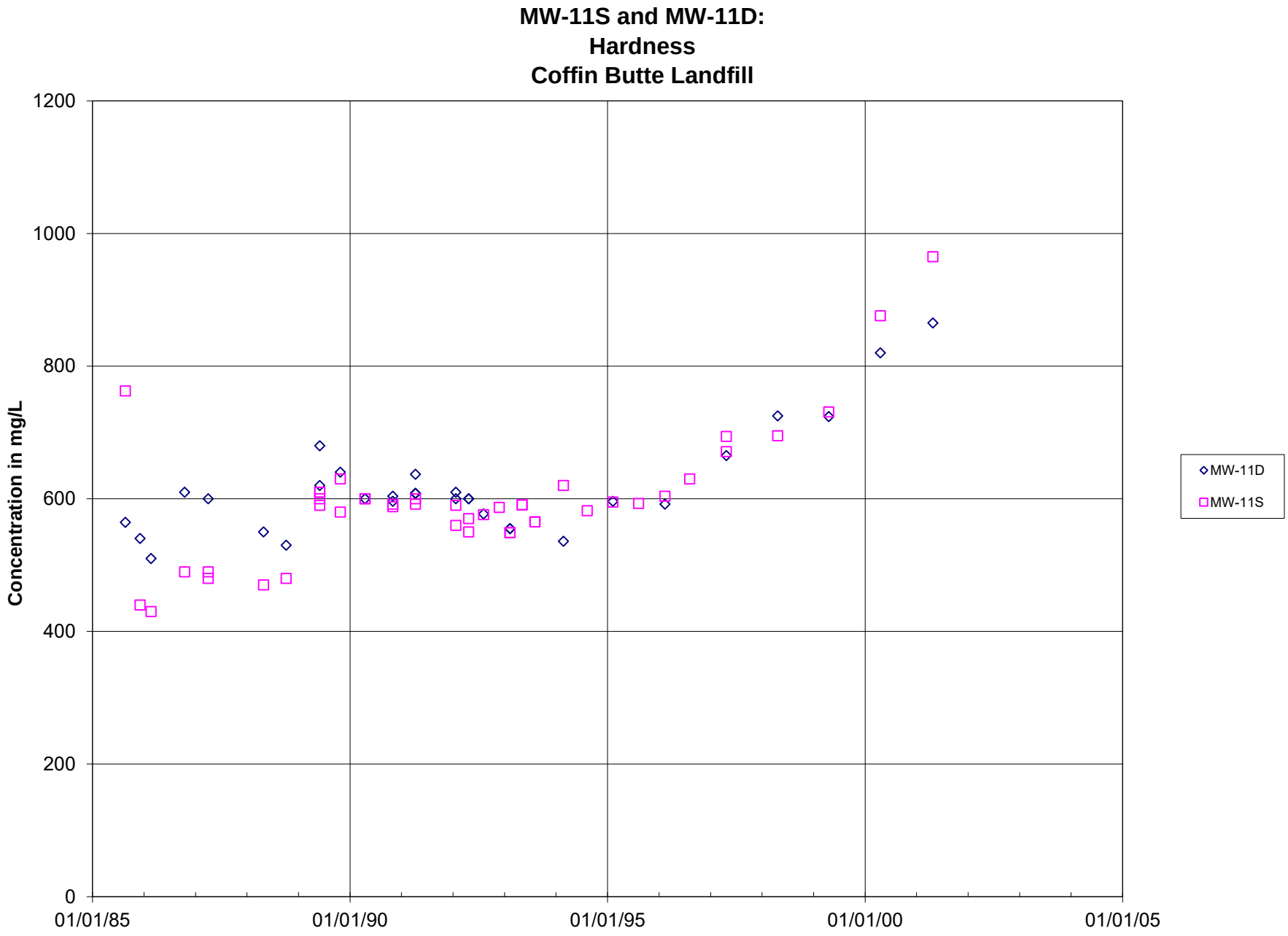
MW-11S&D/Bicarbonate



MW-11S&D/Chloride

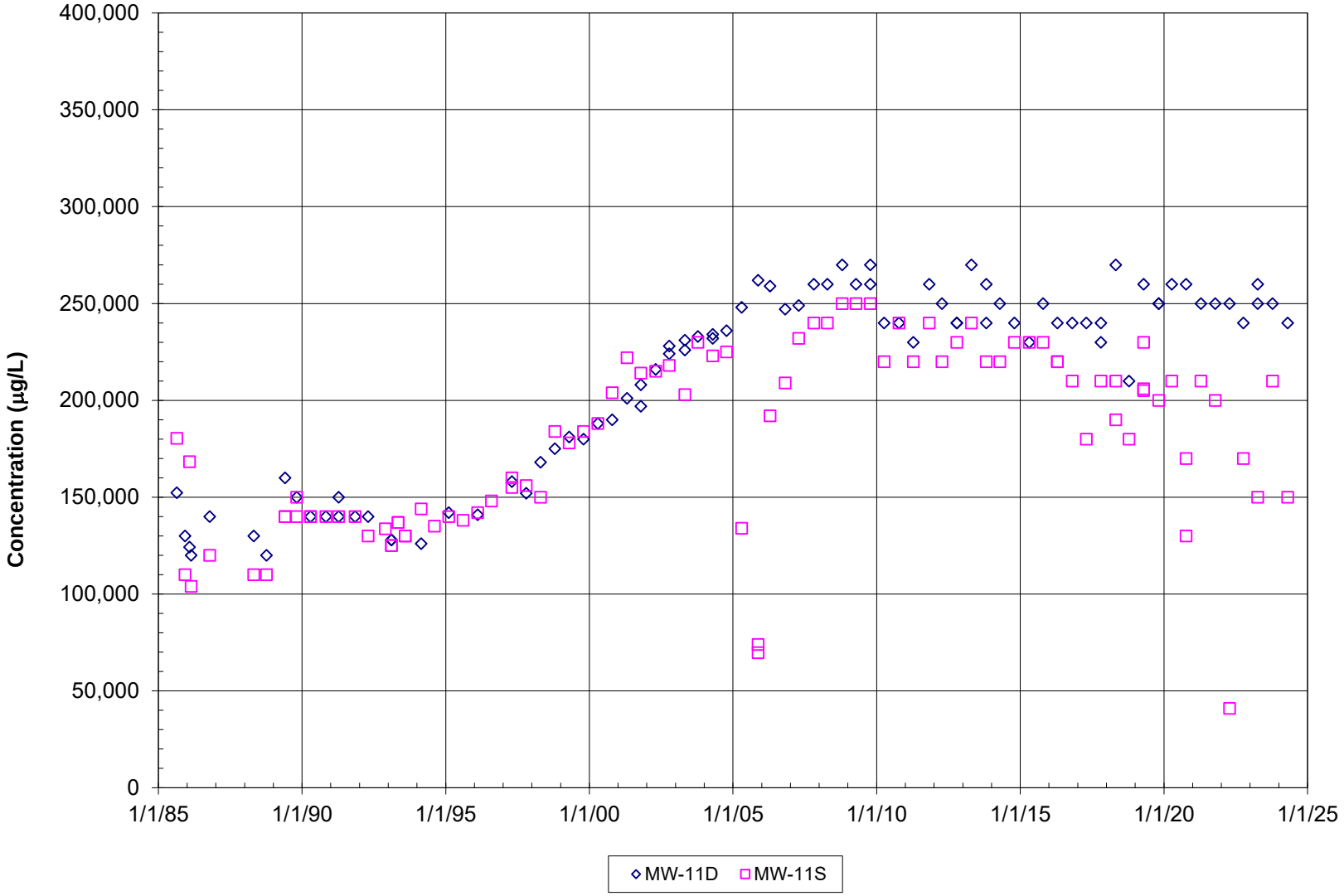

MW-11S and MW-11D:
TDS
Coffin Butte Landfill
Concentration (mg/L)
1500
1300
1100
900
700
500
300
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25
MW-11D
MW-11S
RACL

MW-11S&D/TDS

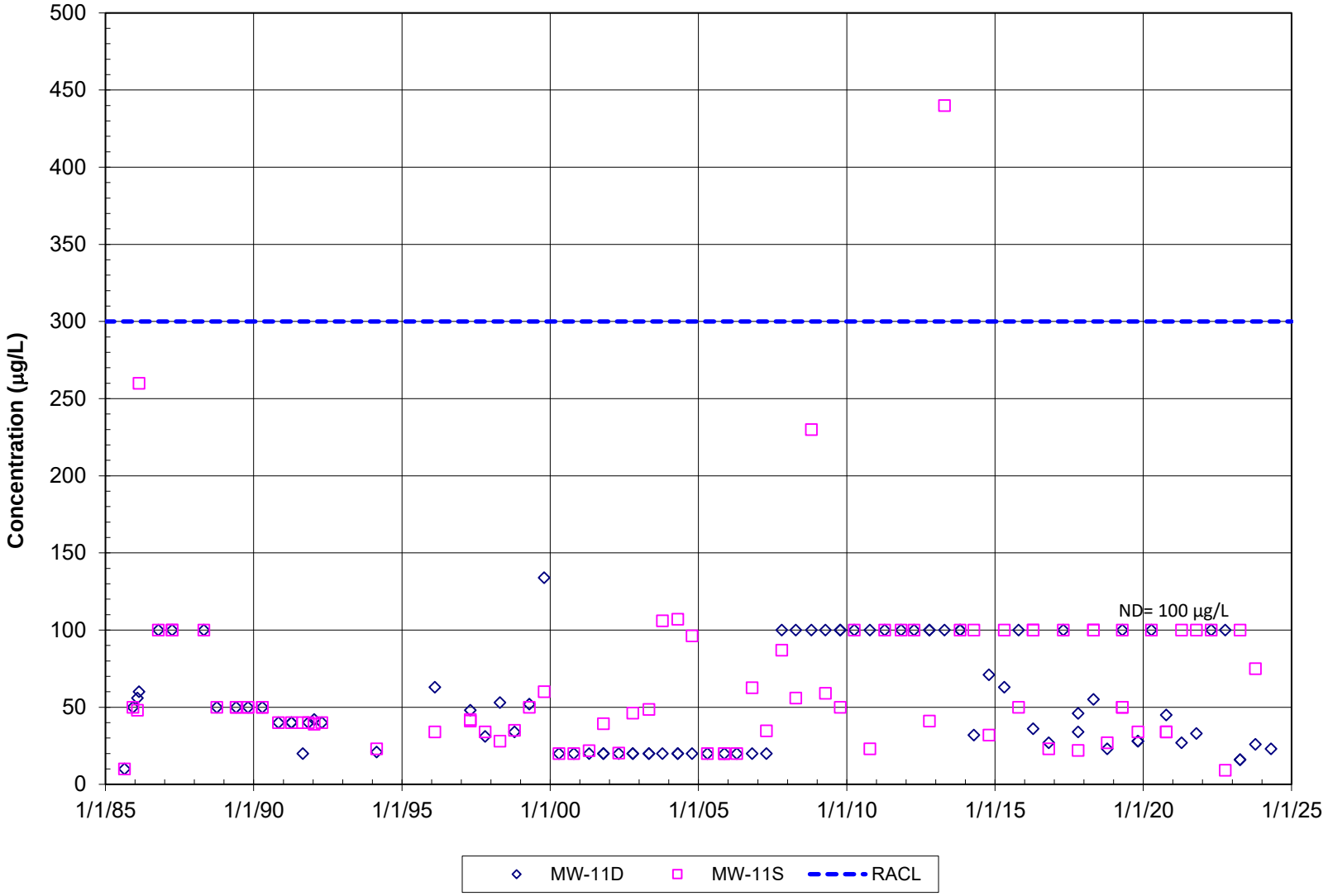


MW-11S&D/Hardness

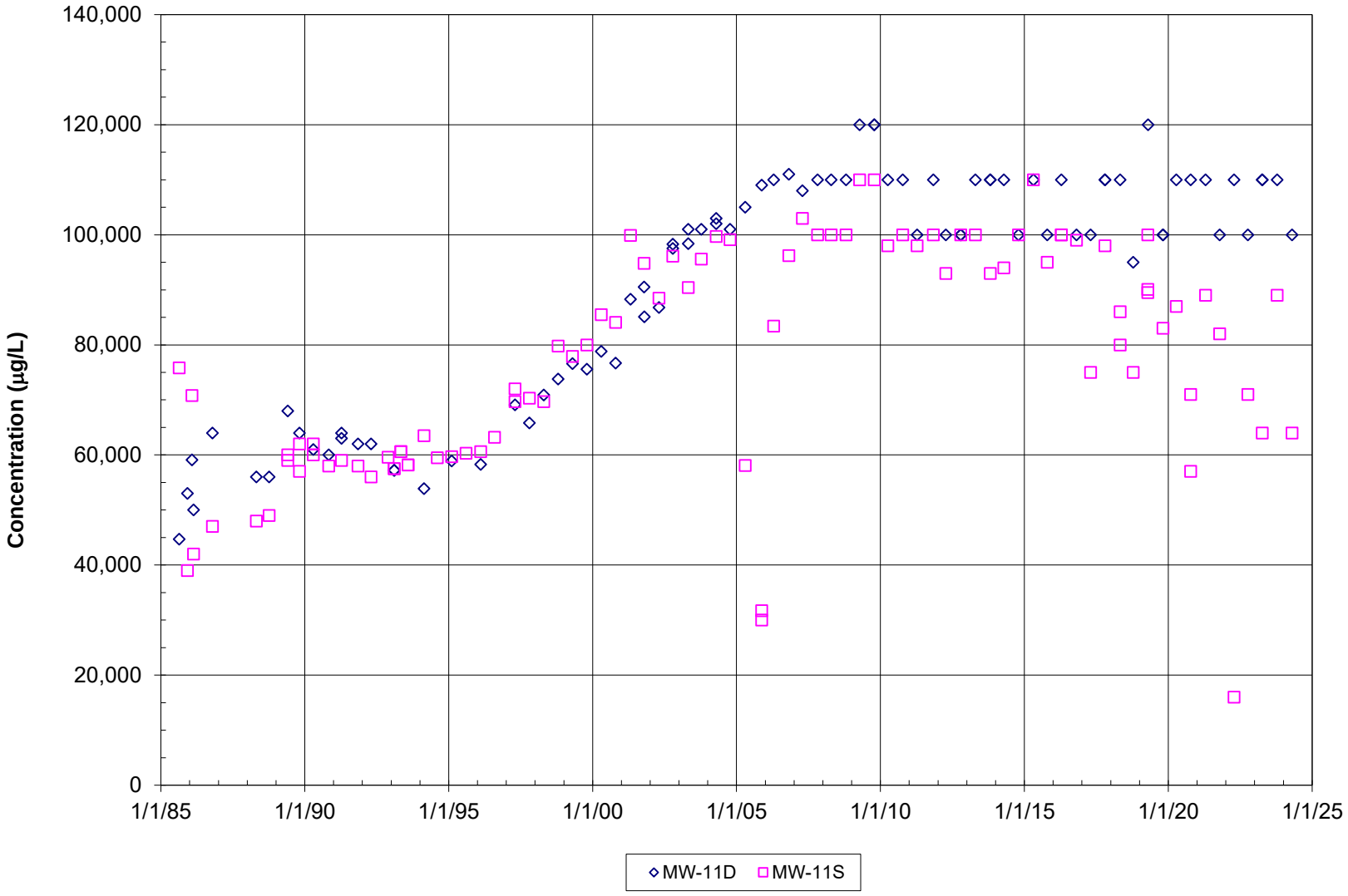
MW-11S and MW-11D:
Calcium
Coffin Butte Landfill



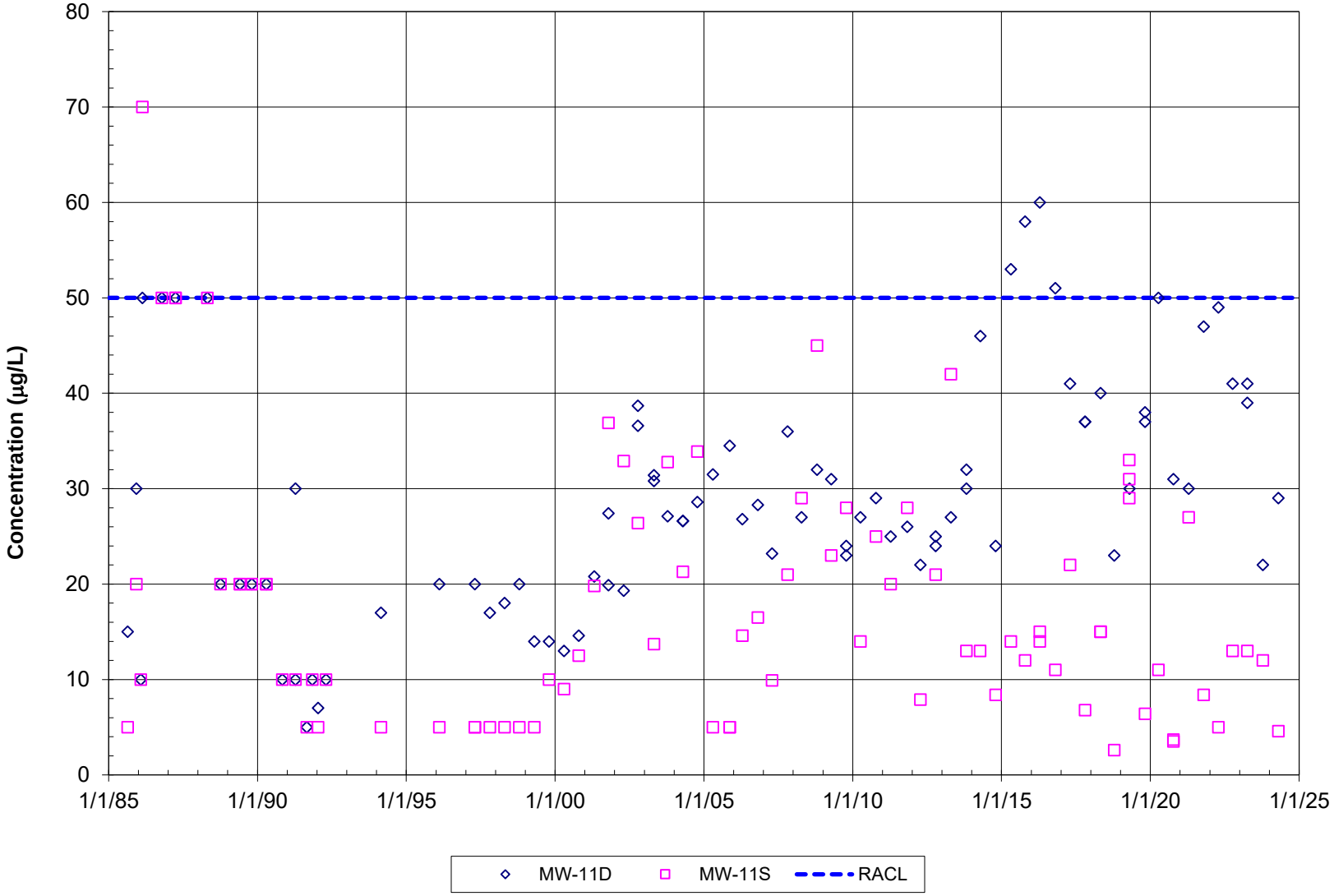
MW-11S and MW-11D:
Iron
Coffin Butte Landfill



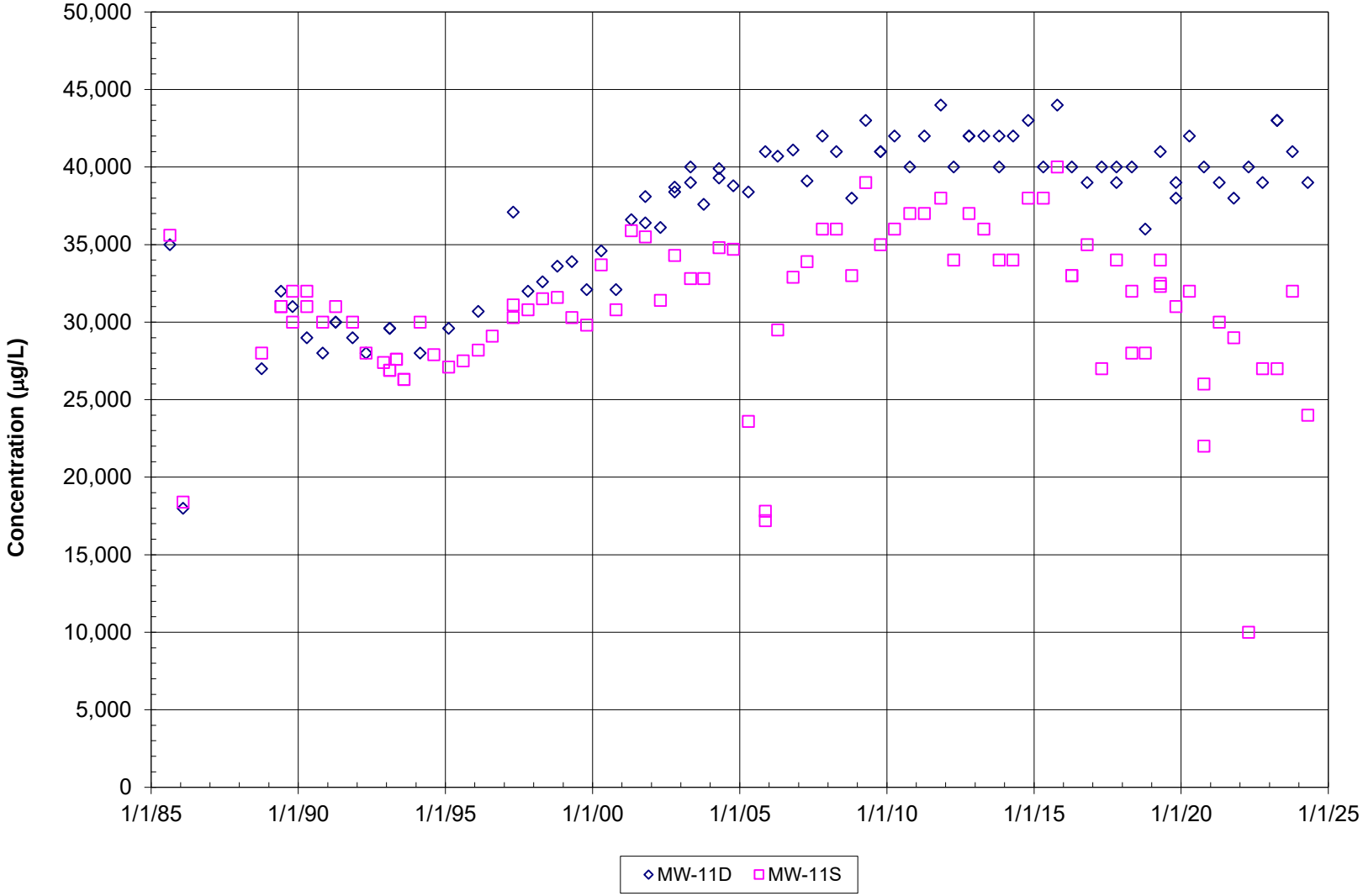
MW-11S and MW-11D:
Magnesium
Coffin Butte Landfill



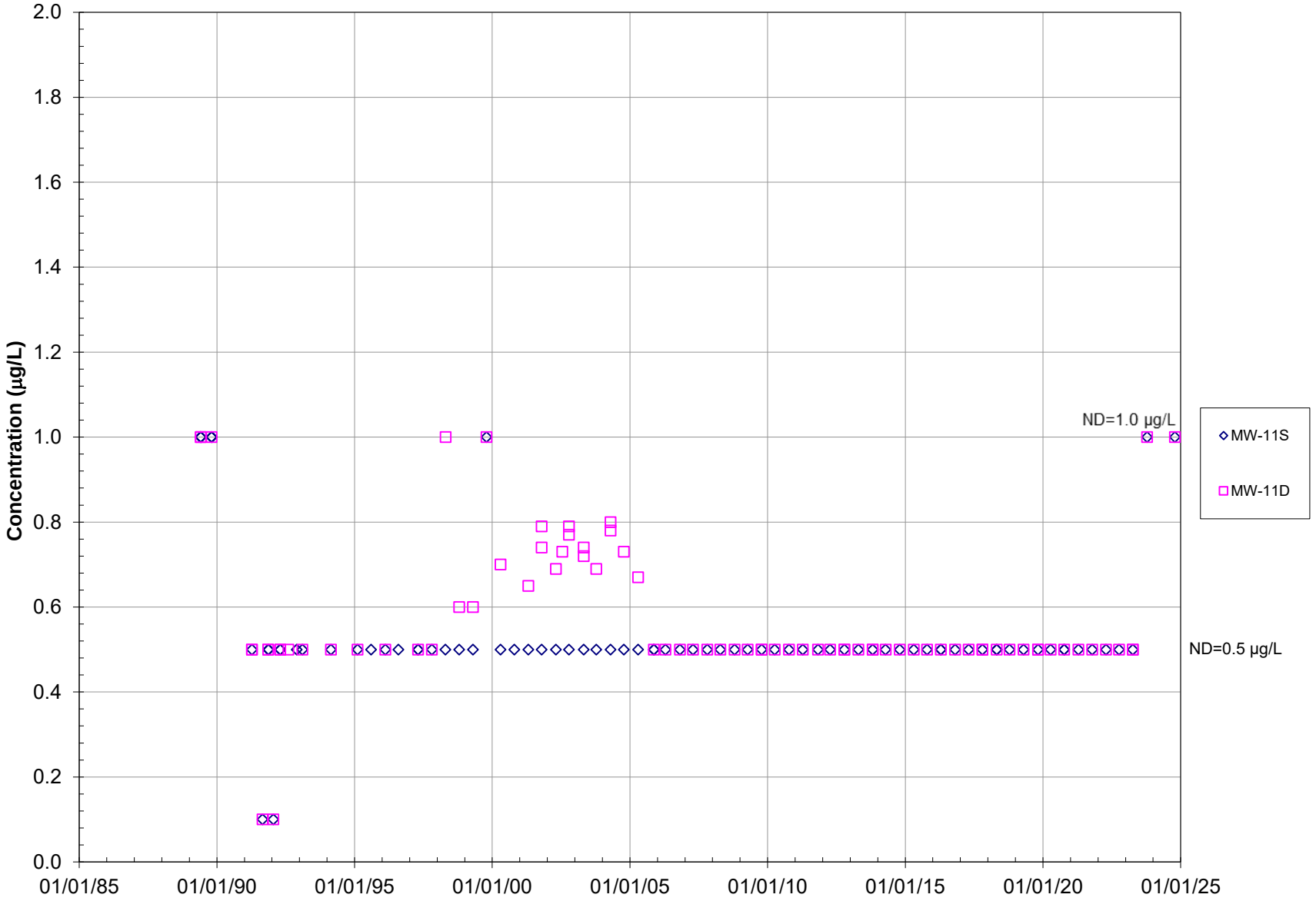
MW-11S and MW-11D:
Manganese
Coffin Butte Landfill



MW-11S and MW-11D:
Sodium
Coffin Butte Landfill

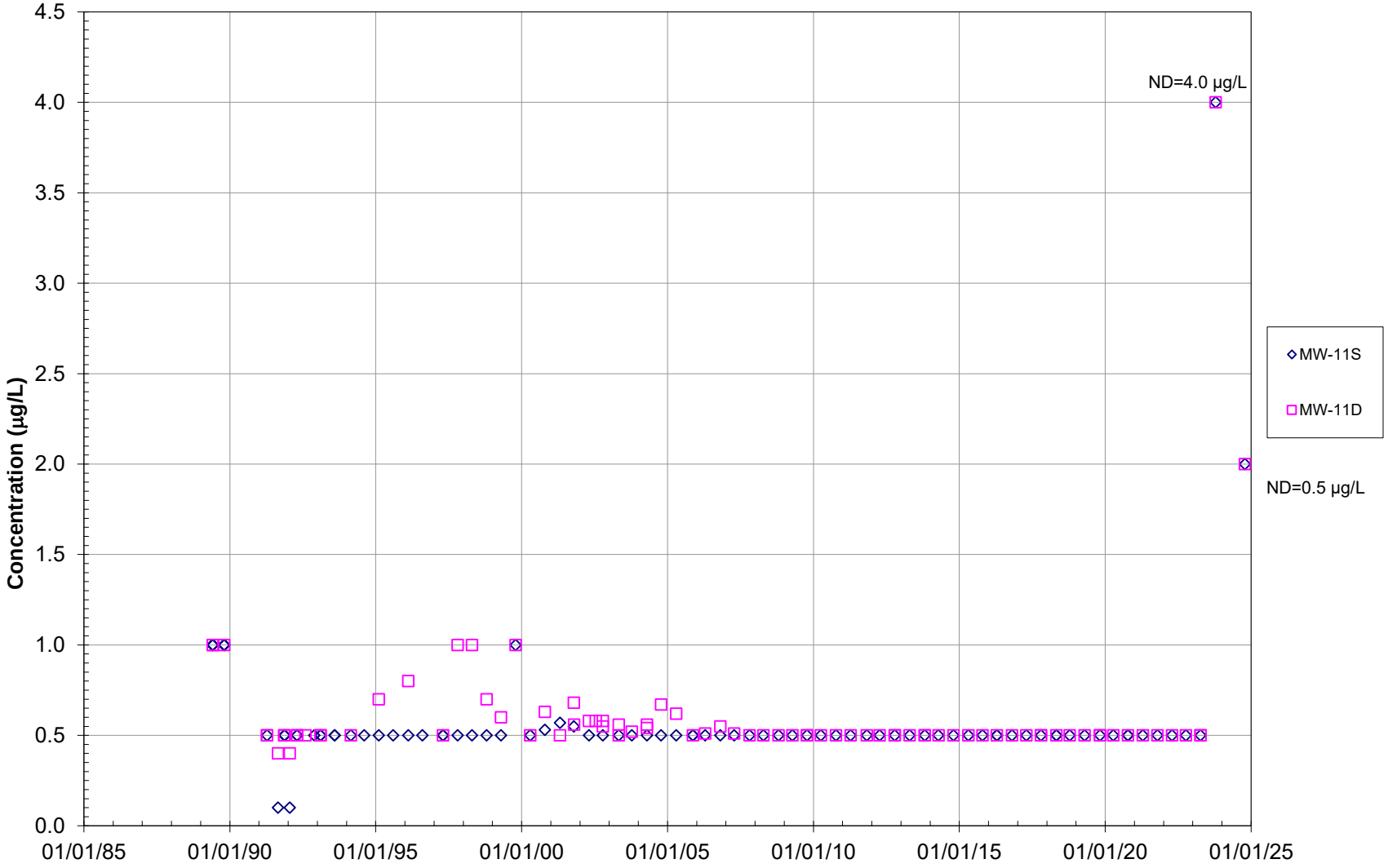


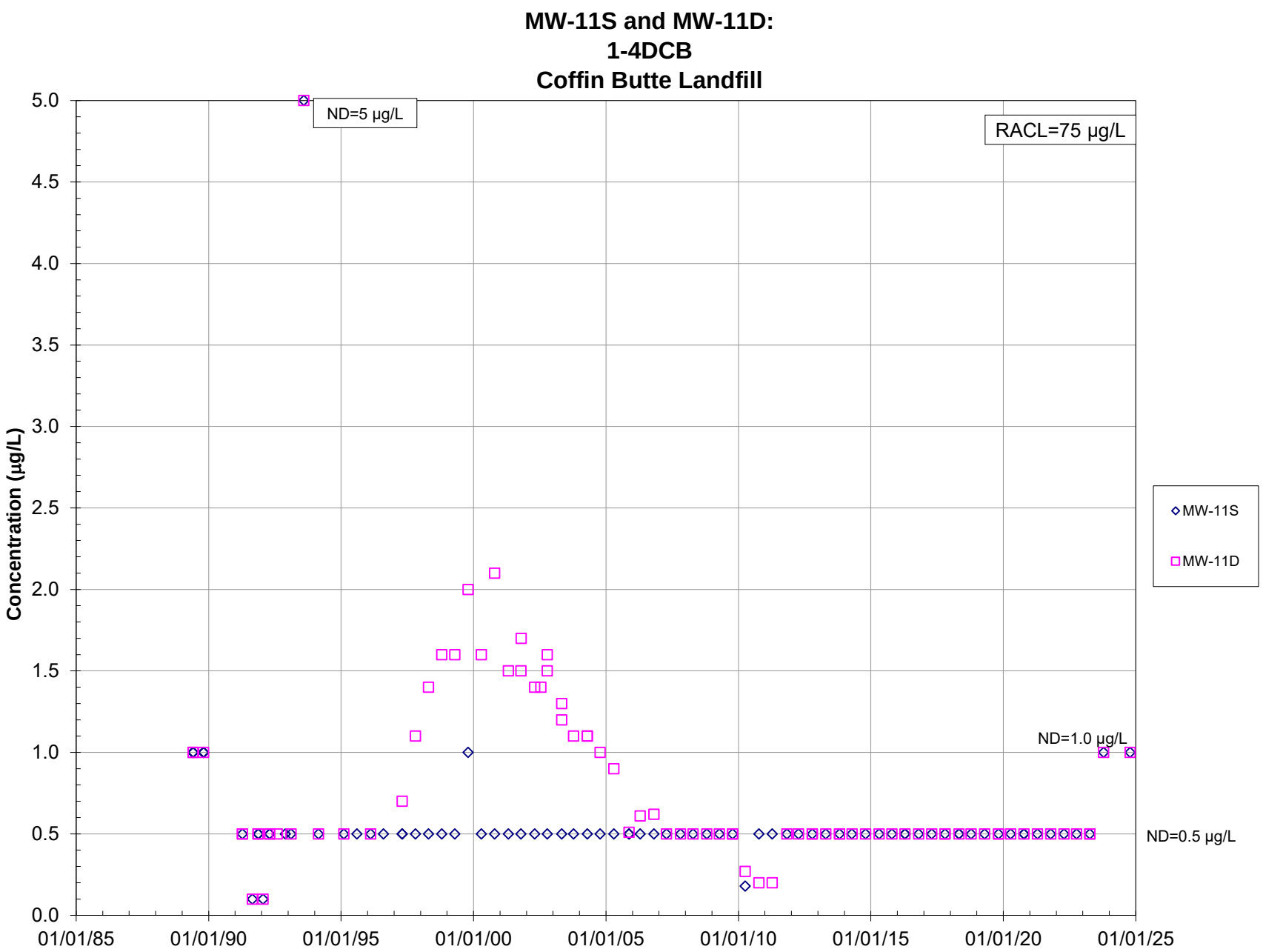
MW-11S and MW-11D:
Chlorobenzene
Coffin Butte Landfill



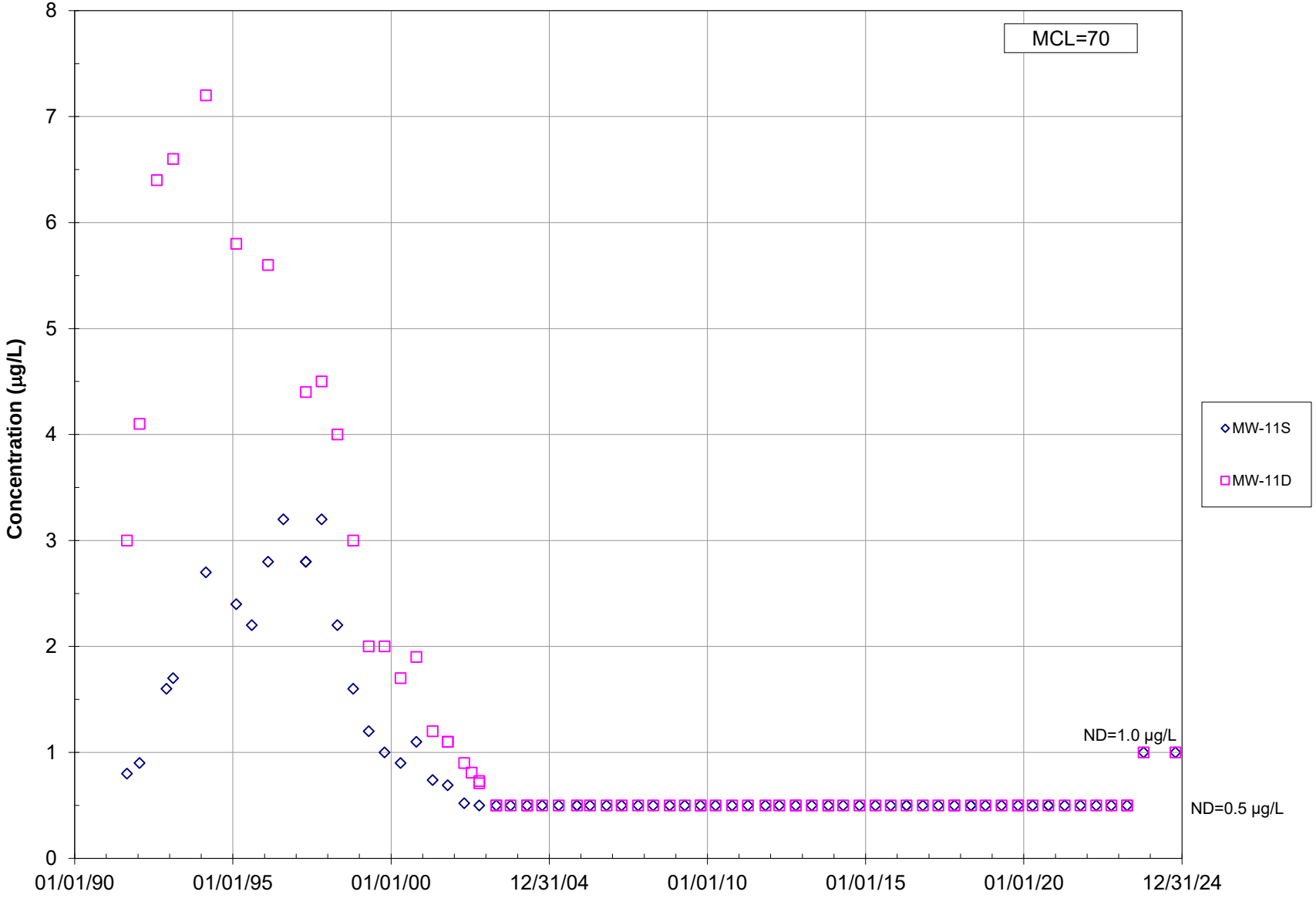
MW-11S&D/Chlorobenzene

MW-11S and MW-11D:
Chloroethane
Coffin Butte Landfill



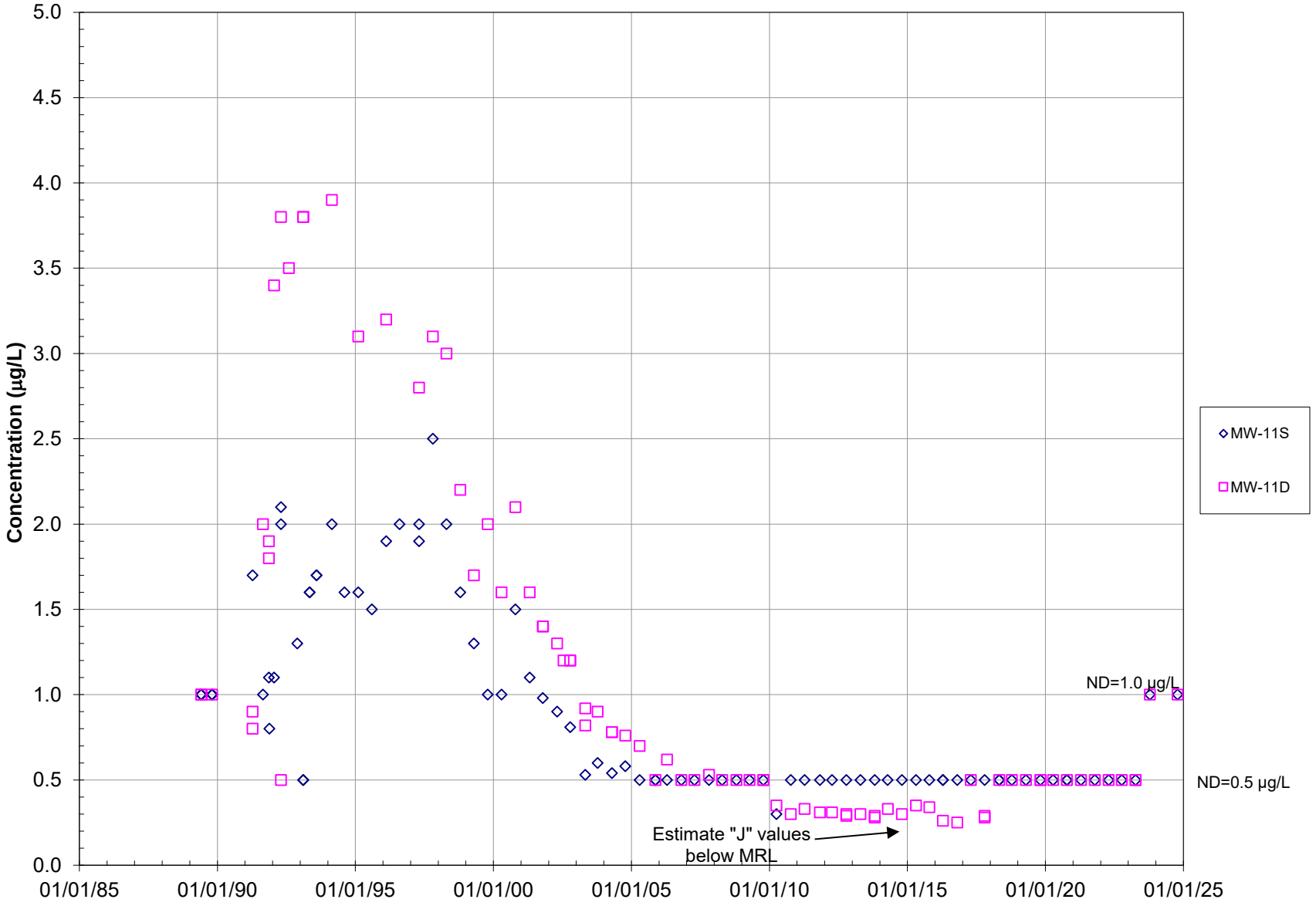

MW-11S and MW-11D:
1-4DCB
Coffin Butte Landfill
ND=5 µg/L
RACL=75 µg/L
ND=1.0 µg/L
ND=0.5 µg/L
MW-11S
MW-11D
Concentration (µg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25

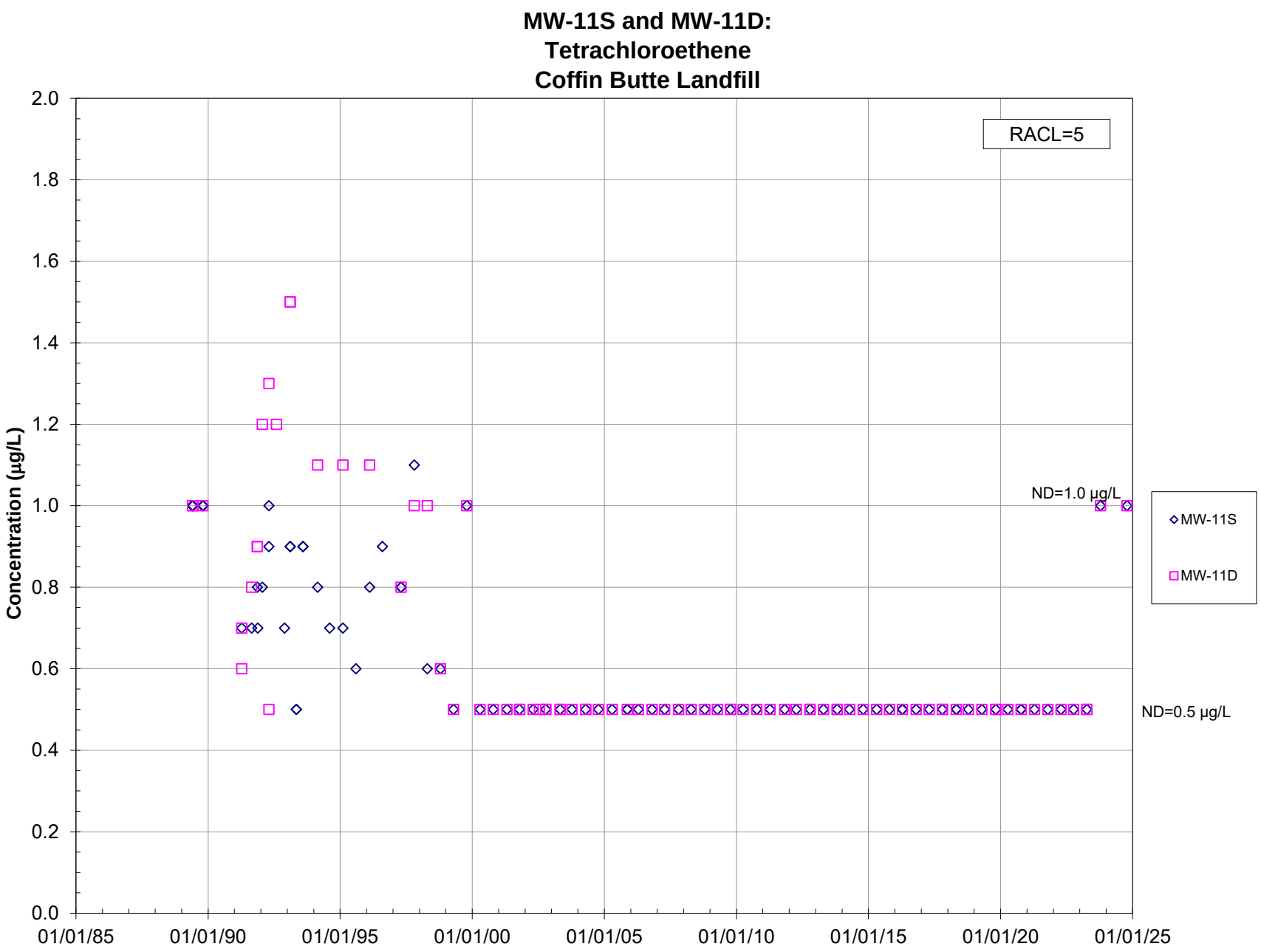
MW-11S and MW-11D:
cis-1,2-Dichloroethene
Coffin Butte Landfill

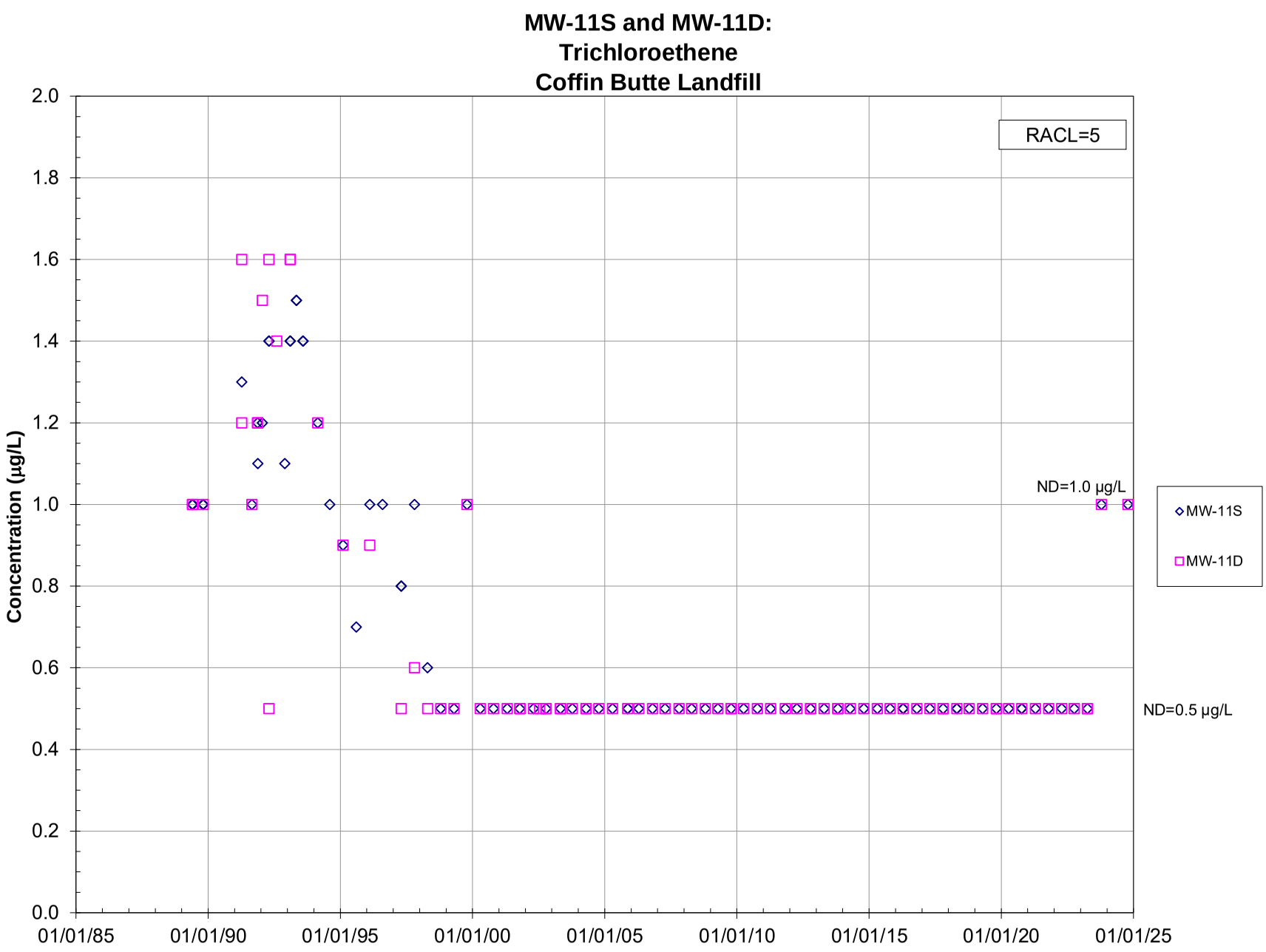


MW-11S&D/cis-1,2-Dichloroethene

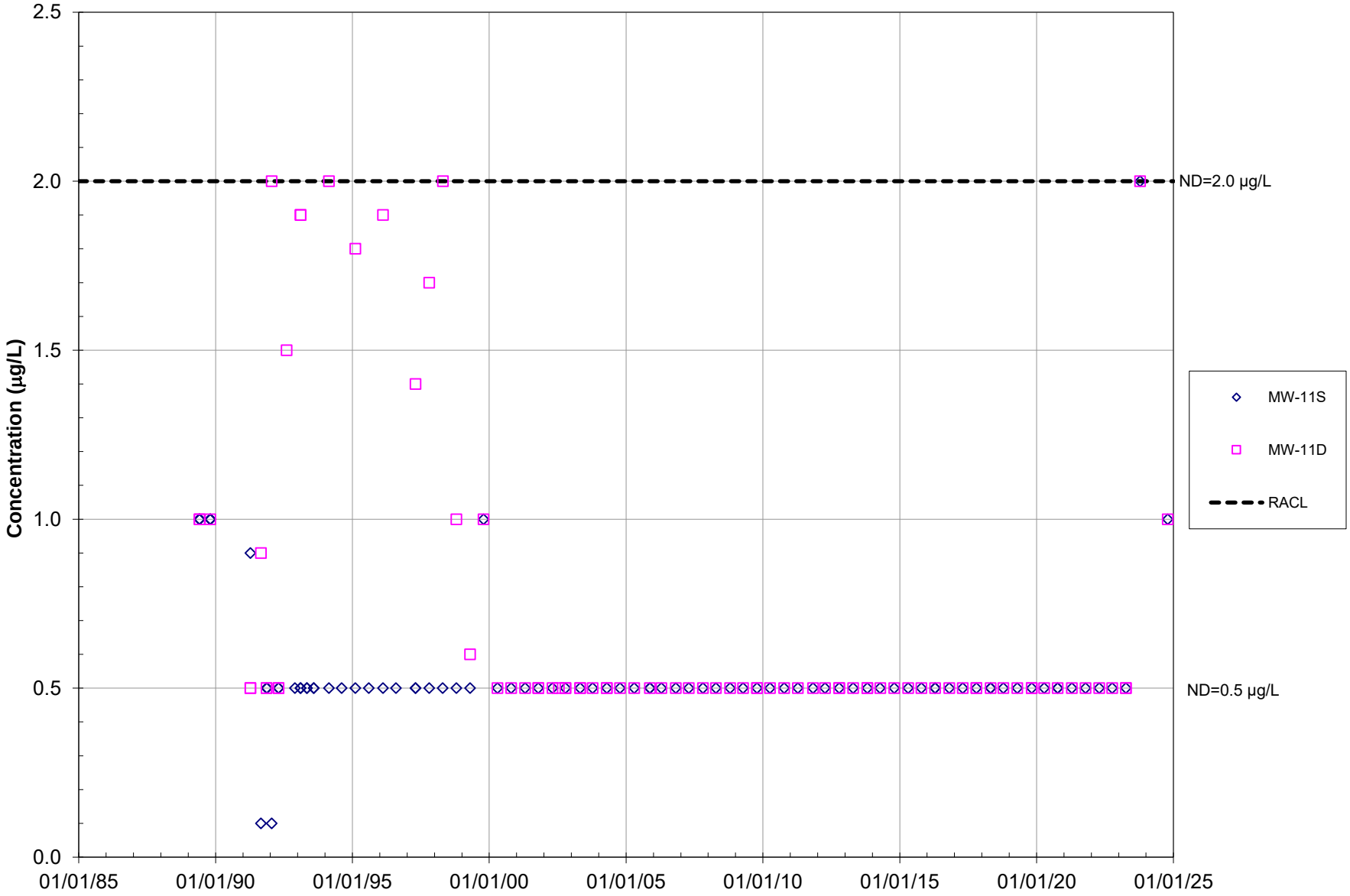
MW-11S and MW-11D:
1,1-Dichloroethane
Coffin Butte Landfill

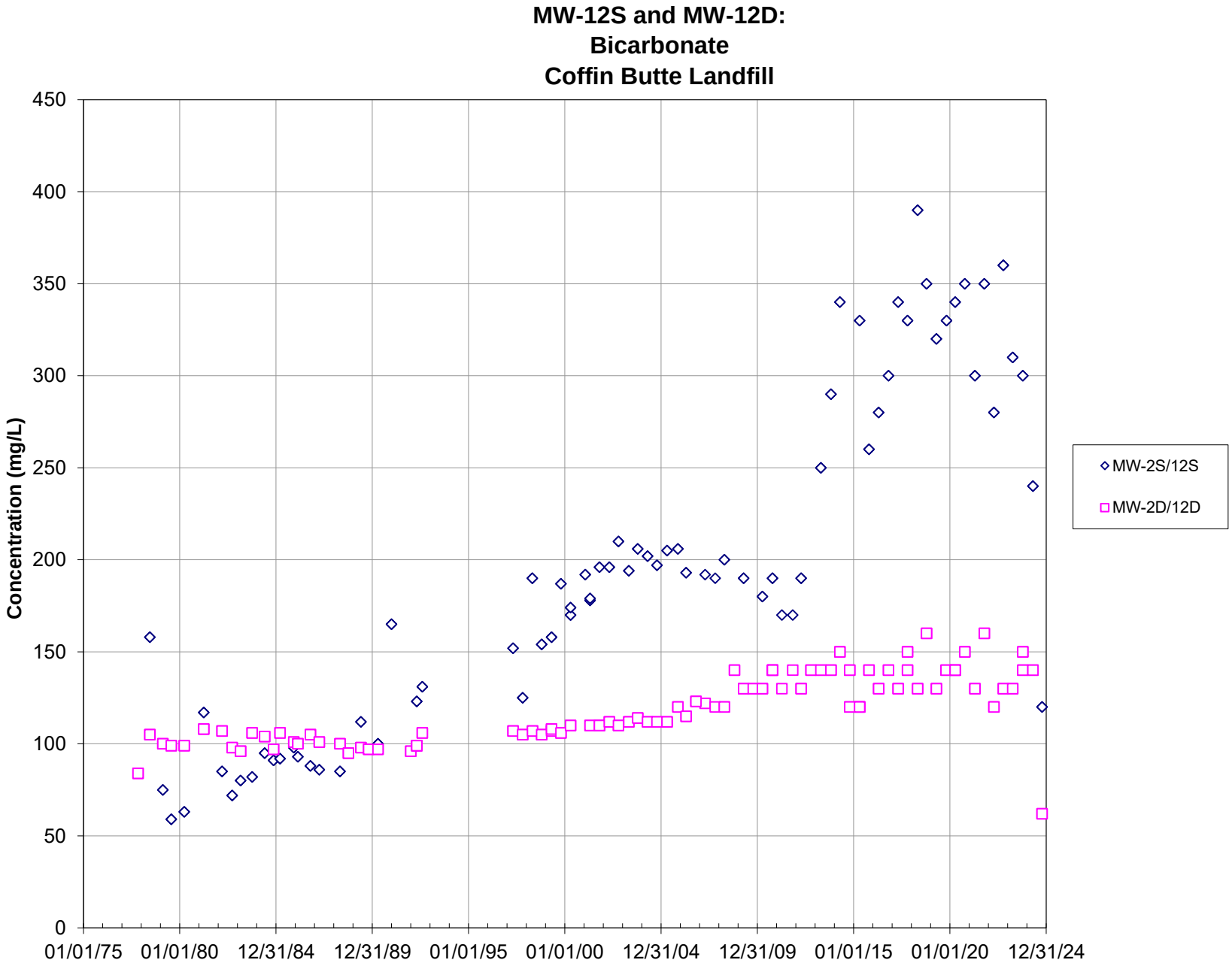



MW-11S and MW-11D:
Tetrachloroethene
Coffin Butte Landfill
RACL=5
ND=1.0 µg/L
ND=0.5 µg/L
MW-11S
MW-11D
Concentration (µg/L)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25

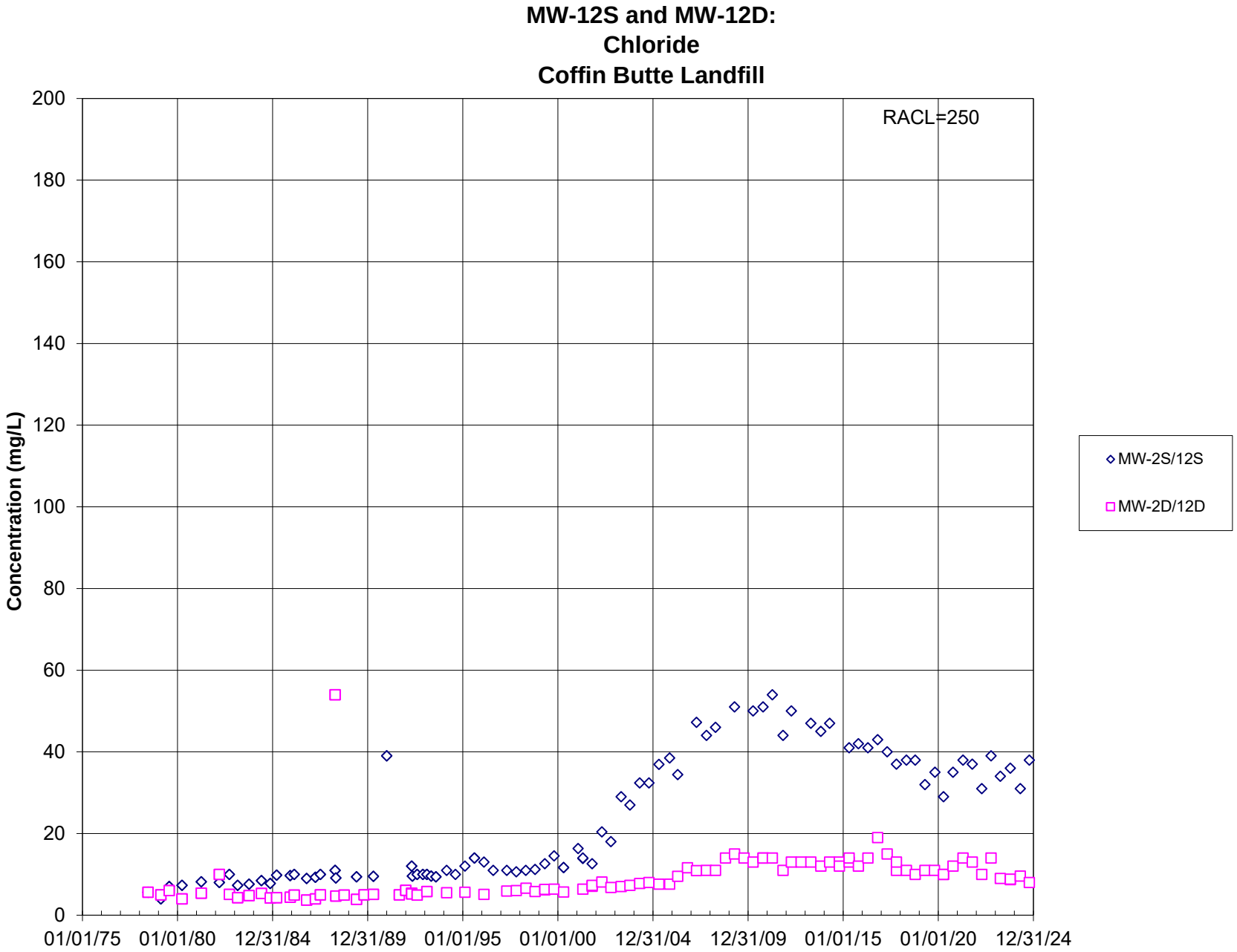

MW-11S and MW-11D:
Trichloroethene
Coffin Butte Landfill
RACL=5
ND=1.0 µg/L
ND=0.5 µg/L
MW-11S
MW-11D
Concentration (µg/L)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
01/01/85
01/01/90
01/01/95
01/01/00
01/01/05
01/01/10
01/01/15
01/01/20
01/01/25

MW-11S and MW-11D:
Vinyl Chloride
Coffin Butte Landfill

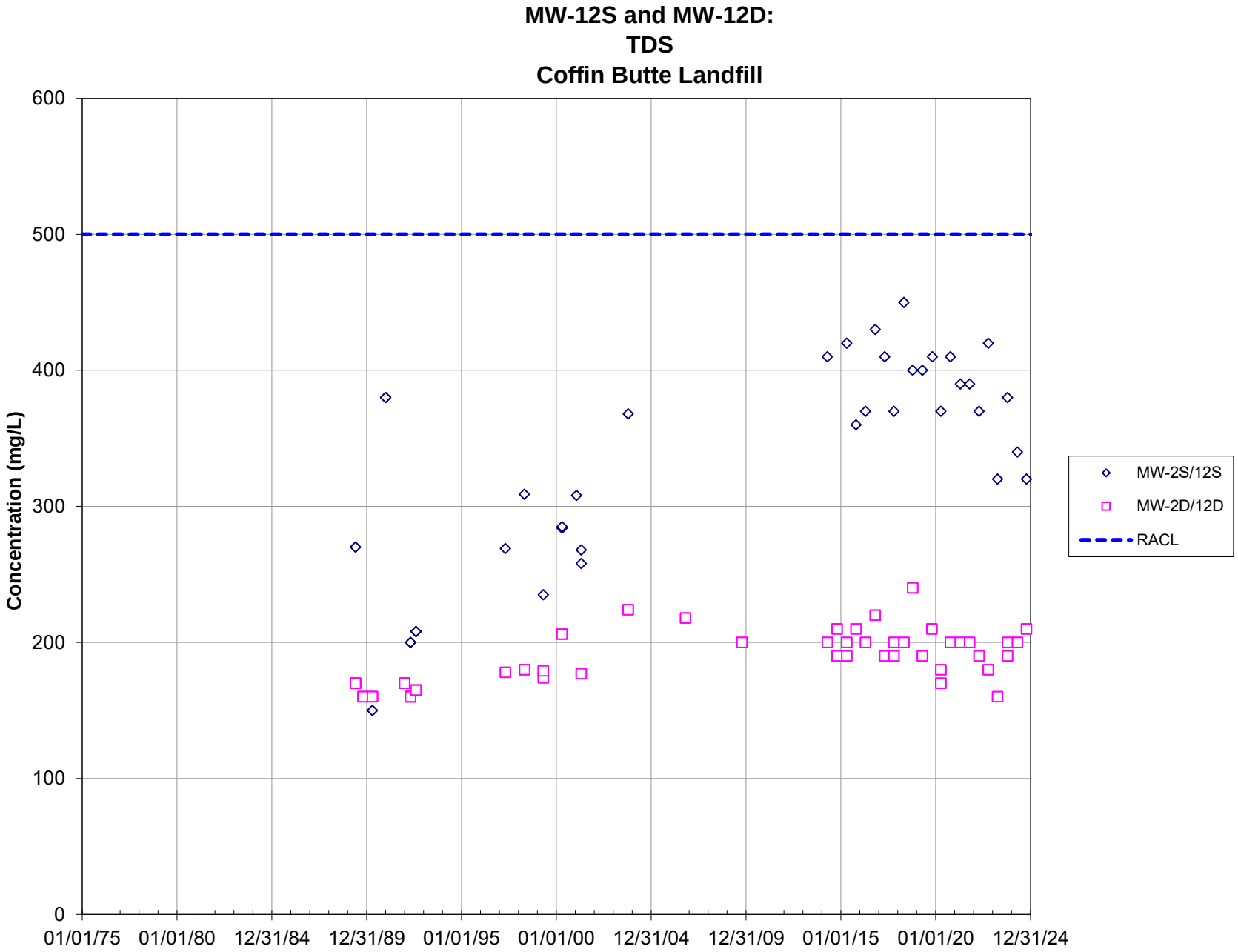




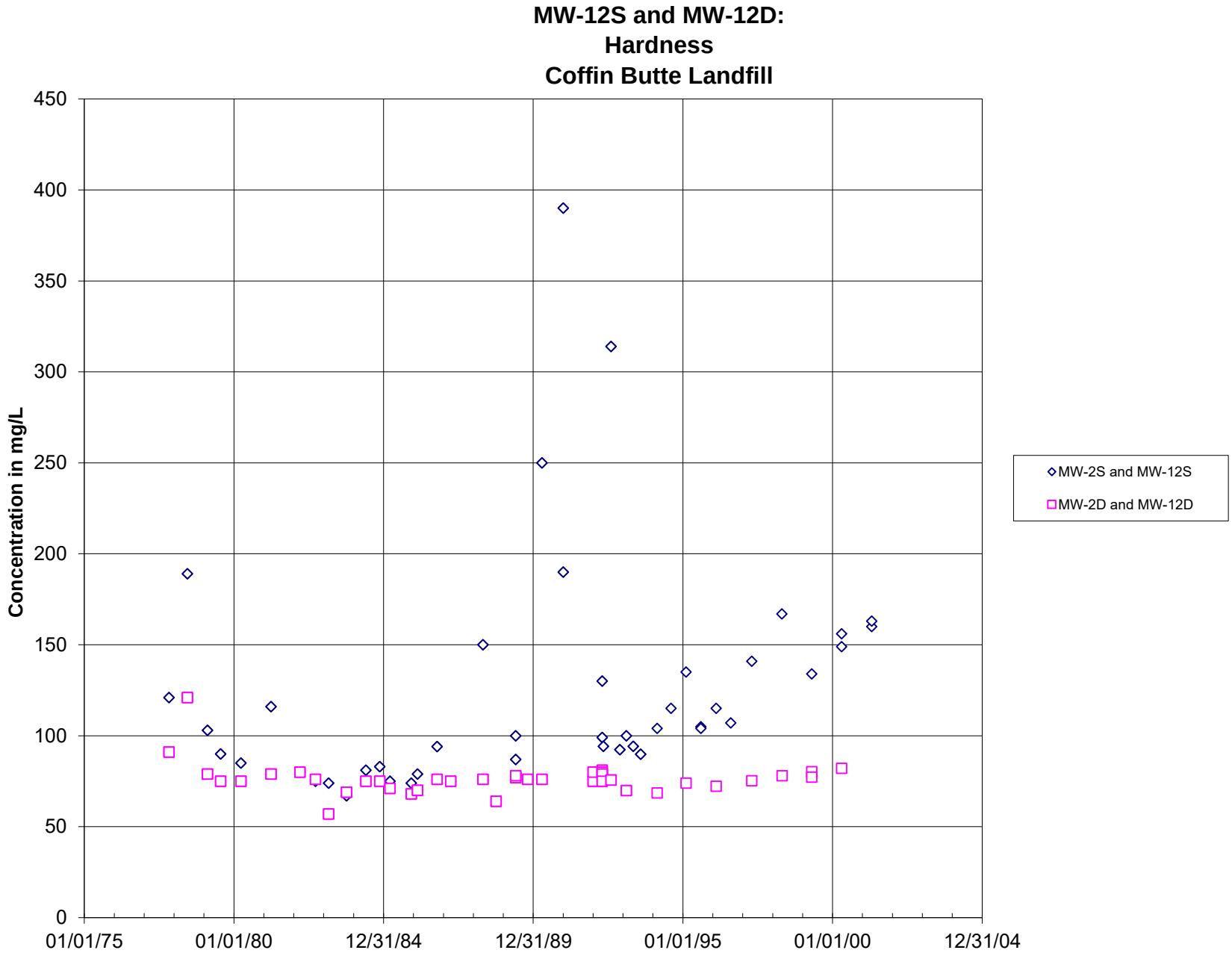
MW-12S&D\Bicarbonate



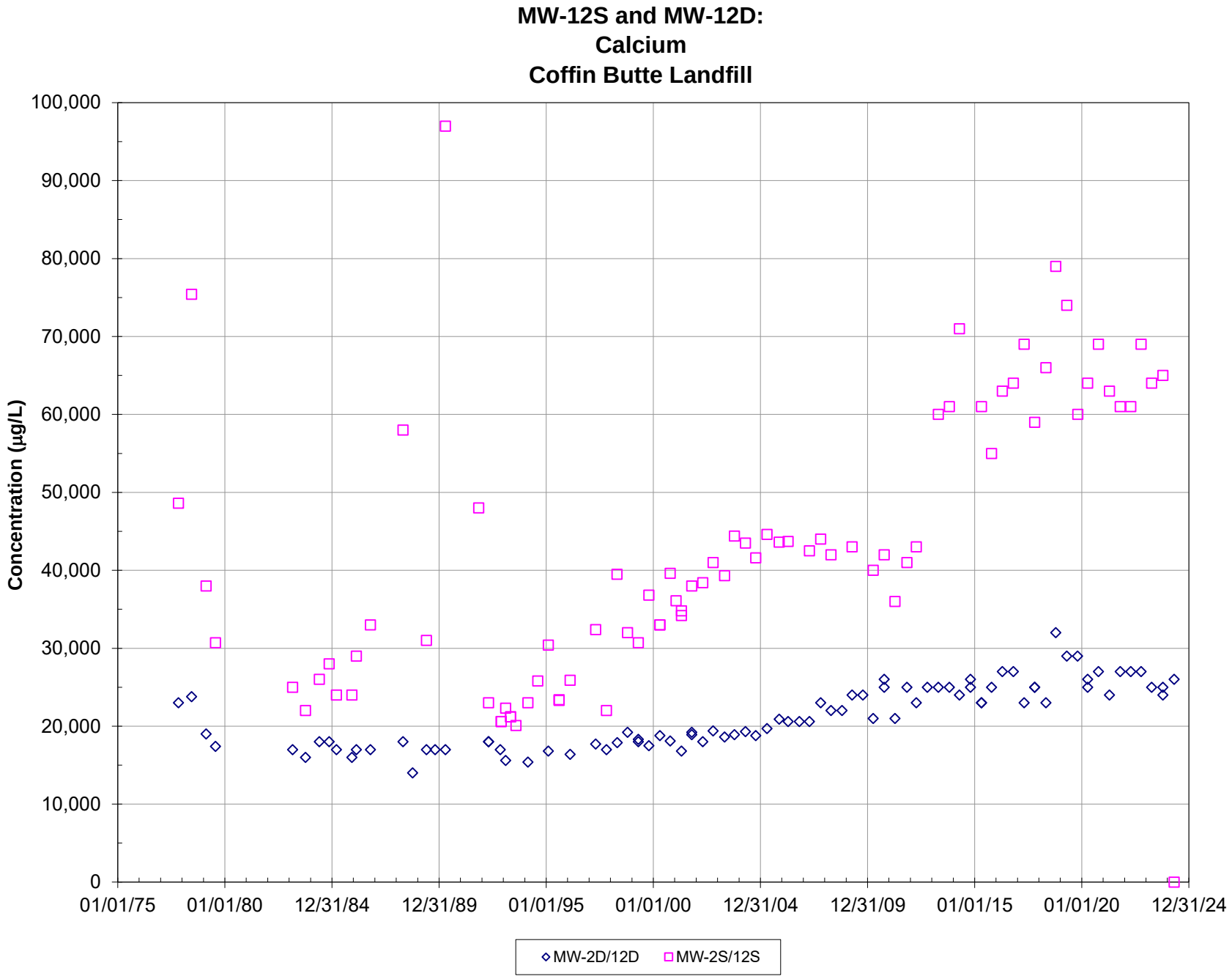
MW-12S&D\Chloride


MW-12S and MW-12D:
TDS
Coffin Butte Landfill
Concentration (mg/L)
600
500
400
300
200
100
0
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24
MW-2S/12S
MW-2D/12D
RACL

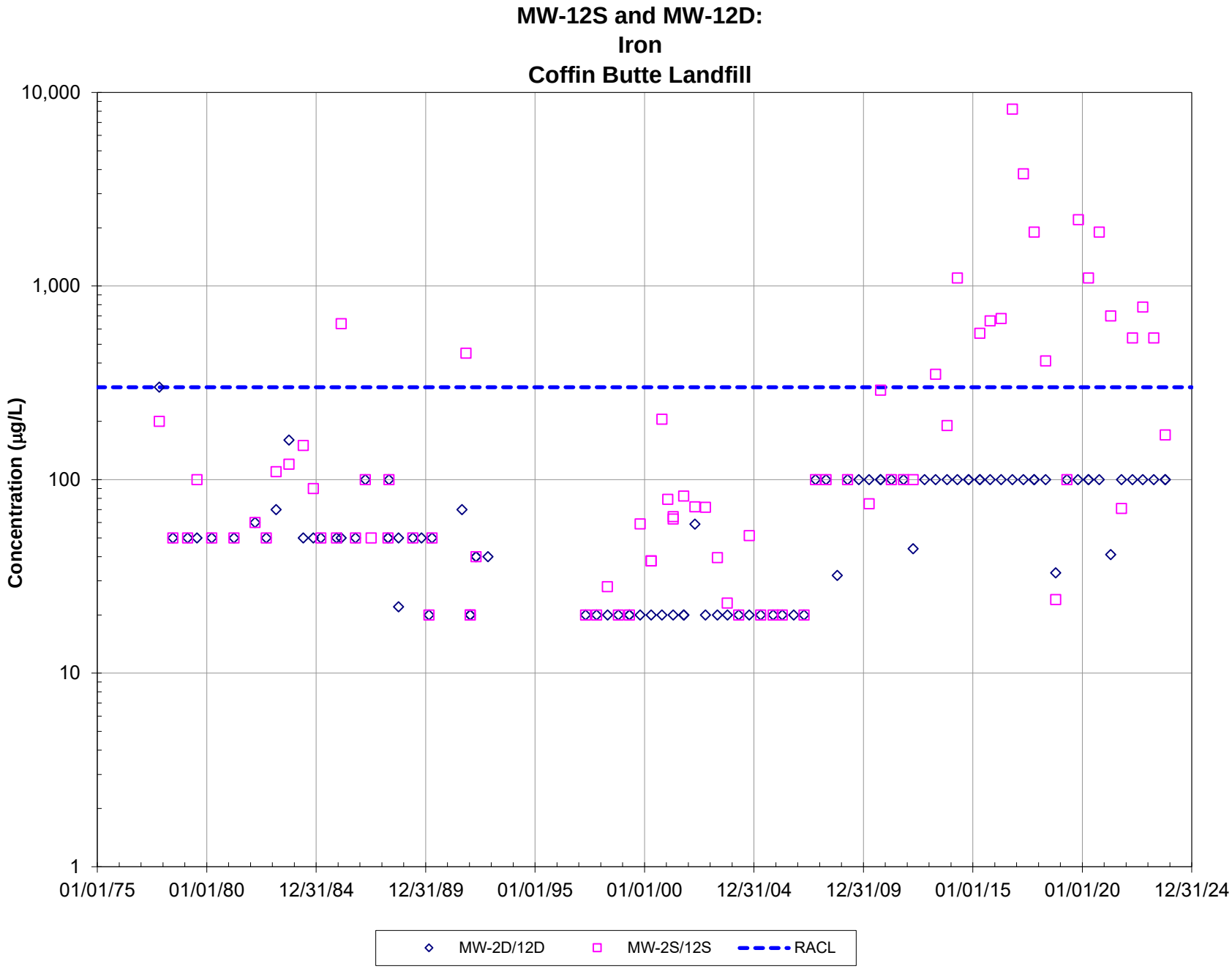
MW-12S&D\TDS



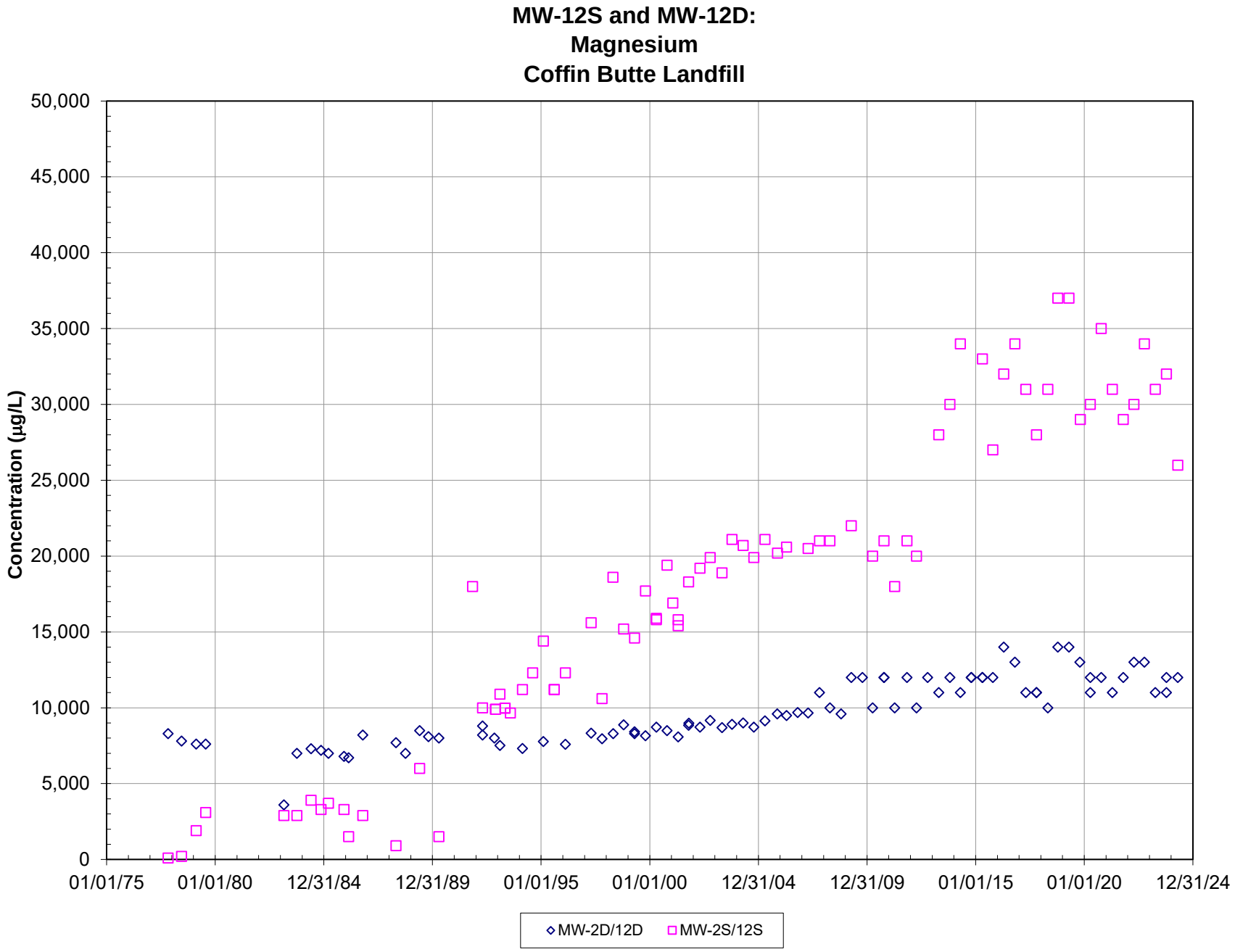
MW-12S&D\Hardness

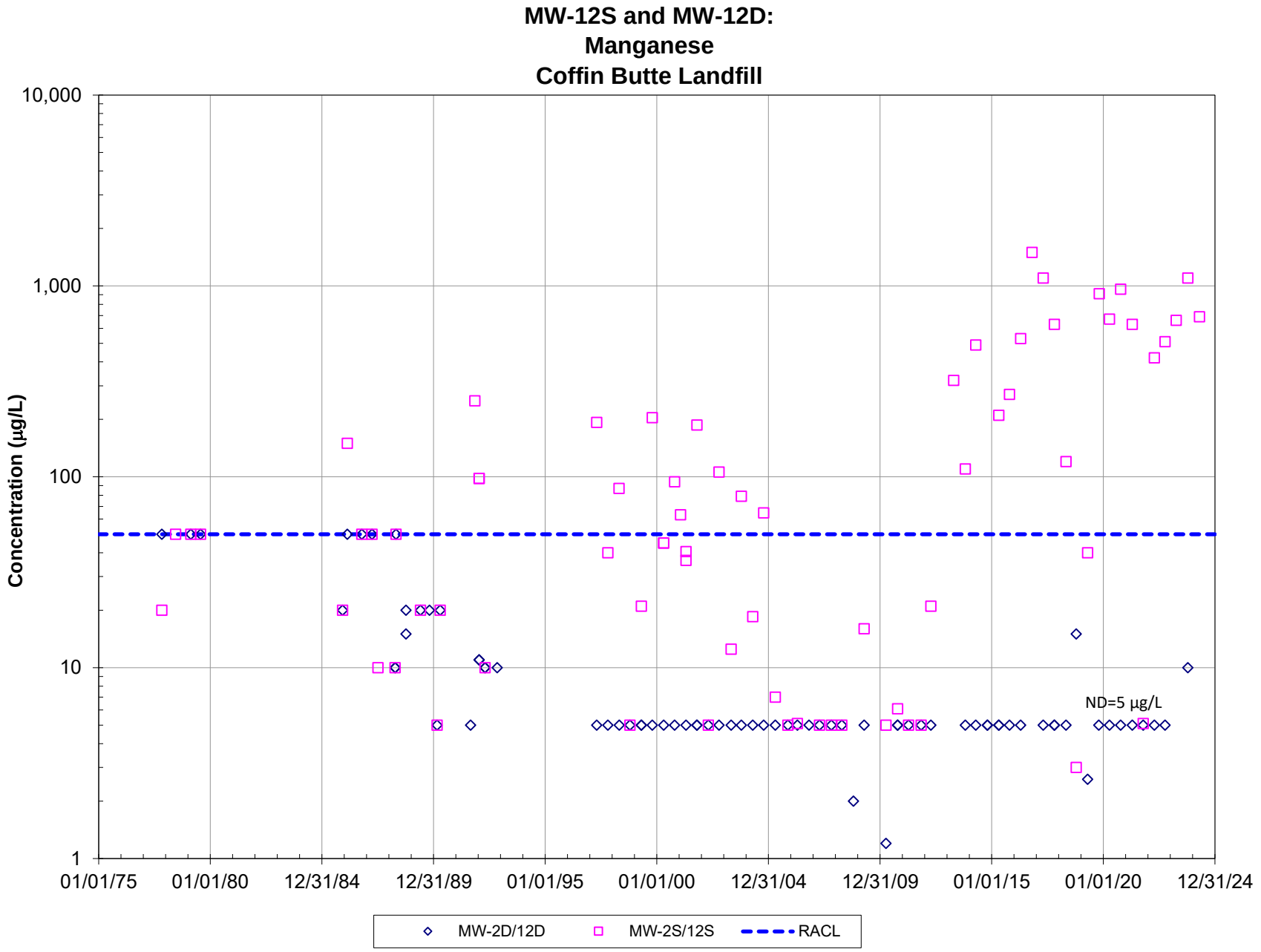


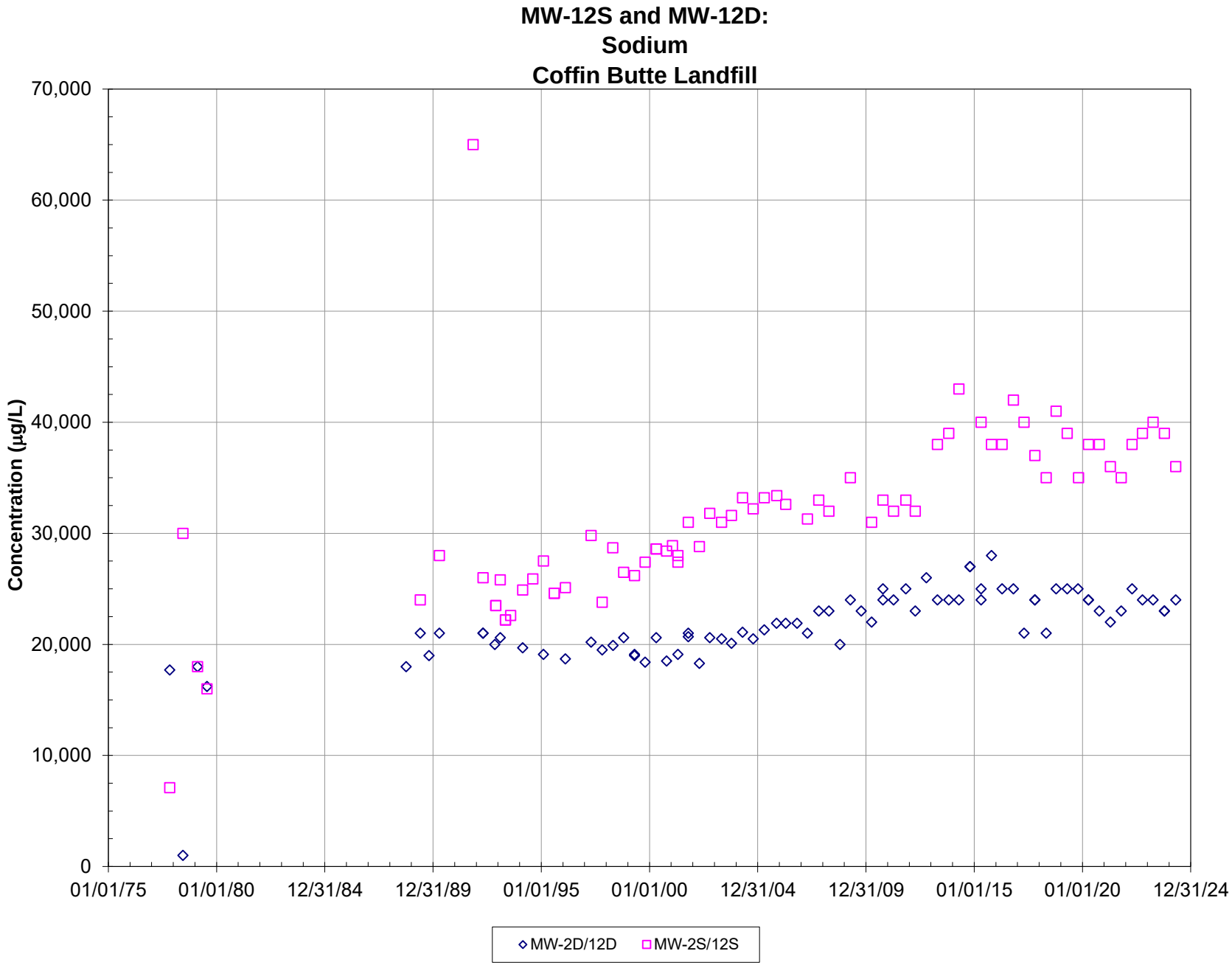
MW-12S&D/Calcium


MW-12S and MW-12D:
Iron
Coffin Butte Landfill
Concentration (µg/L)
10,000
1,000
100
10
1
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24
MW-2D/12D
MW-2S/12S
RACL

MW-12S&D/Iron

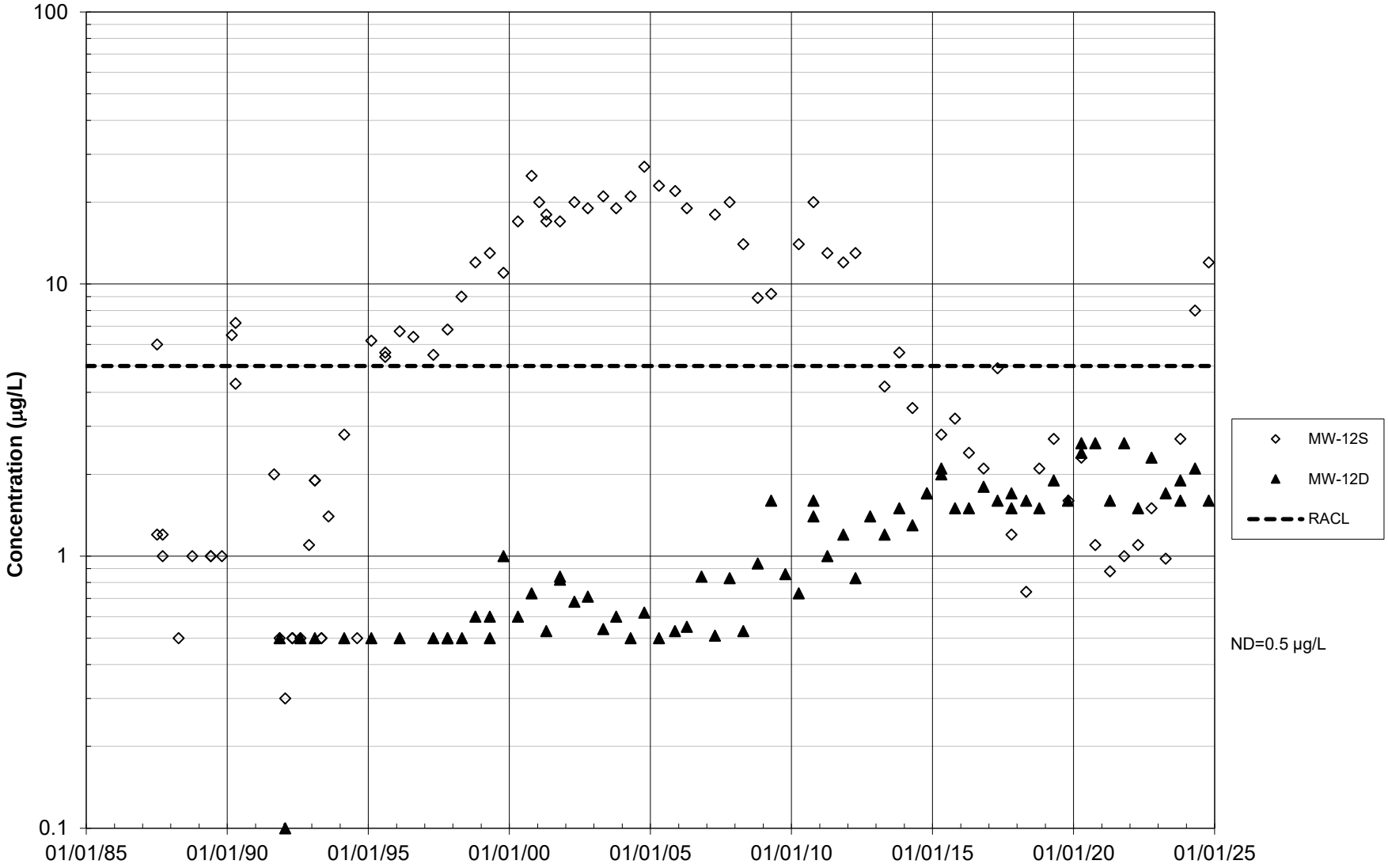

MW-12S and MW-12D:
Magnesium
Coffin Butte Landfill
Concentration (µg/L)
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24
MW-2D/12D
MW-2S/12S


MW-12S and MW-12D:
Manganese
Coffin Butte Landfill
Concentration (µg/L)
10,000
1,000
100
10
1
01/01/75
01/01/80
12/31/84
12/31/89
01/01/95
01/01/00
12/31/04
12/31/09
01/01/15
01/01/20
12/31/24
ND=5 µg/L
MW-2D/12D
MW-2S/12S
RACL



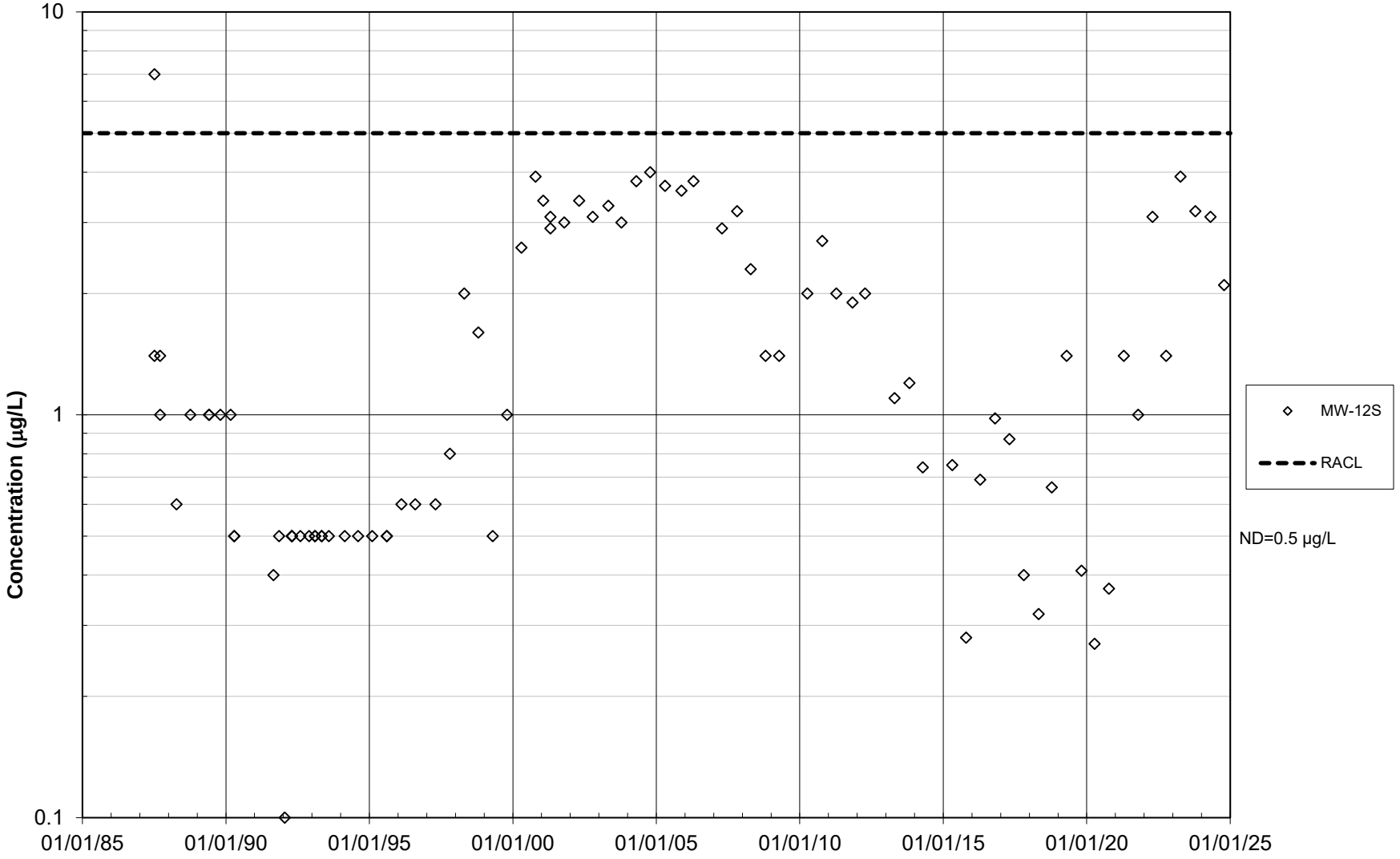
MW-12S&D/Sodium

MW-2S/12S and 2D/12D:
PCE
Coffin Butte Landfill

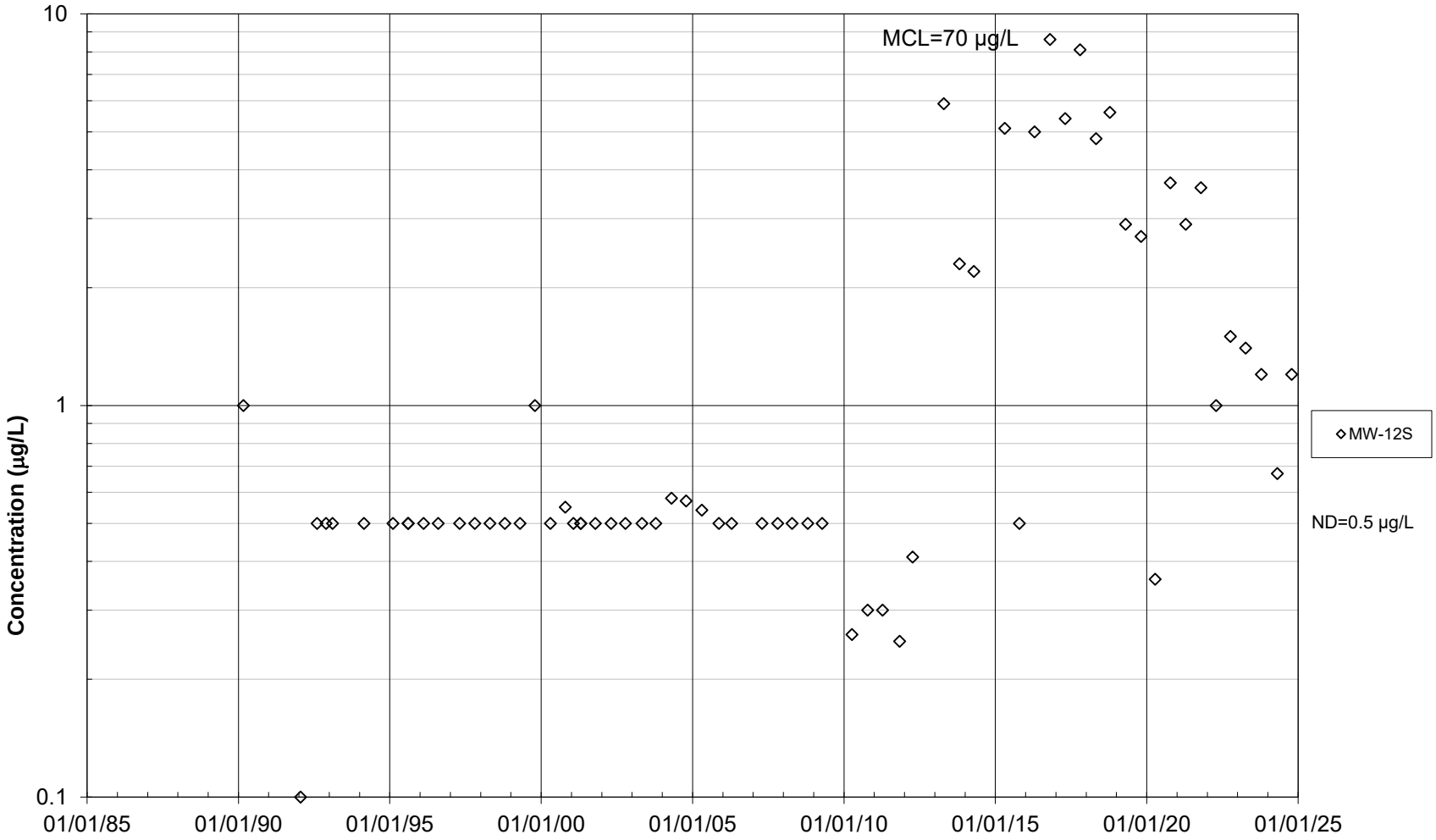


W-2&12S/PCE

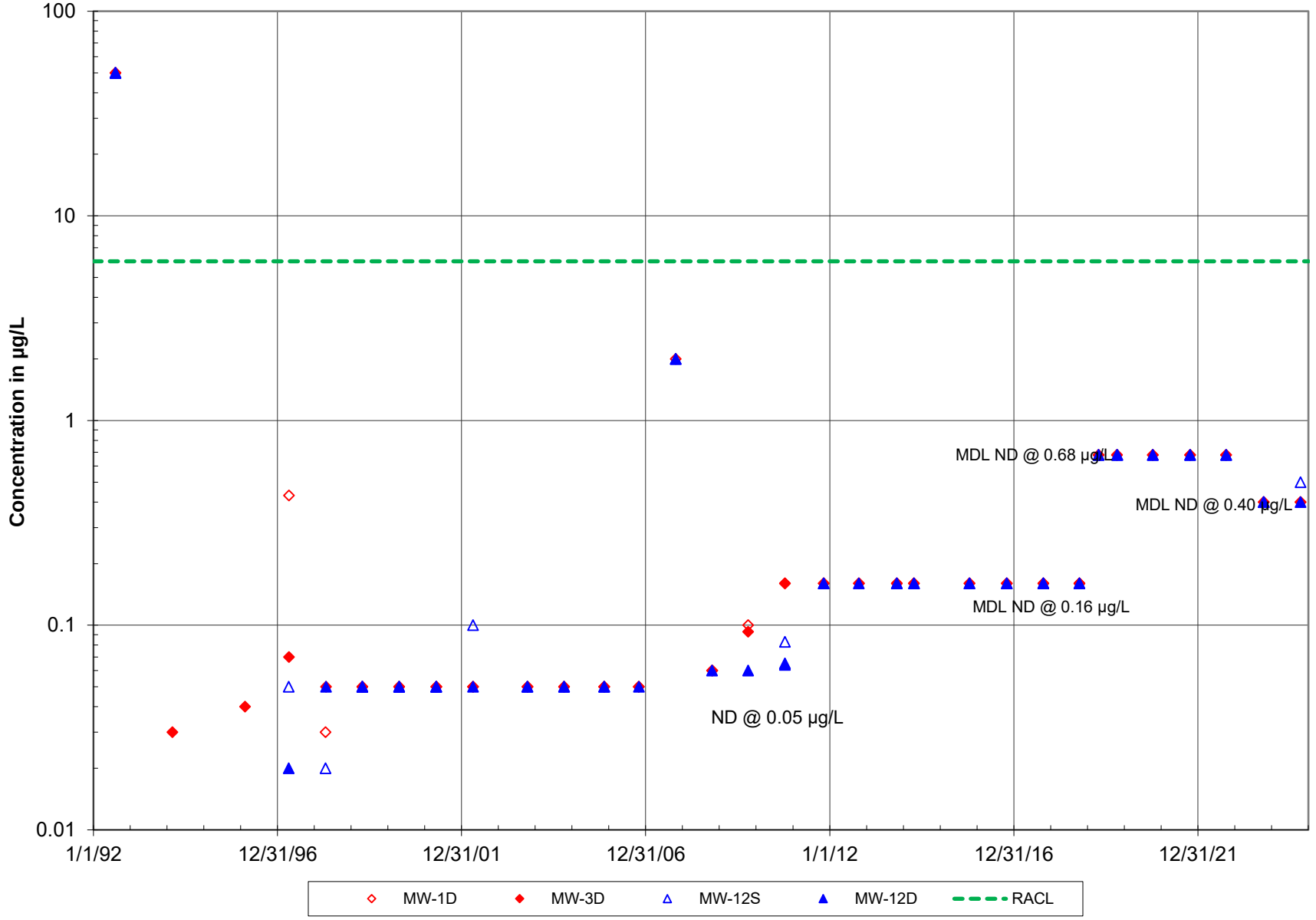
MW-2S/12S and 2D/12D:
TCE
Coffin Butte Landfill



MW-2S/12S and 2D/12D:
cis-1,2-DCE
Coffin Butte Landfill

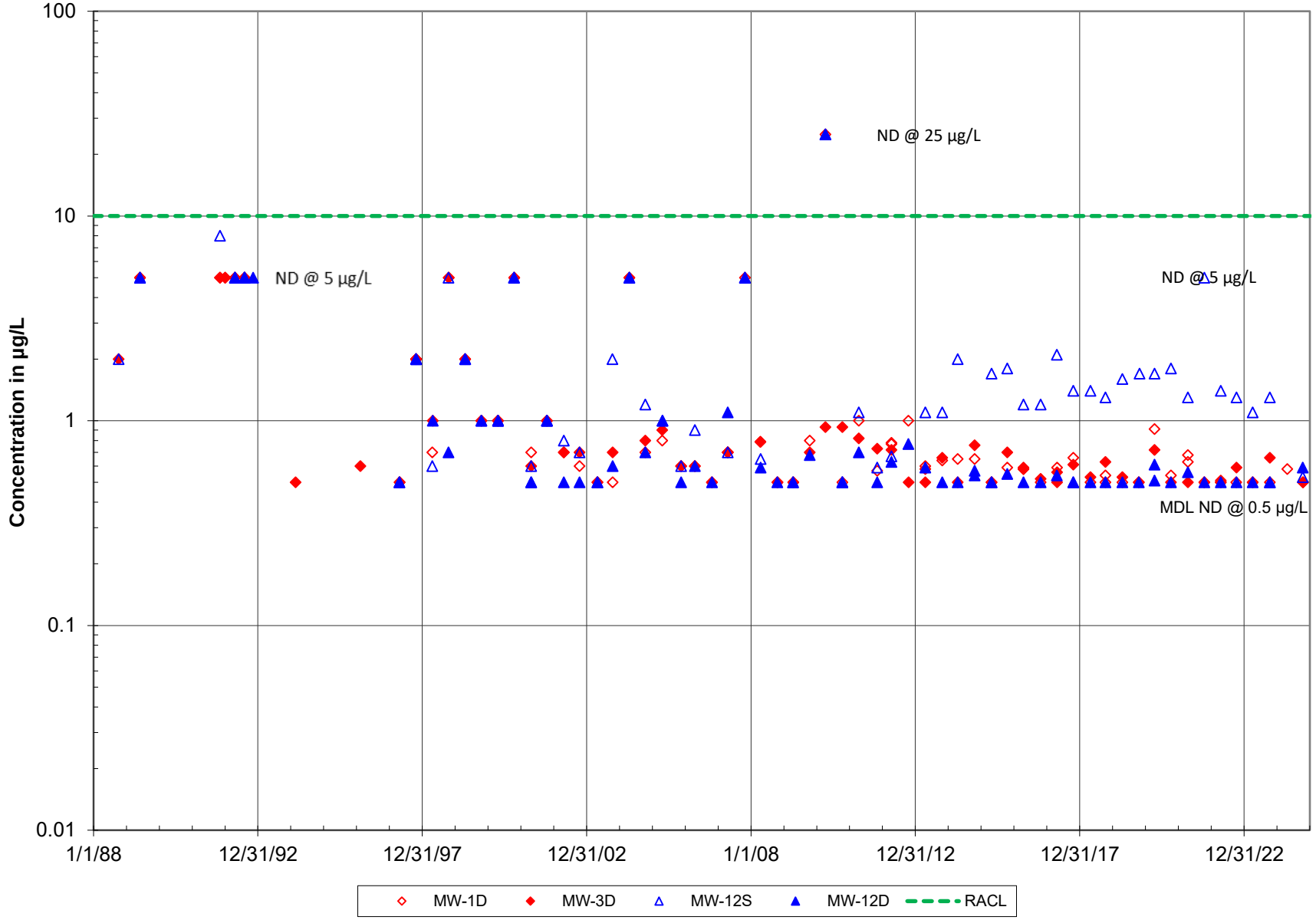


Cell 1
Antimony
Coffin Butte Landfill



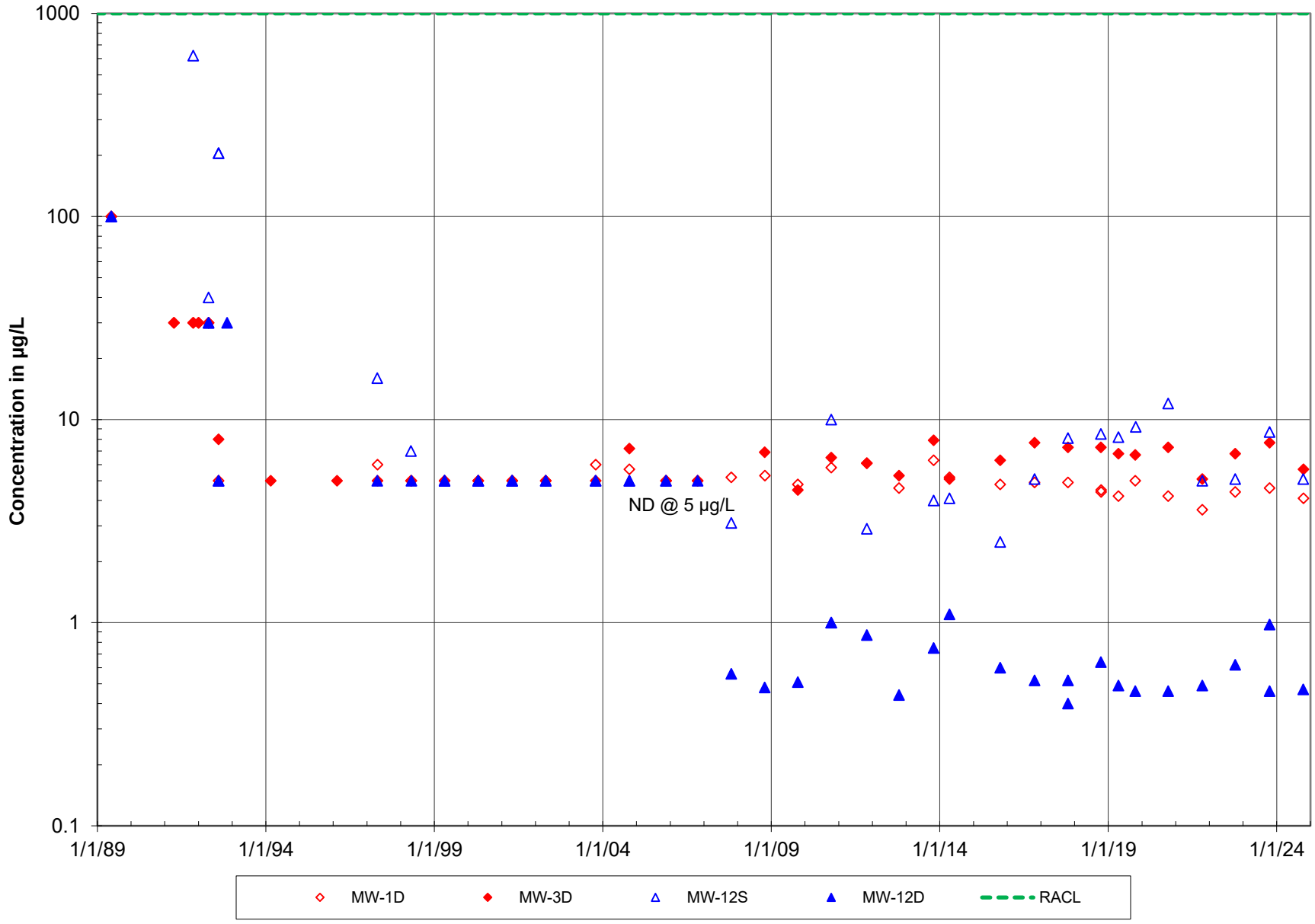
W_Side\Sb-C1

Cell 1
Aresenic
Coffin Butte Landfill



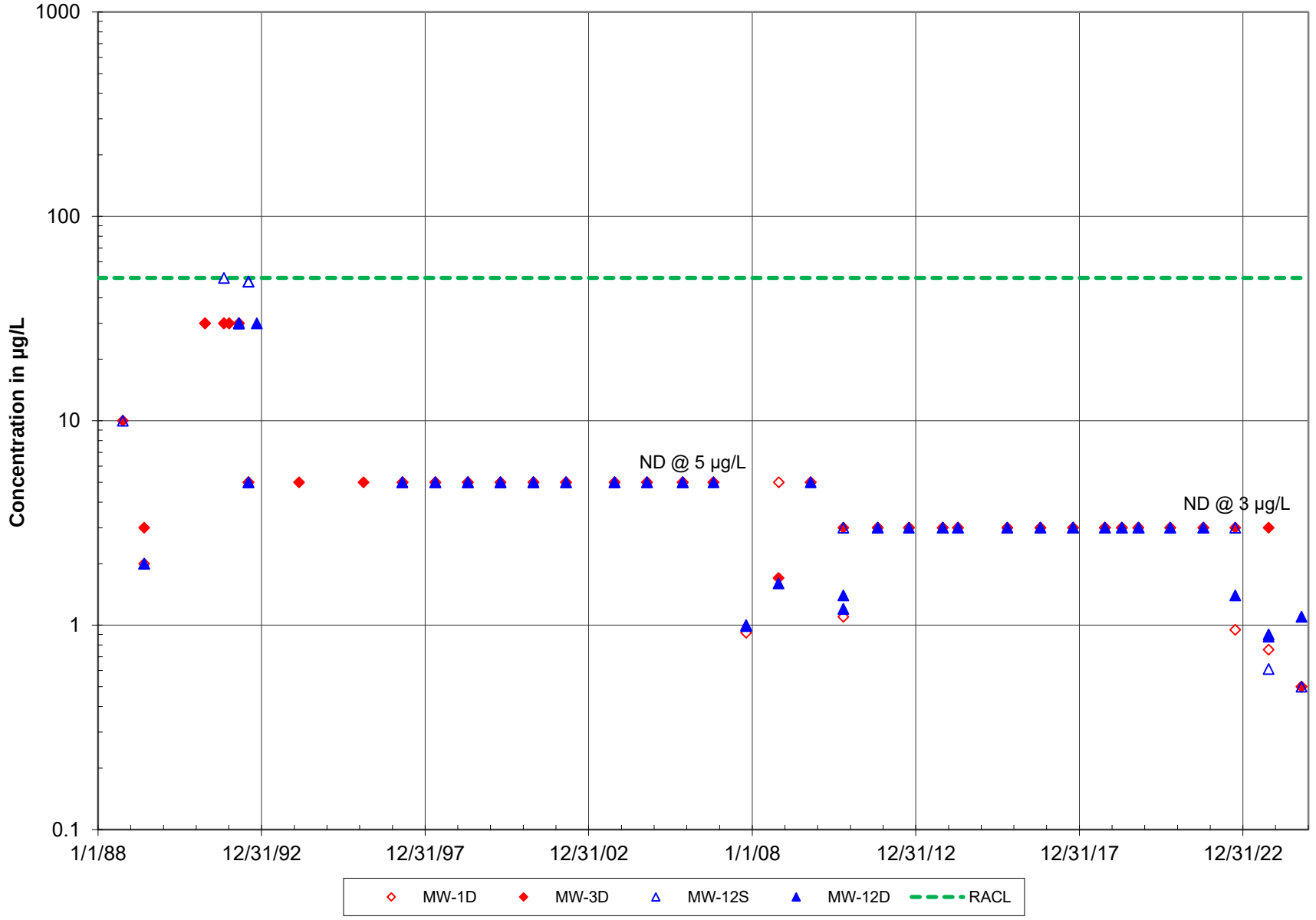
W_Side\As-C1

Cell 1
Barium
Coffin Butte Landfill



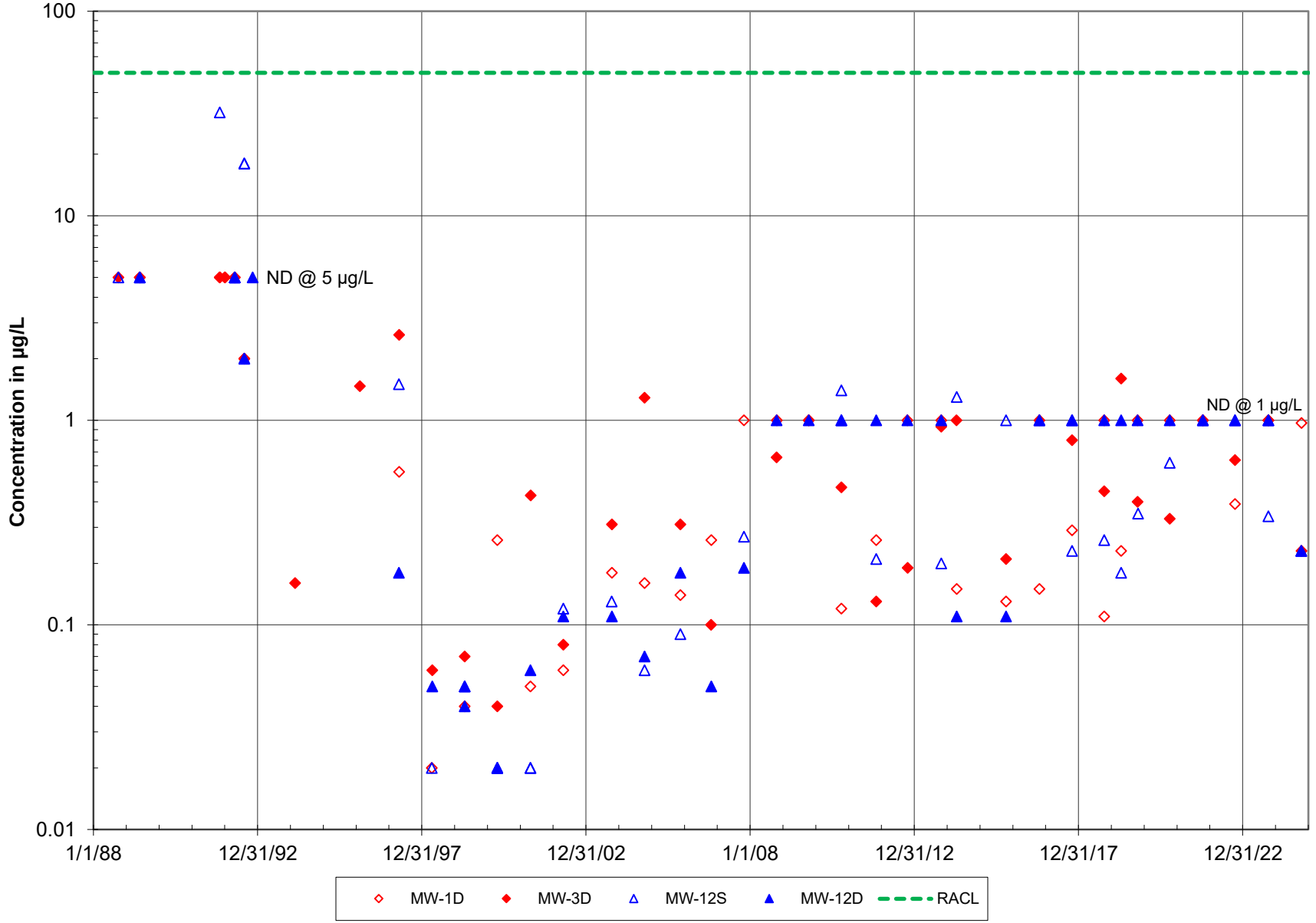
W_Side\Ba-C1

Cell 1
Chromium
Coffin Butte Landfill



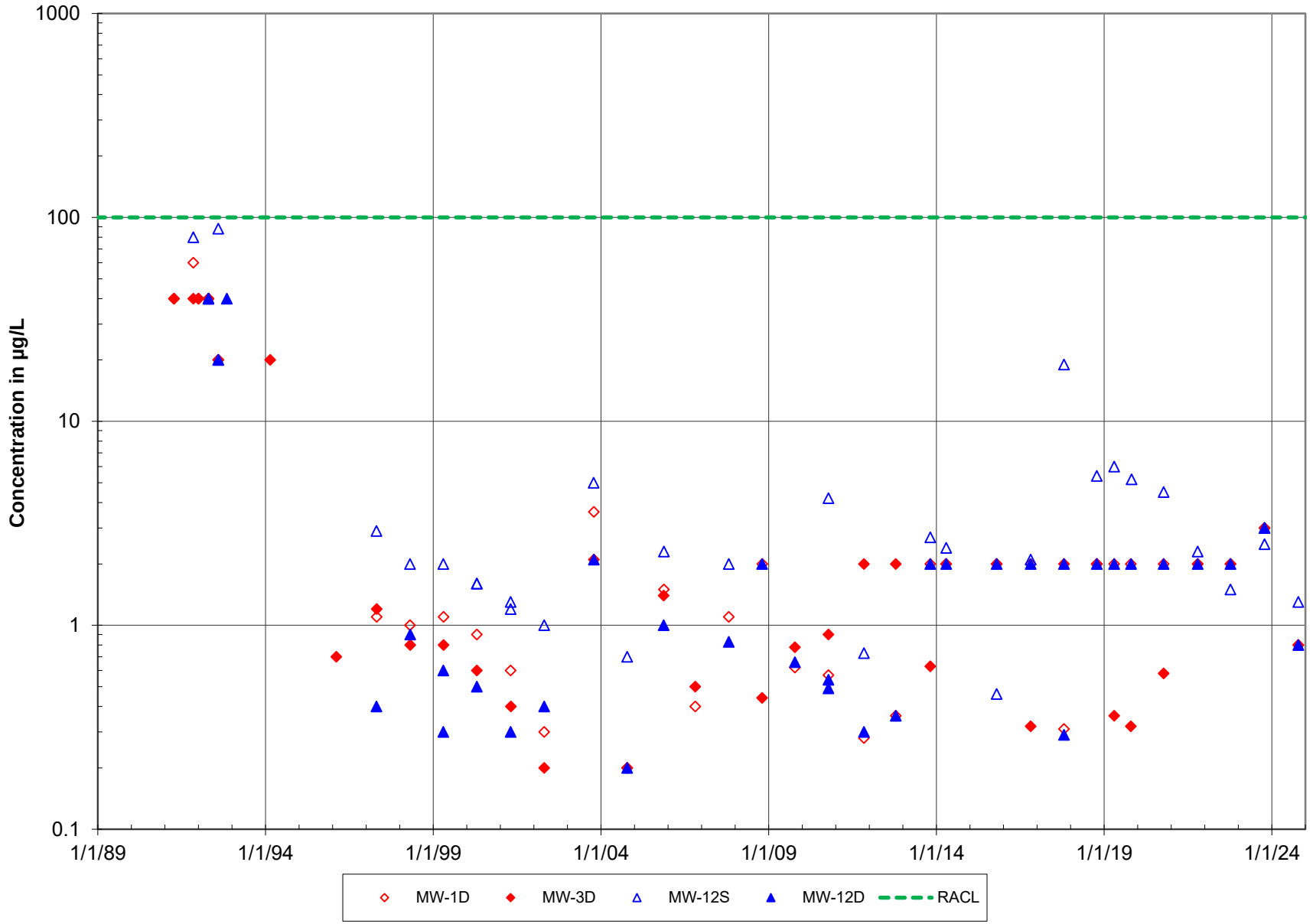
W_Side\Cr-C1

Cell 1
Lead
Coffin Butte Landfill



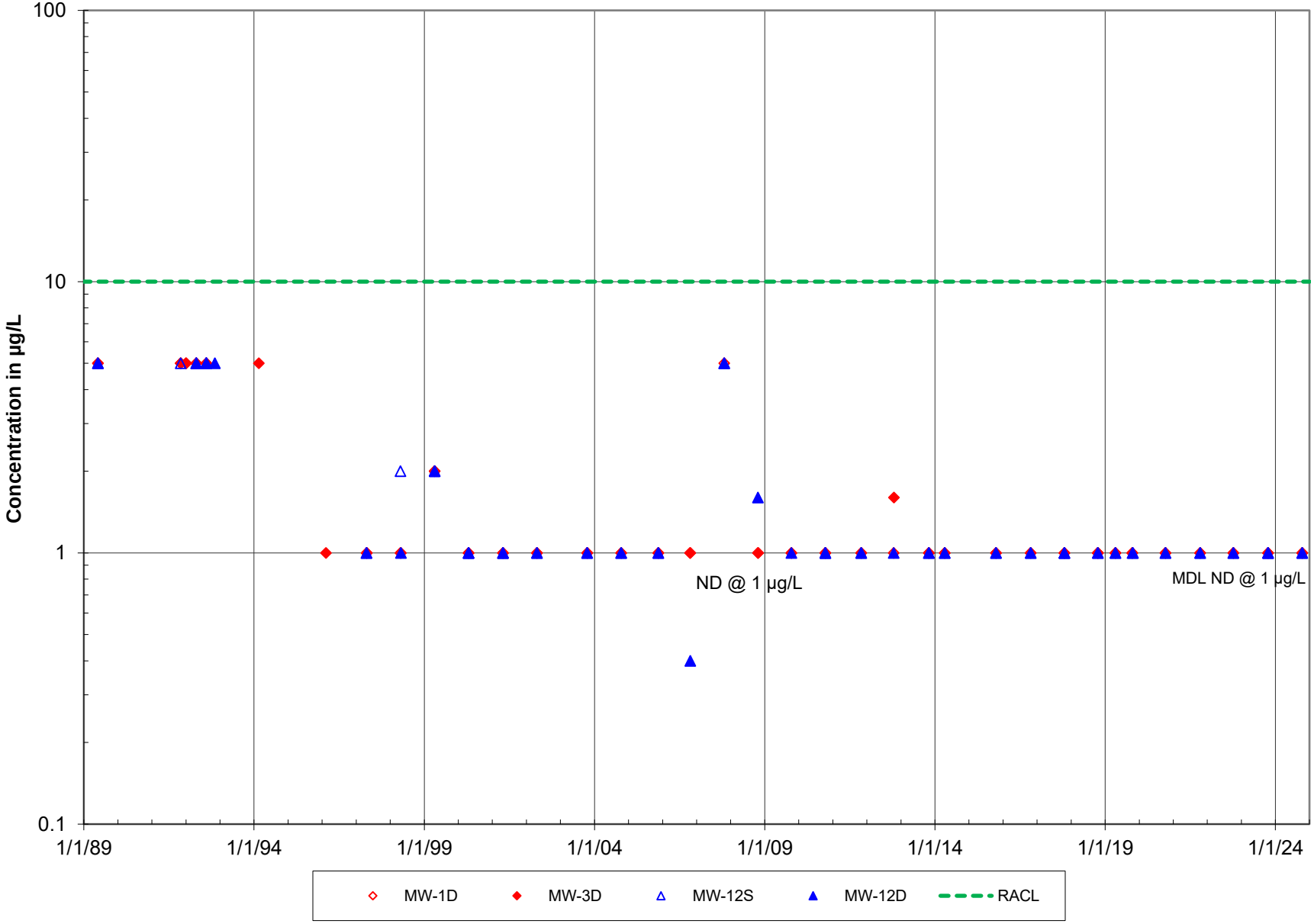
W_Side\Pb-C1

Cell 1
Nickel
Coffin Butte Landfill



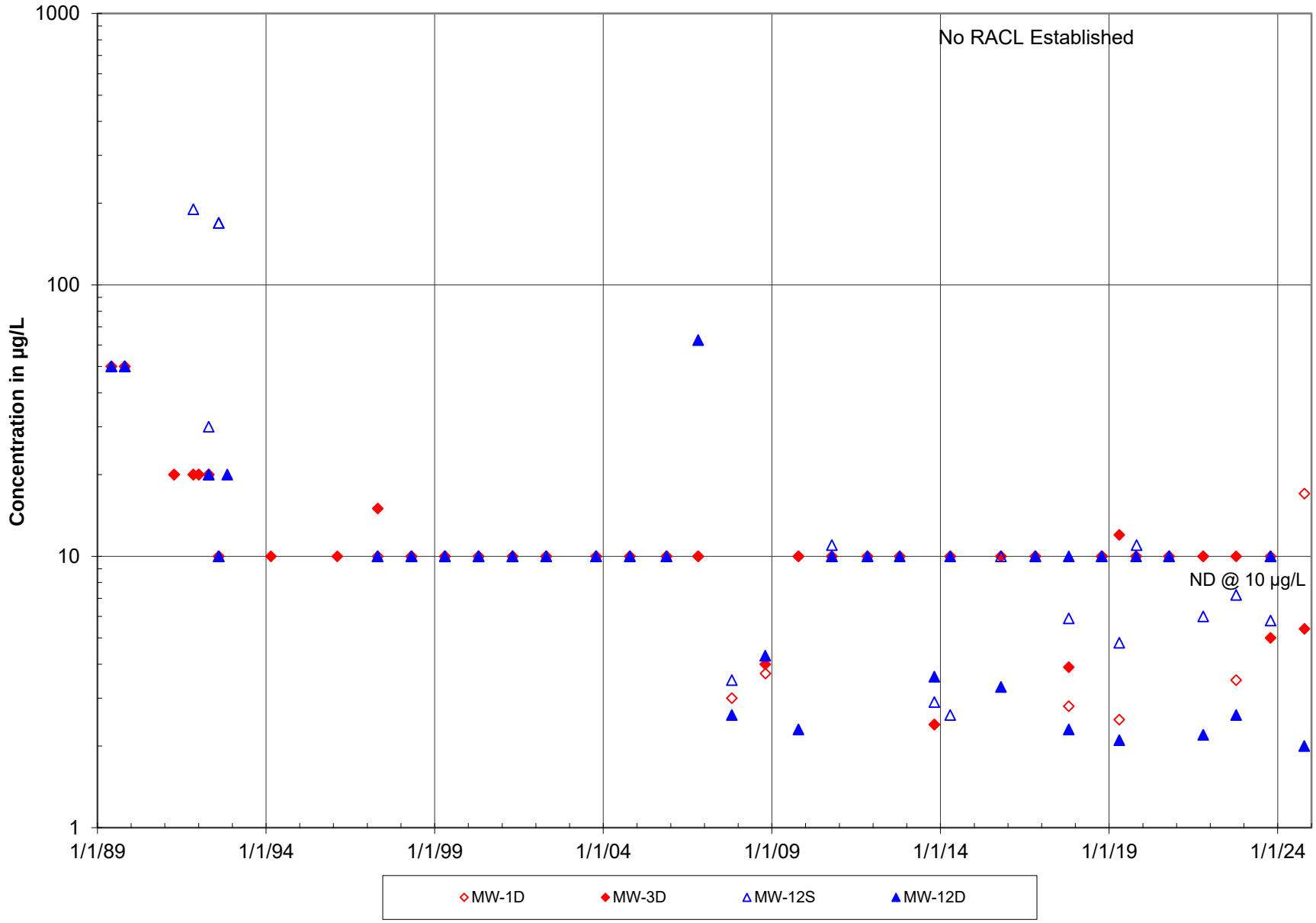
W_Side\Ni-C1

Cell 1
Selenium
Coffin Butte Landfill



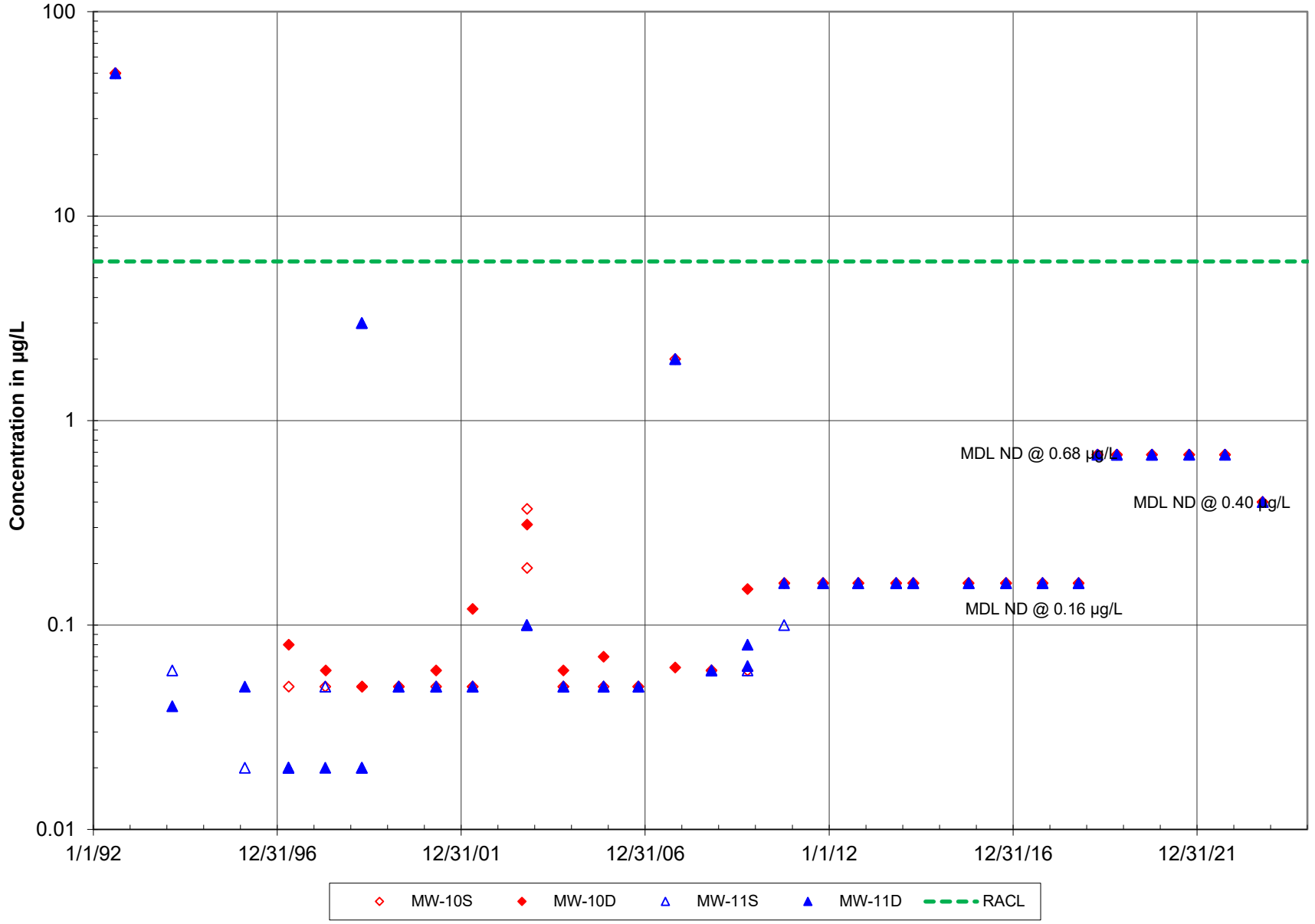
W_Side\Se-C1

Cell 1
Zinc
Coffin Butte Landfill



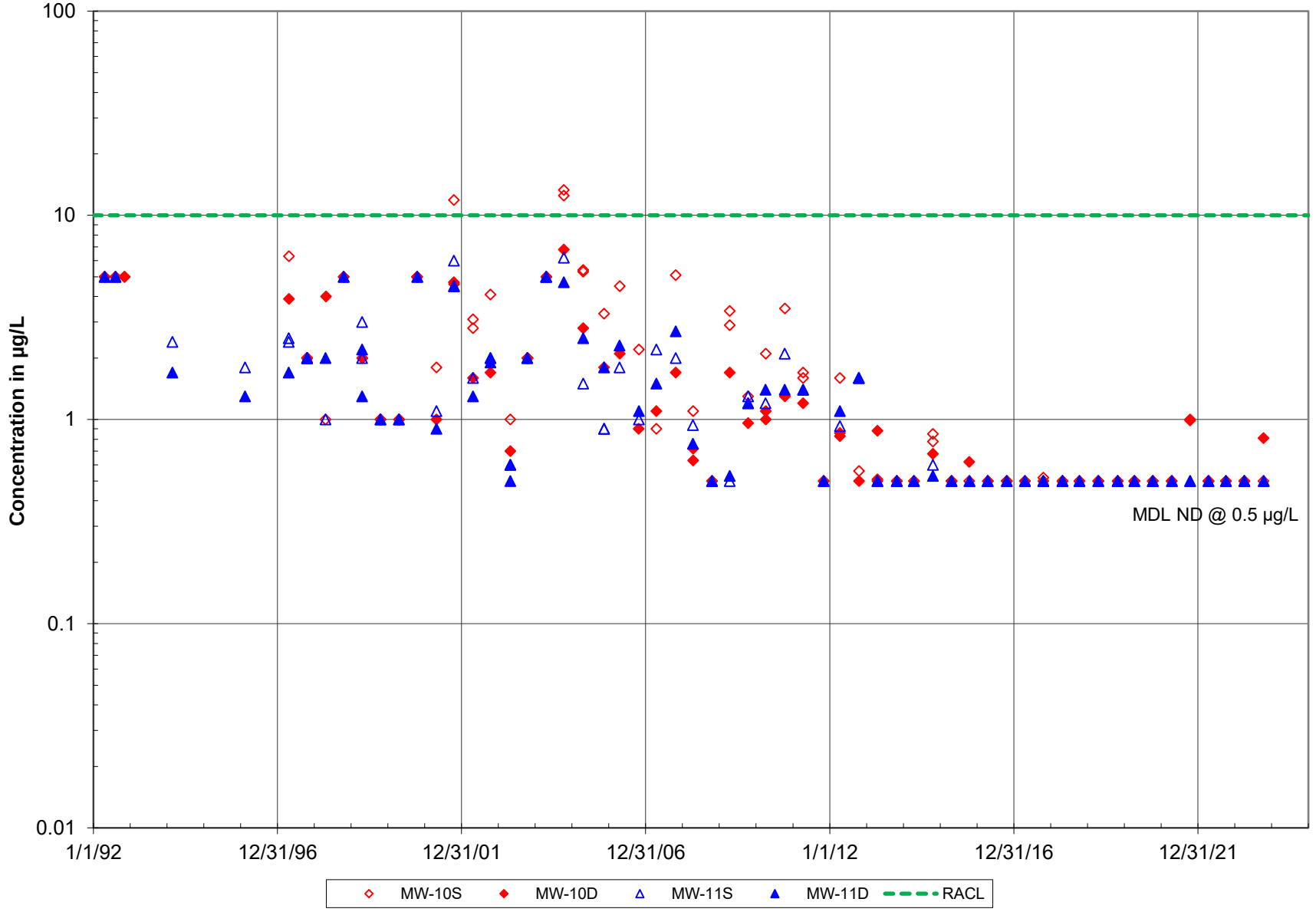
W_Side\Zn-C1

Cell 1A
Antimony
Coffin Butte Landfill



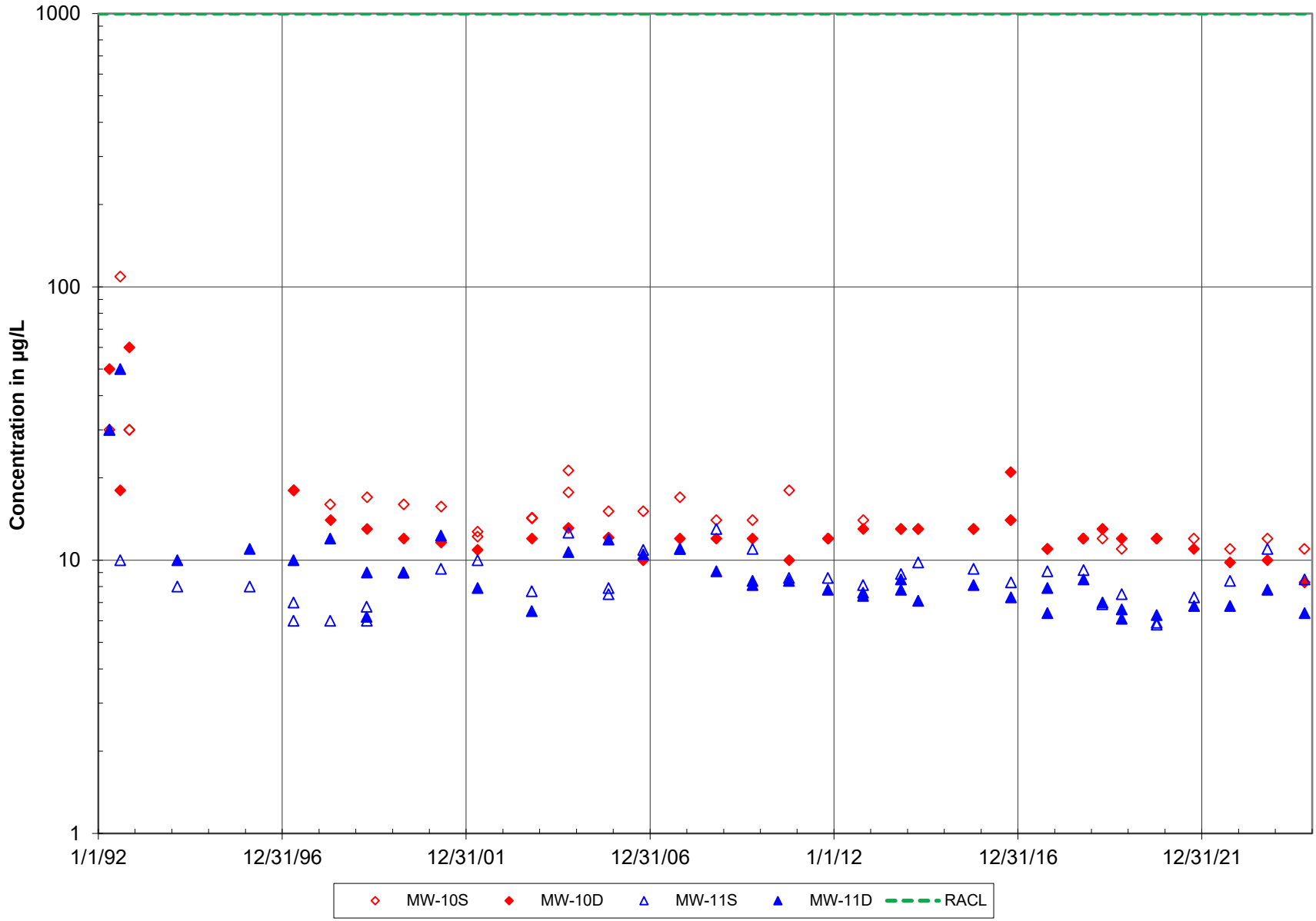
W_Side\Sb-C1a

Cell 1A
Arsenic
Coffin Butte Landfill



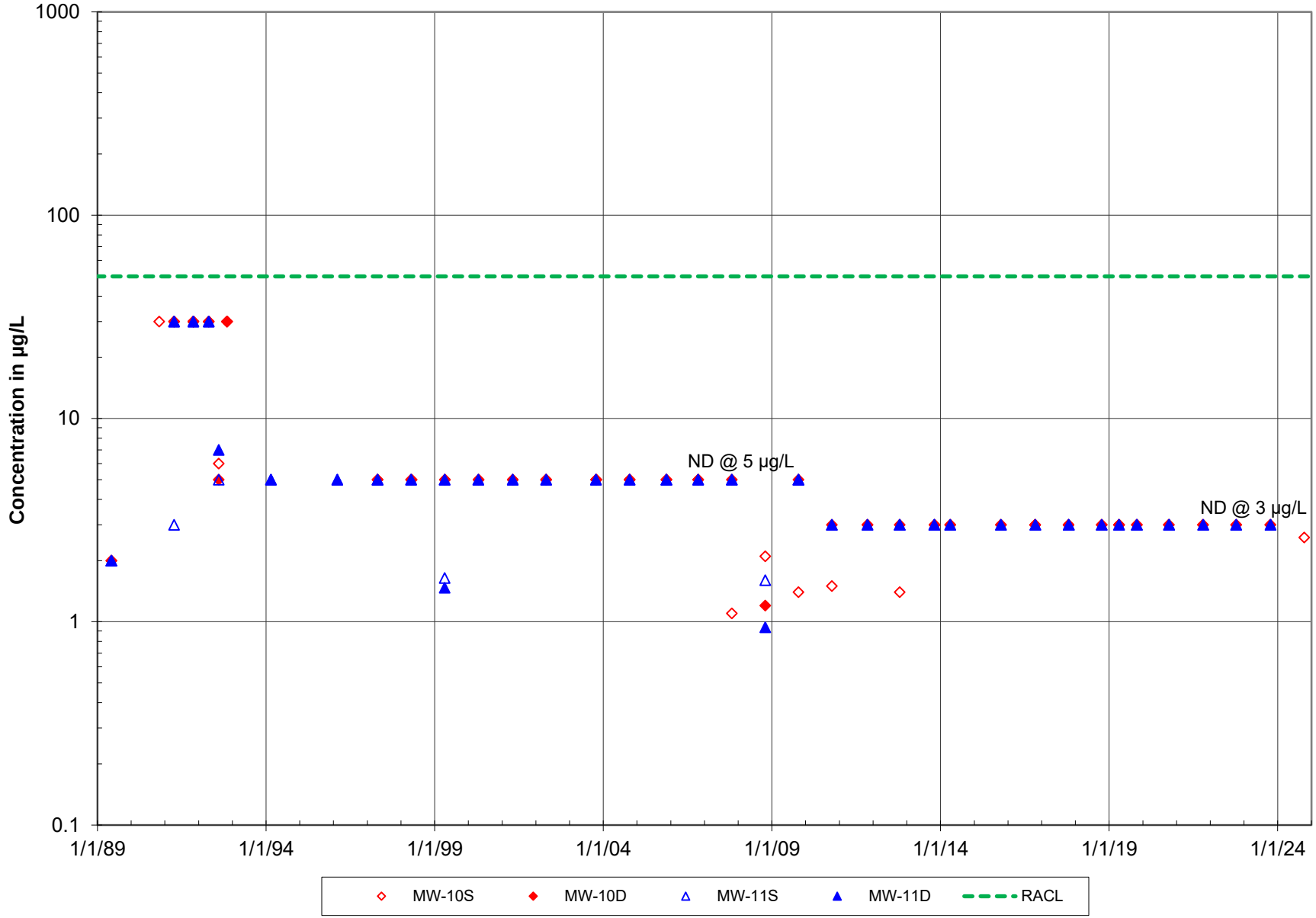
W_Side\As-C1a

Cell 1A
Barium
Coffin Butte Landfill



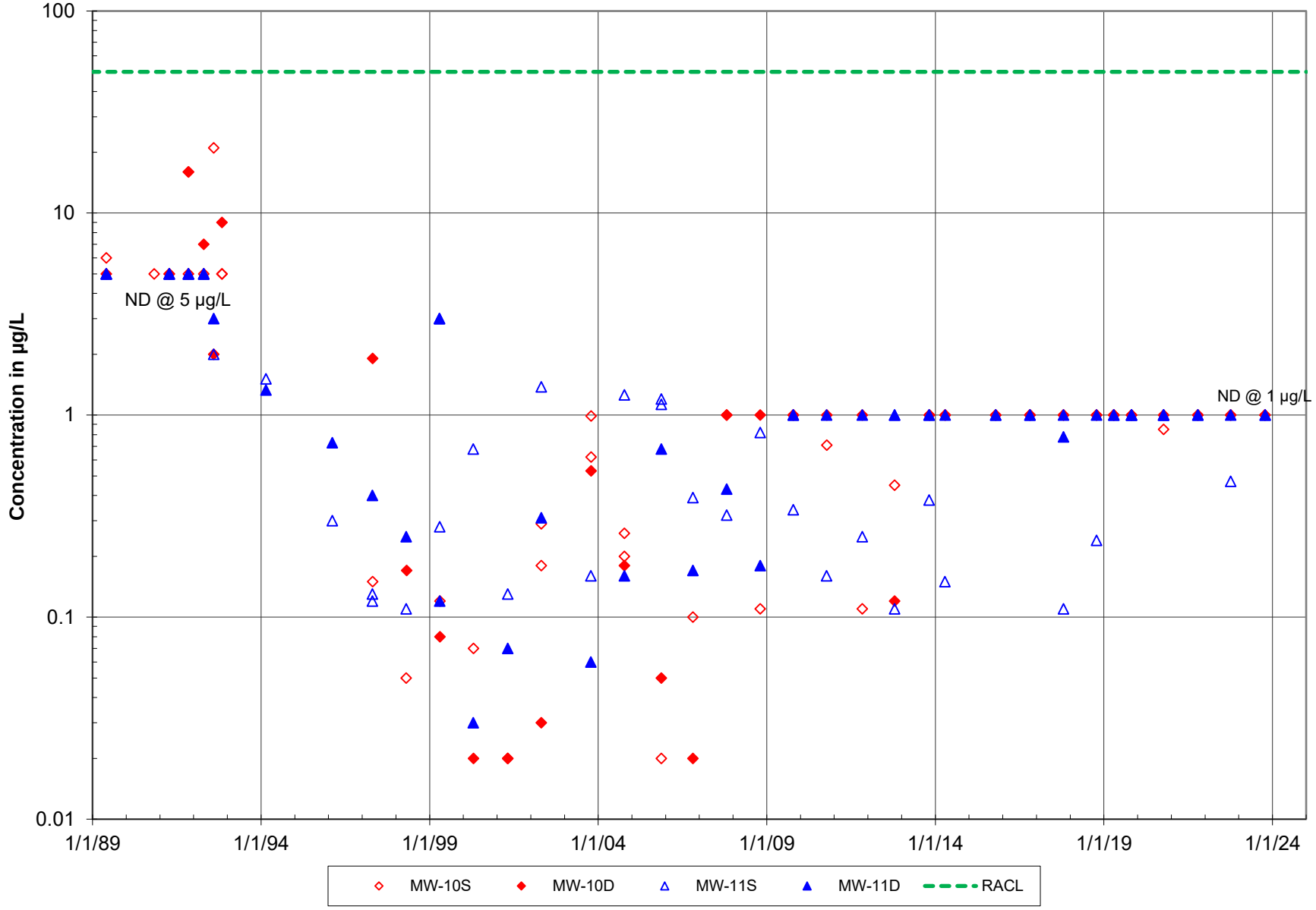
W_Side\Ba-C1a

Cell 1A
Chromium
Coffin Butte Landfill



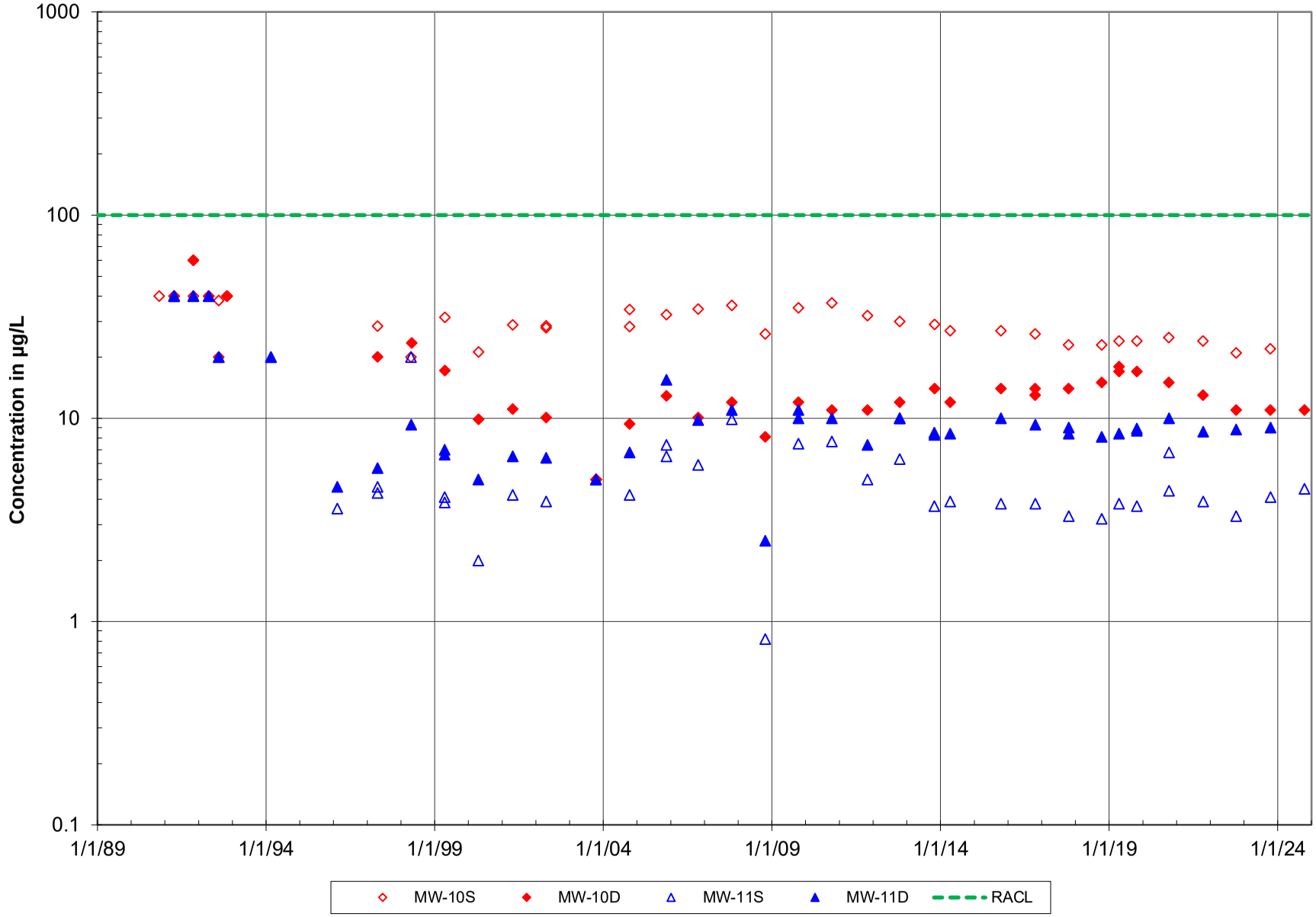
W_Side\Cr-C1a

Cell 1A
Lead
Coffin Butte Landfill



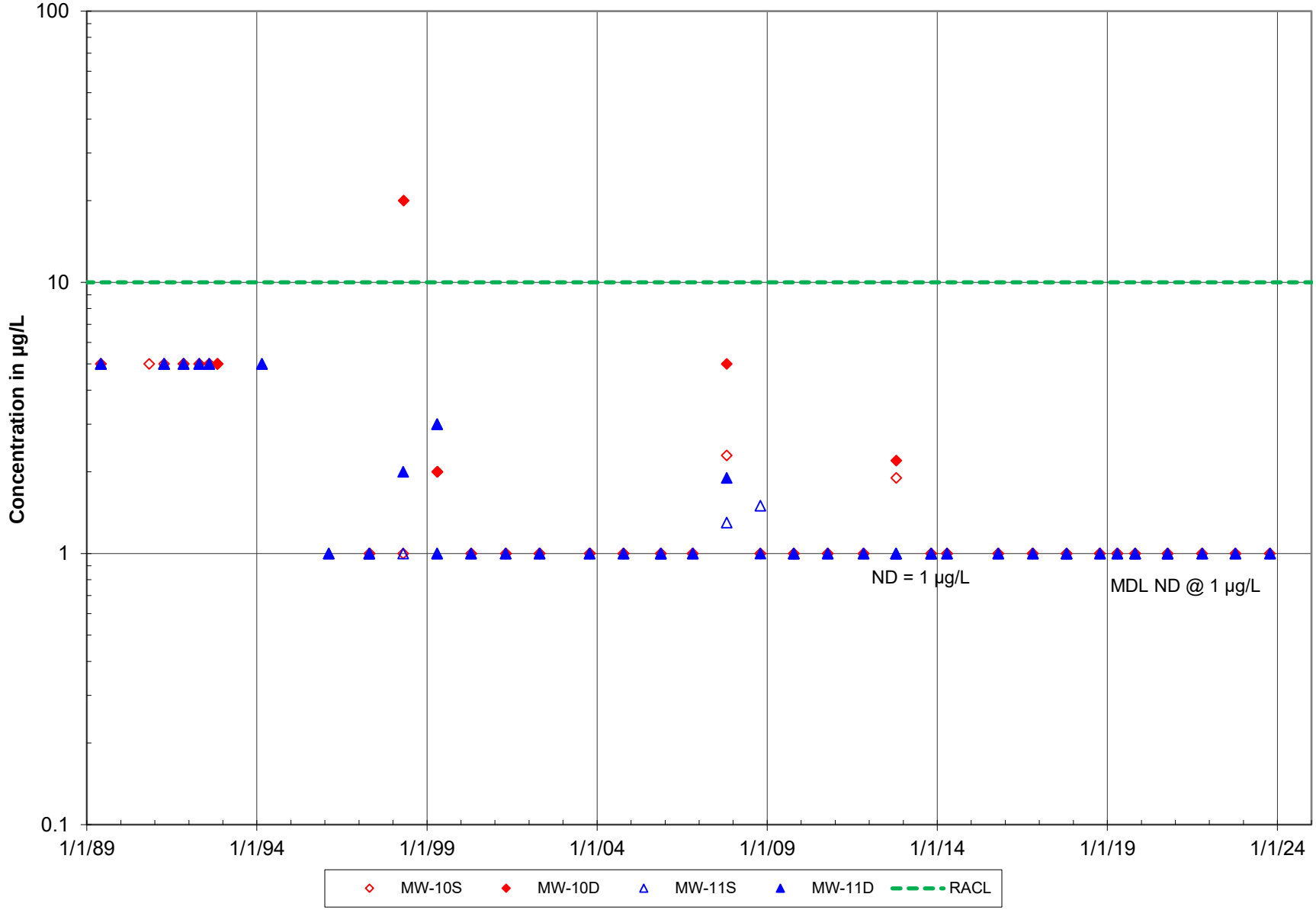
W_Side\Pb-C1a

Cell 1A
Nickel
Coffin Butte Landfill



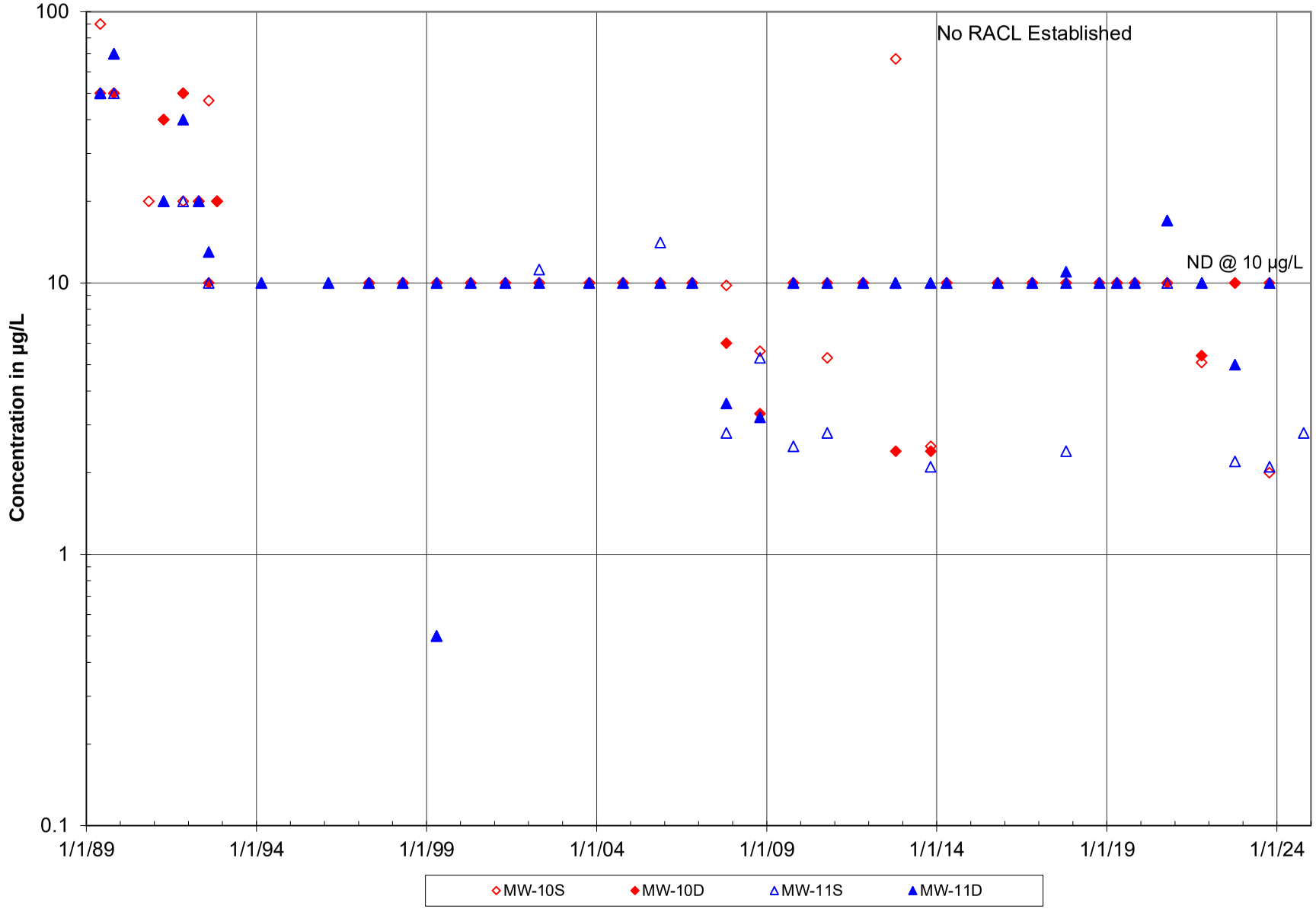
W_Side\Ni-C1a

Cell 1A
Selenium
Coffin Butte Landfill

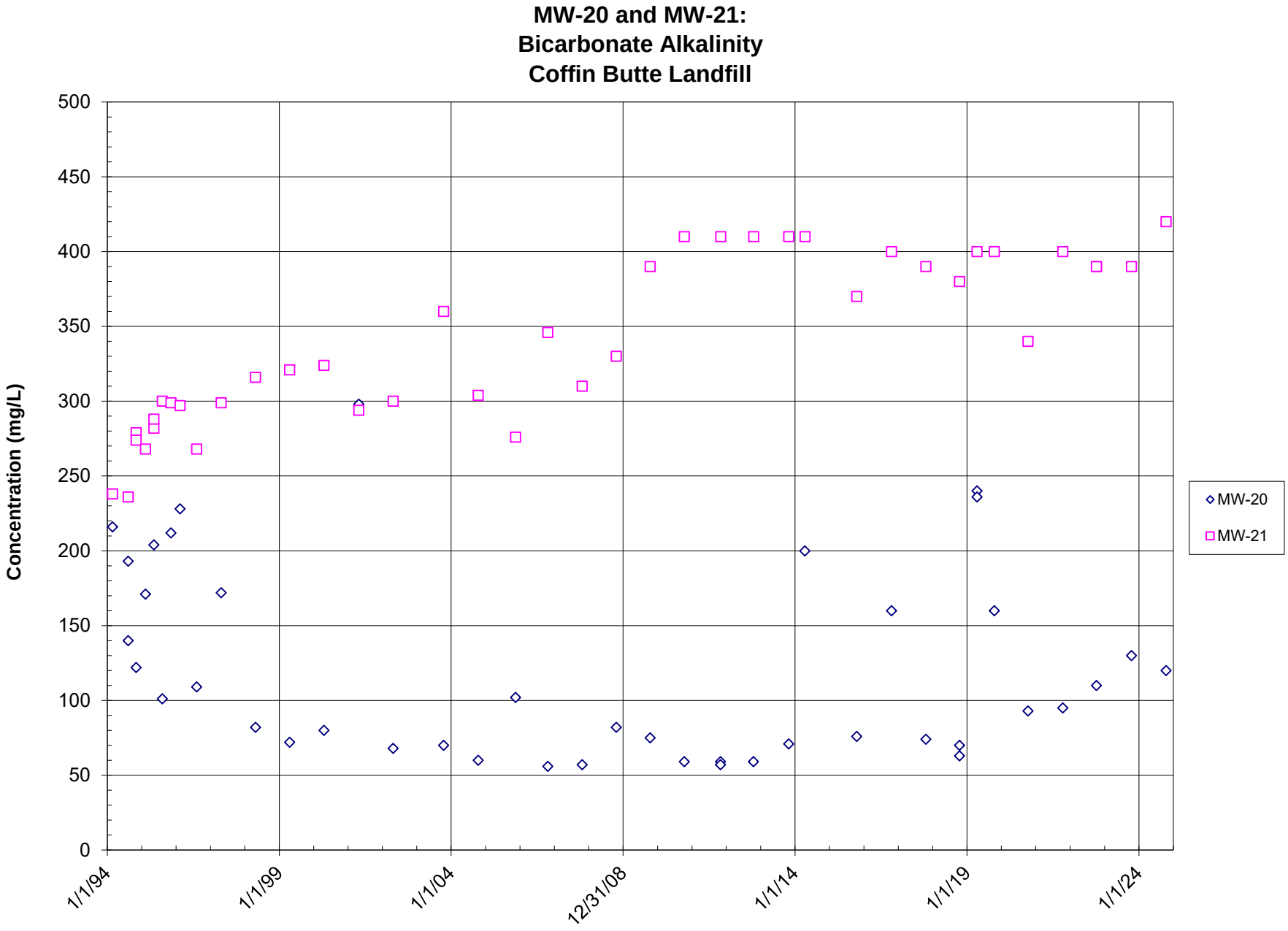


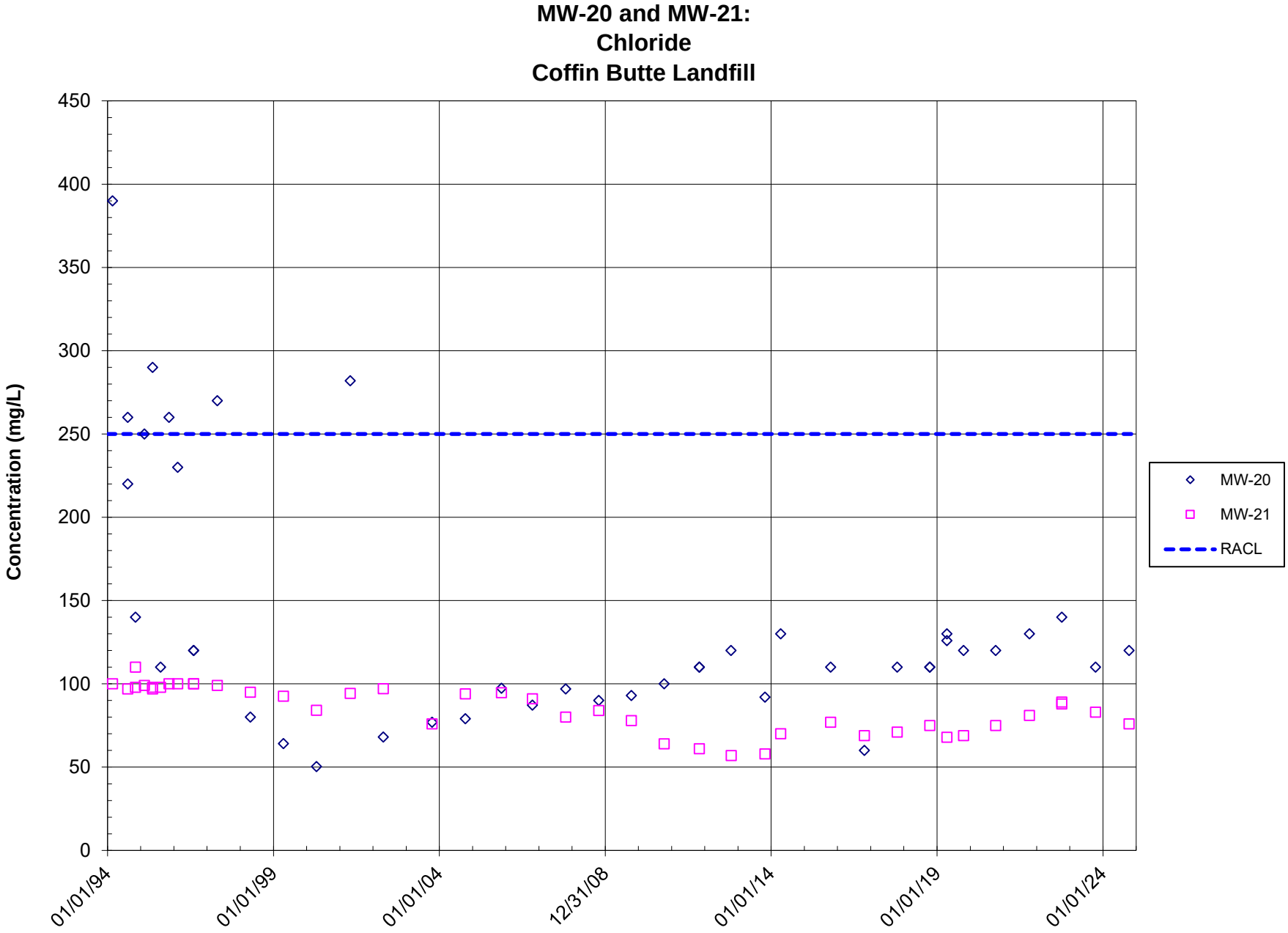
W_Side\Se-C1a

Cell 1A
Zinc
Coffin Butte Landfill

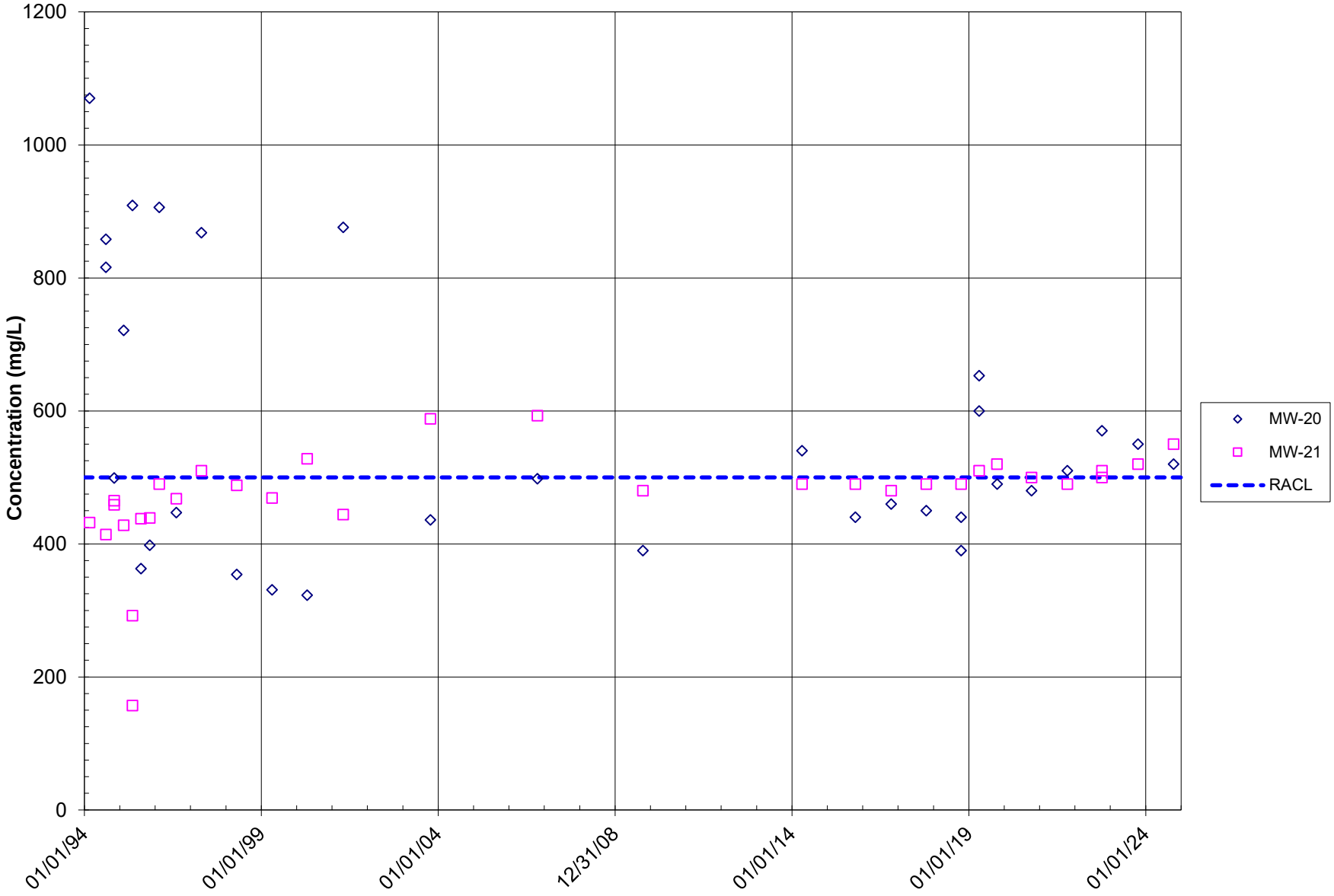


W_Side\Zn-C1a


MW-20 and MW-21:
Bicarbonate Alkalinity
Coffin Butte Landfill
Concentration (mg/L)
500
450
400
350
300
250
200
150
100
50
0
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
1/1/24
MW-20
MW-21

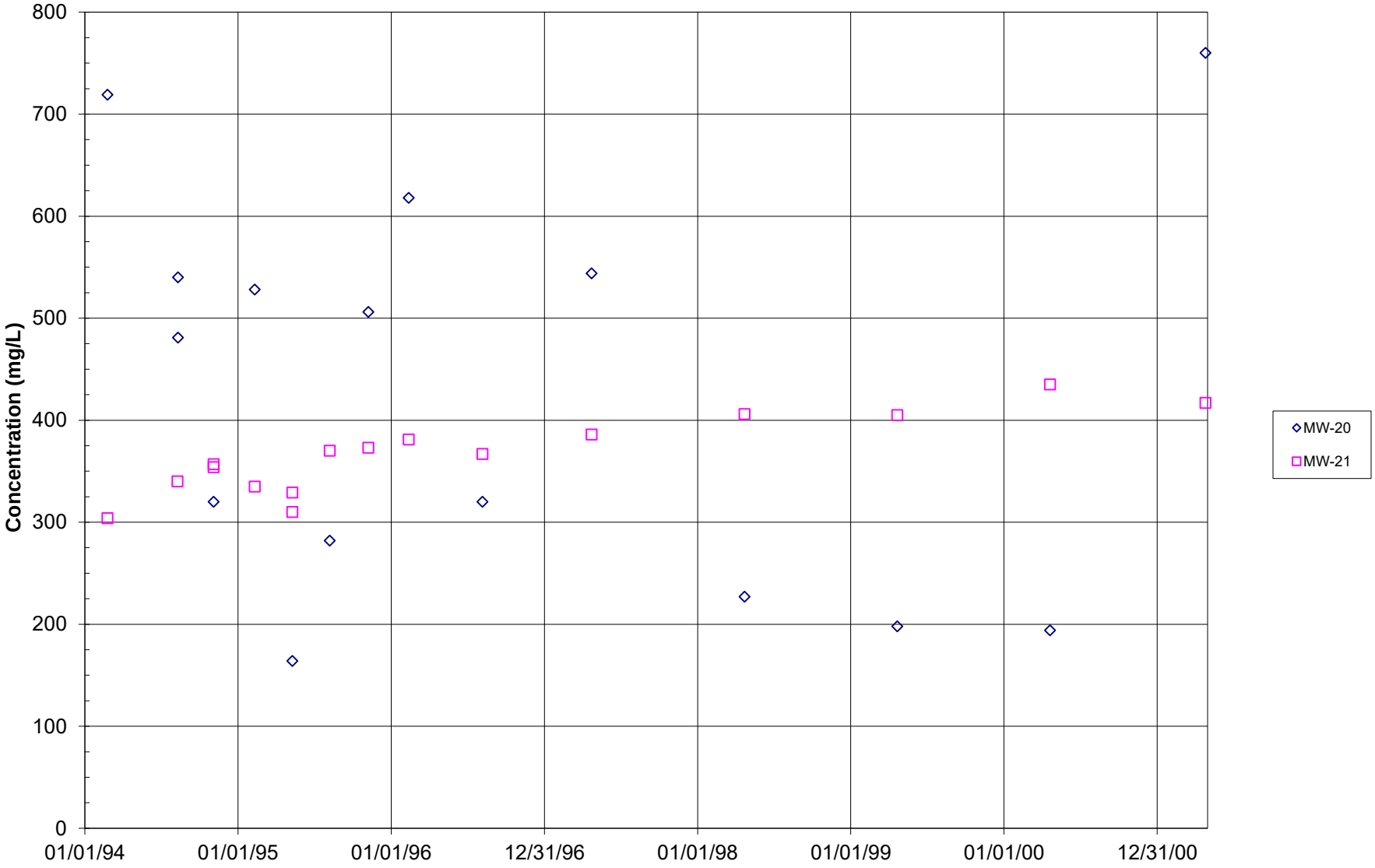

MW-20 and MW-21:
Chloride
Coffin Butte Landfill
Concentration (mg/L)
450
400
350
300
250
200
150
100
50
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
MW-20
MW-21
RACL

MW-20 and MW-21:
TDS
Coffin Butte Landfill

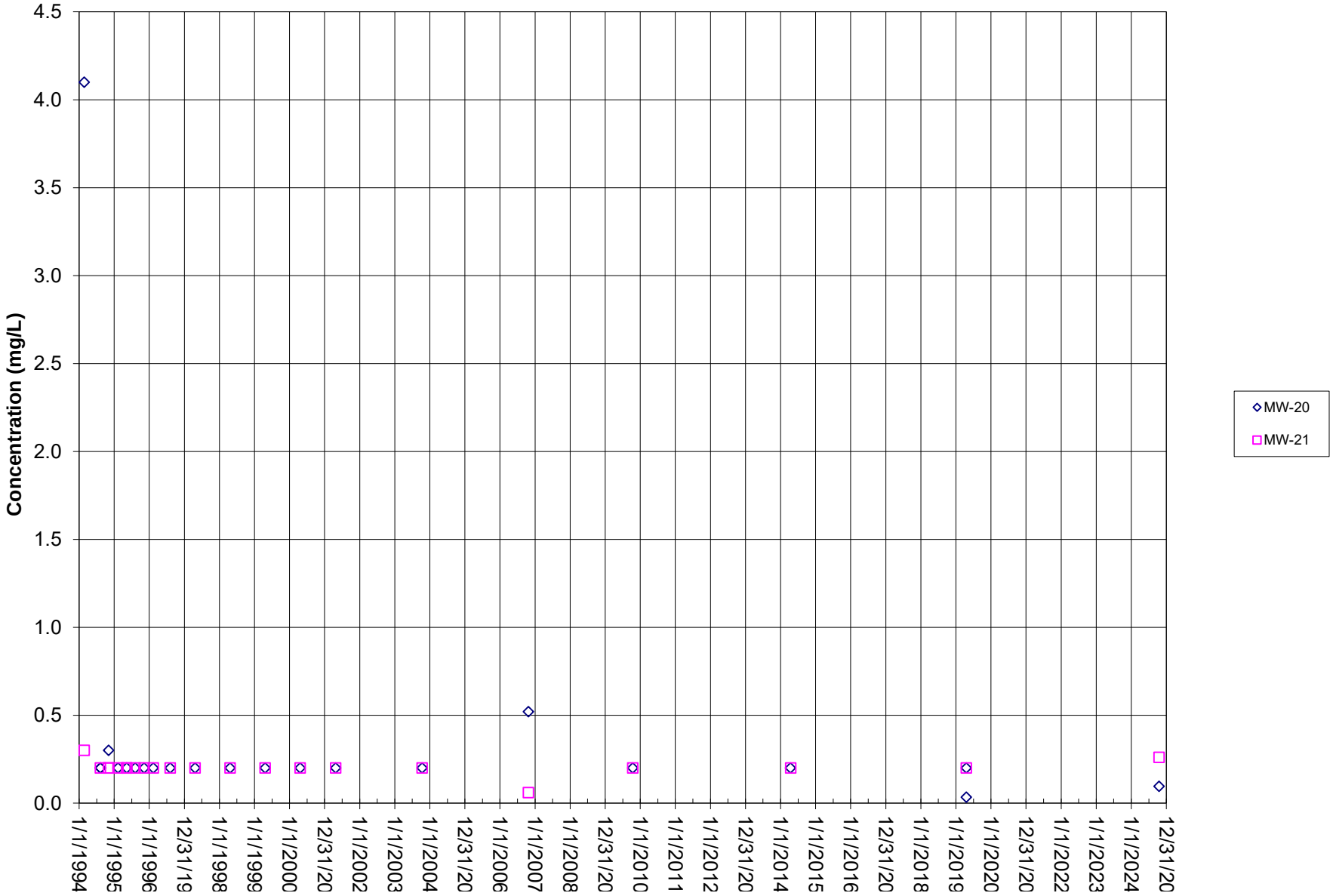


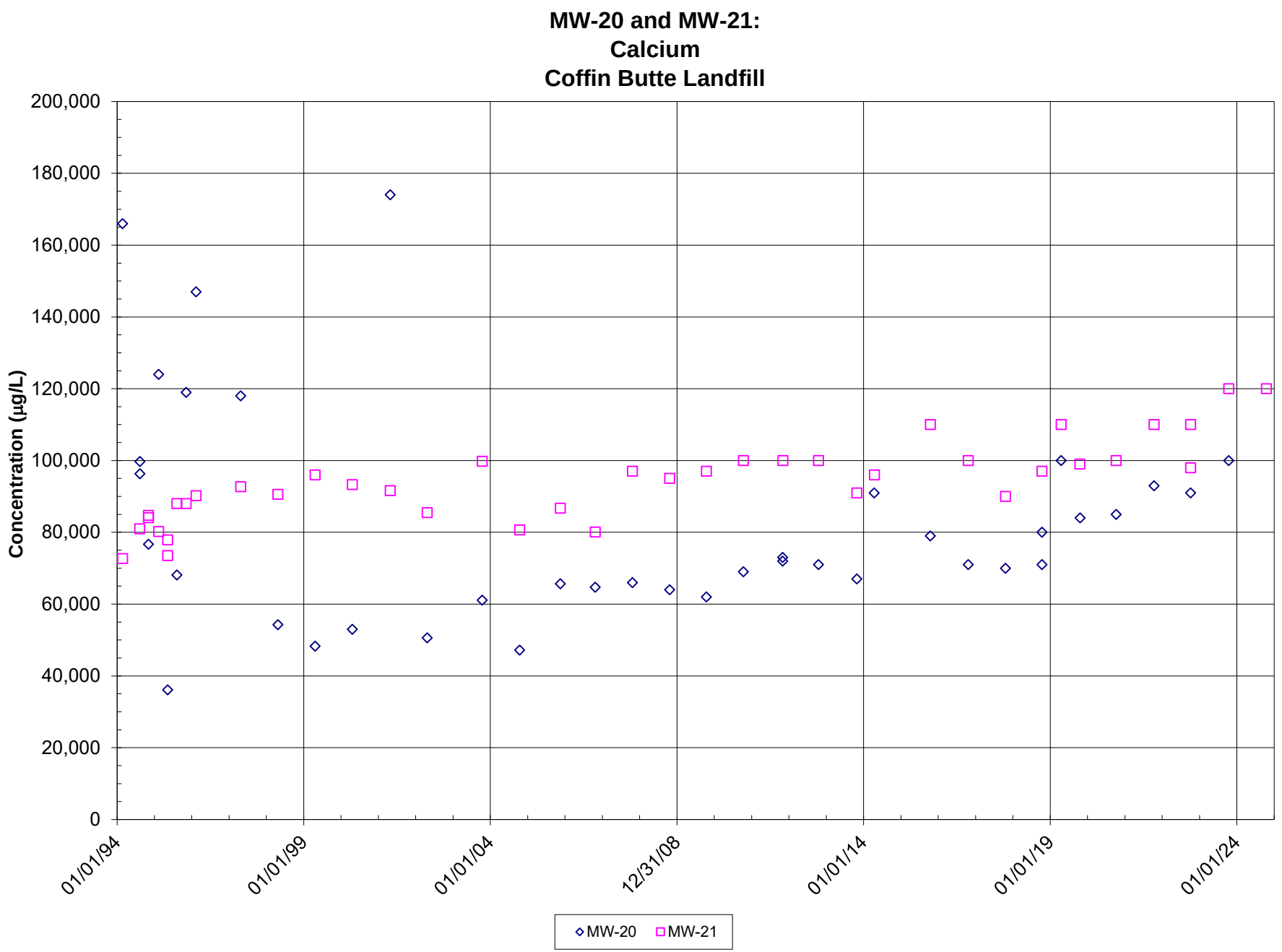
MW-20&21/TDS

MW-20 and MW-21:
Hardness
Coffin Butte Landfill



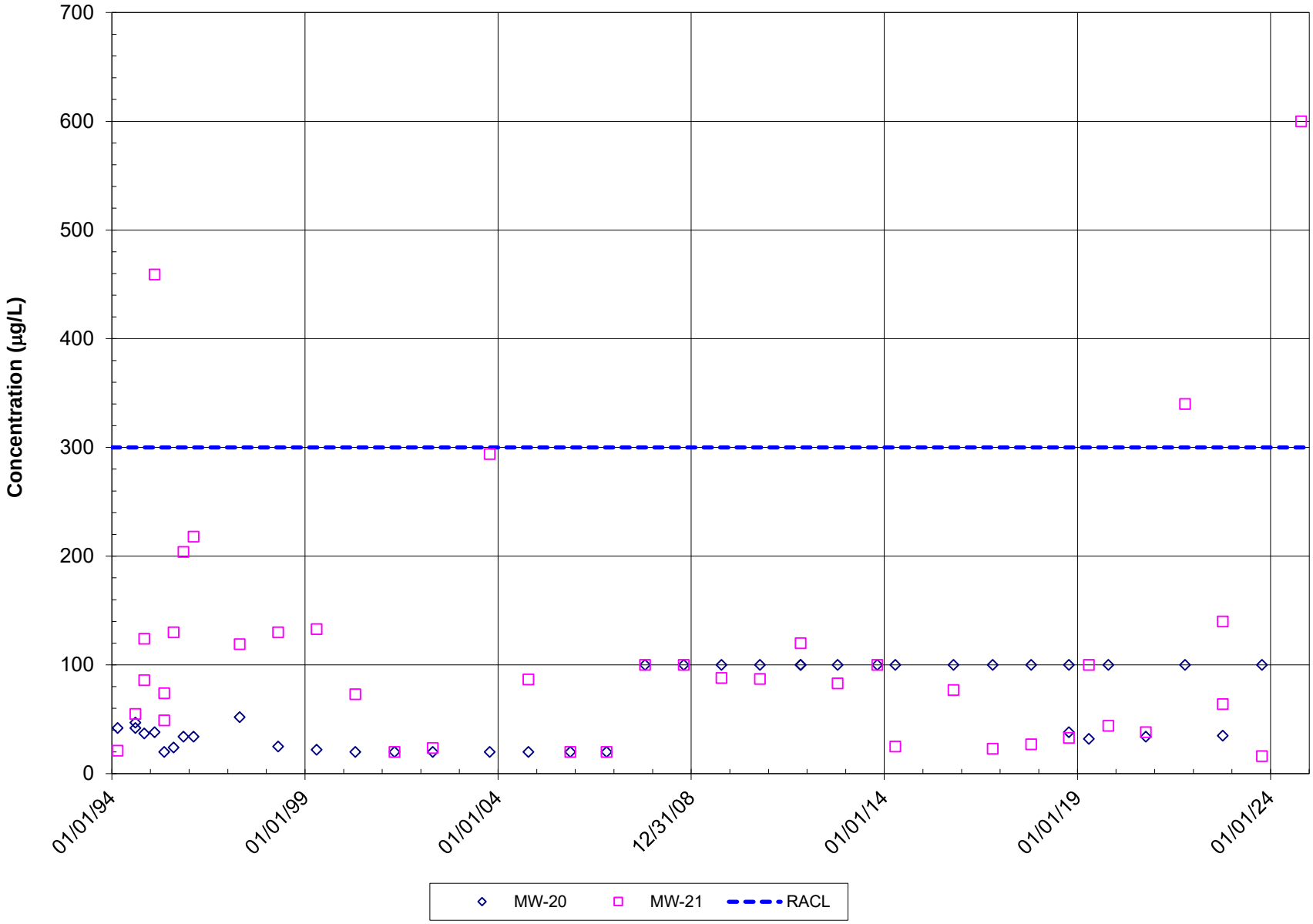
MW-20 and MW-21:
Nitrate-Nitrite
Coffin Butte Landfill



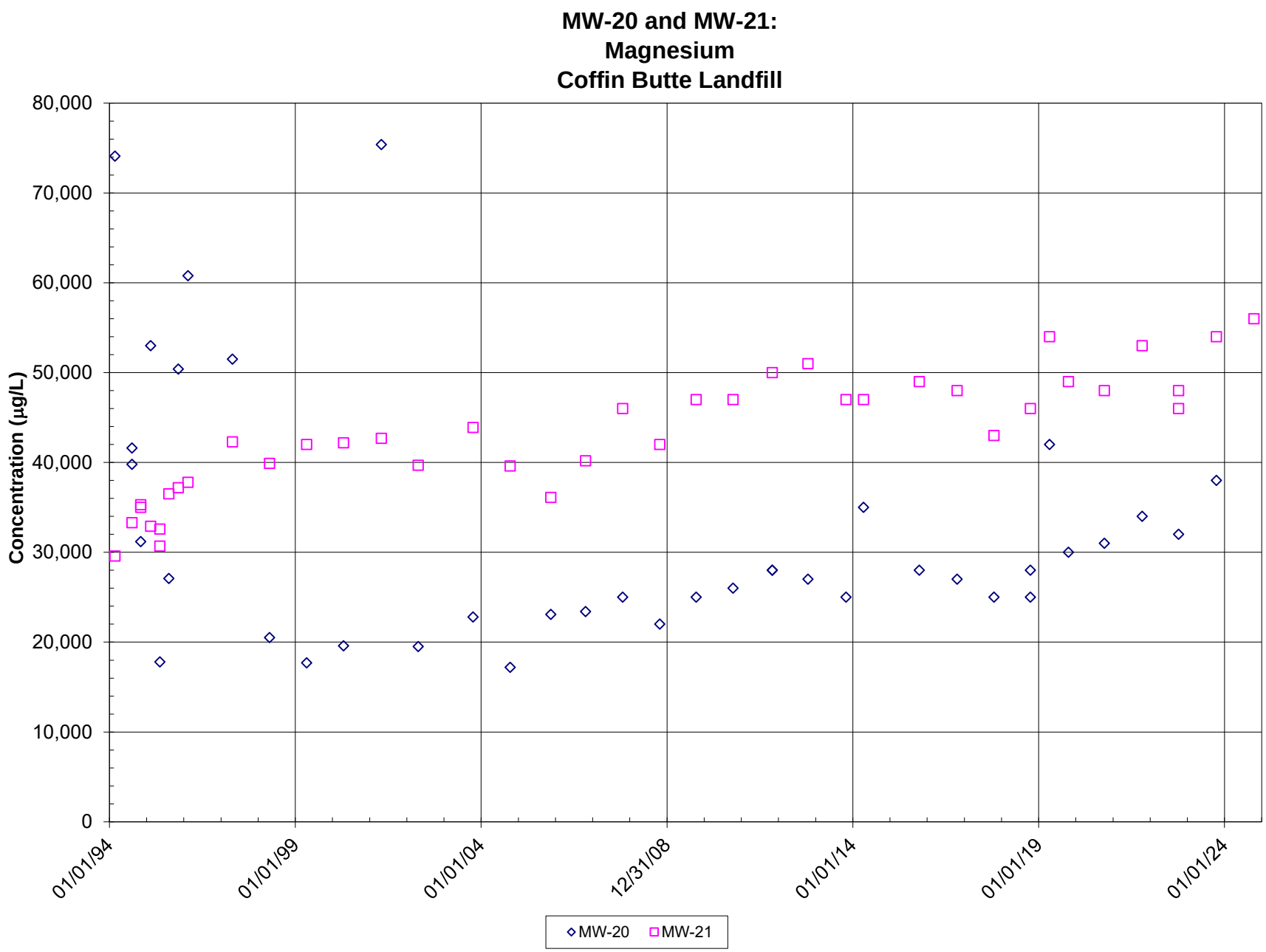


MW-20&21/Calcium

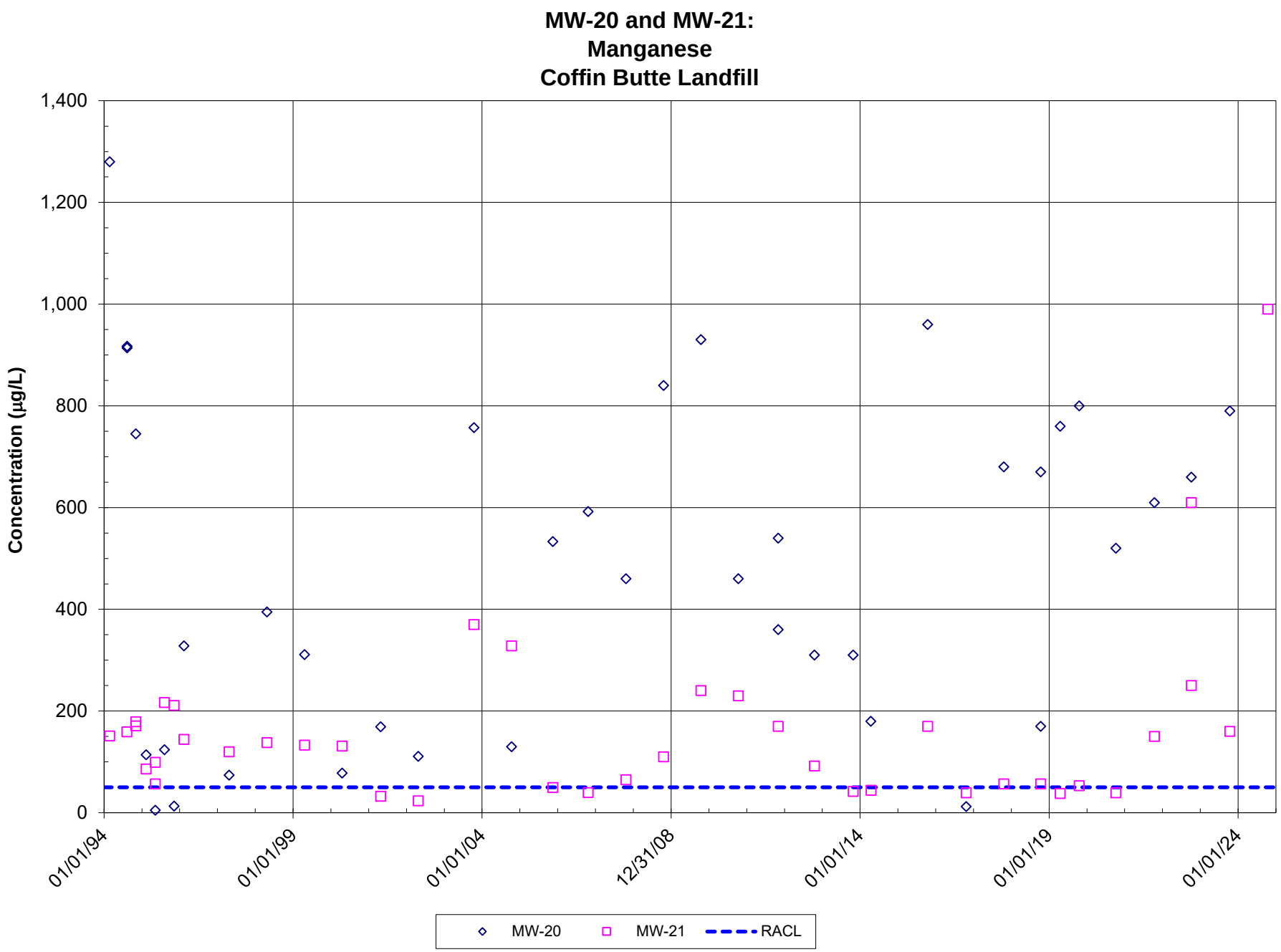
MW-20 and MW-21:
Iron
Coffin Butte Landfill



MW-20&21/Iron

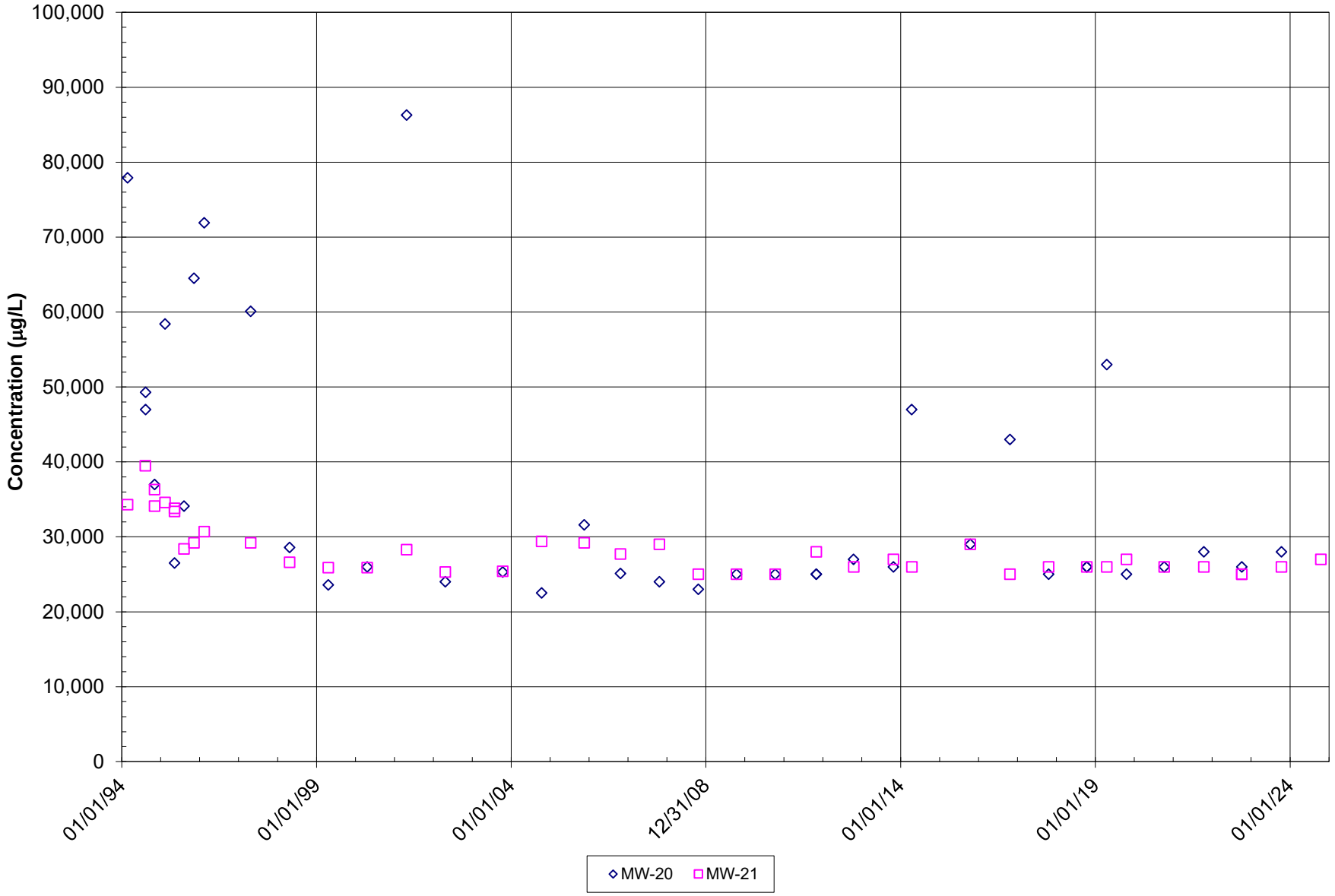


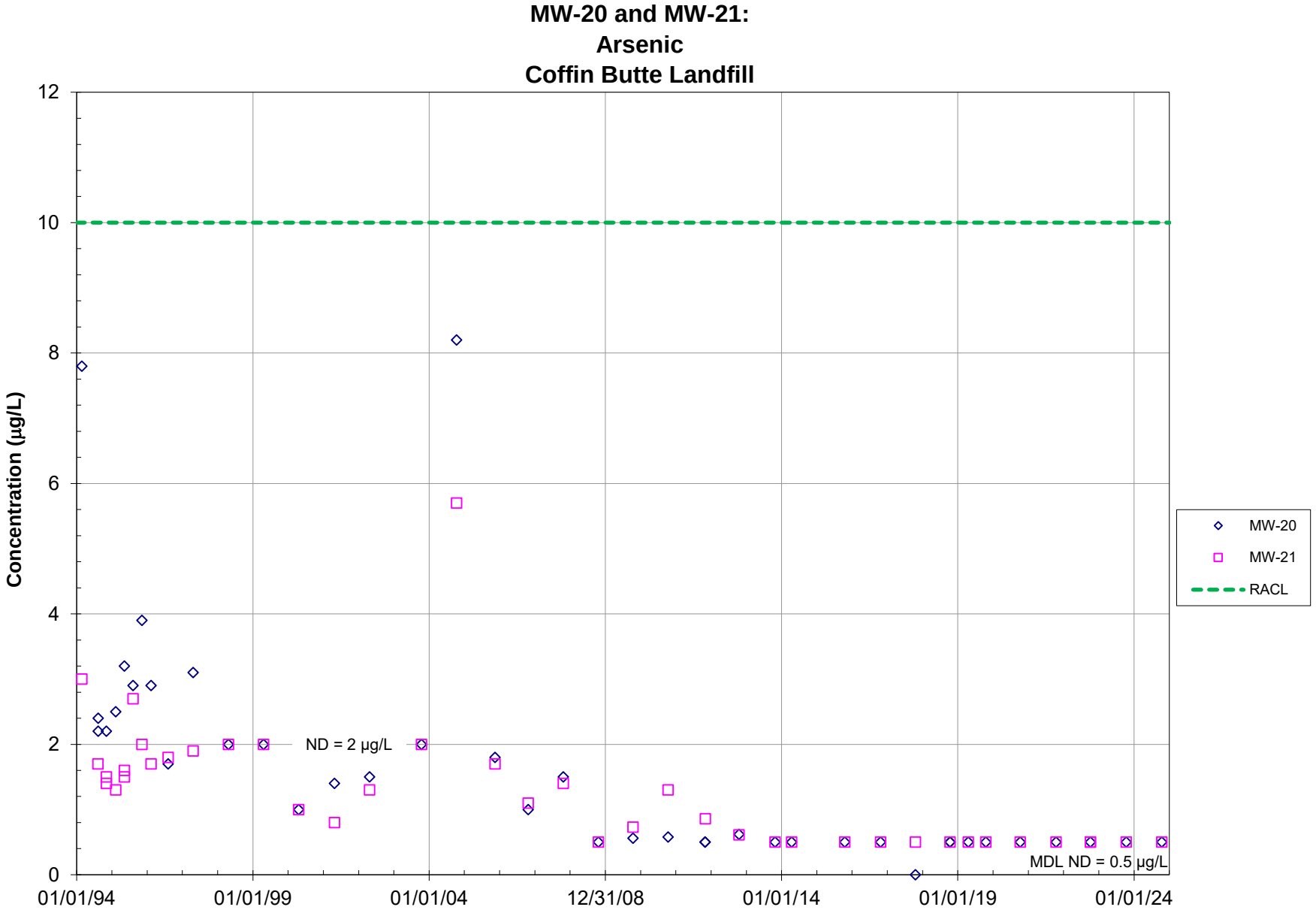
MW-20&21/Magnesium

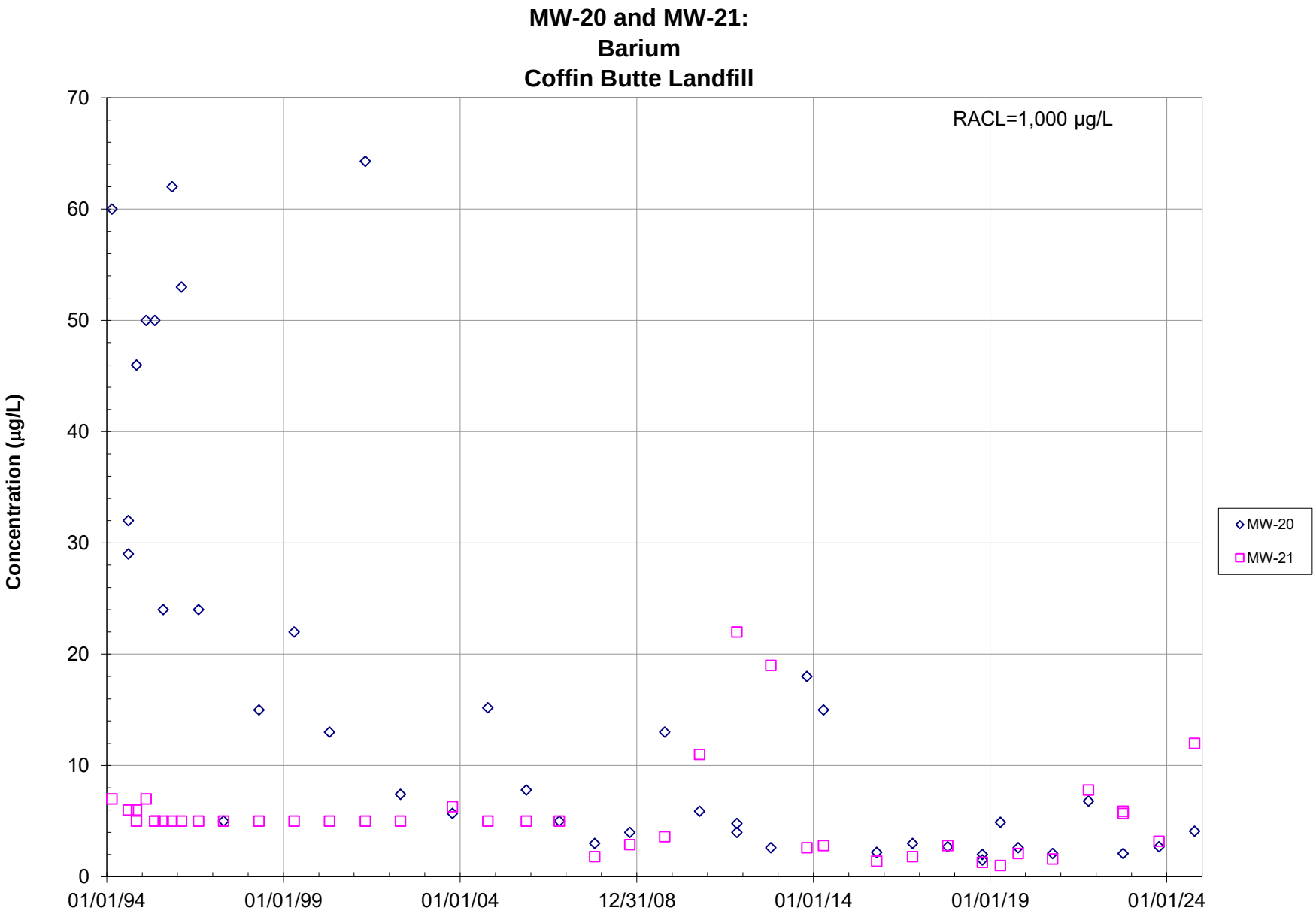


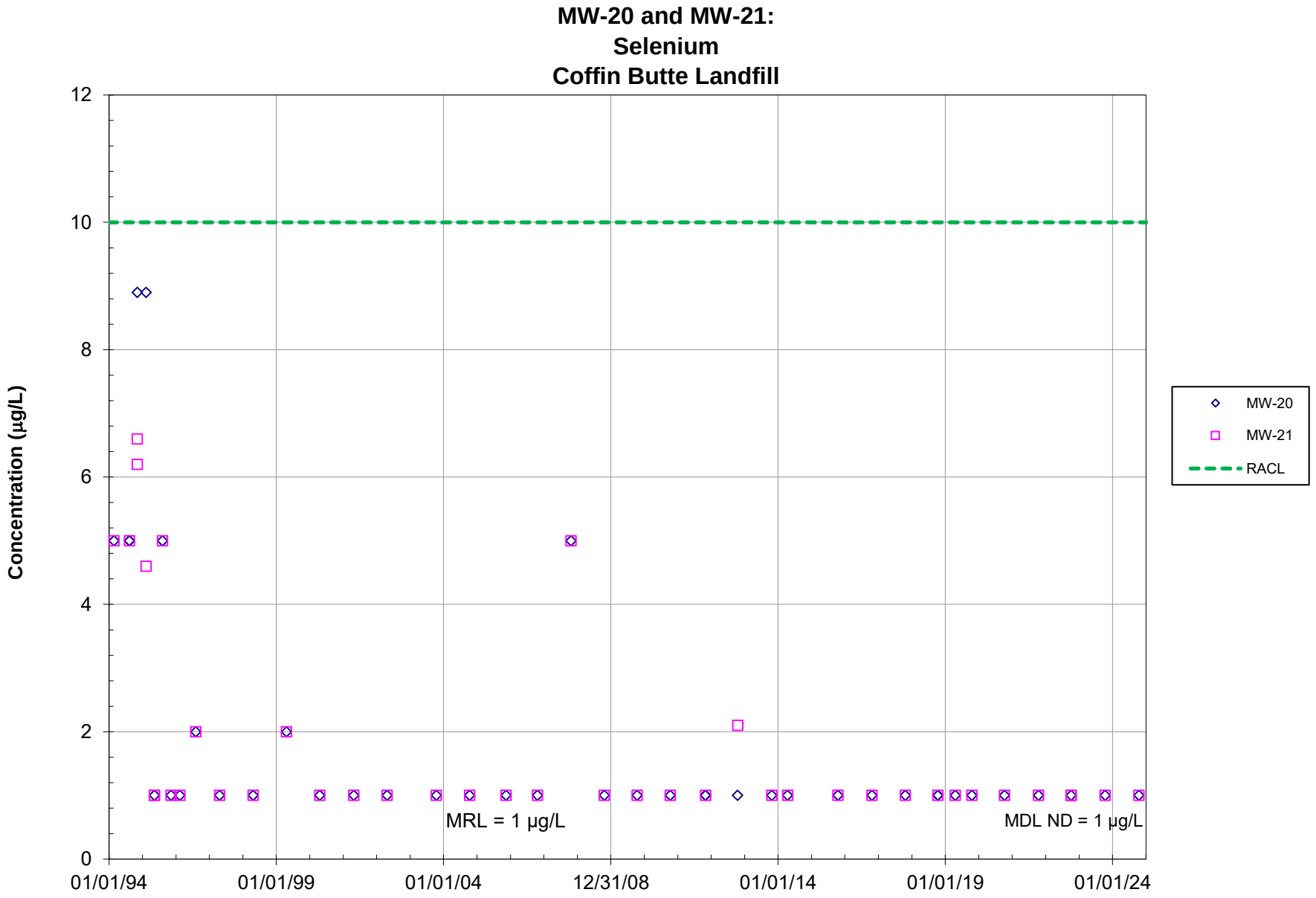
MW-20&21/Manganese

MW-20 and MW-21:
Sodium
Coffin Butte Landfill

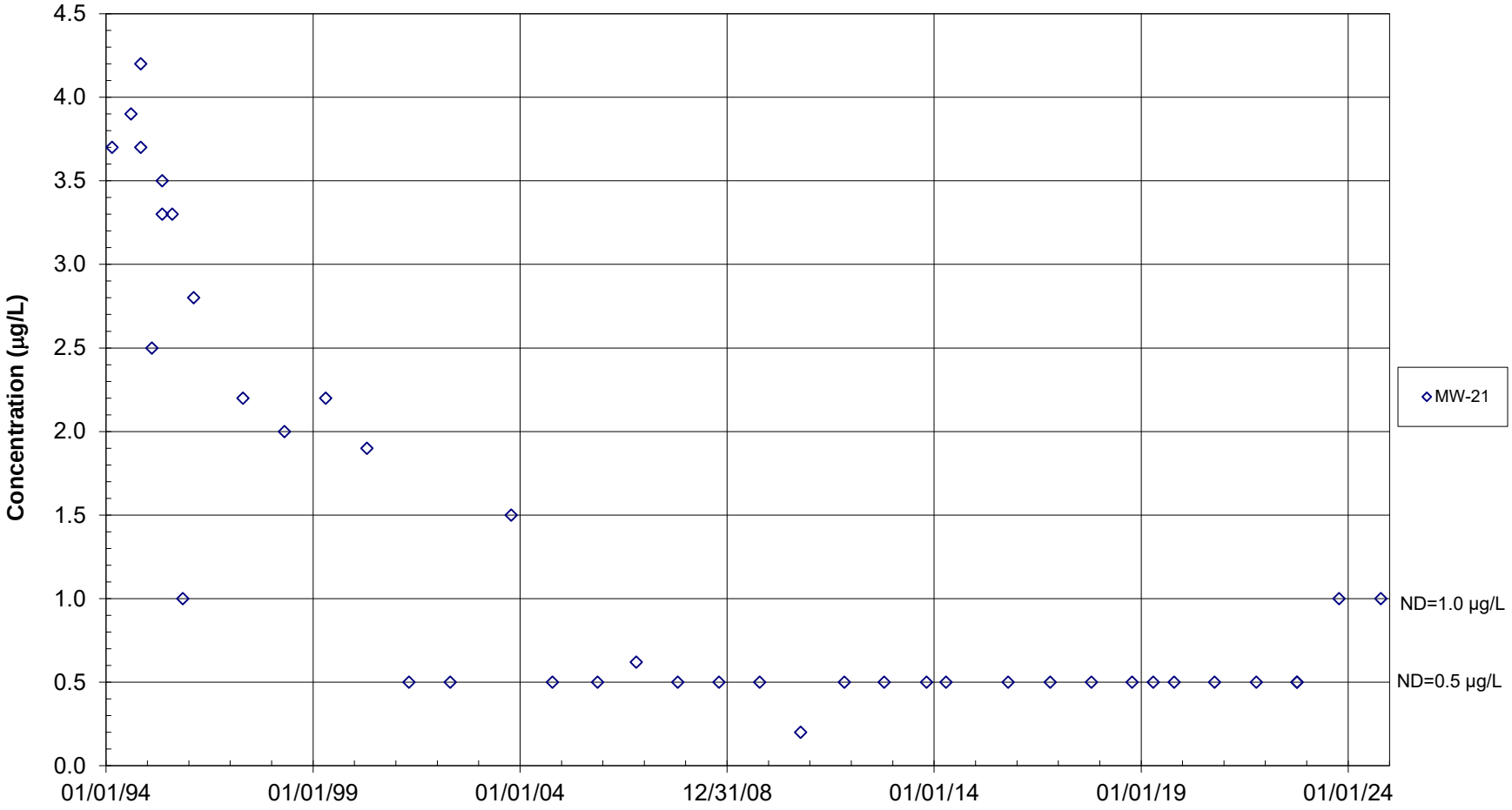



MW-20 and MW-21:
Arsenic
Coffin Butte Landfill
Concentration (µg/L)
12
10
8
6
4
2
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
ND = 2 µg/L
MDL ND = 0.5 µg/L
MW-20
MW-21
RACL

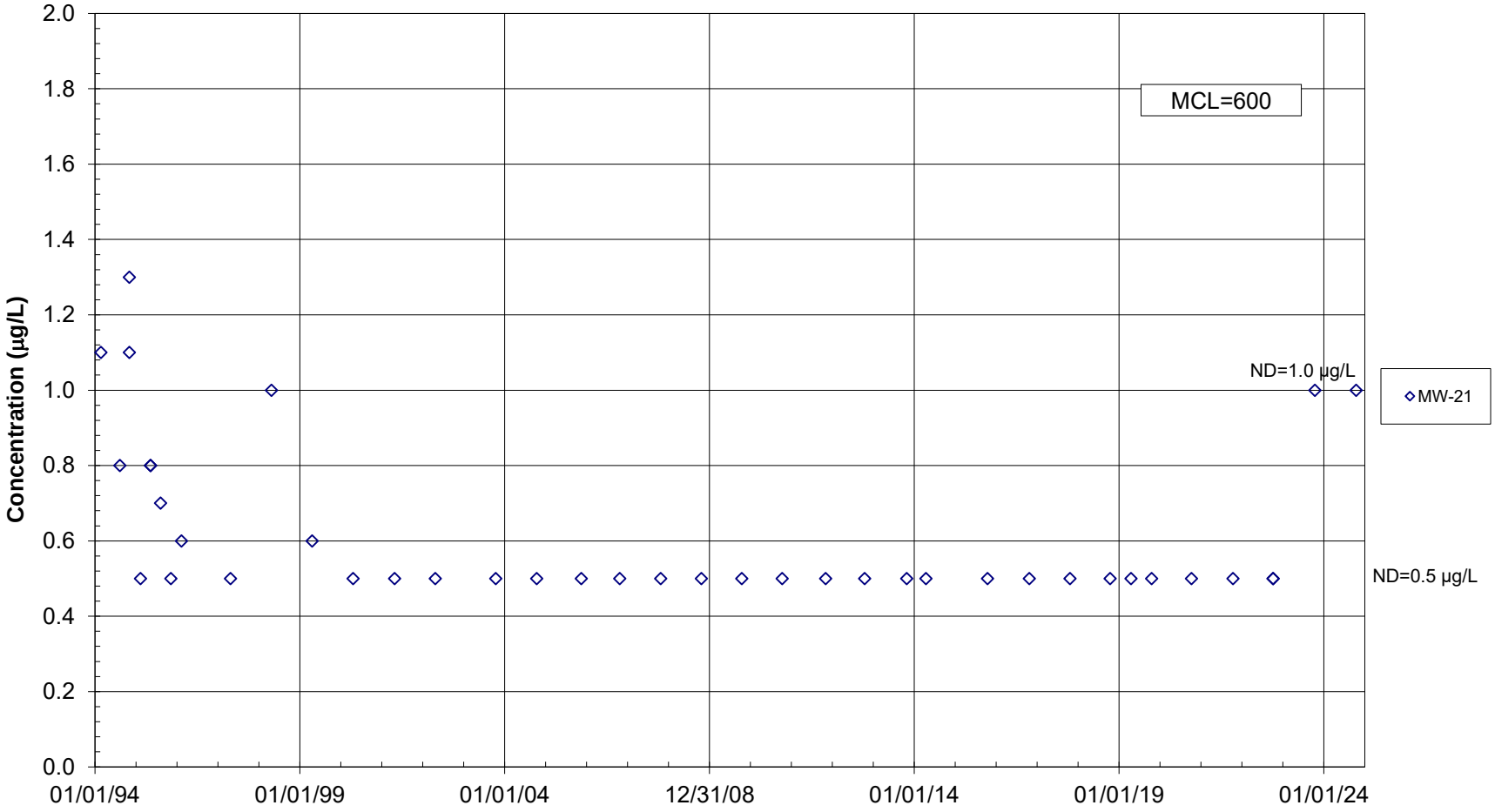

MW-20 and MW-21:
Barium
Coffin Butte Landfill
RACL=1,000 µg/L
Concentration (µg/L)
70
60
50
40
30
20
10
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
MW-20
MW-21


MW-20 and MW-21:
Selenium
Coffin Butte Landfill
Concentration (µg/L)
12
10
8
6
4
2
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
MRL = 1 µg/L
MDL ND = 1 µg/L
MW-20
MW-21
RACL

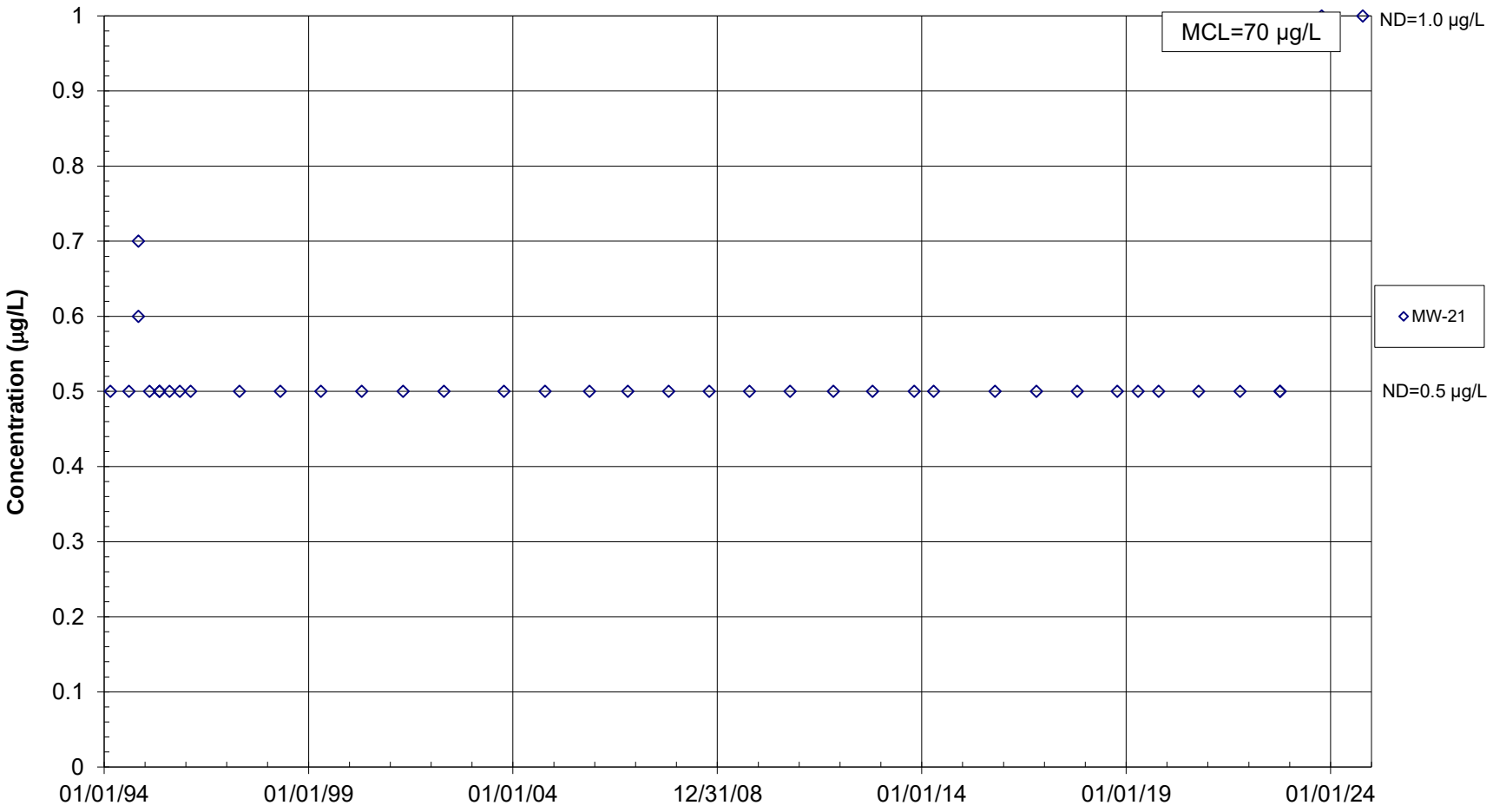
MW-21:
Chlorobenzene
Coffin Butte Landfill



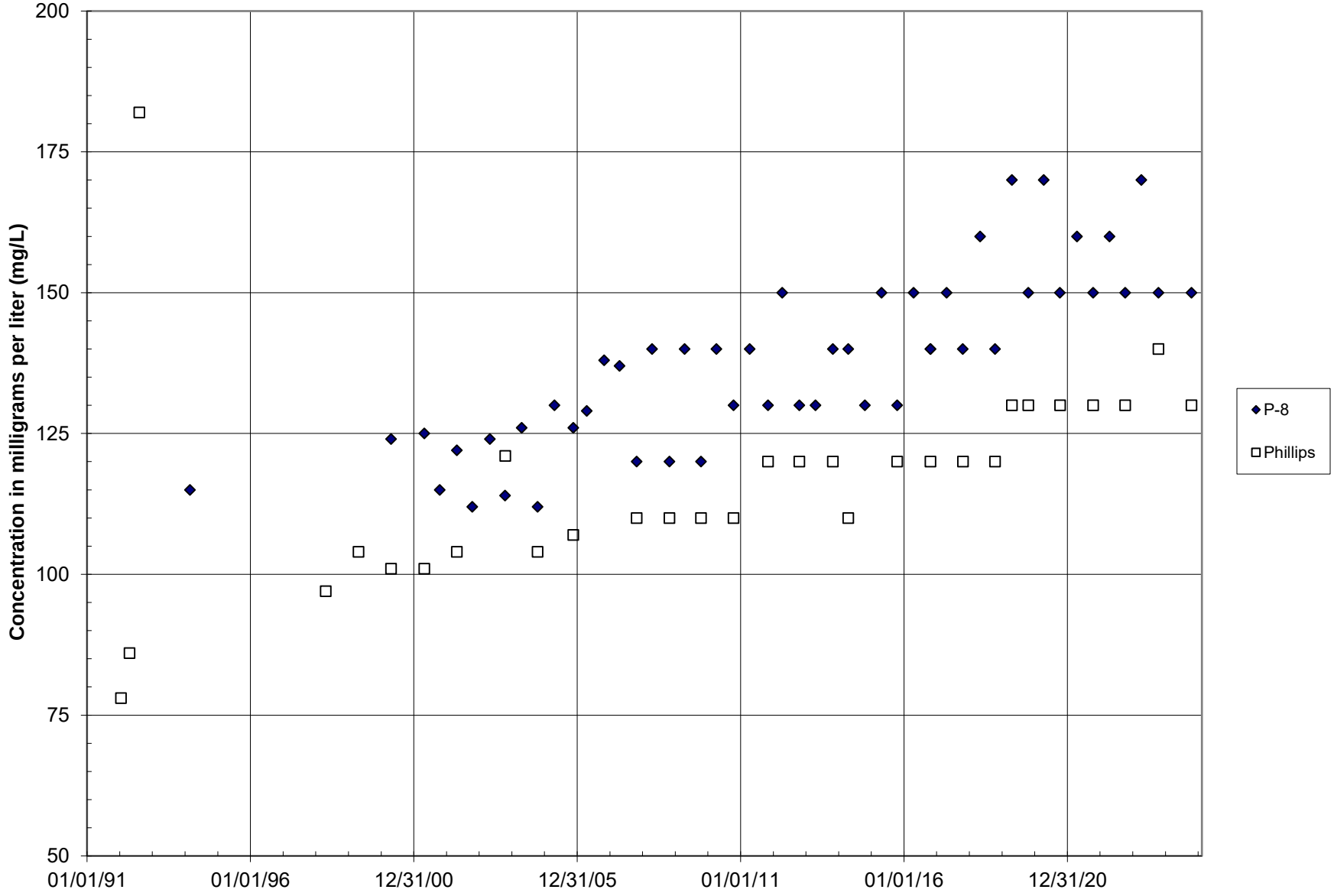
MW-21:
1,2-Dichlorobenzene
Coffin Butte Landfill



MW-21:
cis-1,2-Dichloroethene
Coffin Butte Landfill

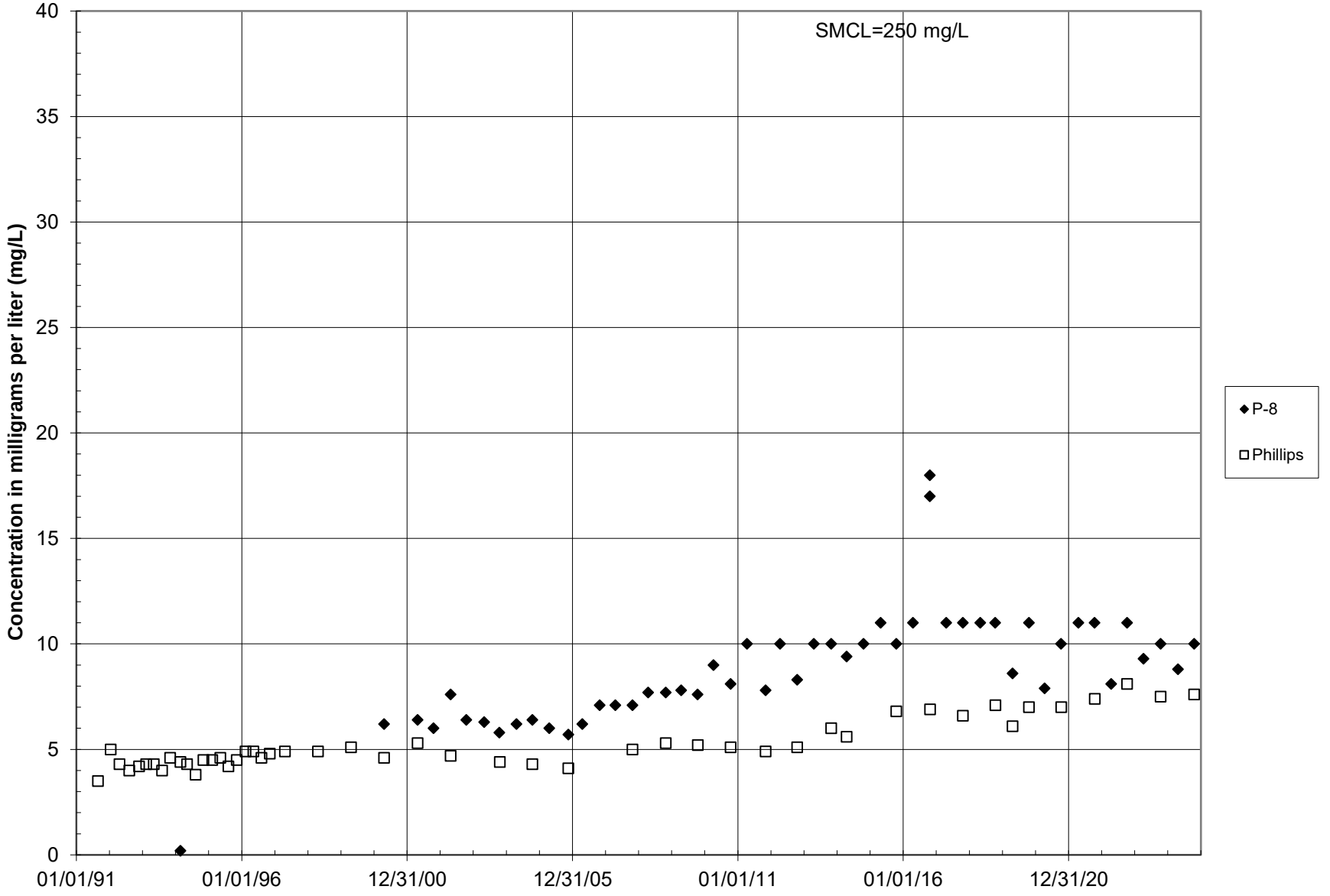


P-8 and Phillips Domestic Well:
Bicarbonate
Coffin Butte Landfill



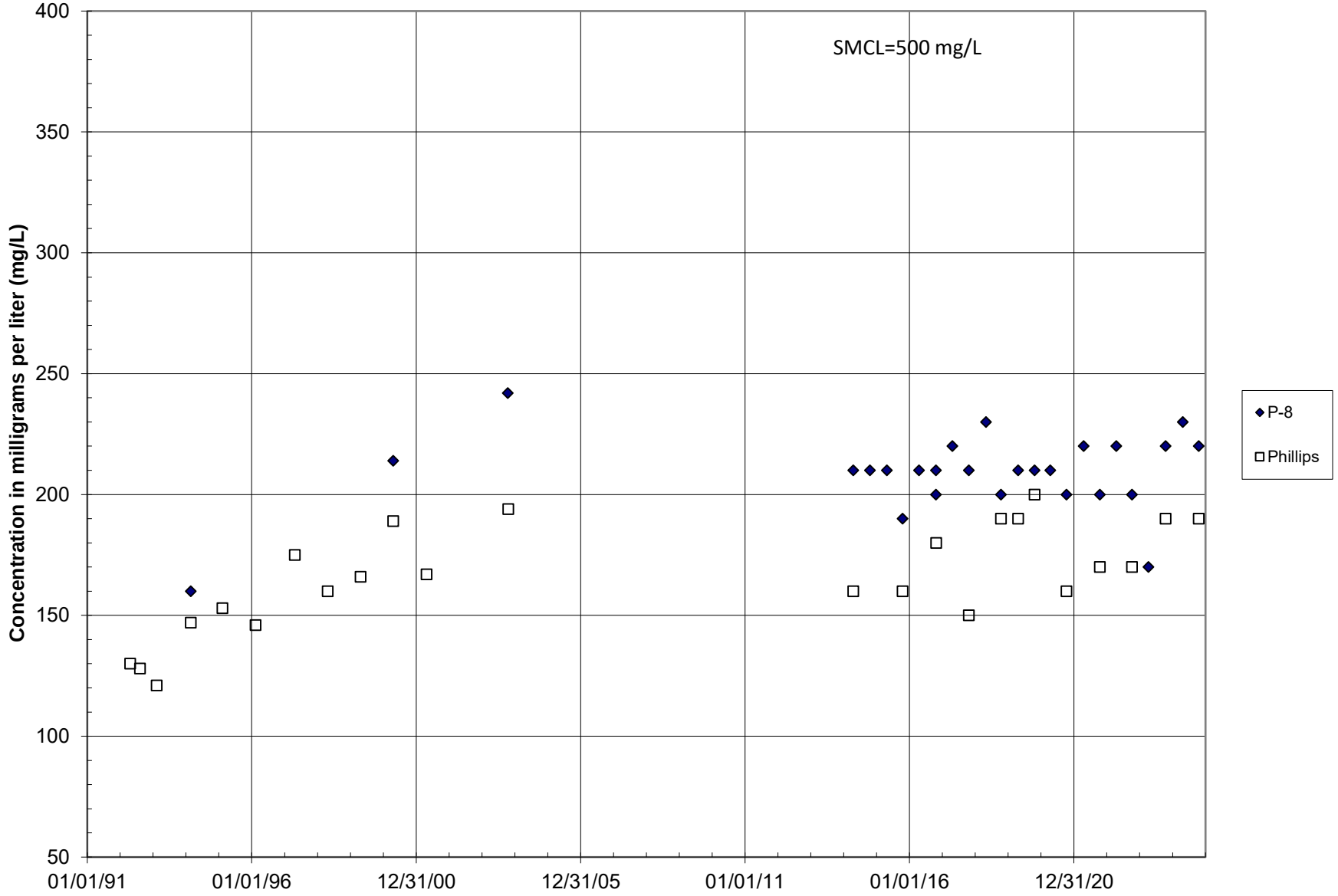
P-8r\Bicarbonate

P-8 and Phillips Domestic Well:
Chloride
Coffin Butte Landfill



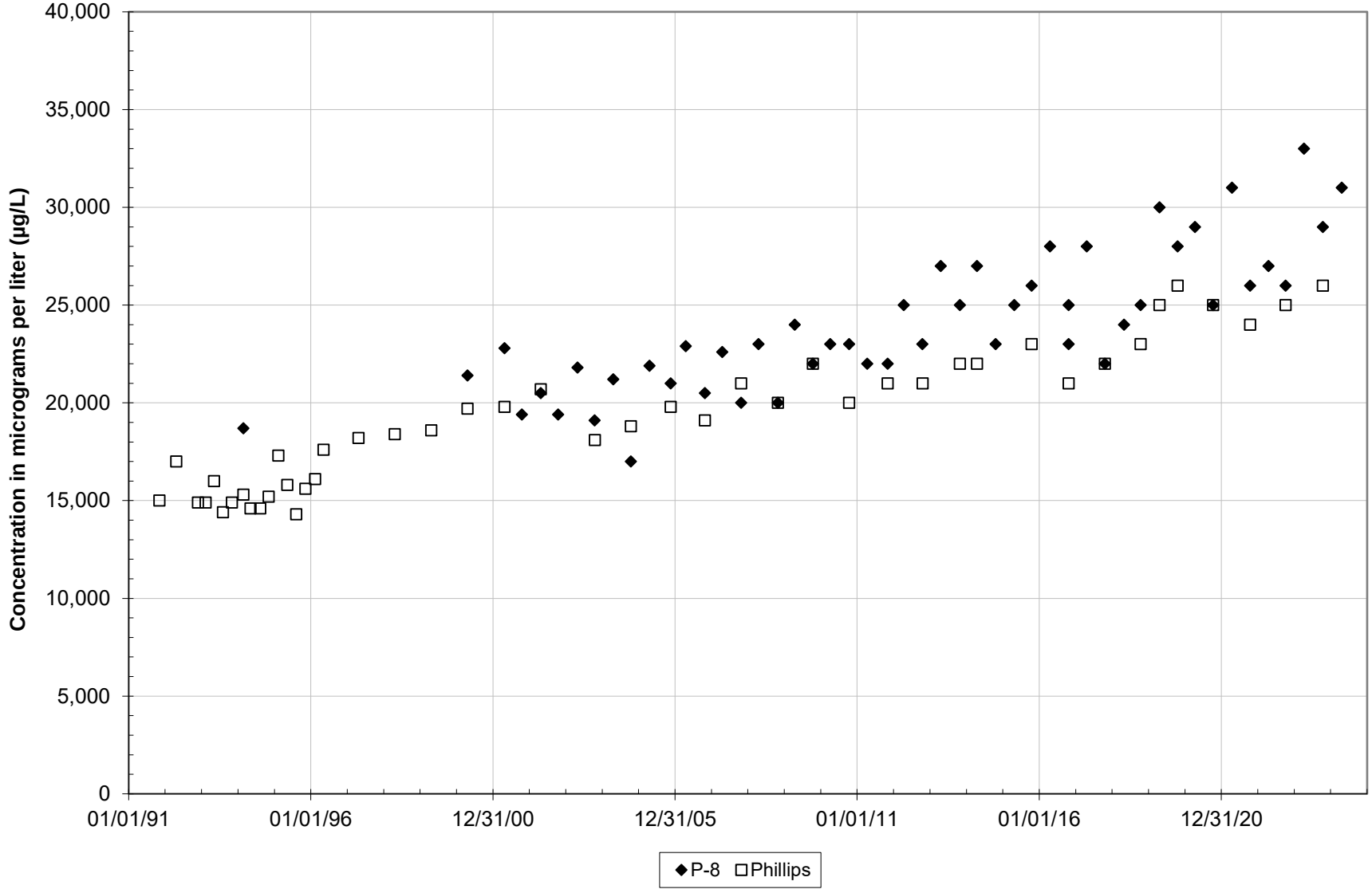
P-8r\Chloride

P-8 and Phillips Domestic Well:
TDS
Coffin Butte Landfill



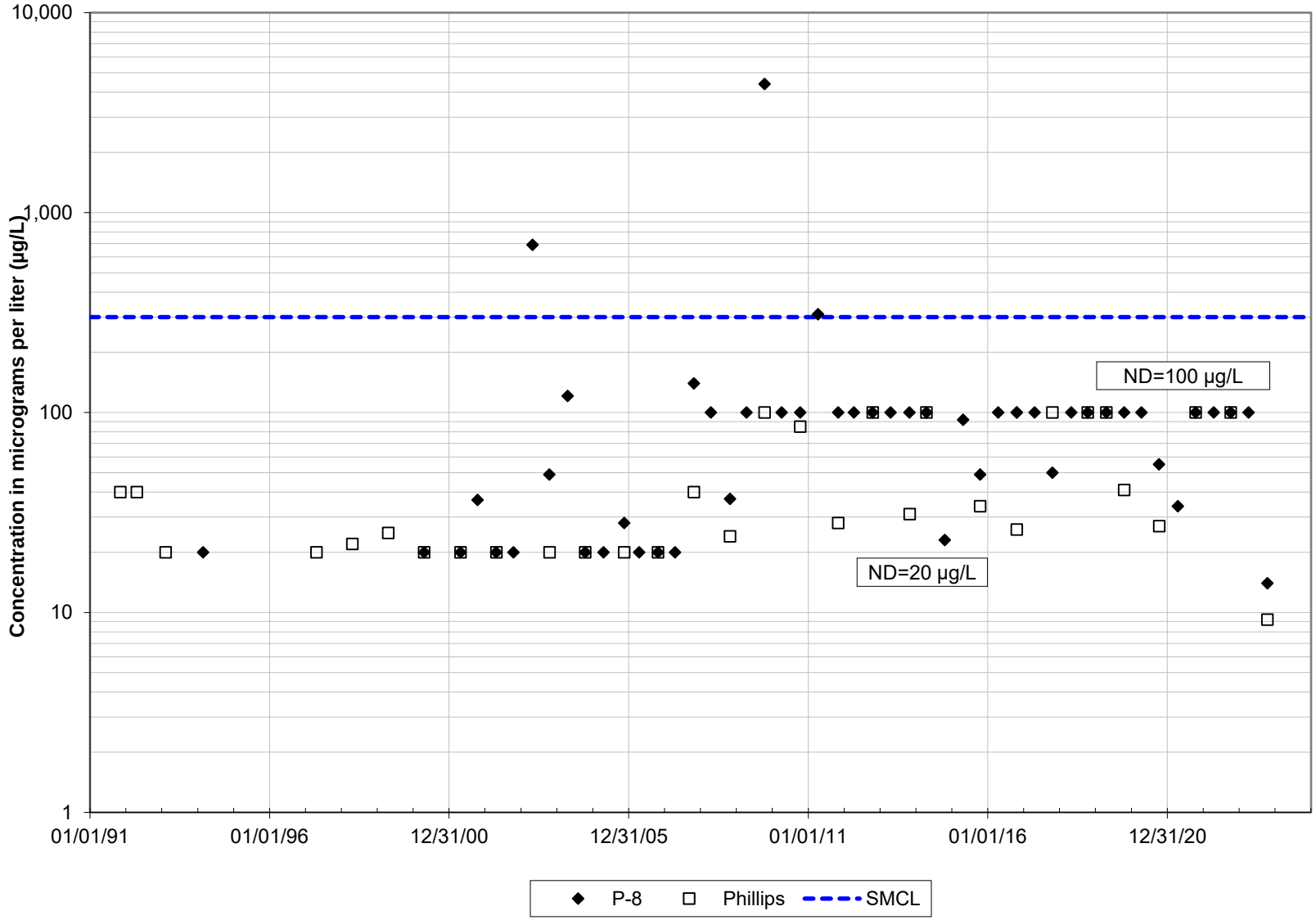
P-8r\TDS

P-8 and Phillips:
Calcium
Coffin Butte Landfill



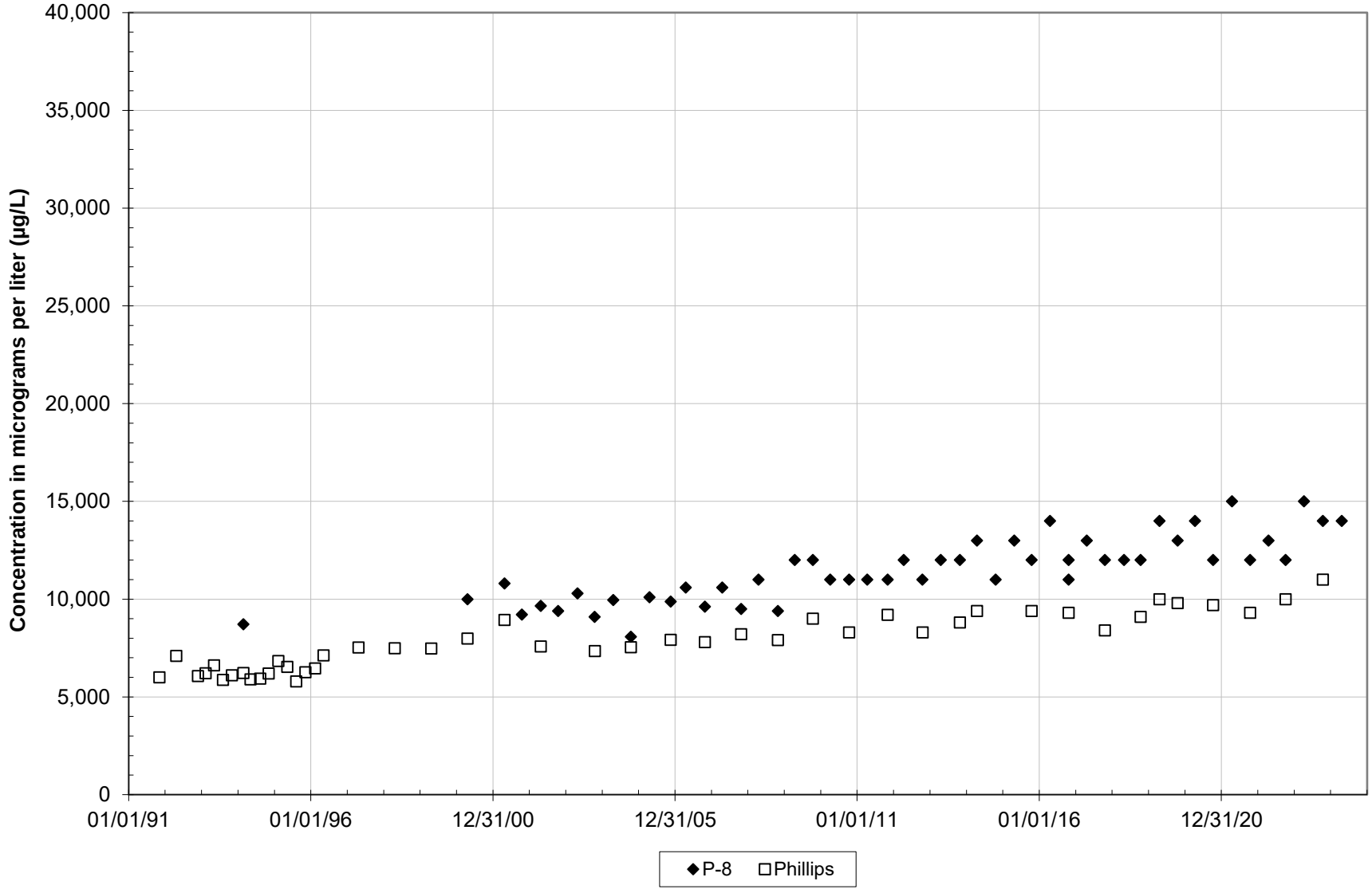
P-8-phillips\Calcium

P-8 and Phillips:
Iron
Coffin Butte Landfill



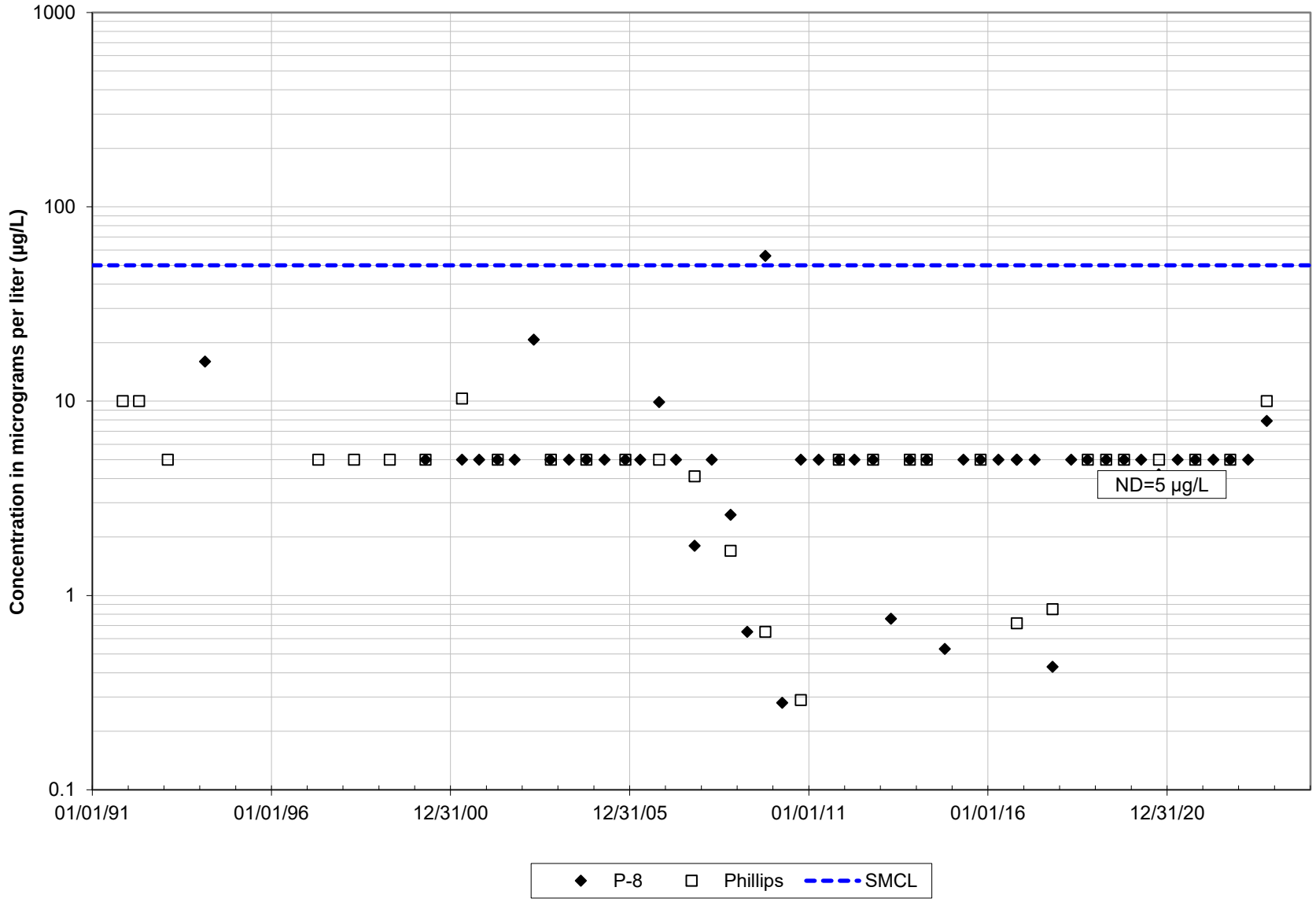
P-8-phillips\Iron

P-8 and Phillips:
Magnesium
Coffin Butte Landfill



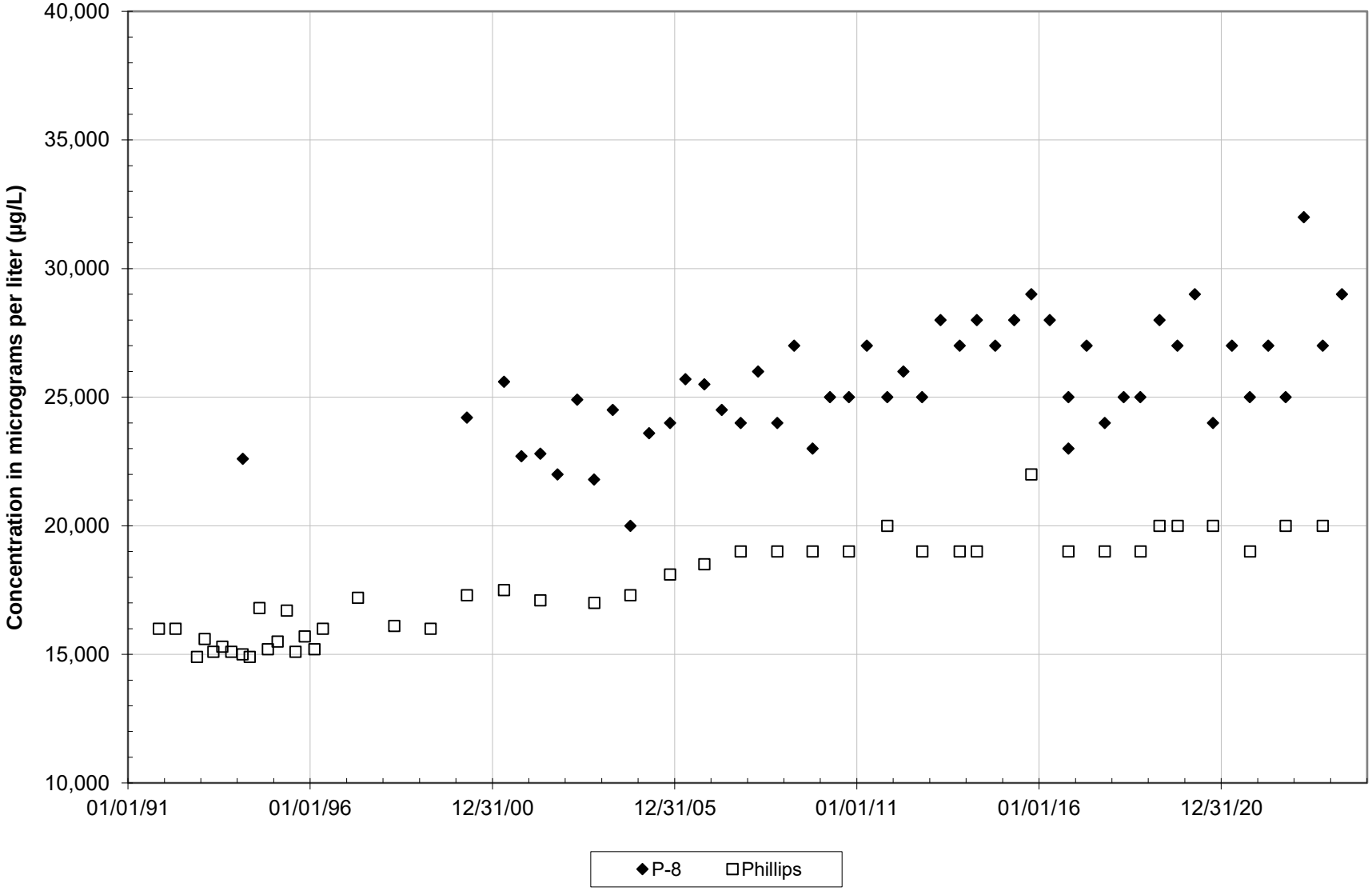
P-8-phillips\Magnesium

P-8 and Phillips:
Manganese
Coffin Butte Landfill



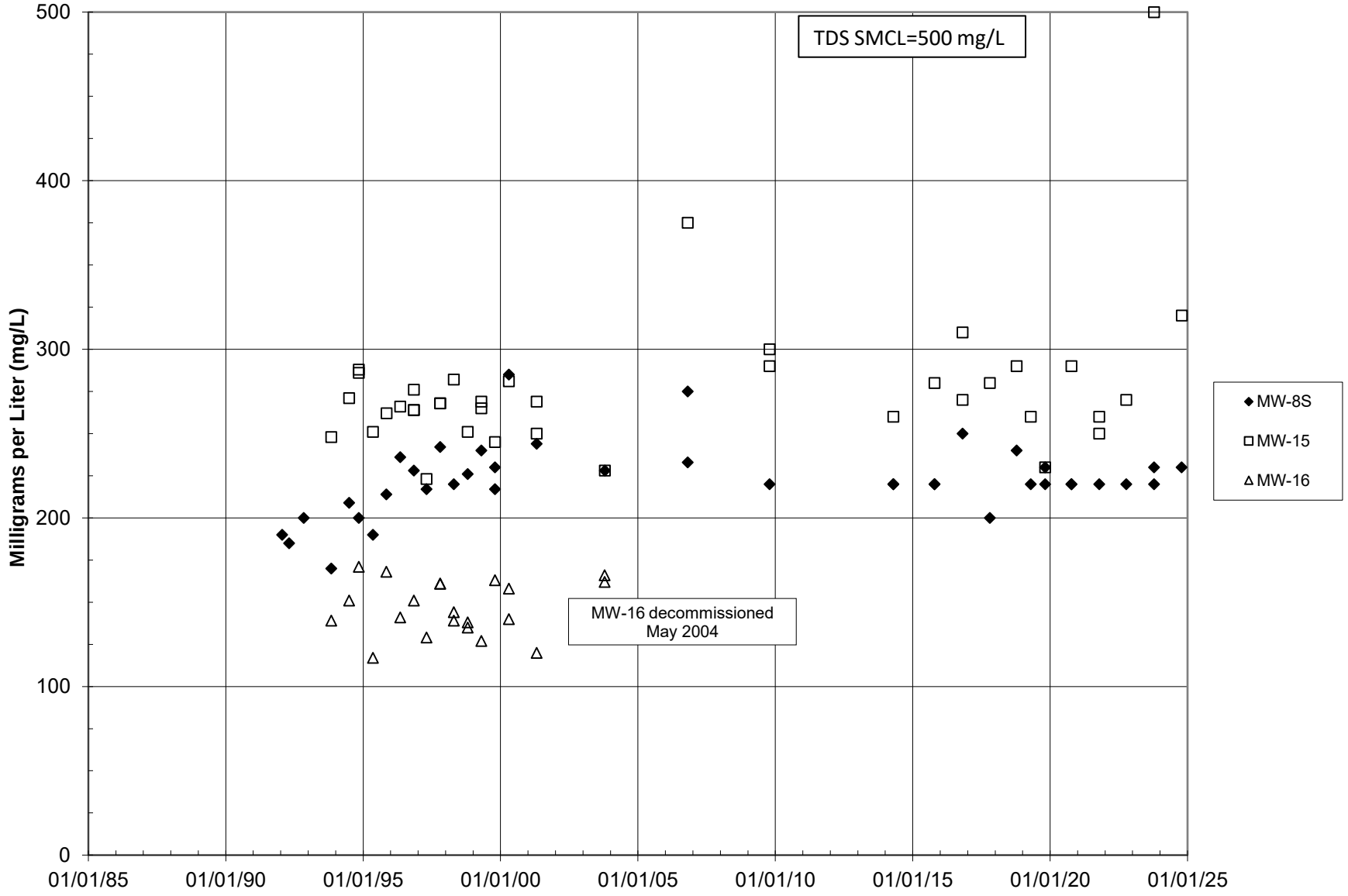
P-8-phillips\Manganese

P-8 and Phillips:
Sodium
Coffin Butte Landfill

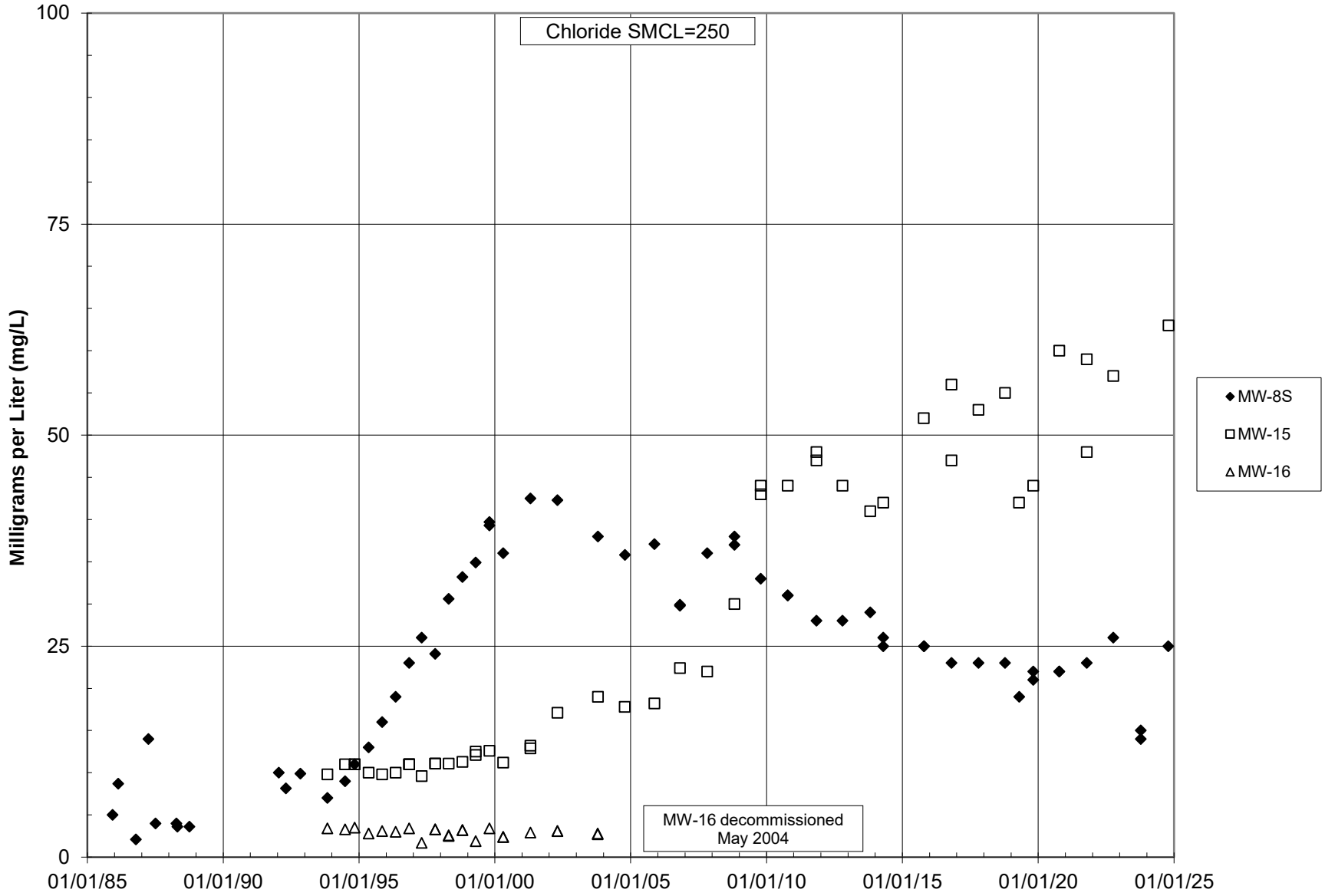


P-8-phillips\Sodium

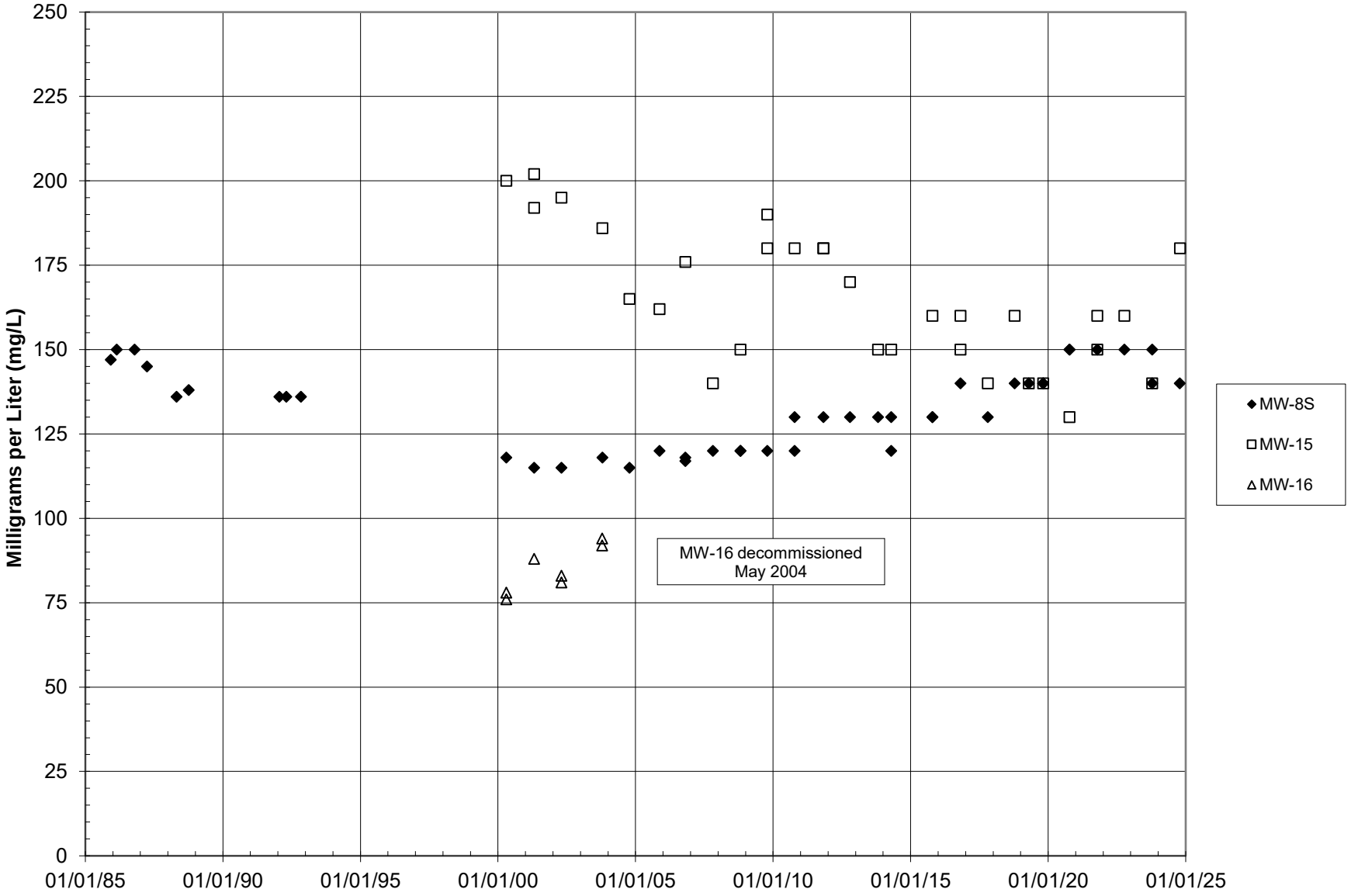
MW-8S, MW-15, MW-16 - TDS
Coffin Butte Landfill



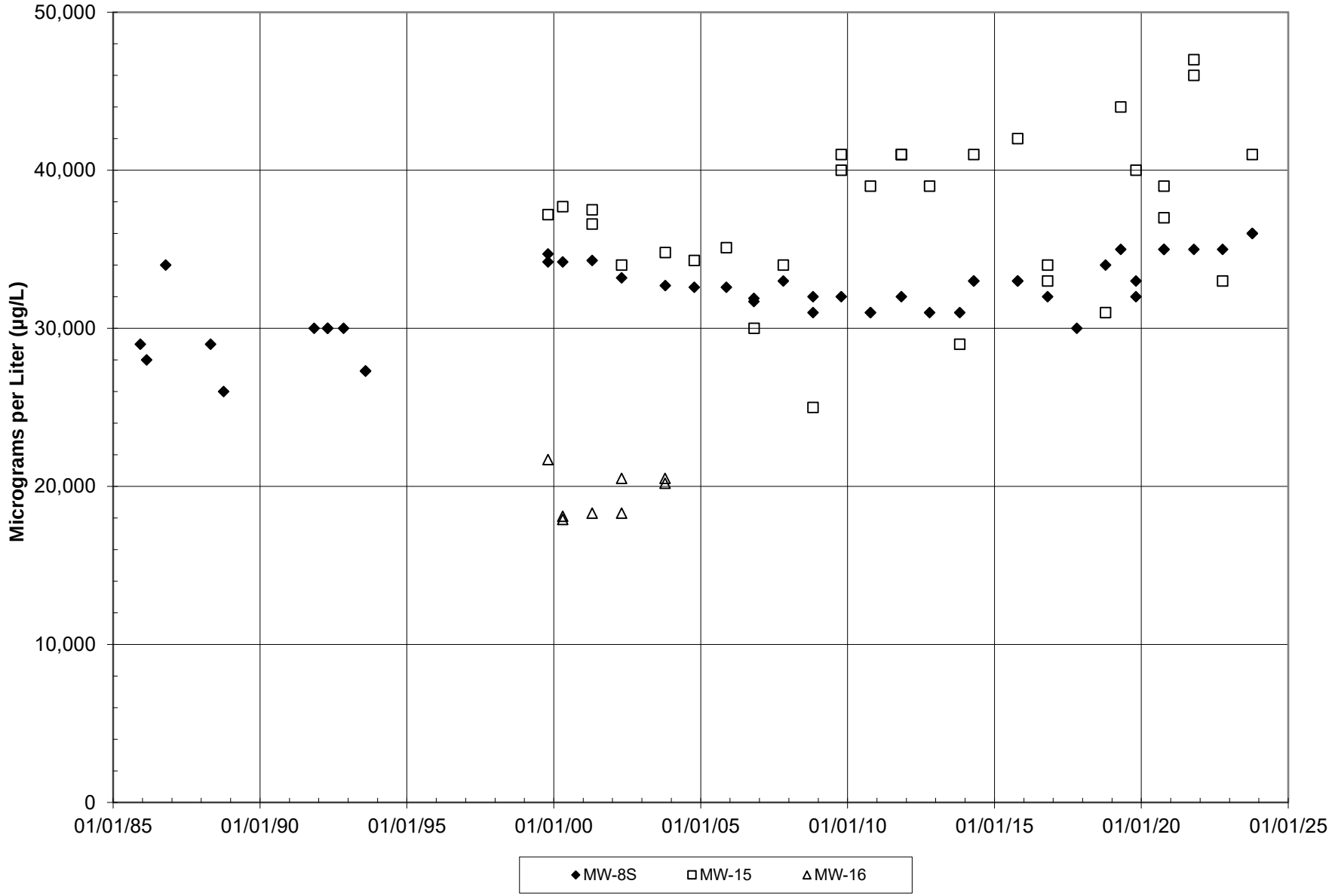
MW-8S, MW-15, MW-16 - Chloride
Coffin Butte Landfill



MW-8S, MW-15, MW-16 - Bicarbonate Alkalinity
Coffin Butte Landfill

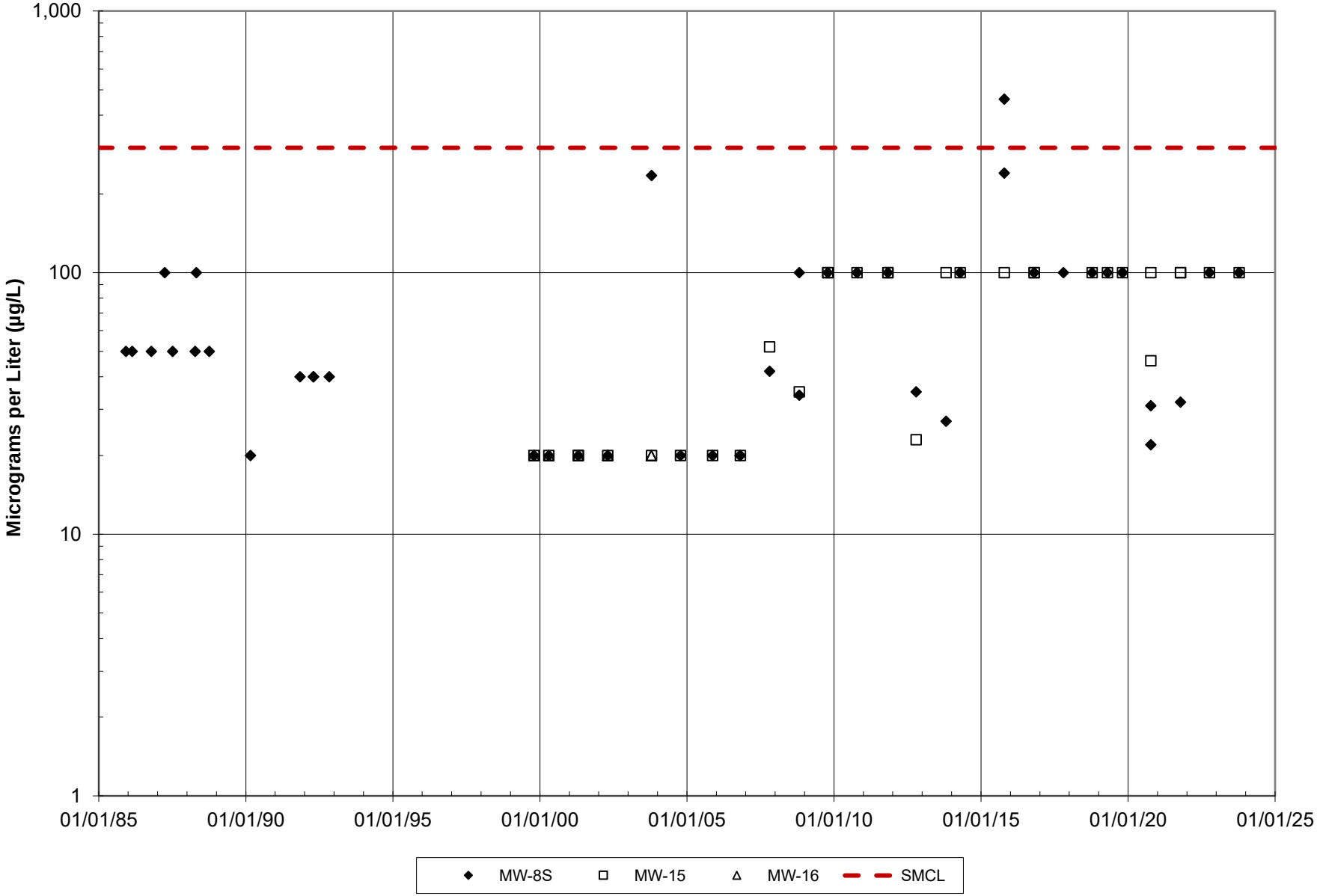


MW-8S, MW-15, MW-16
Calcium
Coffin Butte Landfill



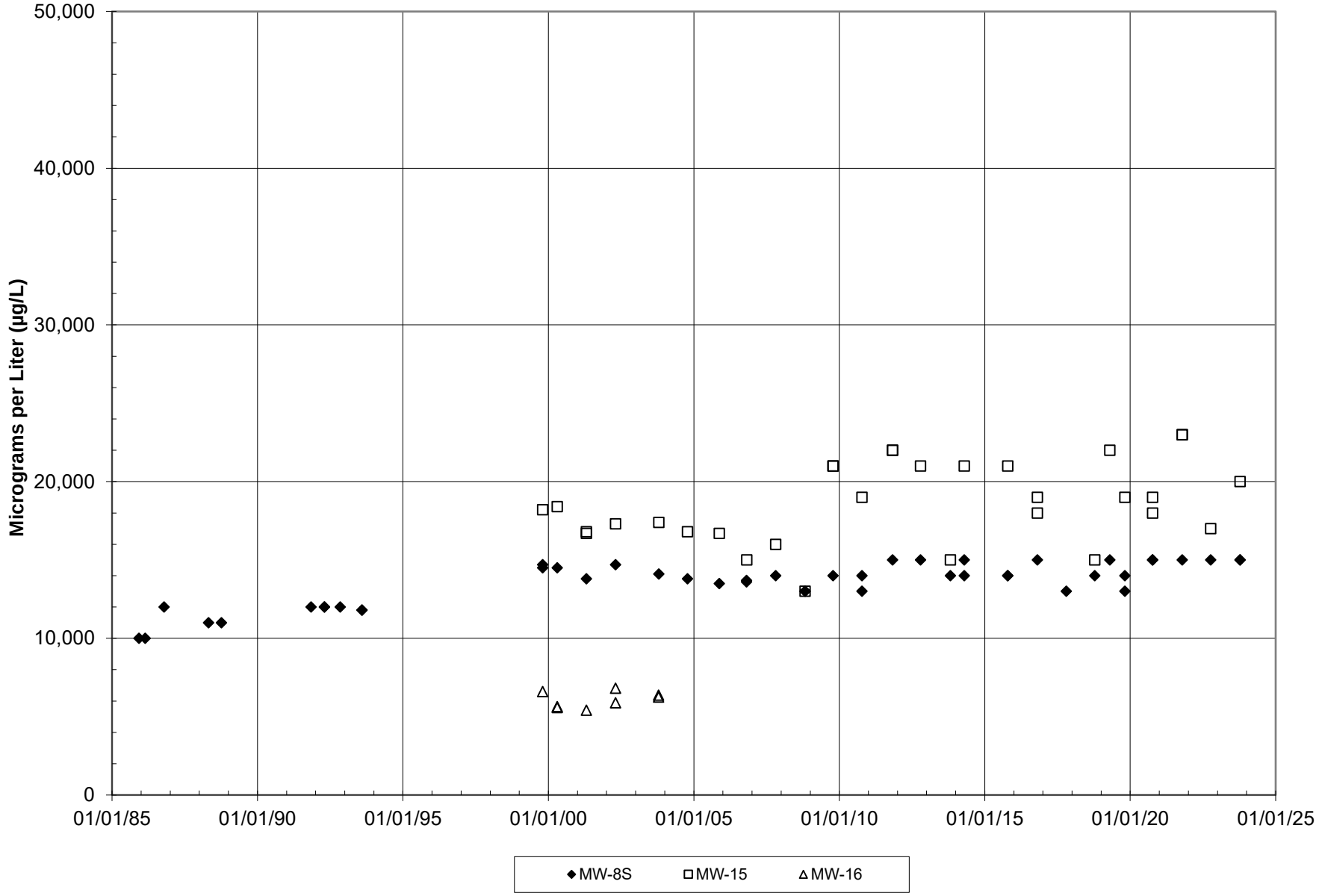
lch-flds\MW-8-15_Ca

MW-8S, MW-15, MW-16
Iron
Coffin Butte Landfill



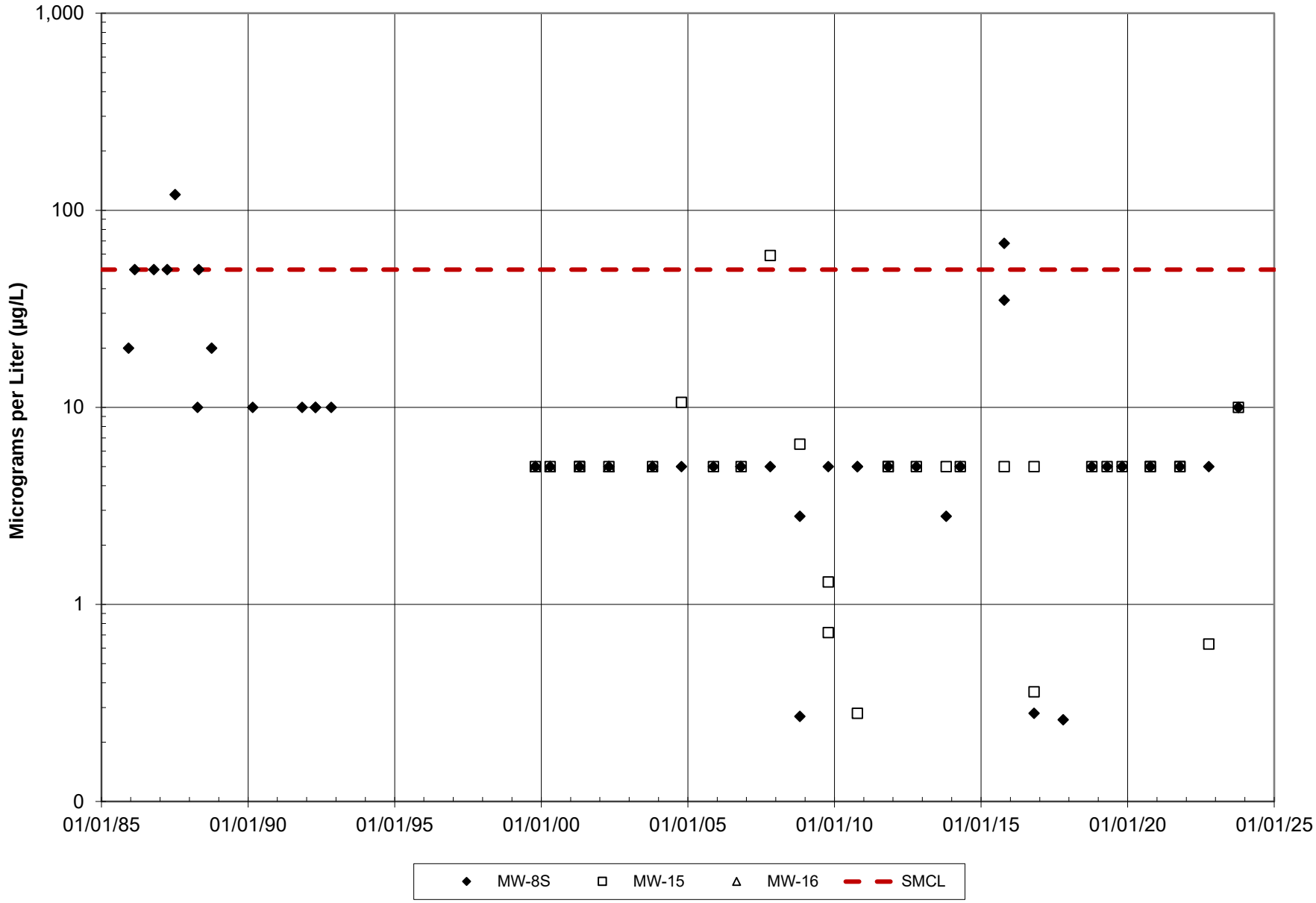
lch-flds\MW-8-15_Fe

MW-8S, MW-15, MW-16
Magnesium
Coffin Butte Landfill



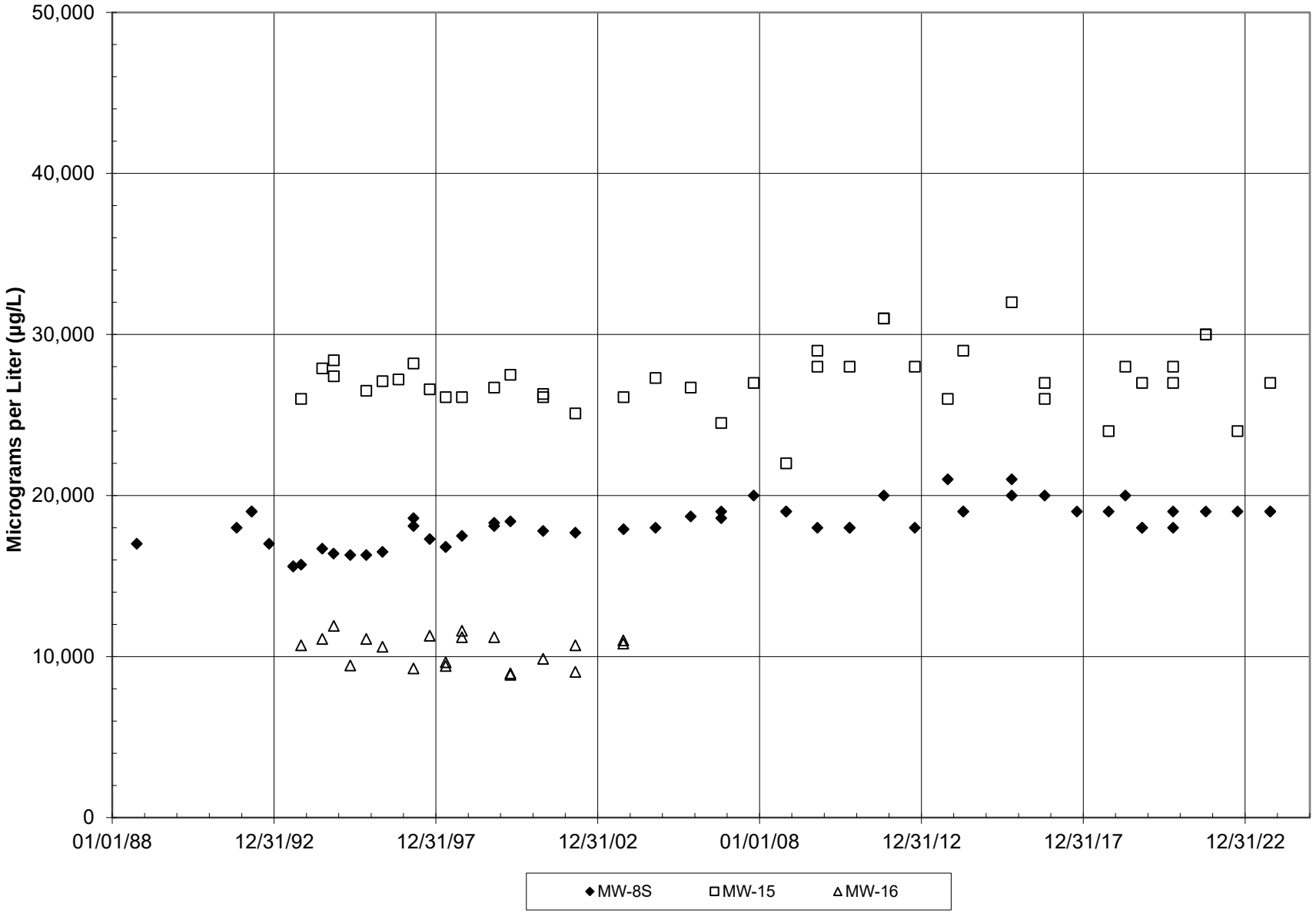
lch-flds\MW-8-15_Mg

MW-8S, MW-15, MW-16
Manganese
Coffin Butte Landfill



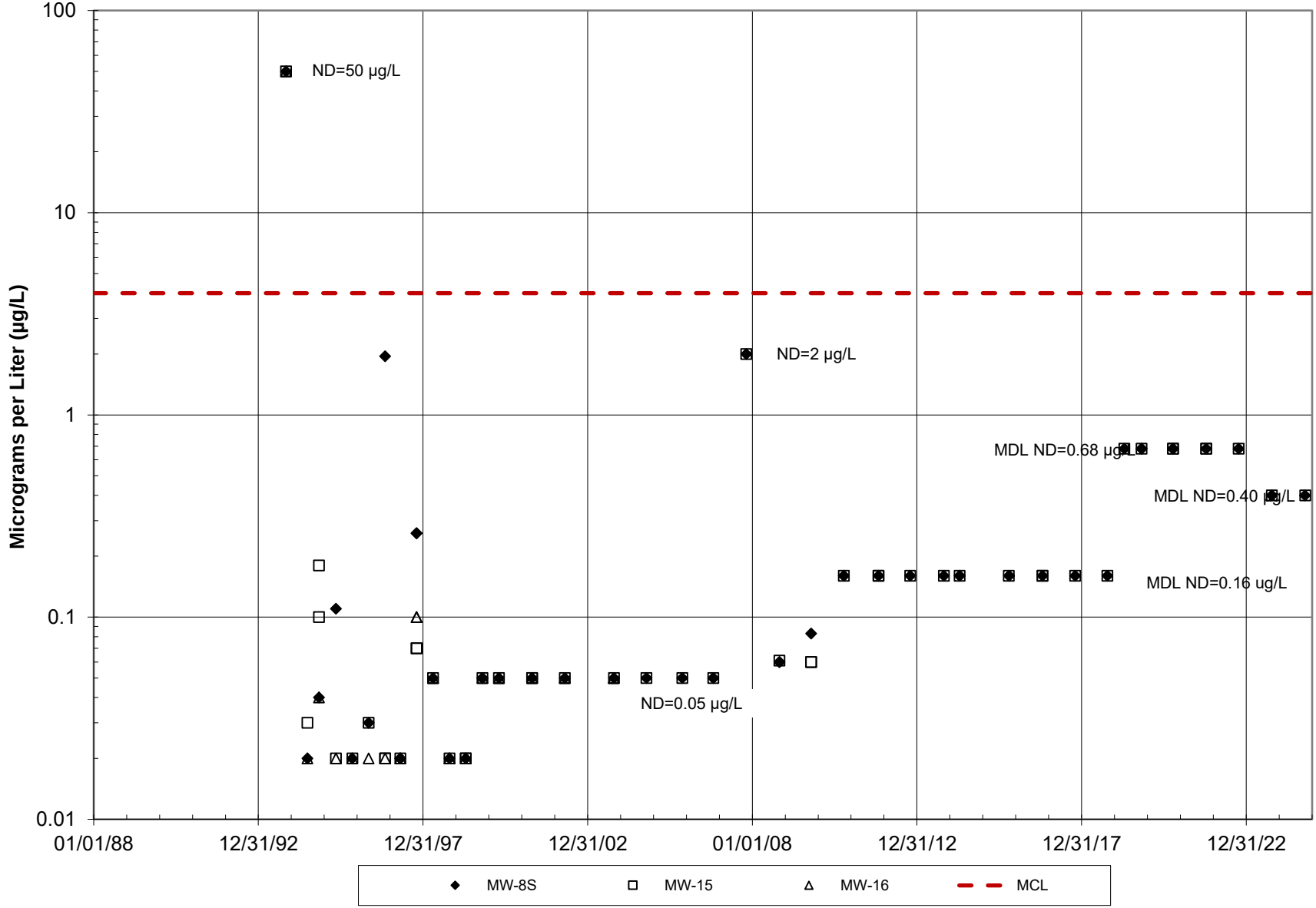
lch-flds\MW-8-15_Mn

MW-8S, MW-15, MW-16
Sodium
Coffin Butte Landfill



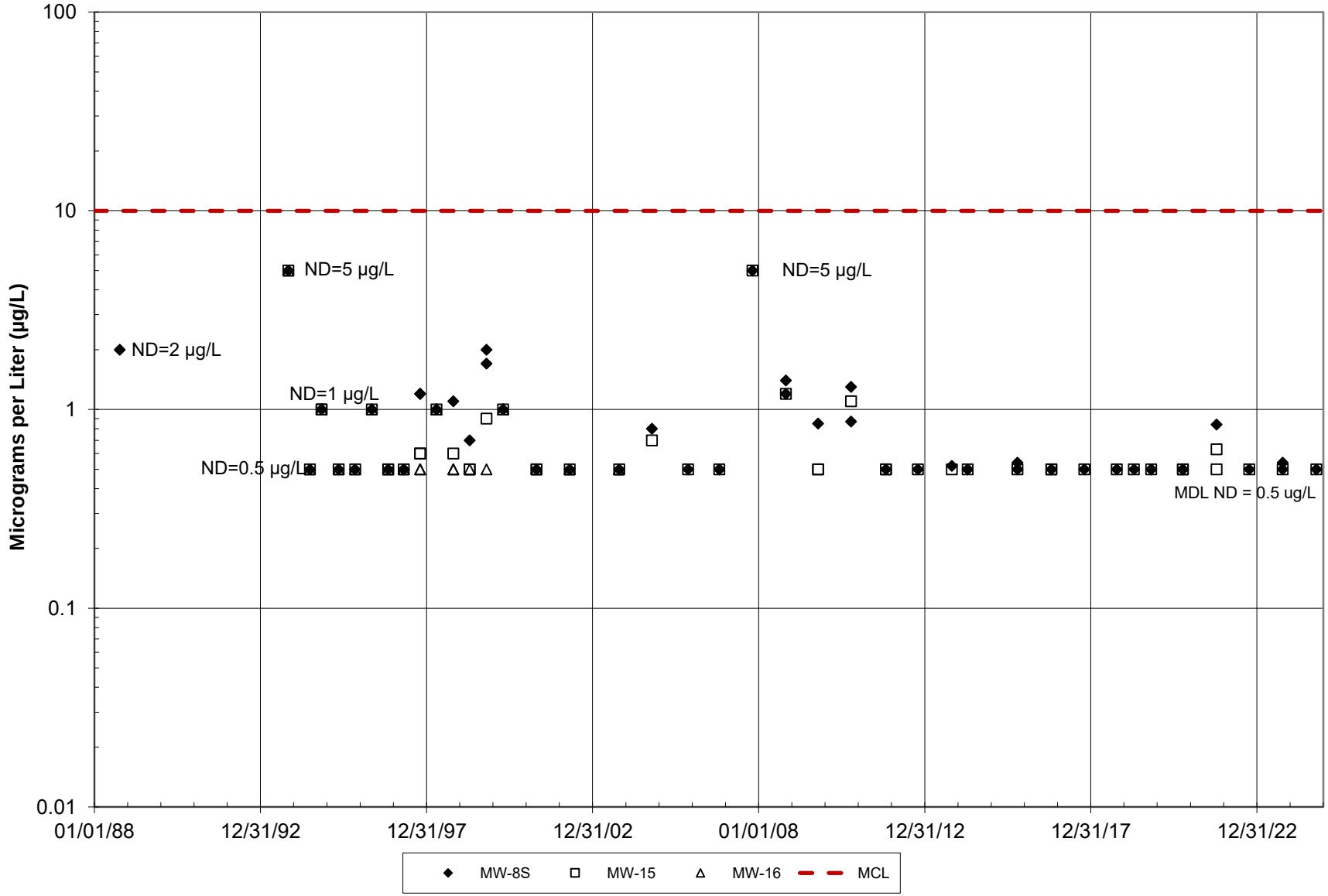
lch-flds\MW-8-15_Na

MW-8S, MW-15, MW-16
Antimony
Coffin Butte Landfill



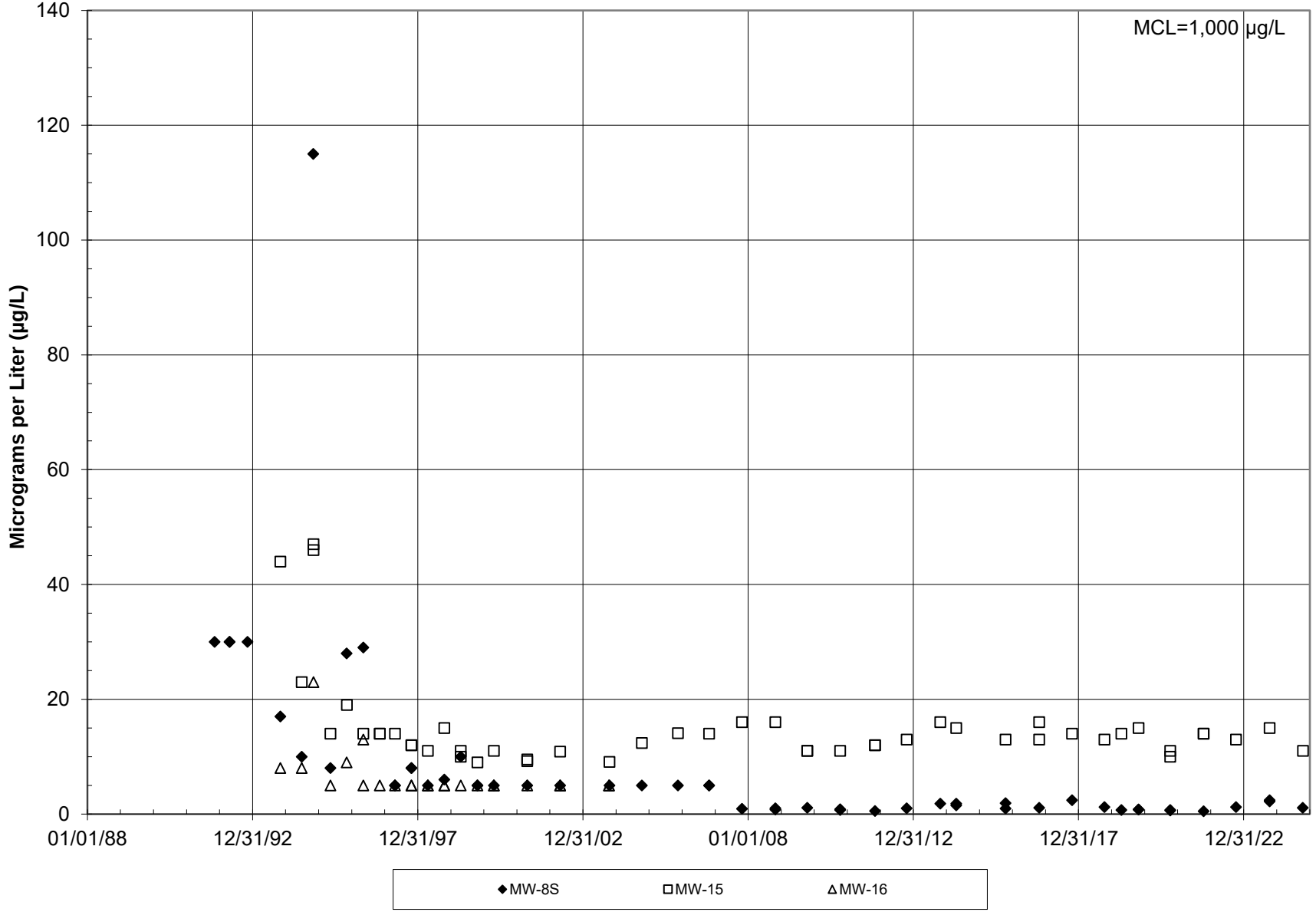
lch-flds\MW-8-15-Sb

MW-8S, MW-15, MW-16
Arsenic
Coffin Butte Landfill



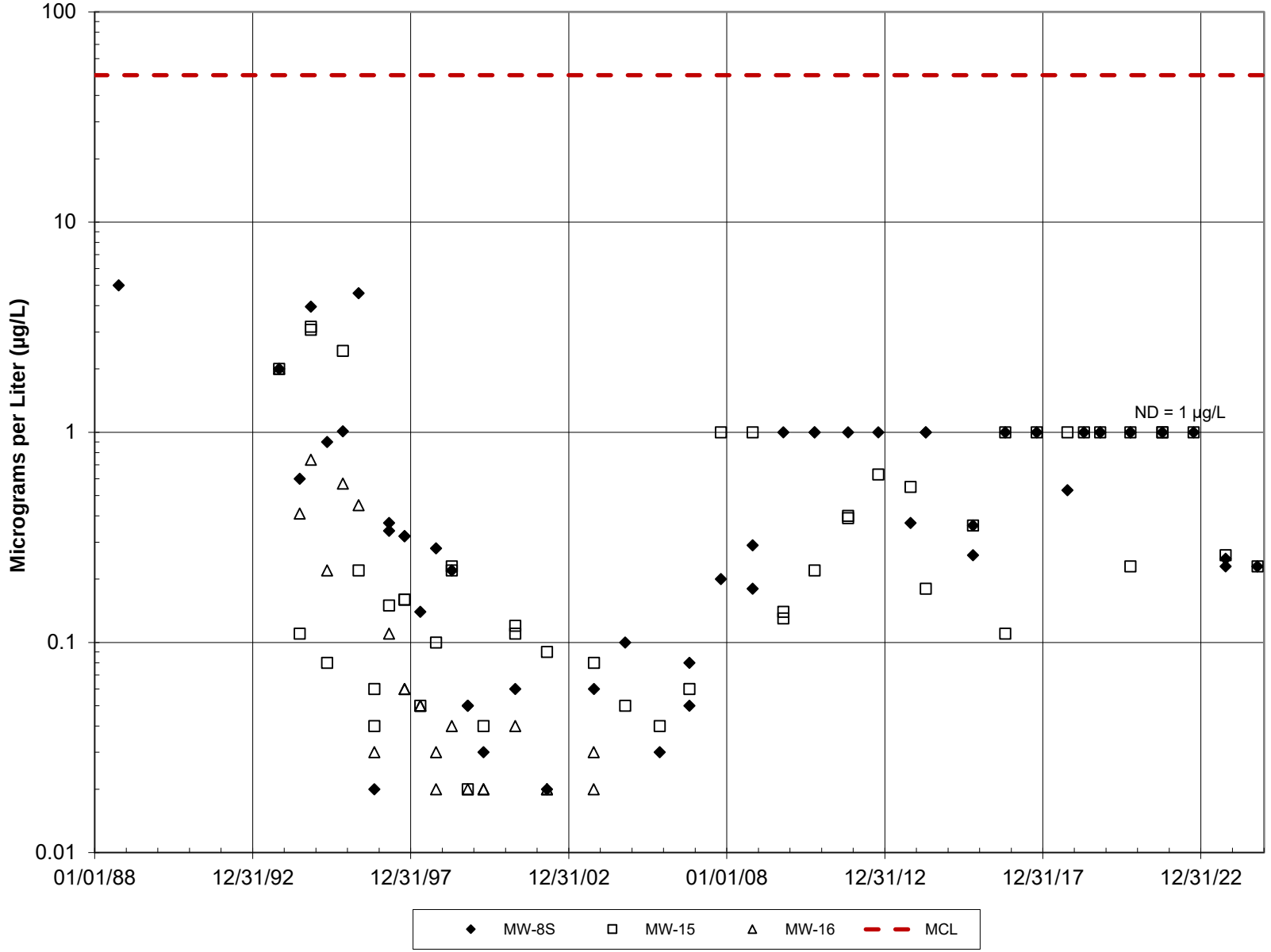
lch-flds\MW-8-15-As

MW-8S, MW-15, MW-16
Barium
Coffin Butte Landfill



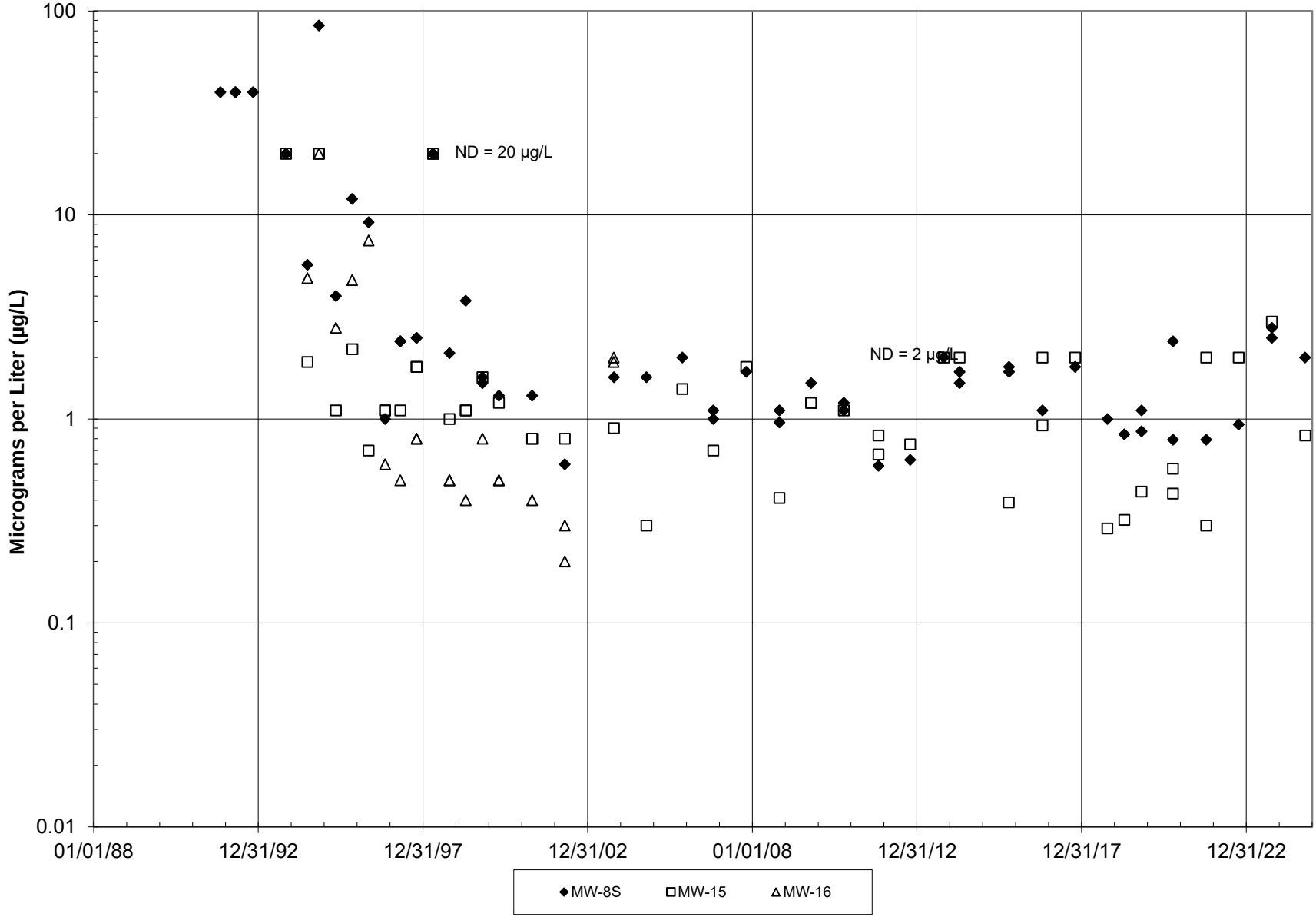
lch-flds\MW-8-15-Ba

MW-8S, MW-15, MW-16
Lead
Coffin Butte Landfill



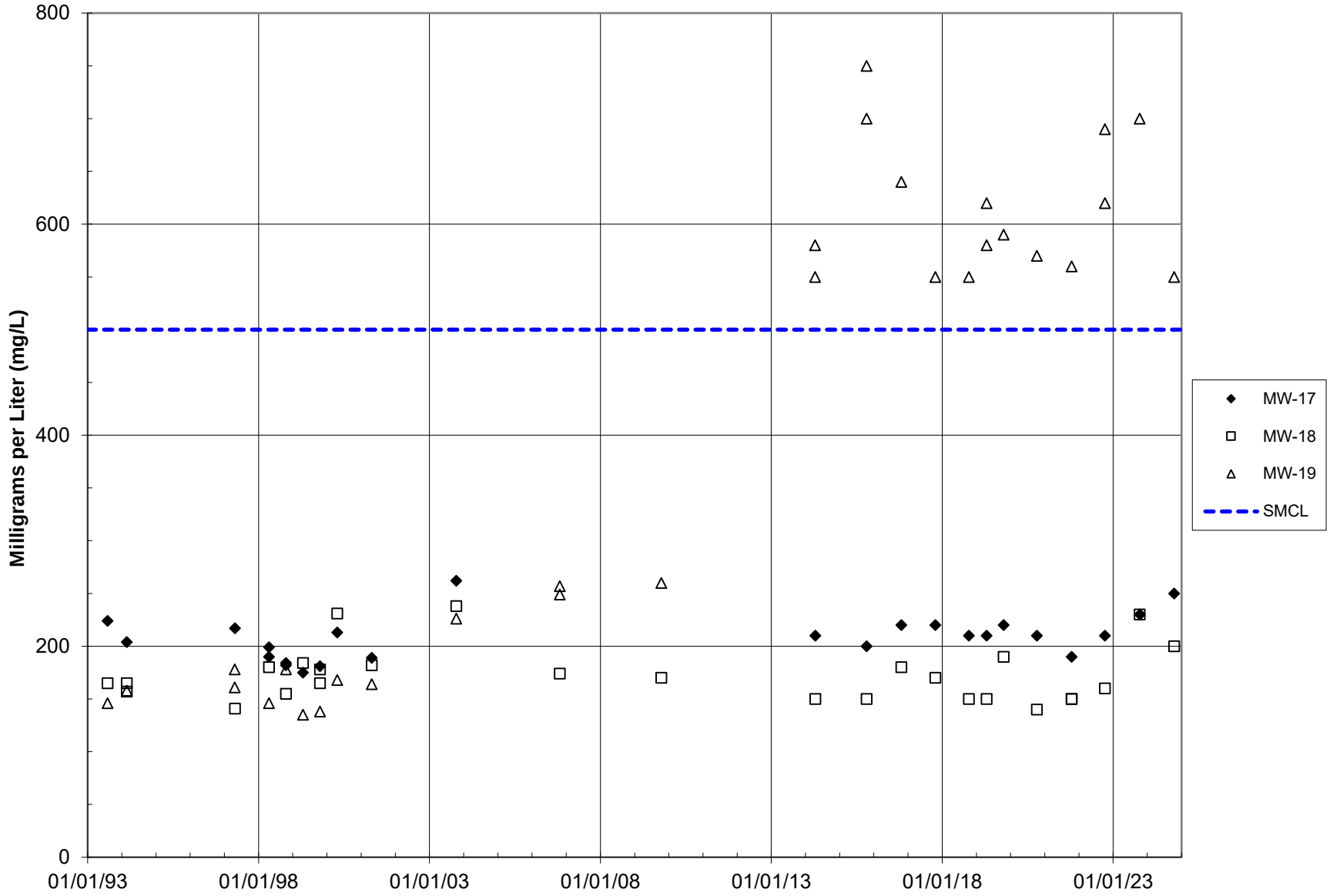
lch-flds\MW-8-15-Pb

MW-8S, MW-15, MW-16
Nickel
Coffin Butte Landfill

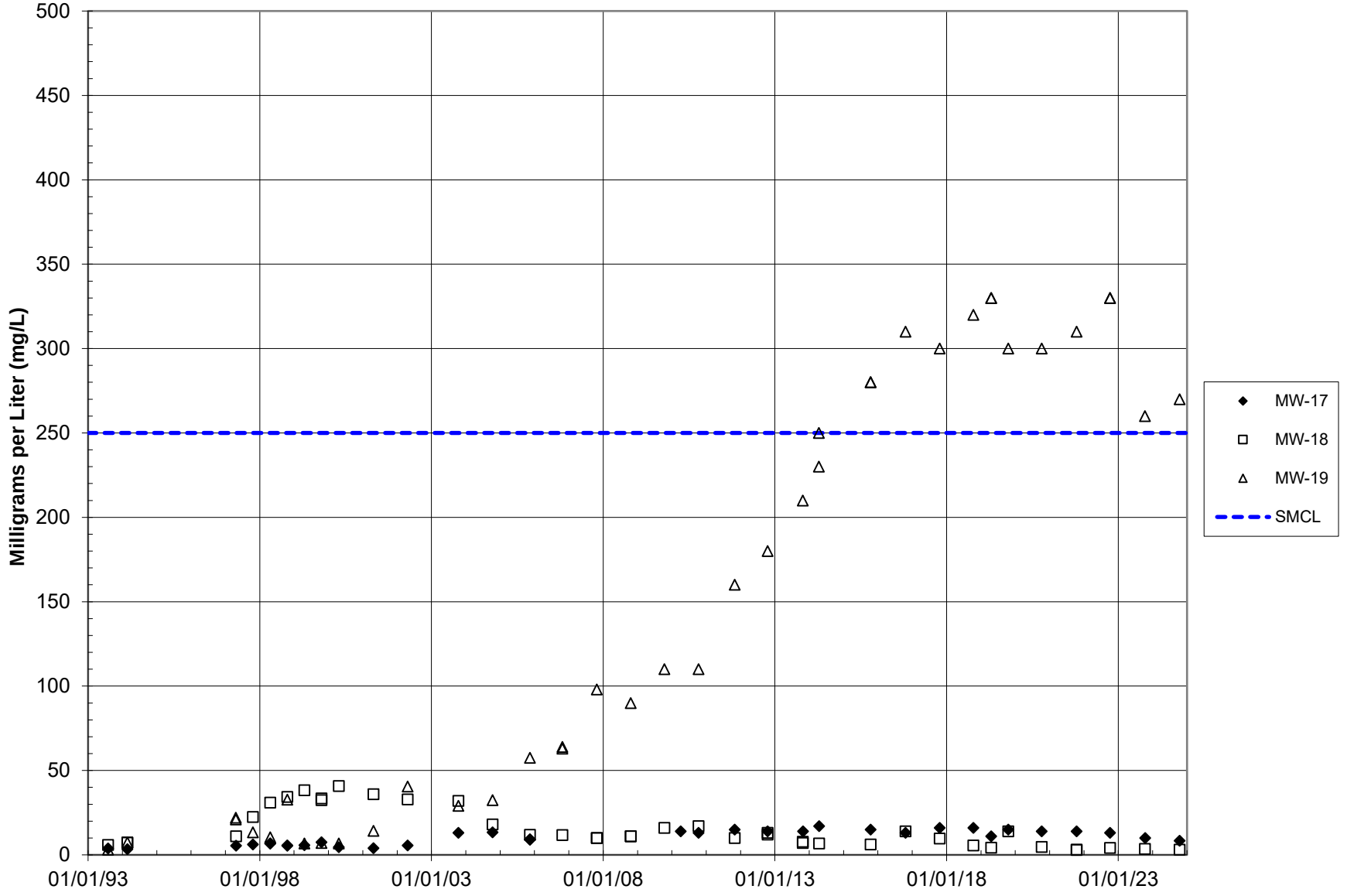


lch-flds\MW-8-15-Ni

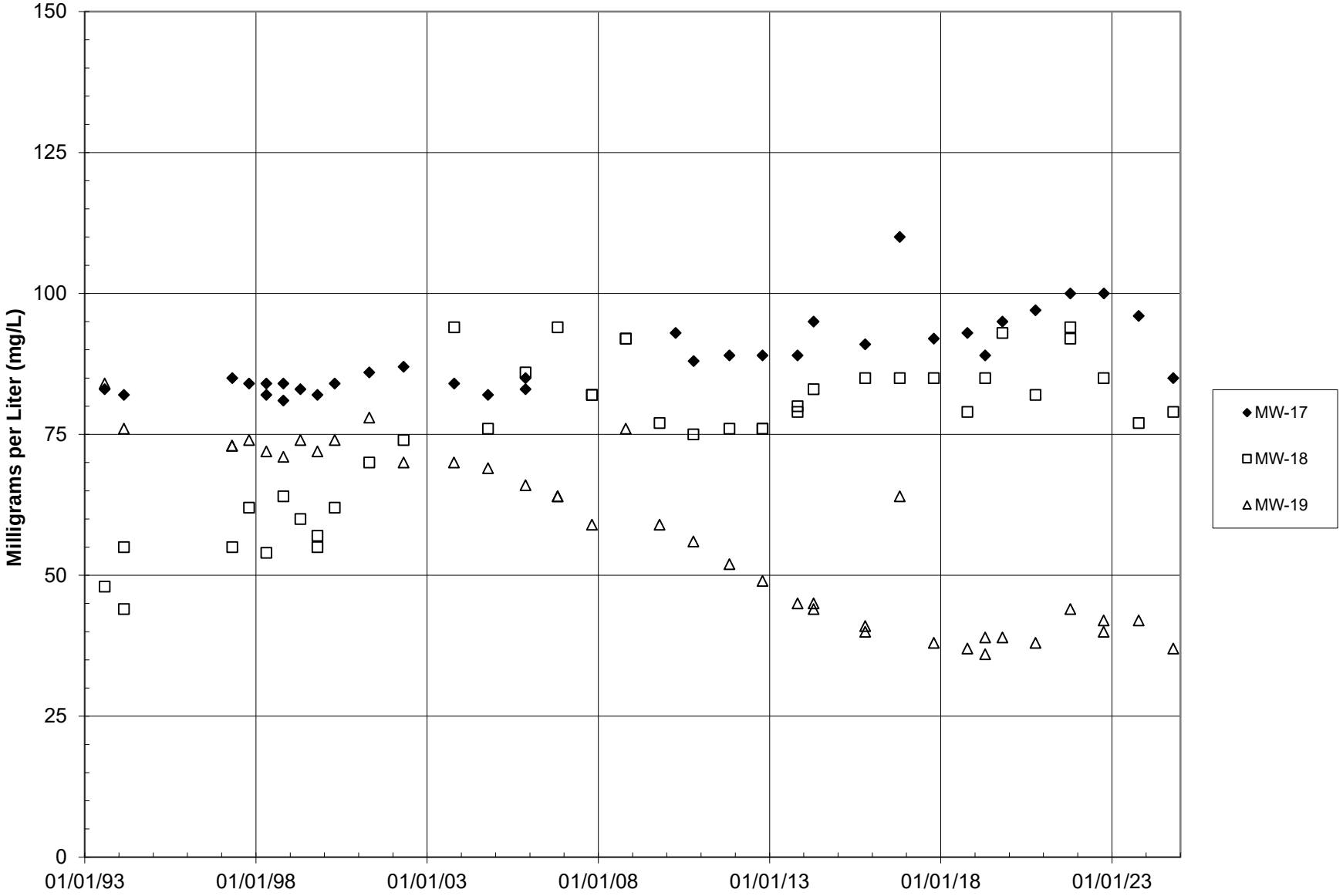
Detection Wells MW-17, MW-18, MW-19
TDS
Coffin Butte Landfill



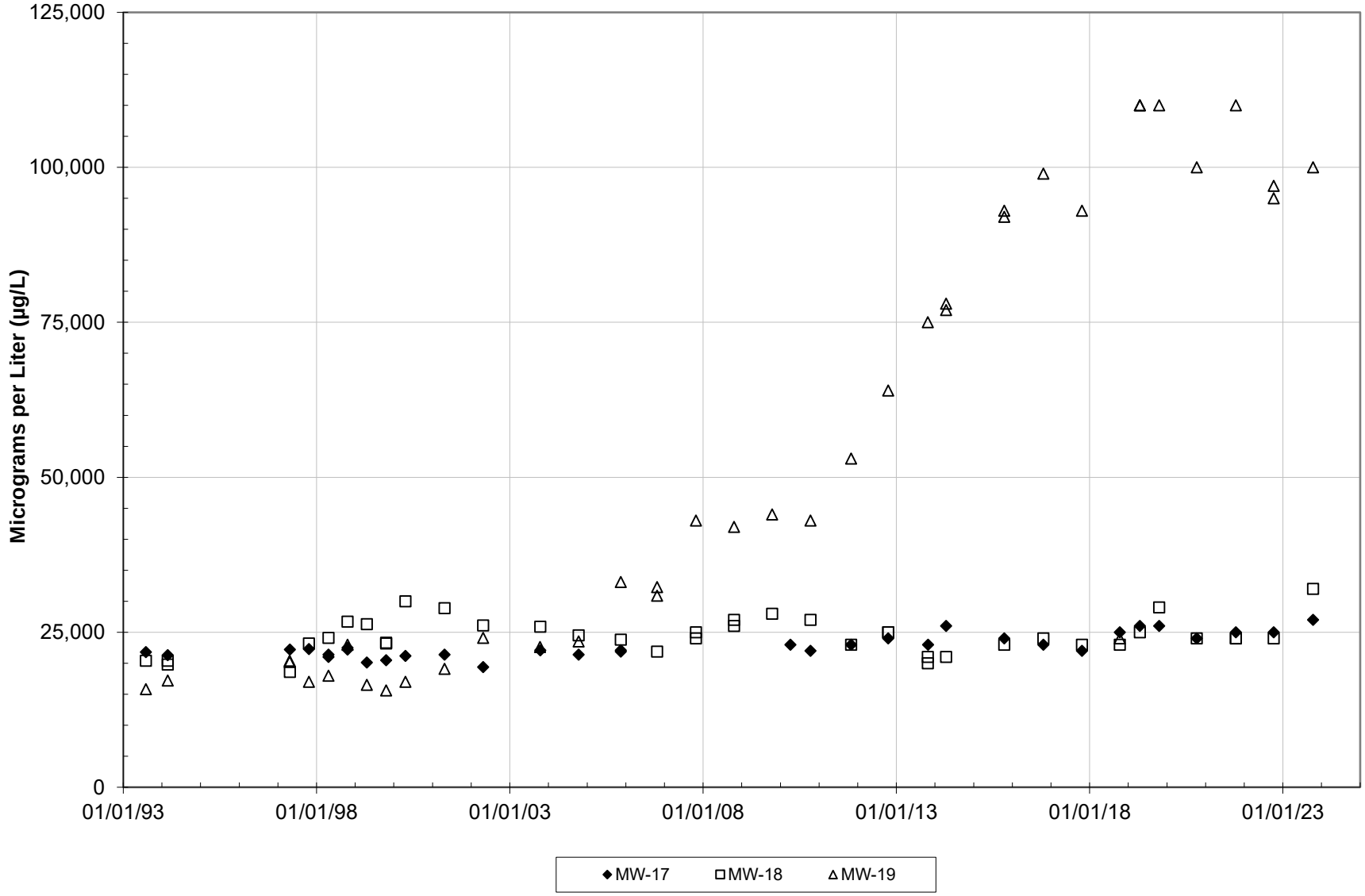
Detection Wells MW-17, MW-18, MW-19
Chloride
Coffin Butte Landfill



Detection Wells MW-17, MW-18, MW-19
Bicarbonate Alkalinity
Coffin Butte Landfill

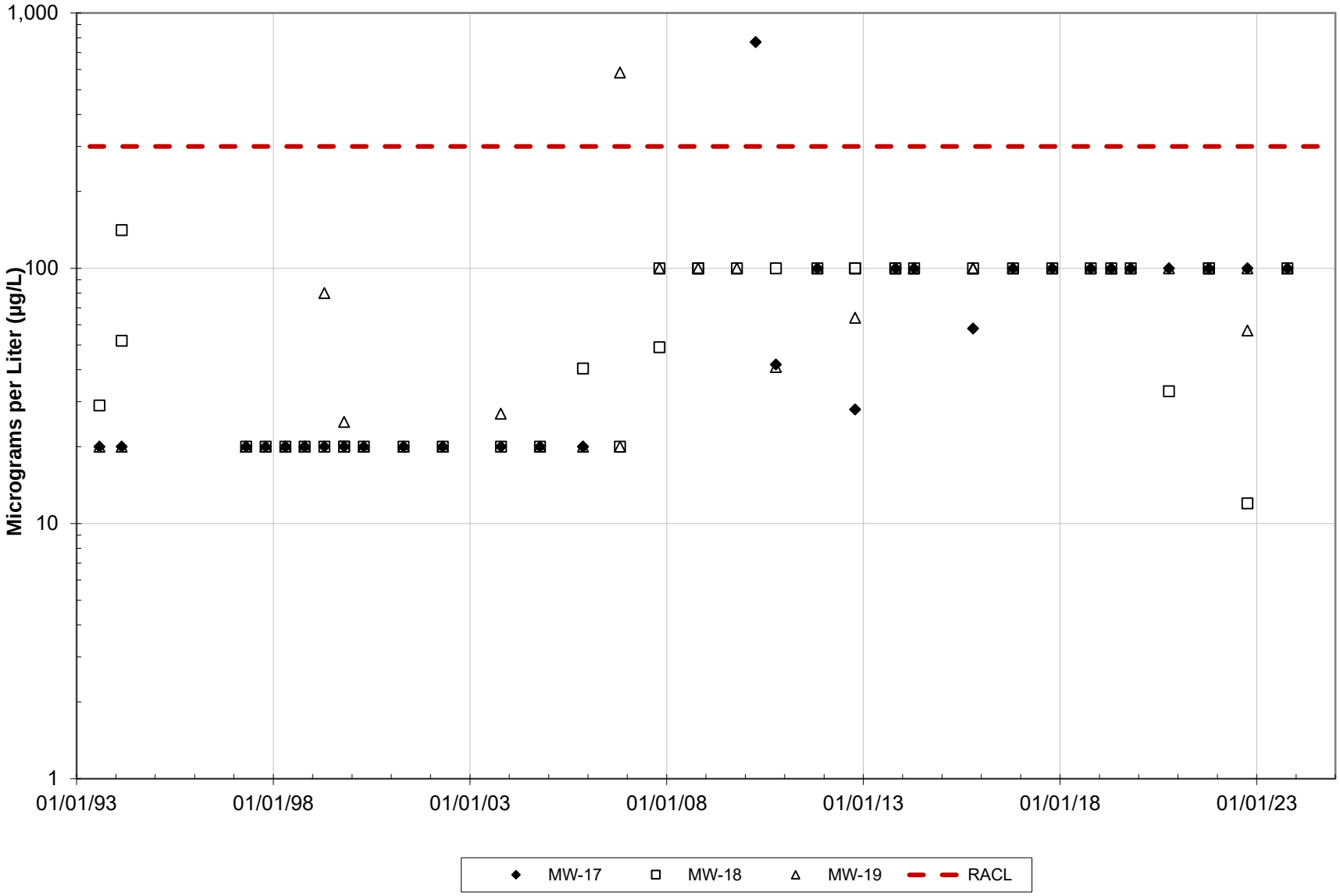


Detection Wells MW-17, MW-18, MW-19
Calcium
Coffin Butte Landfill



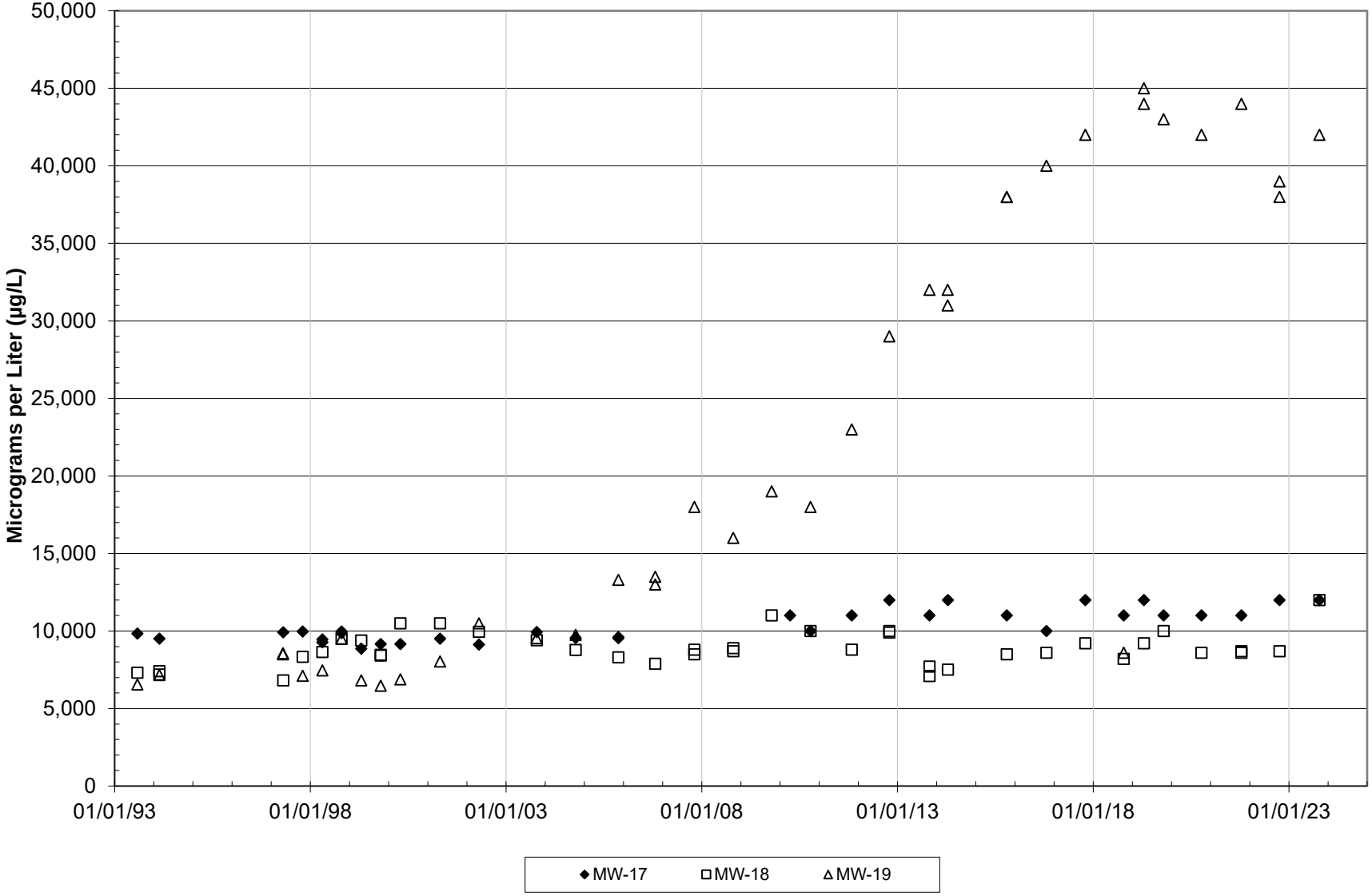
lch-flds\MW-17-18-19Ca

Detection Wells MW-17, MW-18, MW-19
Iron
Coffin Butte Landfill



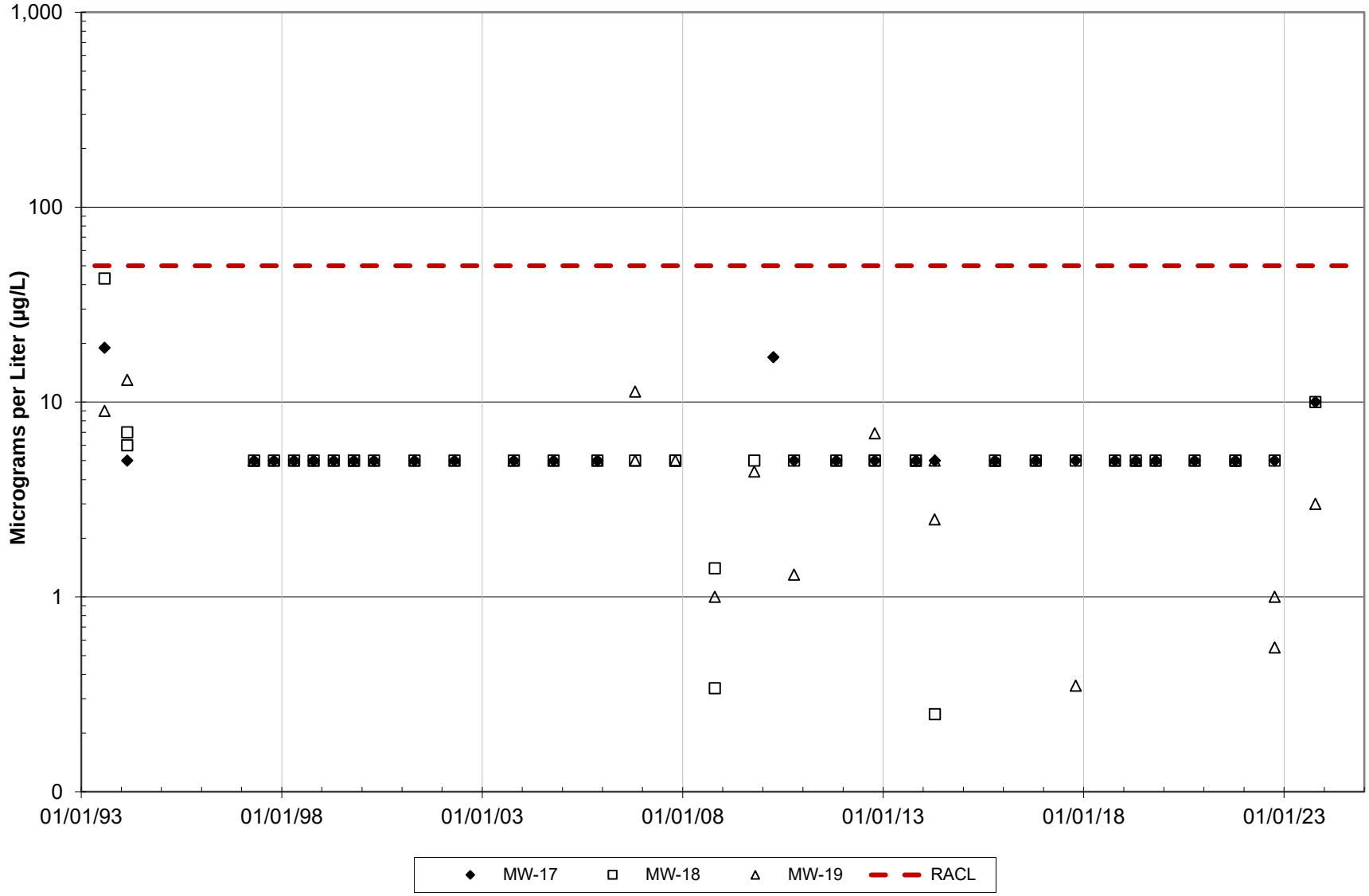
lch-flds\MW-17-18-19Fe

Detection Wells MW-17, MW-18, MW-19
Magnesium
Coffin Butte Landfill



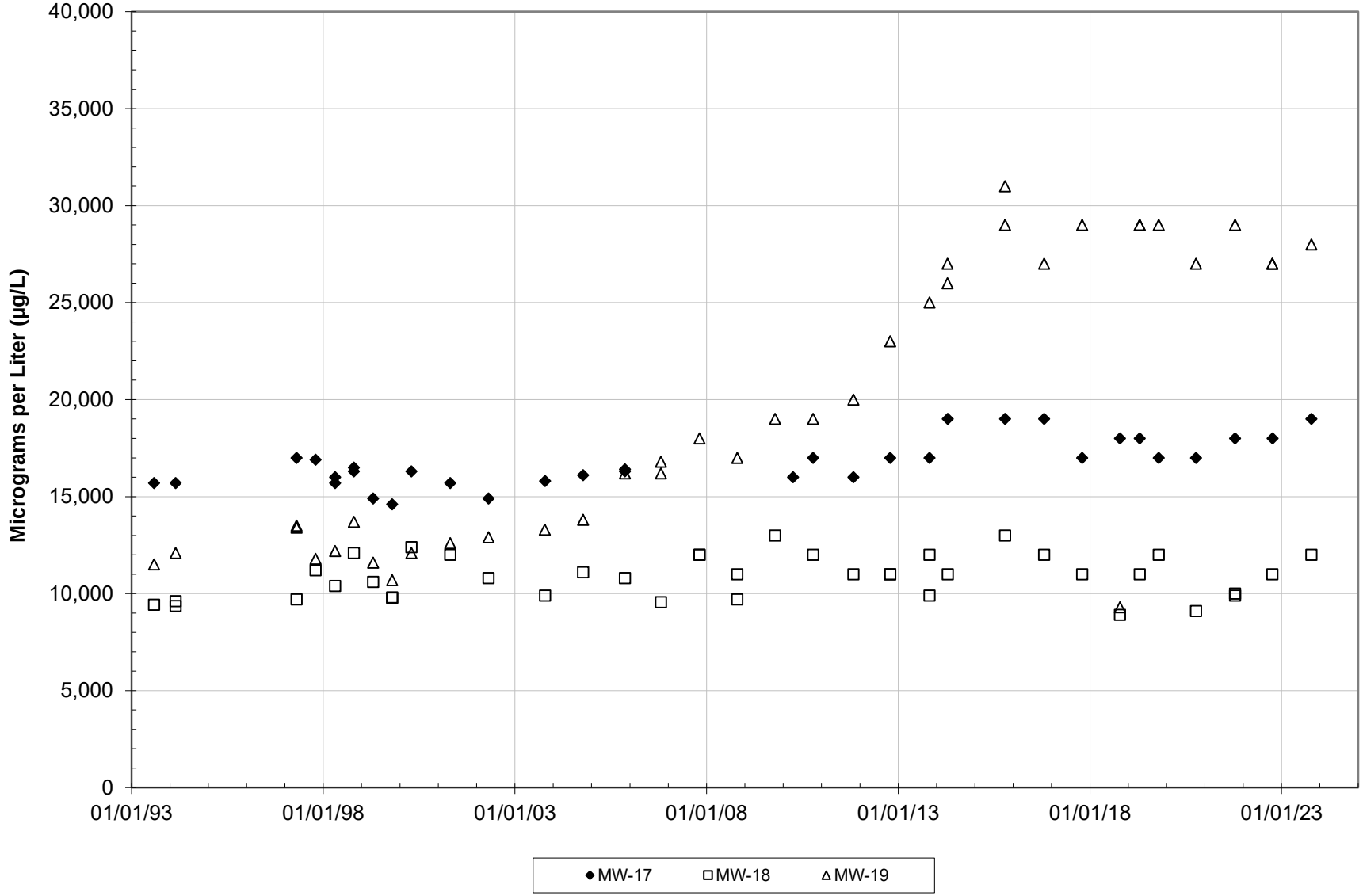
lch-flds\MW-17-18-19Mg

Detection Wells MW-17, MW-18, MW-19
Manganese
Coffin Butte Landfill



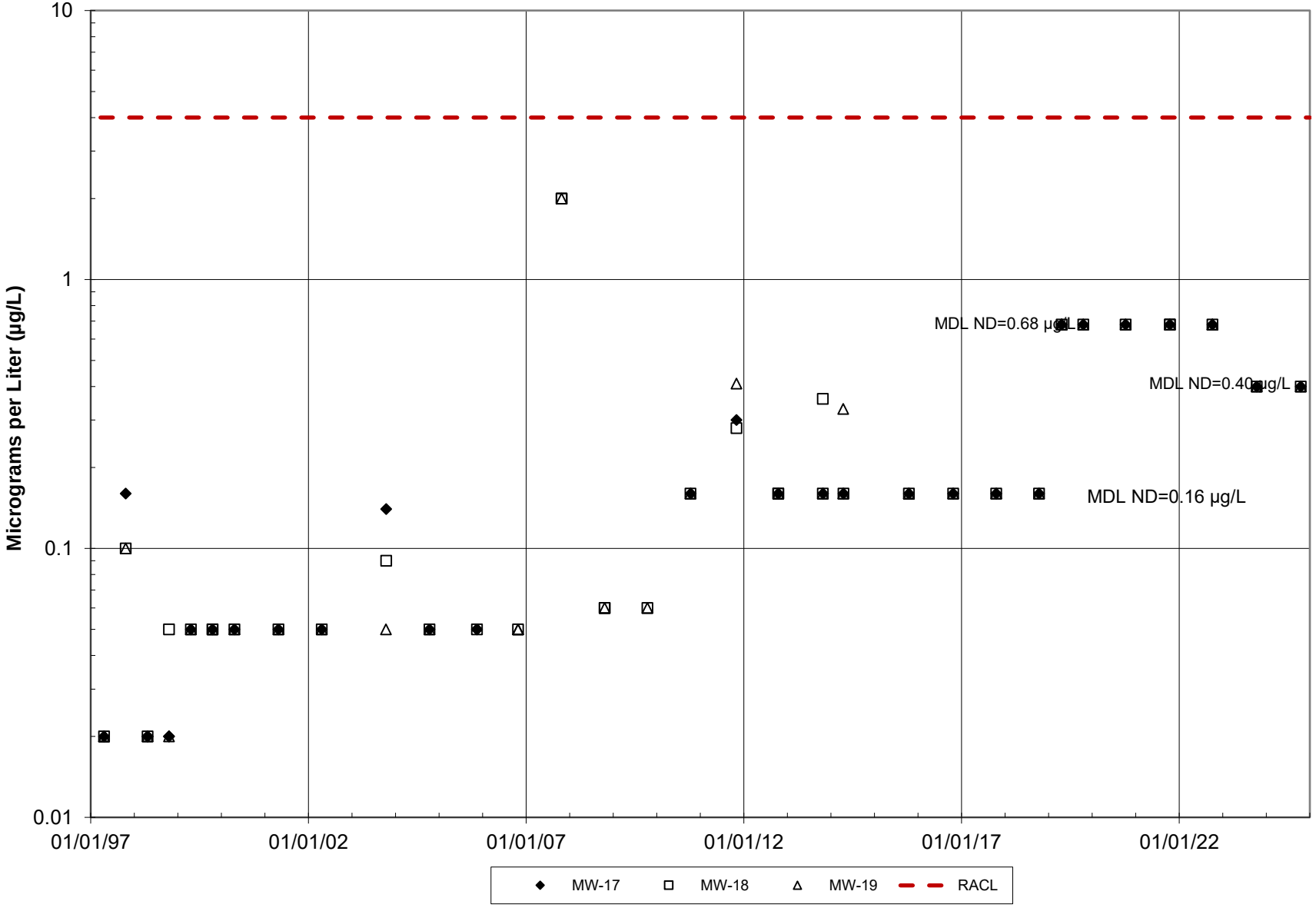
lch-flds\MW-17-18-19Mn

Detection Wells MW-17, MW-18, MW-19
Sodium
Coffin Butte Landfill



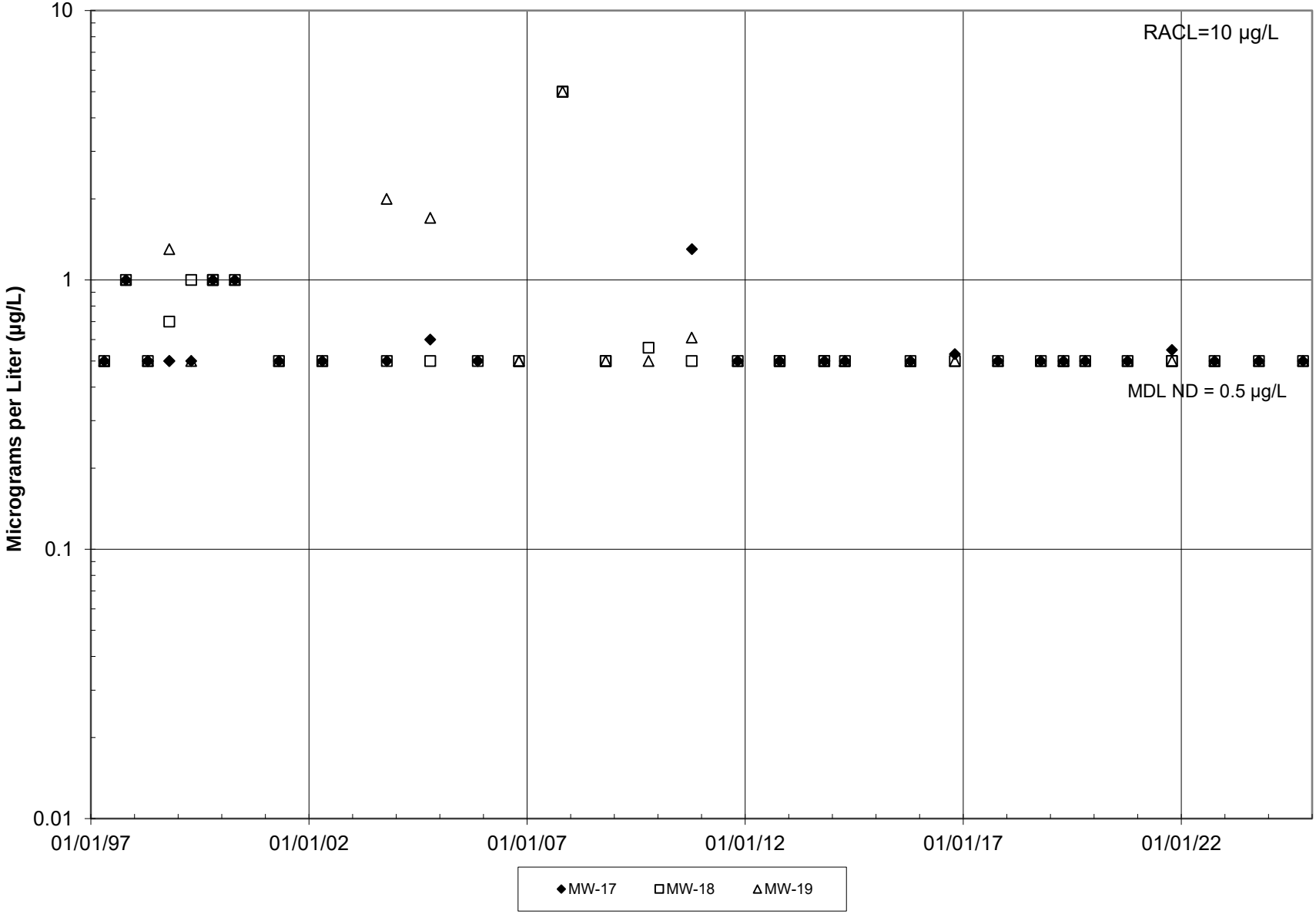
lch-flds\MW-17-18-19Na

Detection Wells MW-17, MW-18, MW-19
Antimony
Coffin Butte Landfill



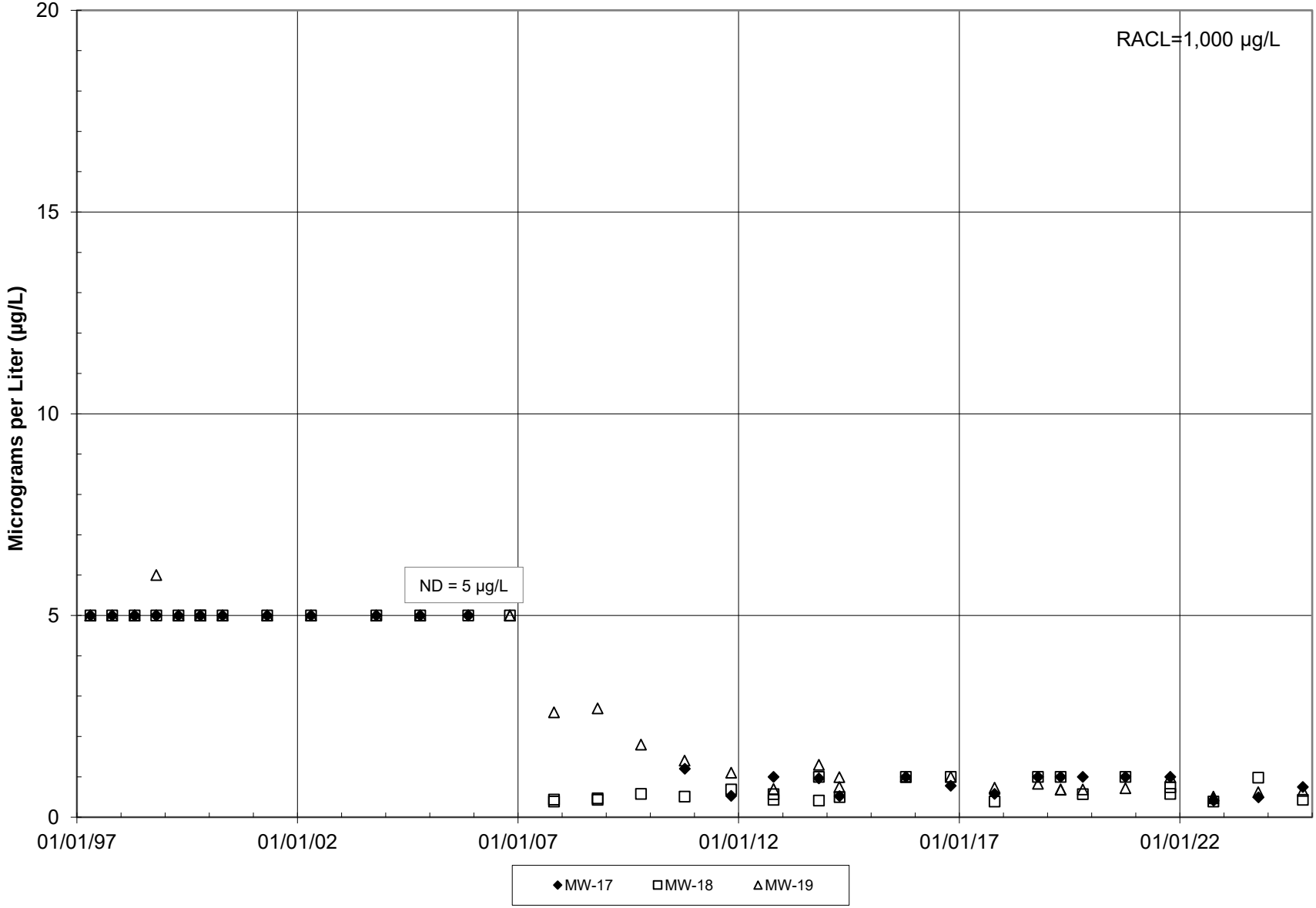
lch-flds\MW-17-19-Sb

Detection Wells MW-17, MW-18, MW-19
Arsenic
Coffin Butte Landfill



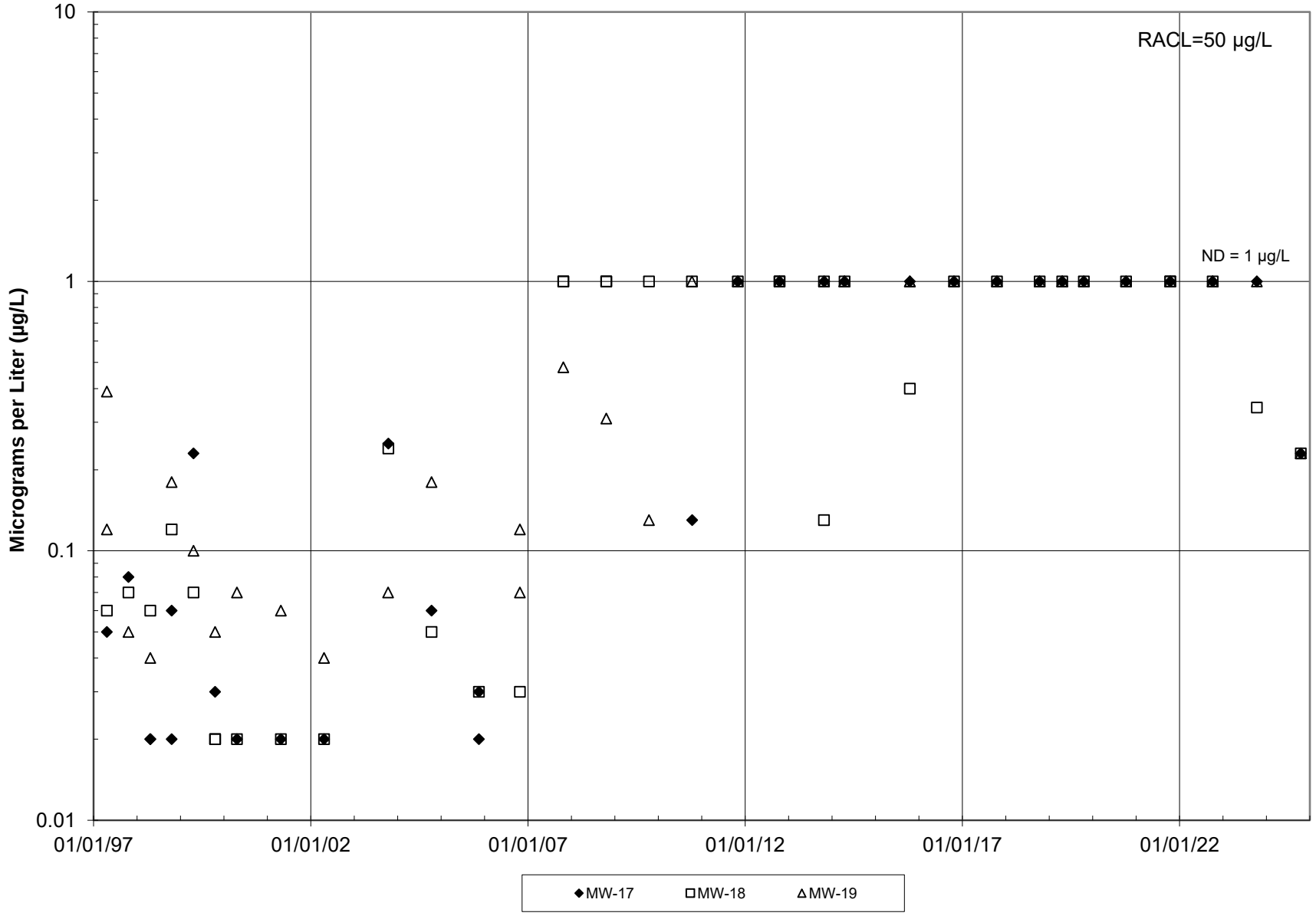
lch-flds\MW-17-19-As

Detection Wells MW-17, MW-18, MW-19
Barium
Coffin Butte Landfill



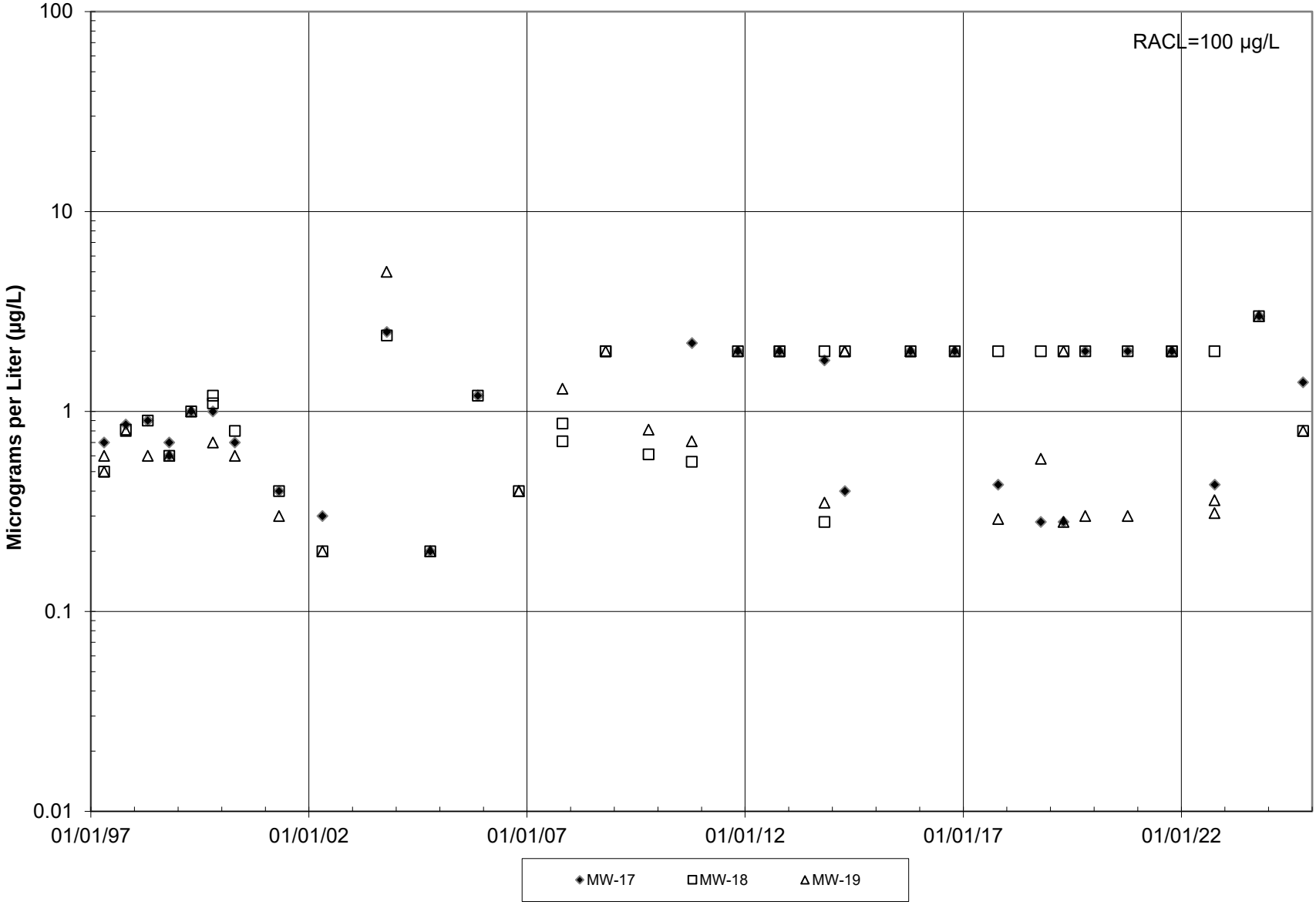
lch-flds\MW-17-19-Ba

Detection Wells MW-17, MW-18, MW-19
Lead
Coffin Butte Landfill



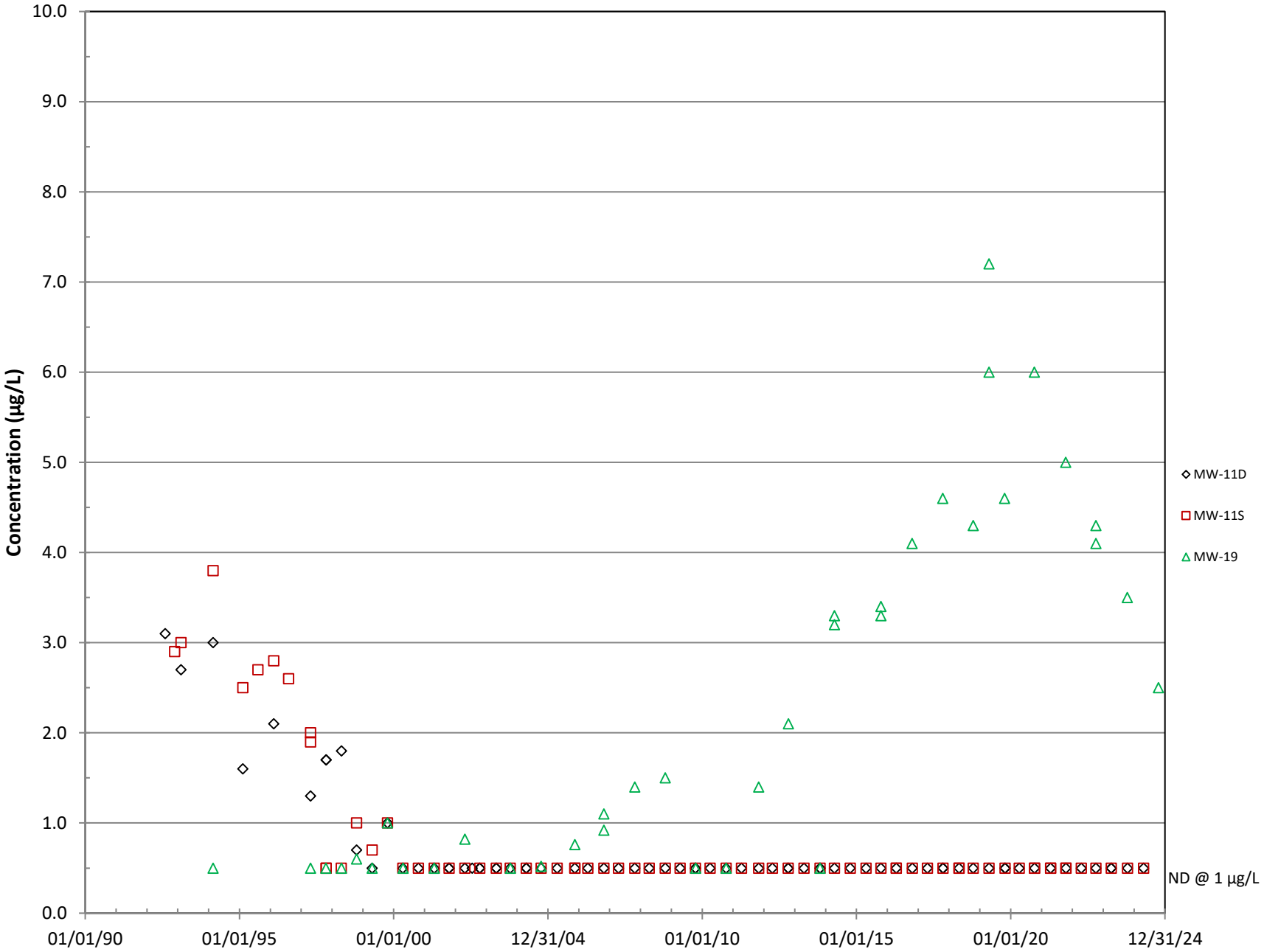
lch-flds\MW-17-19-Pb

Detection Wells MW-17, MW-18, MW-19
Nickel
Coffin Butte Landfill

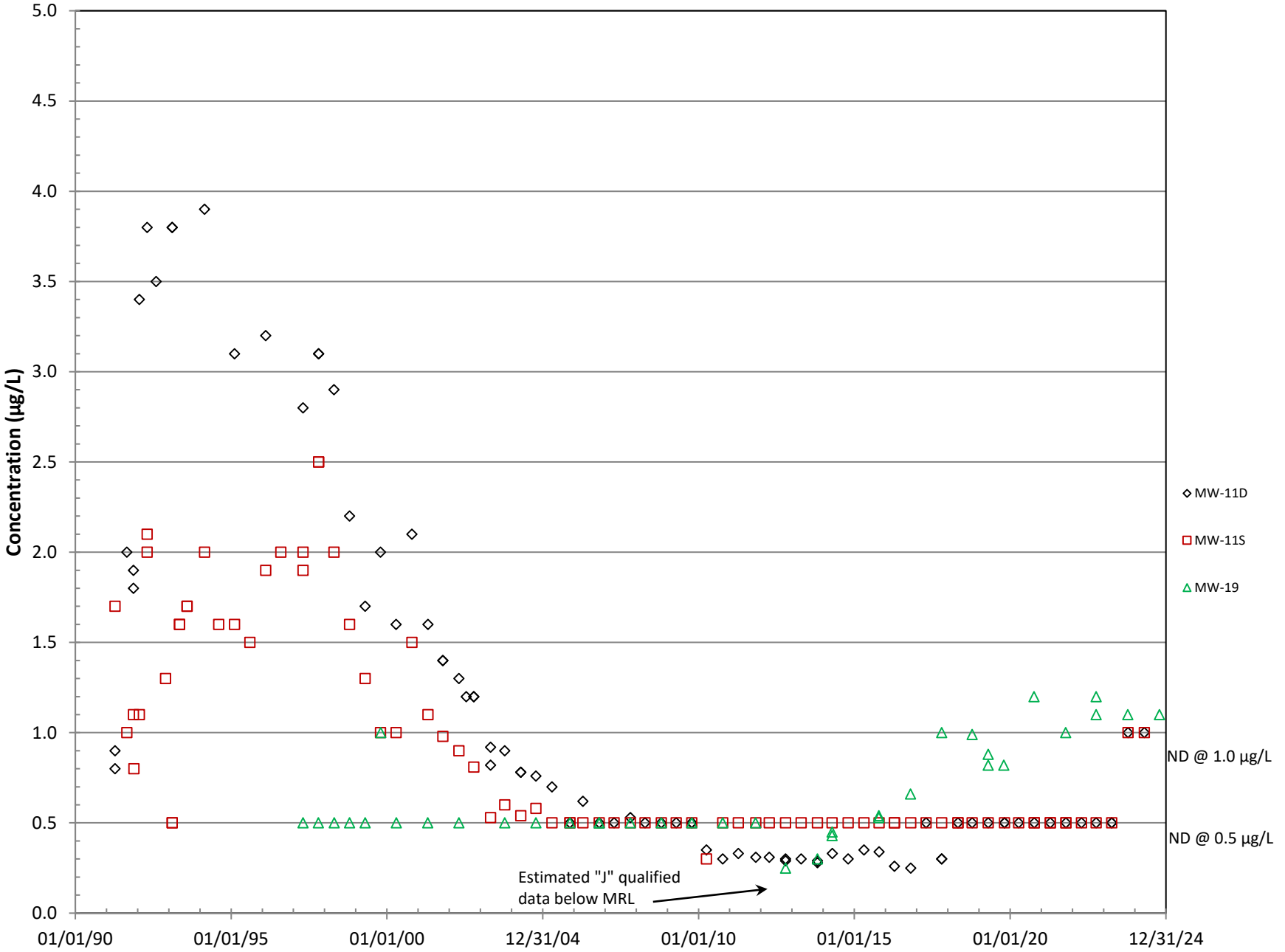


lch-flds\MW-17-19-Ni

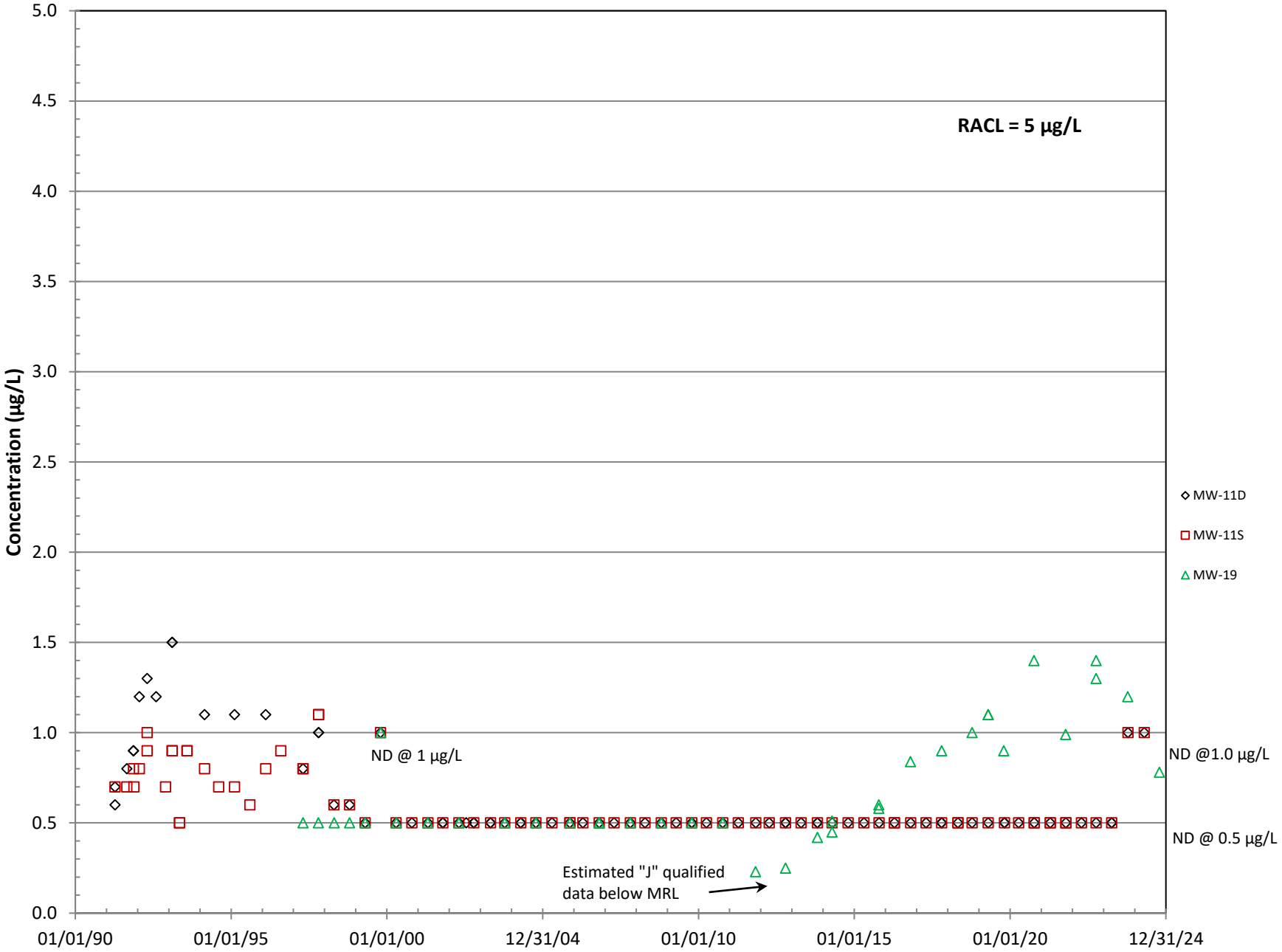
MW-19:
Freon12



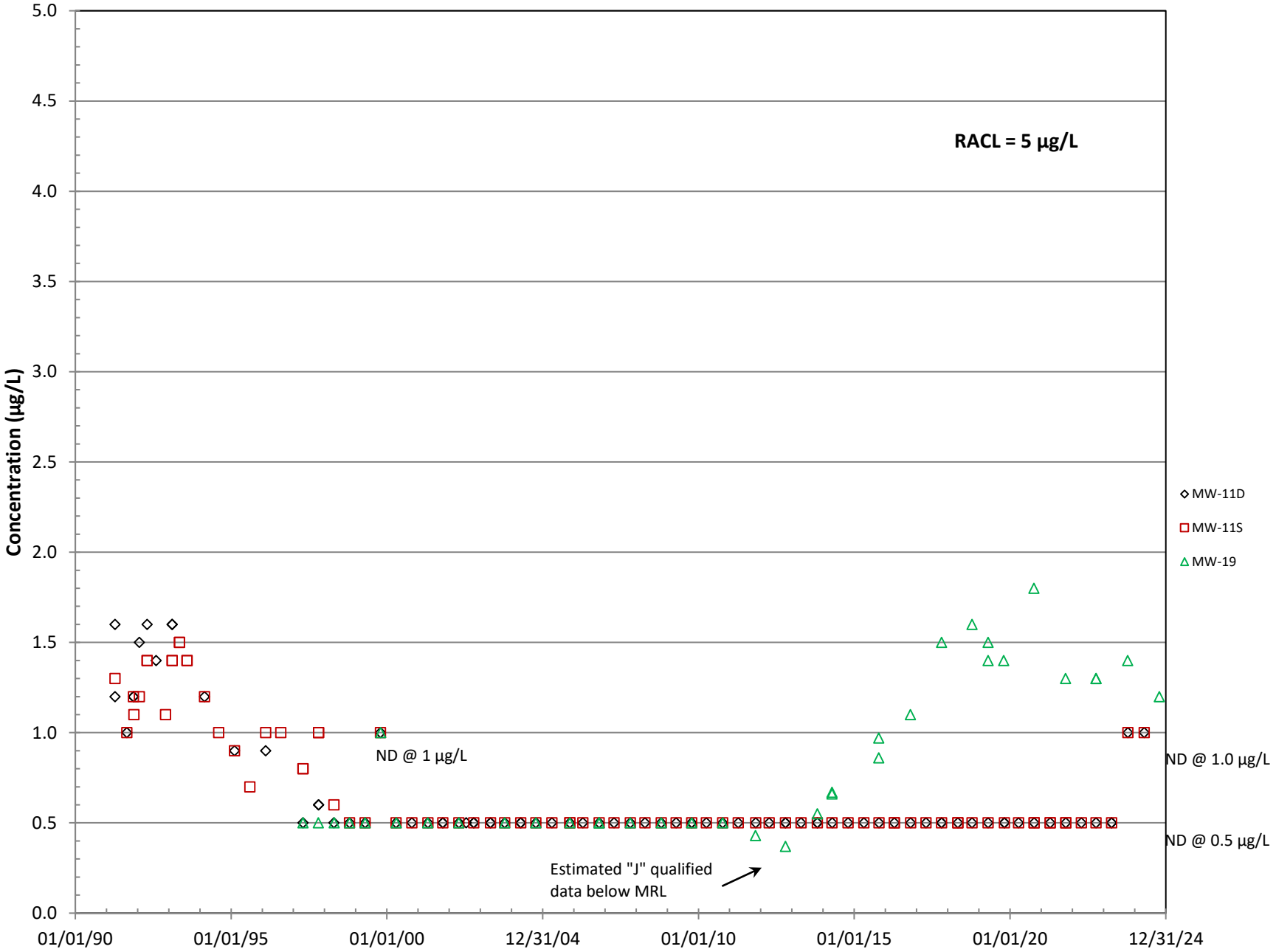
MW-19:
1,1-DCA


5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Concentration (µg/L)
01/01/90
01/01/95
01/01/00
12/31/04
01/01/10
01/01/15
01/01/20
12/31/24
MW-11D
MW-11S
MW-19
ND @ 1.0 µg/L
ND @ 0.5 µg/L
Estimated "J" qualified
data below MRL

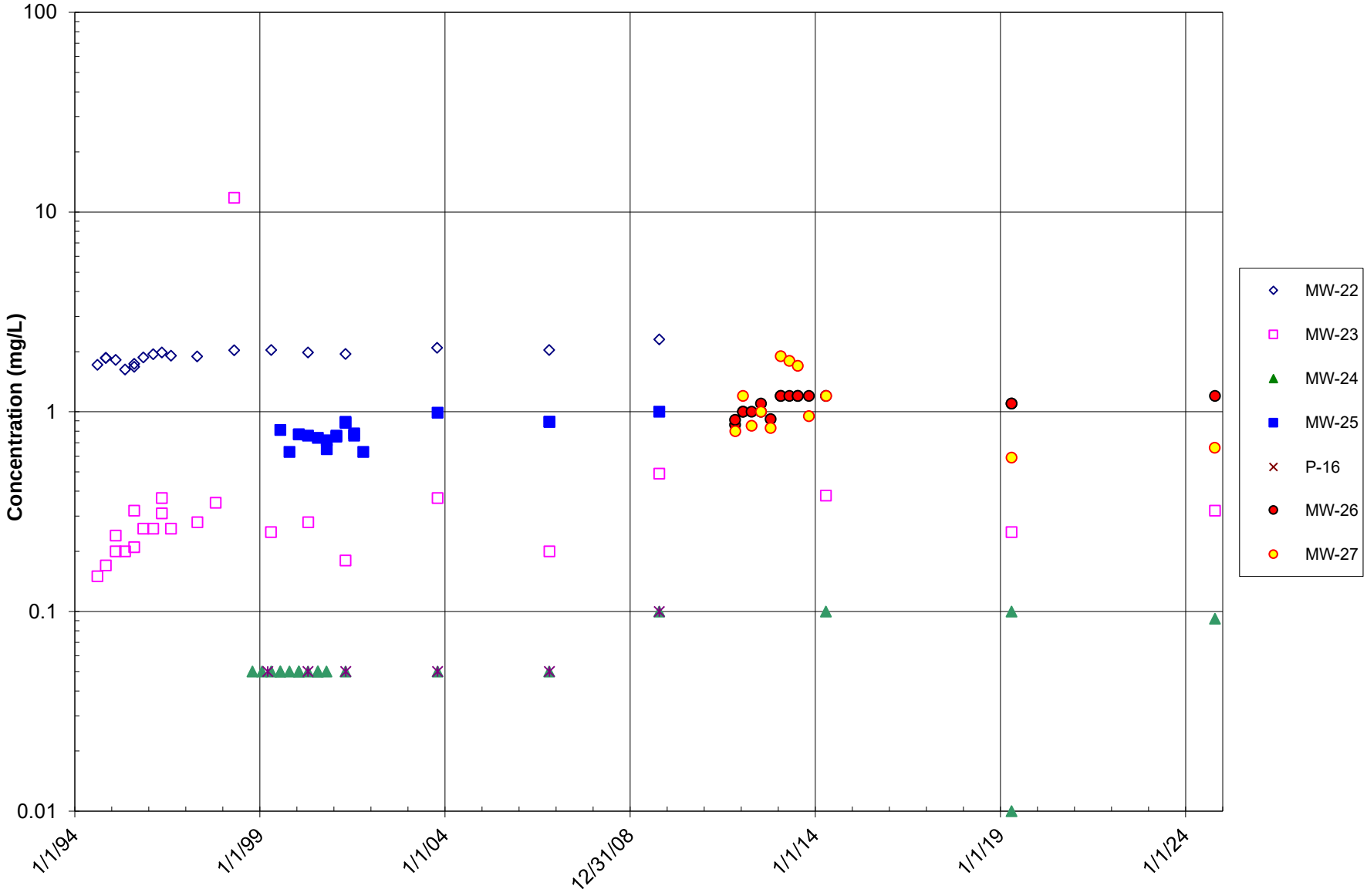
MW-19:
PCE


RACL = 5 µg/L
Concentration (µg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
01/01/90
01/01/95
01/01/00
12/31/04
01/01/10
01/01/15
01/01/20
12/31/24
MW-11D
MW-11S
MW-19
ND @ 1 µg/L
ND @1.0 µg/L
ND @ 0.5 µg/L
Estimated "J" qualified
data below MRL

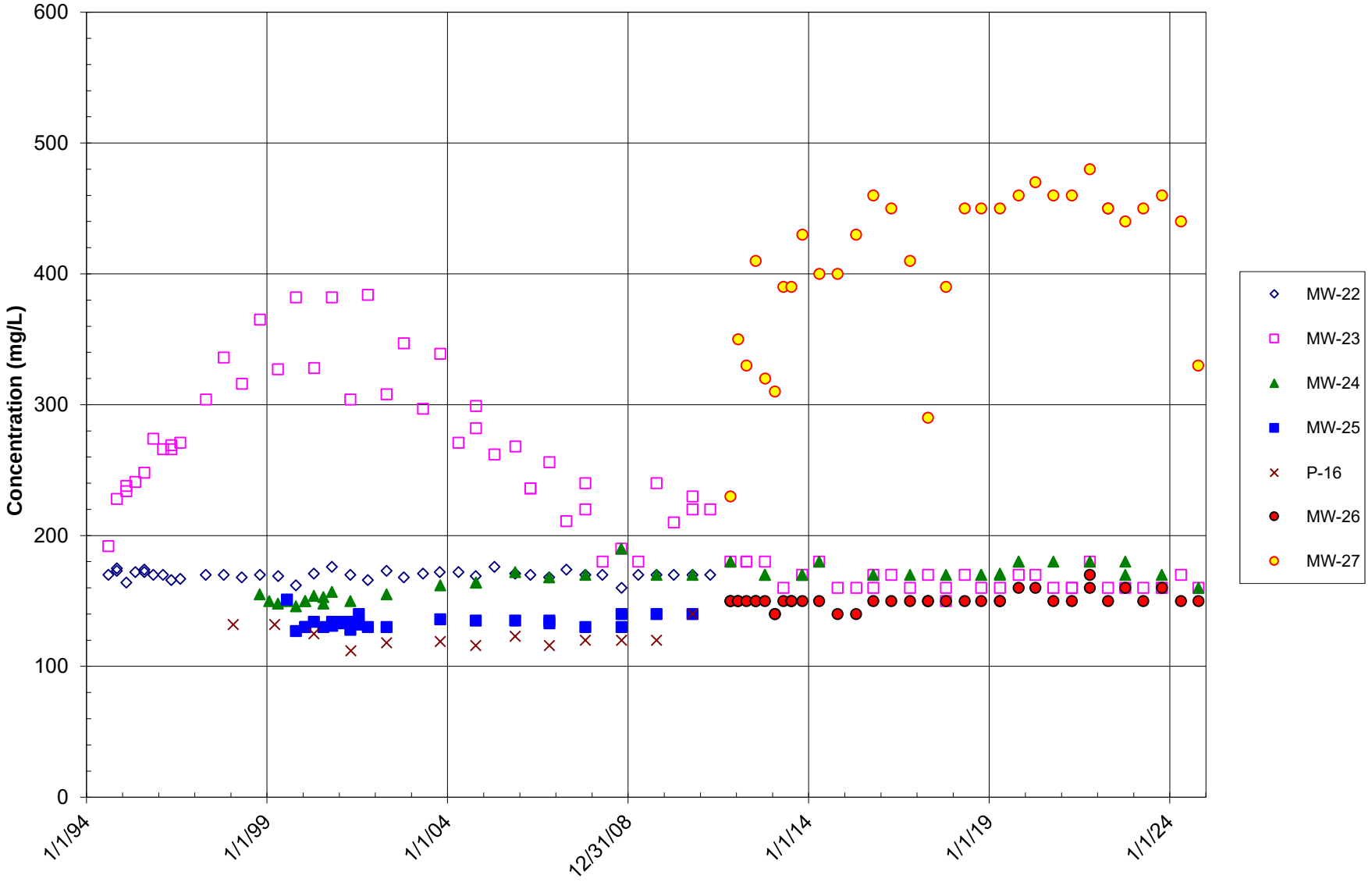
MW-19:
TCE


5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Concentration (µg/L)
RACL = 5 µg/L
ND @ 1 µg/L
ND @ 1.0 µg/L
ND @ 0.5 µg/L
Estimated "J" qualified
data below MRL
MW-11D
MW-11S
MW-19
01/01/90
01/01/95
01/01/00
12/31/04
01/01/10
01/01/15
01/01/20
12/31/24

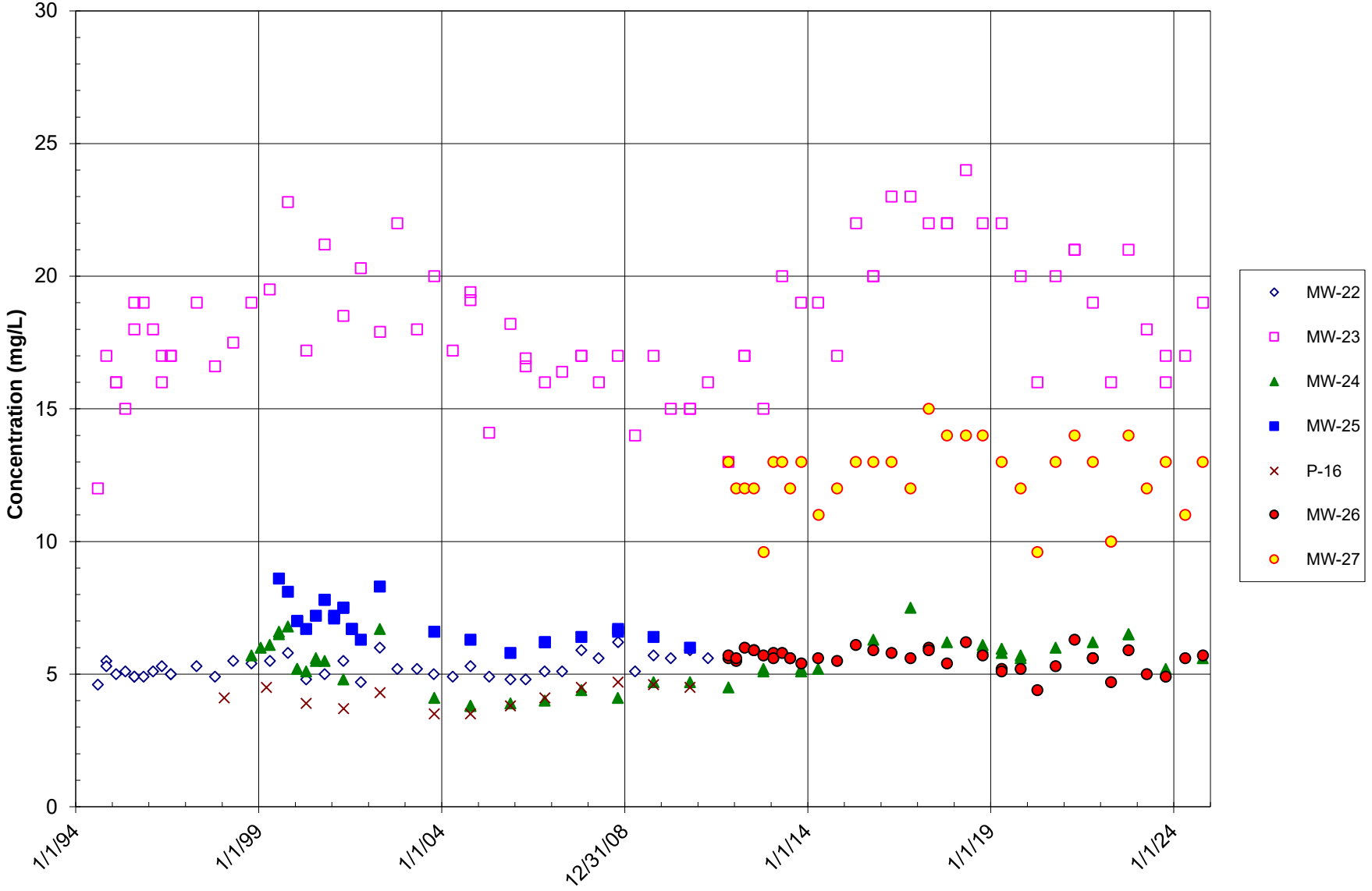
East-Side Wells:
Ammonia
Coffin Butte Landfill



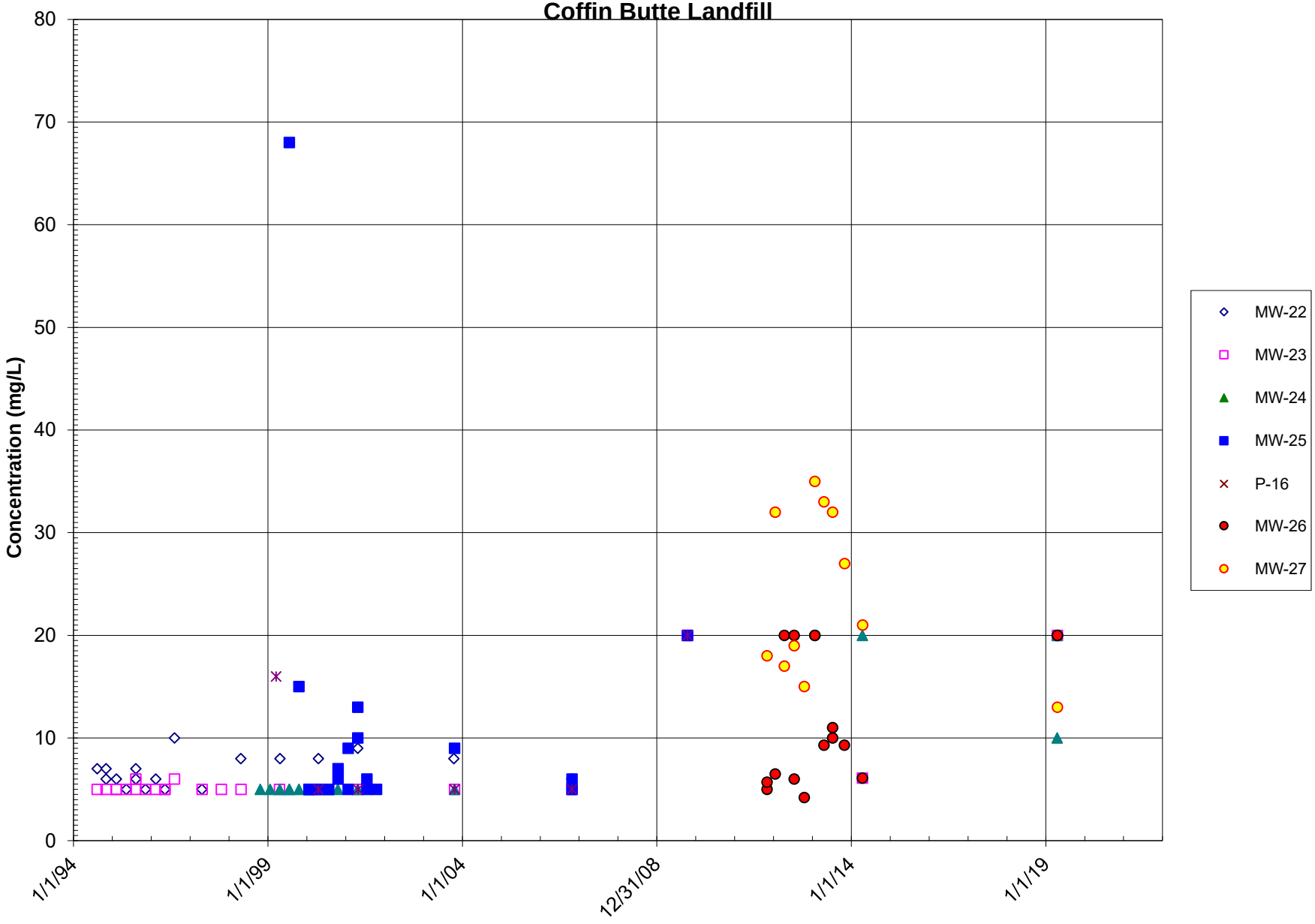
East-Side Wells:
Bicarbonate Alkalinity
Coffin Butte Landfill



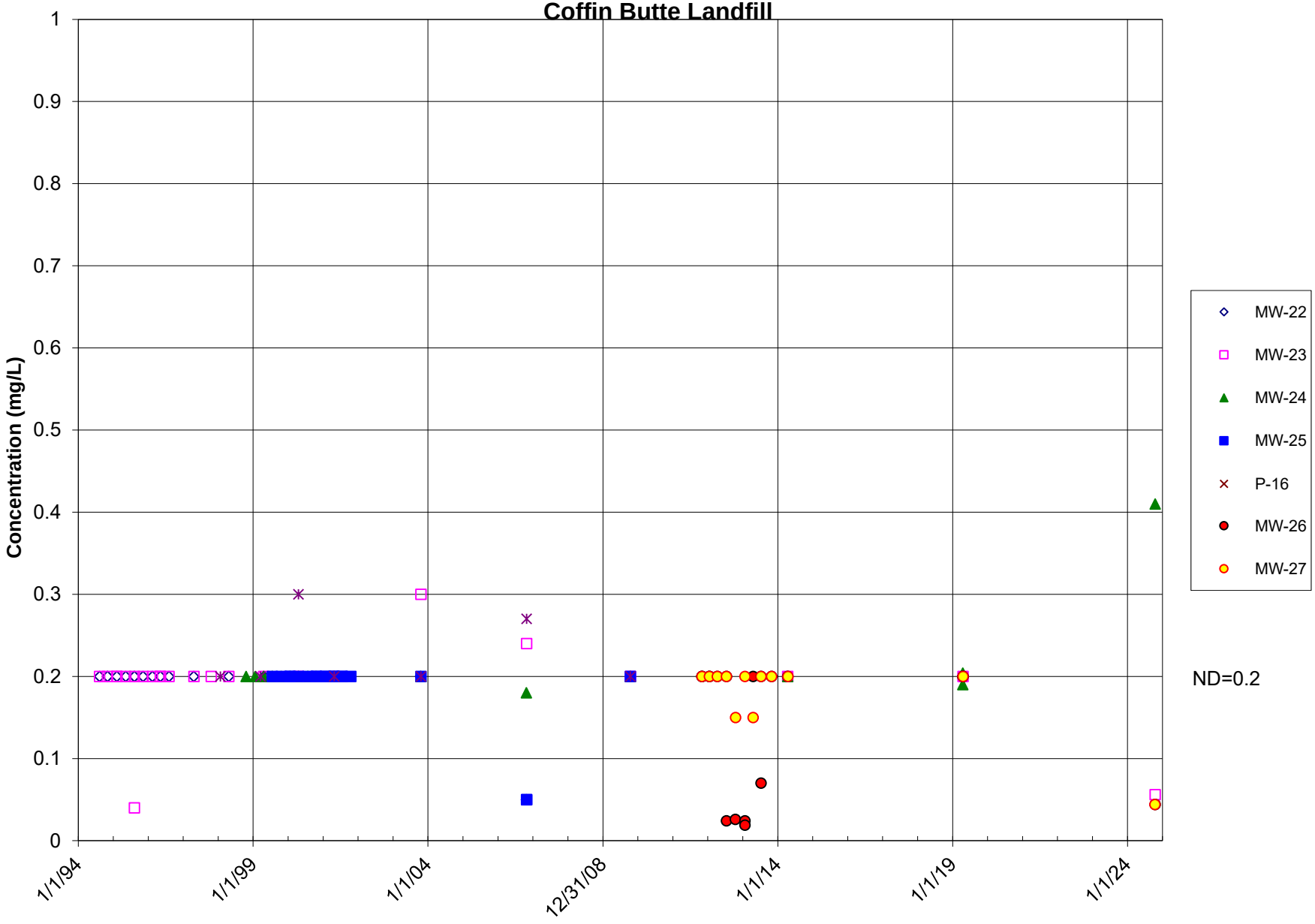
East-Side Wells:
Chloride
Coffin Butte Landfill



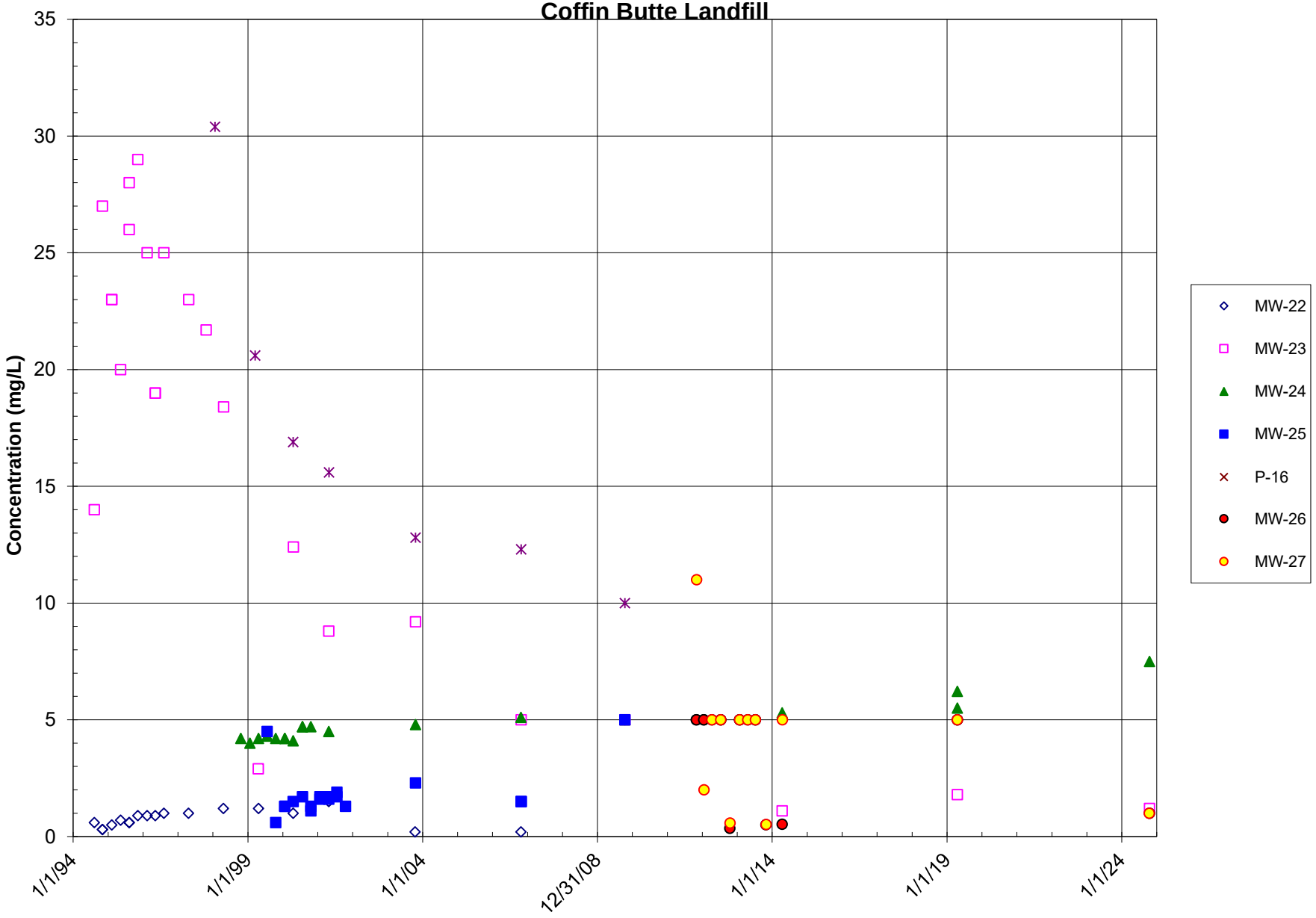
East-Side Wells:
COD
Coffin Butte Landfill

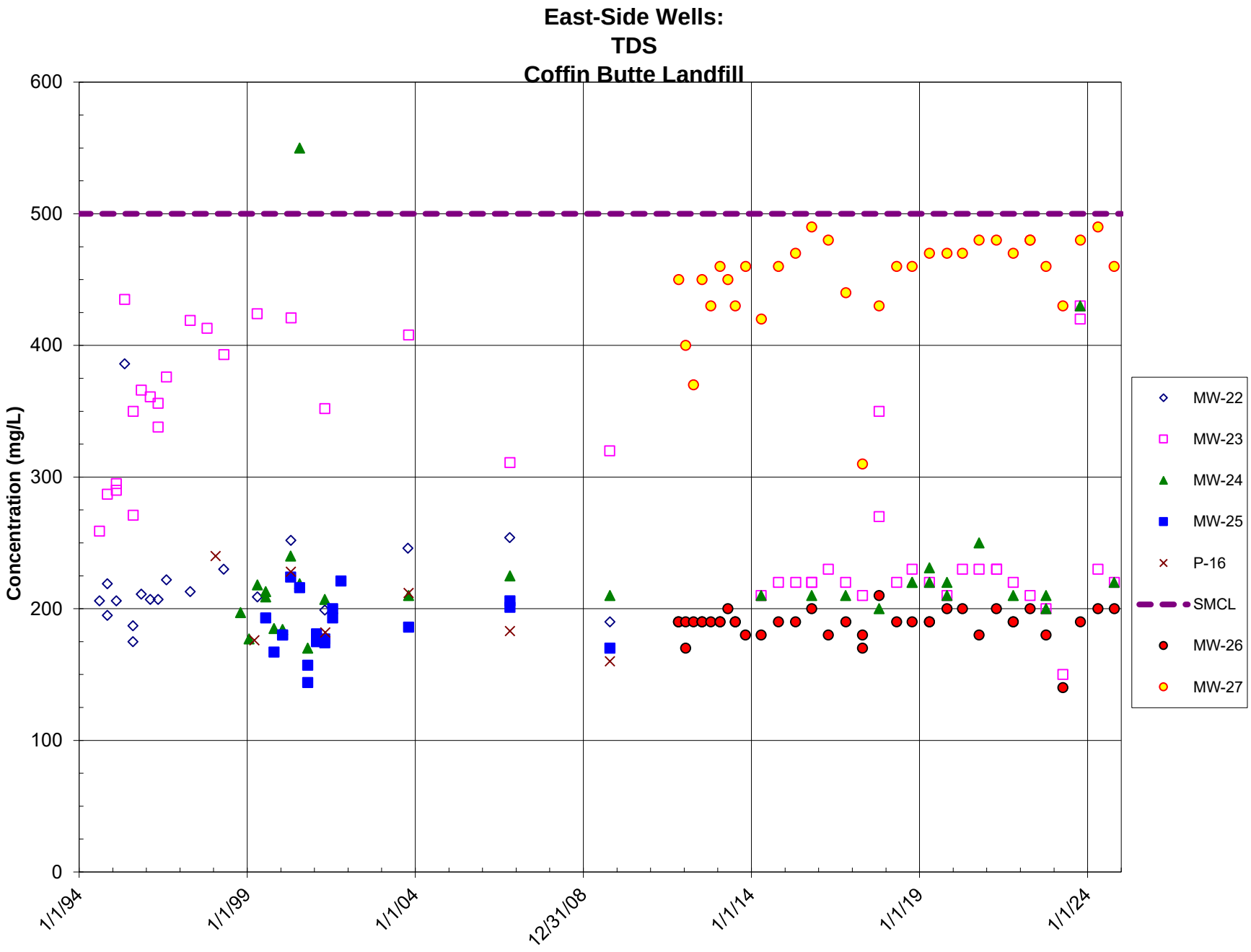


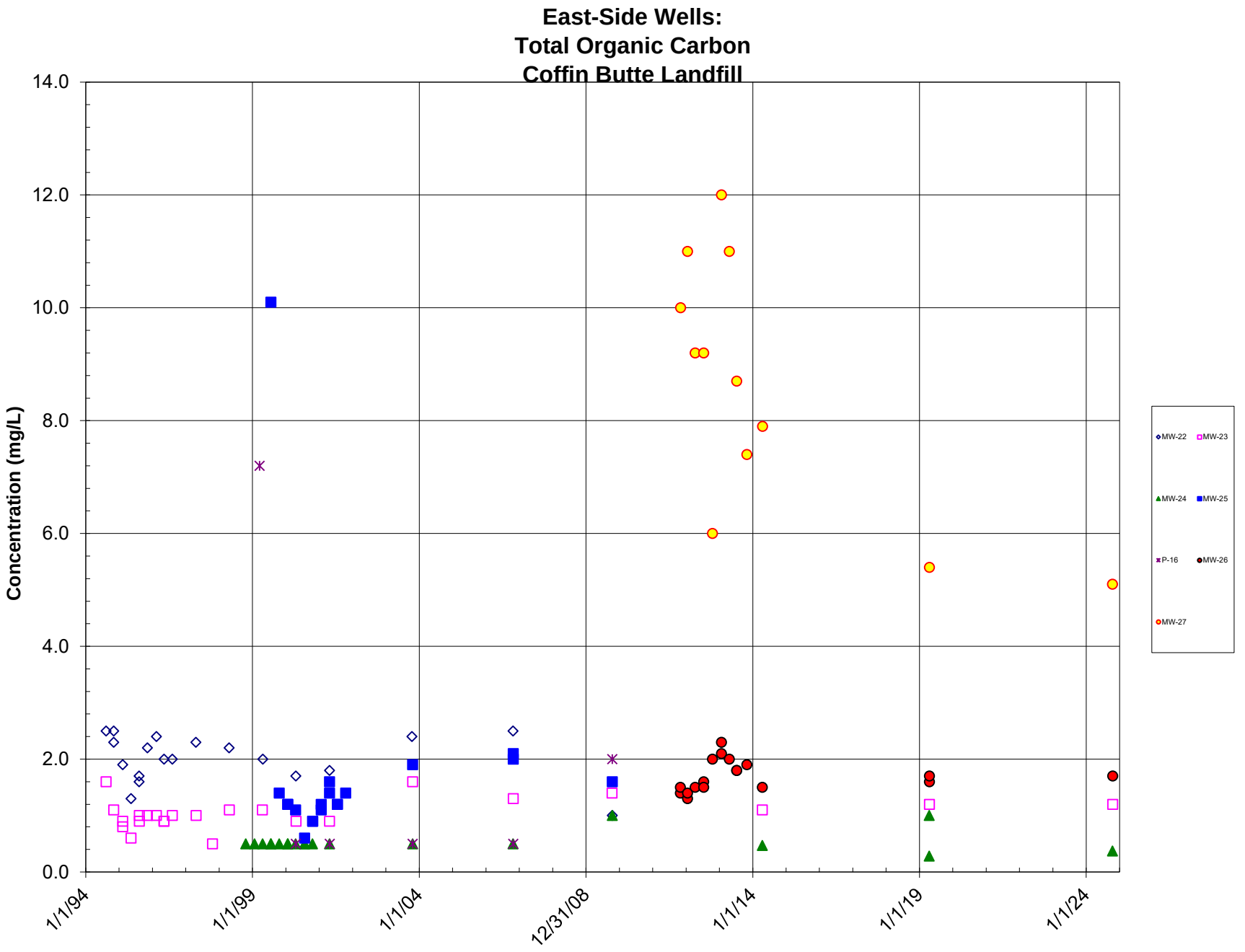
East-Side Wells:
Nitrate-Nitrite
Coffin Butte Landfill



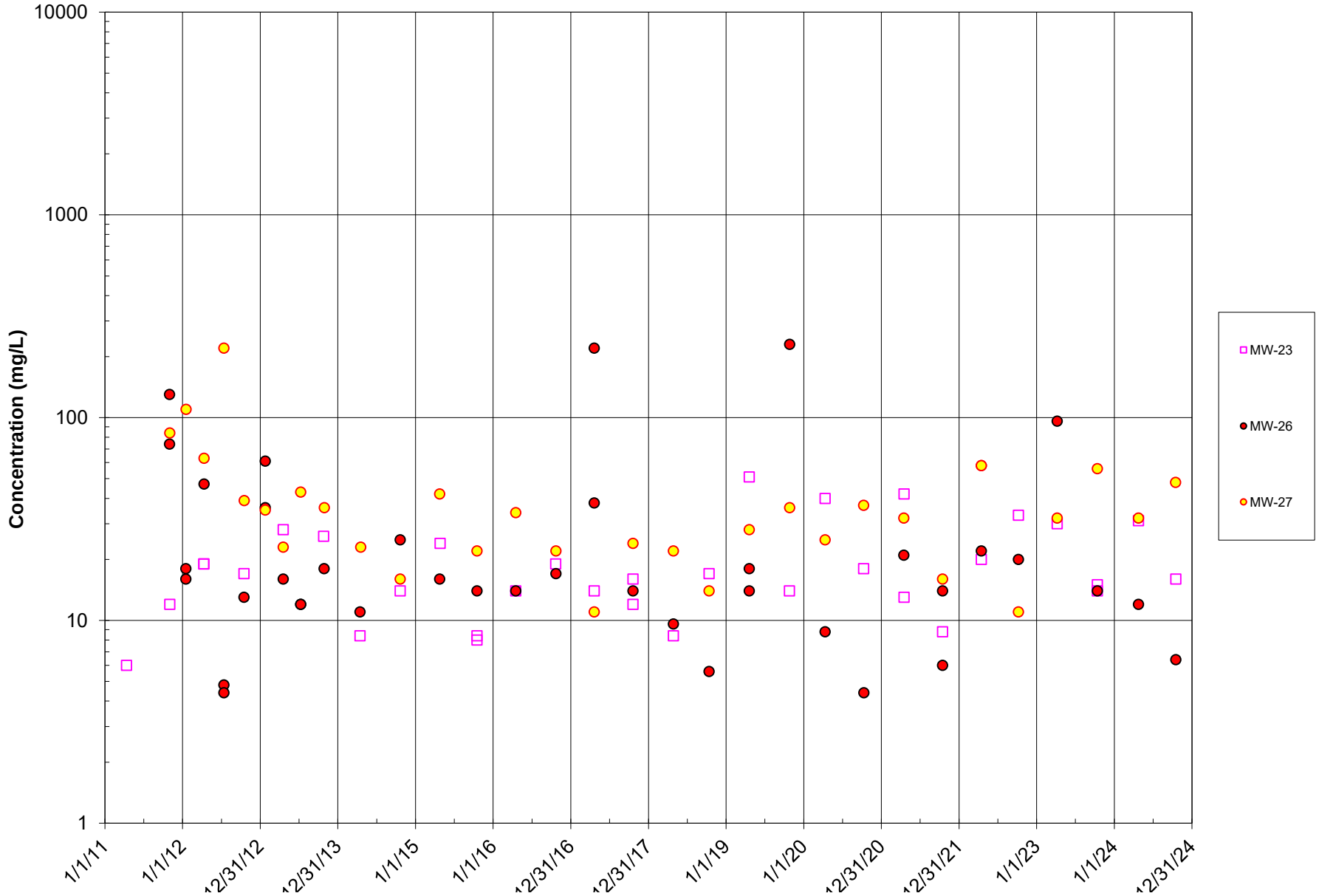
East-Side Wells:
Sulfate
Coffin Butte Landfill




East-Side Wells:
TDS
Coffin Butte Landfill
Concentration (mg/L)
600
500
400
300
200
100
0
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
1/1/24
MW-22
MW-23
MW-24
MW-25
P-16
SMCL
MW-26
MW-27

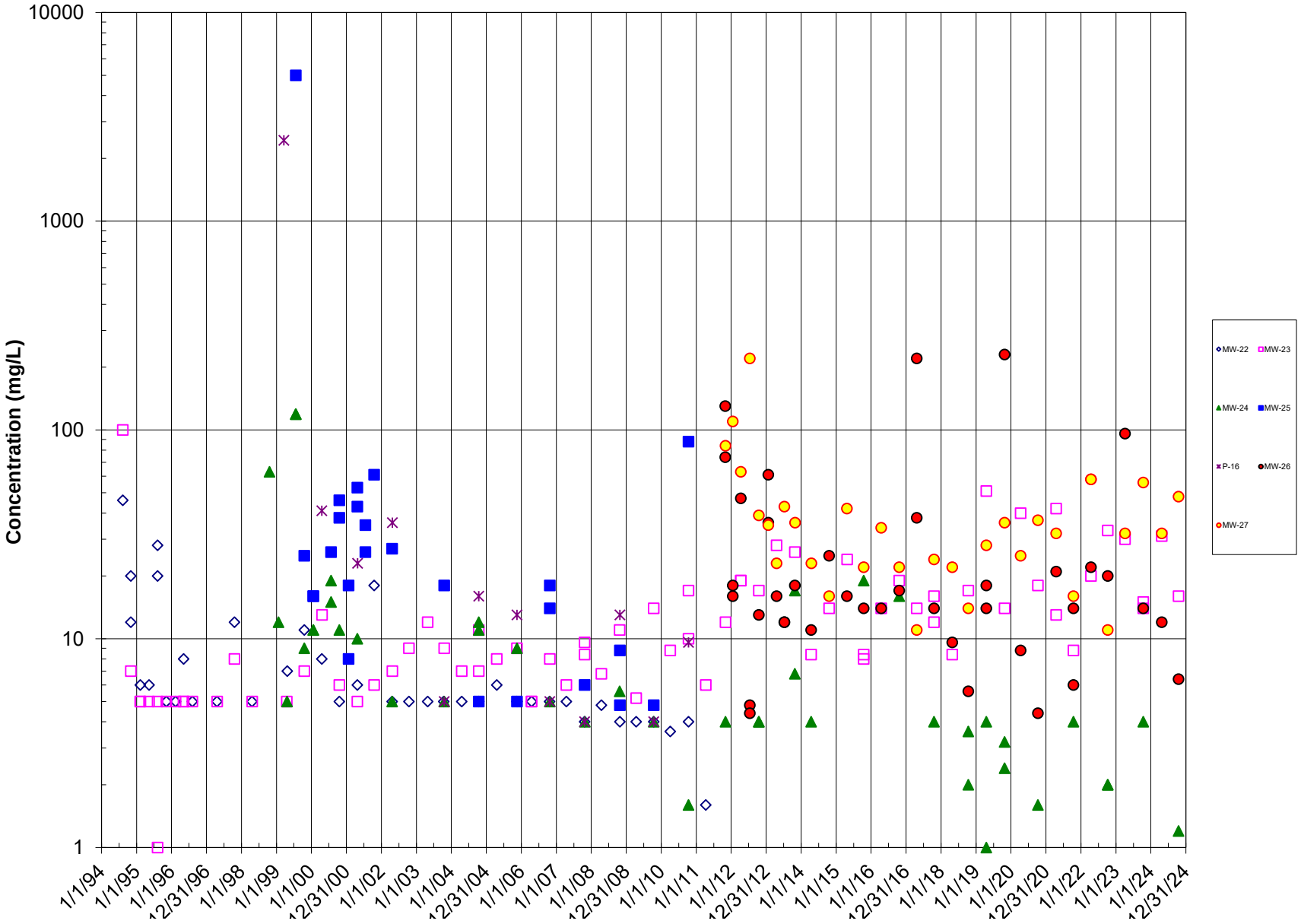

East-Side Wells:
Total Organic Carbon
Coffin Butte Landfill
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
1/1/24
MW-22
MW-23
MW-24
MW-25
P-16
MW-26
MW-27

MW-23, MW-24, MW-26, and MW-27:
Total Suspended Solids
Coffin Butte Landfill



MW-26-27_new SSLs/Total Suspended Solids

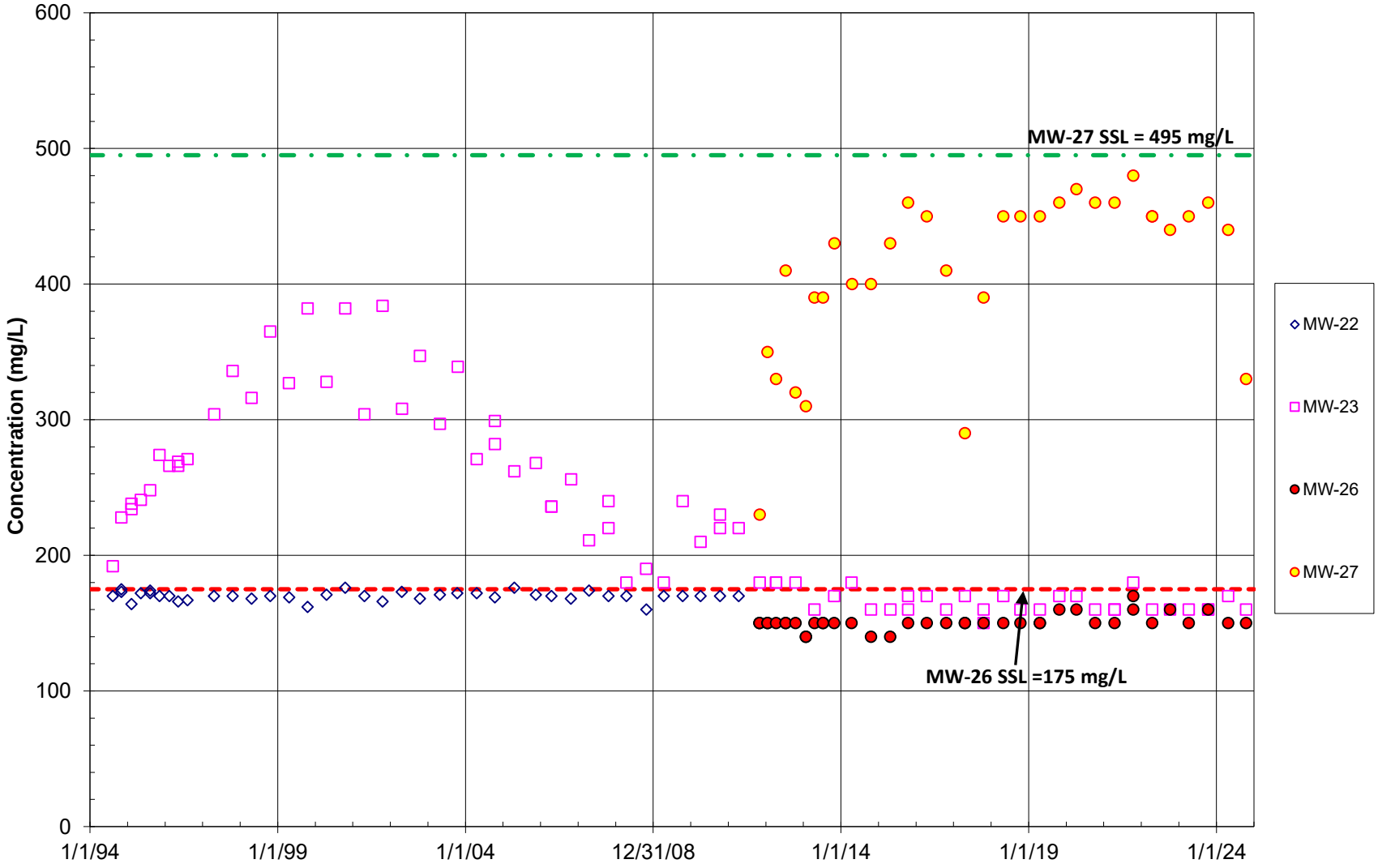
East-Side Wells:
Total Suspended Solids
Coffin Butte Landfill



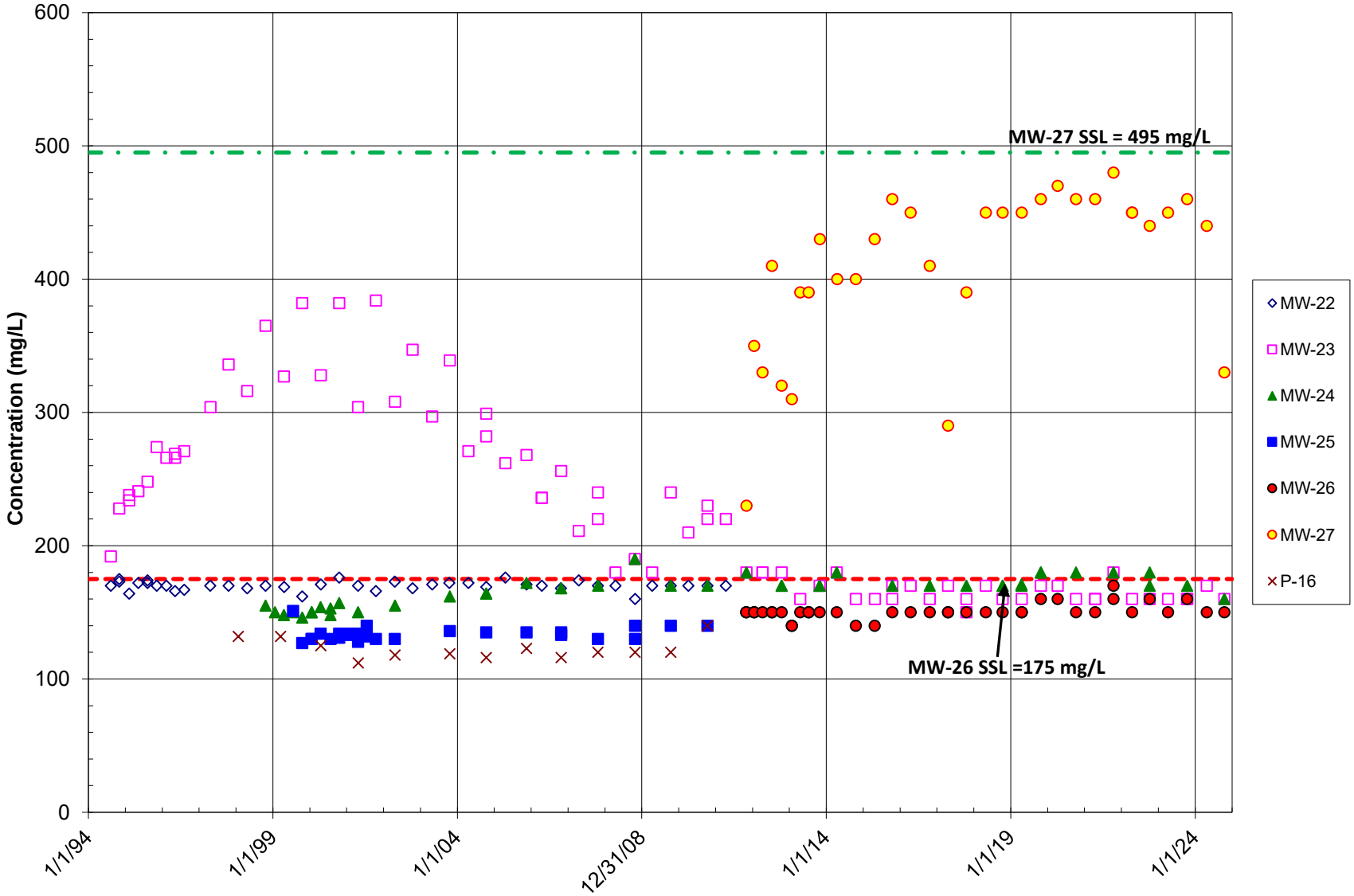
MW-26-27_new SSLs/Total Suspended Solids

East-Side Wells:
Bicarbonate Alkalinity
Coffin Butte Landfill

Figure 3
Bicarbonate Alkalinity in East Side Wells
Coffin Butte Landfill



East-Side Wells:
Bicarbonate Alkalinity
Coffin Butte Landfill



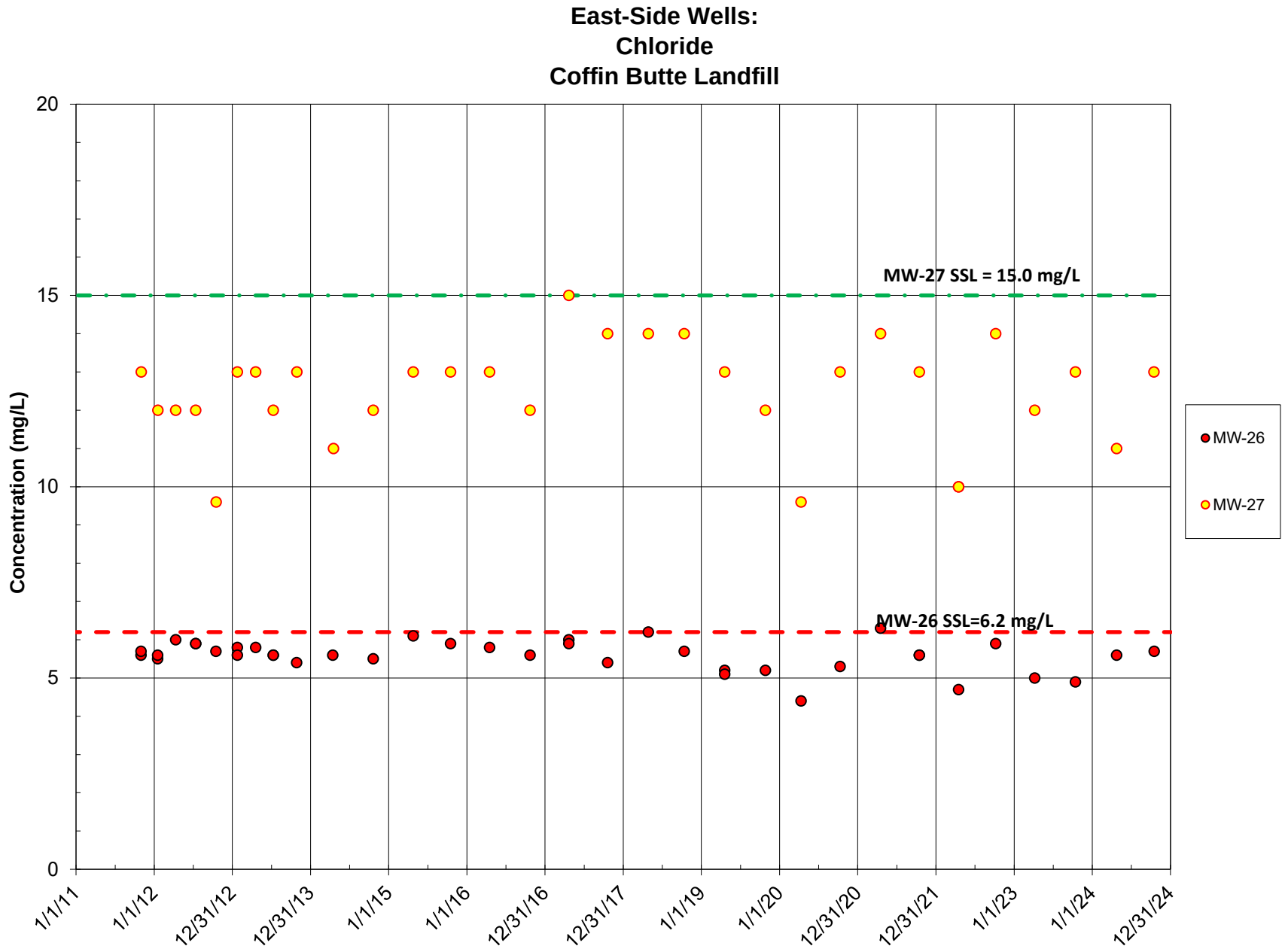
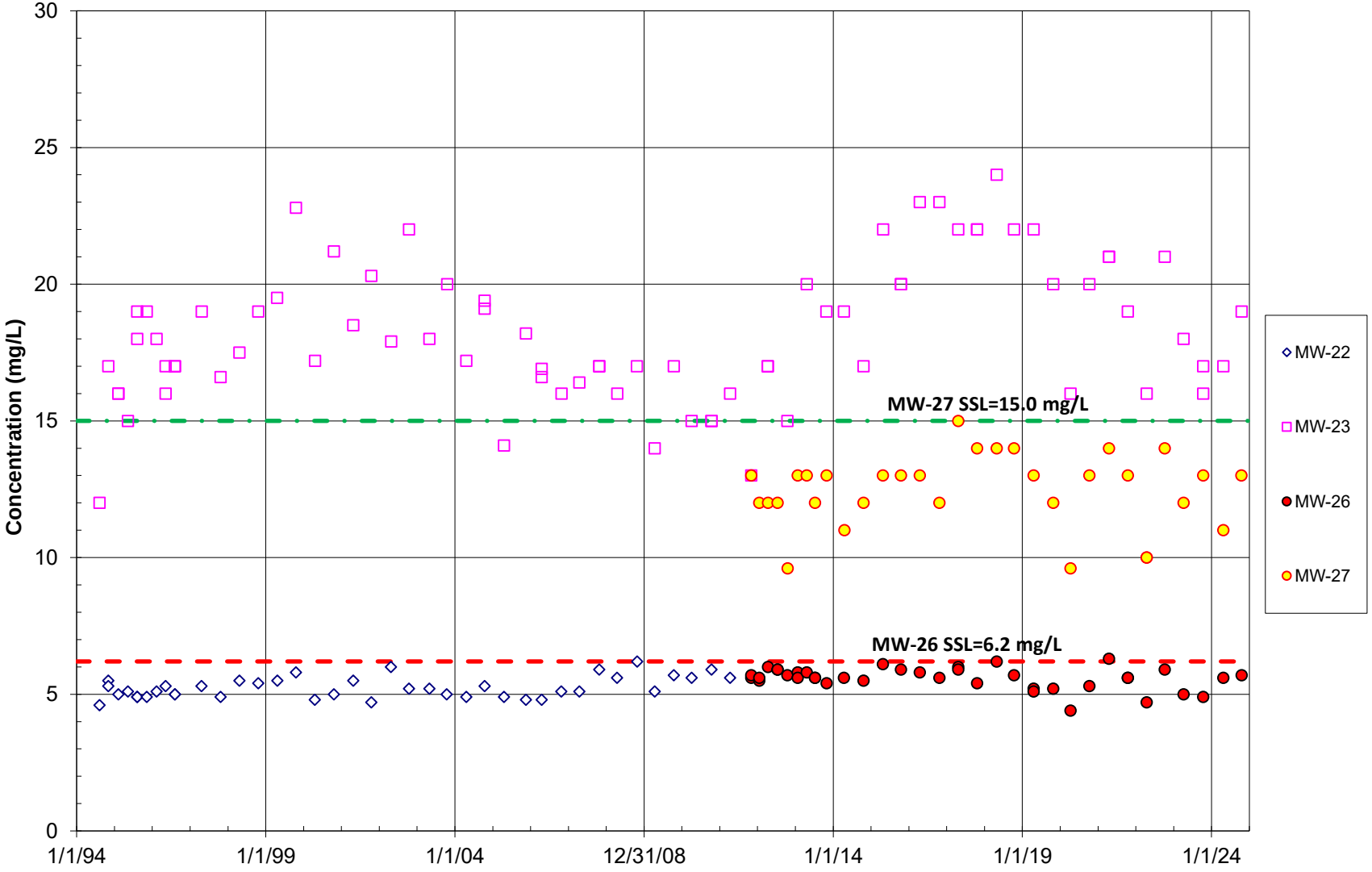
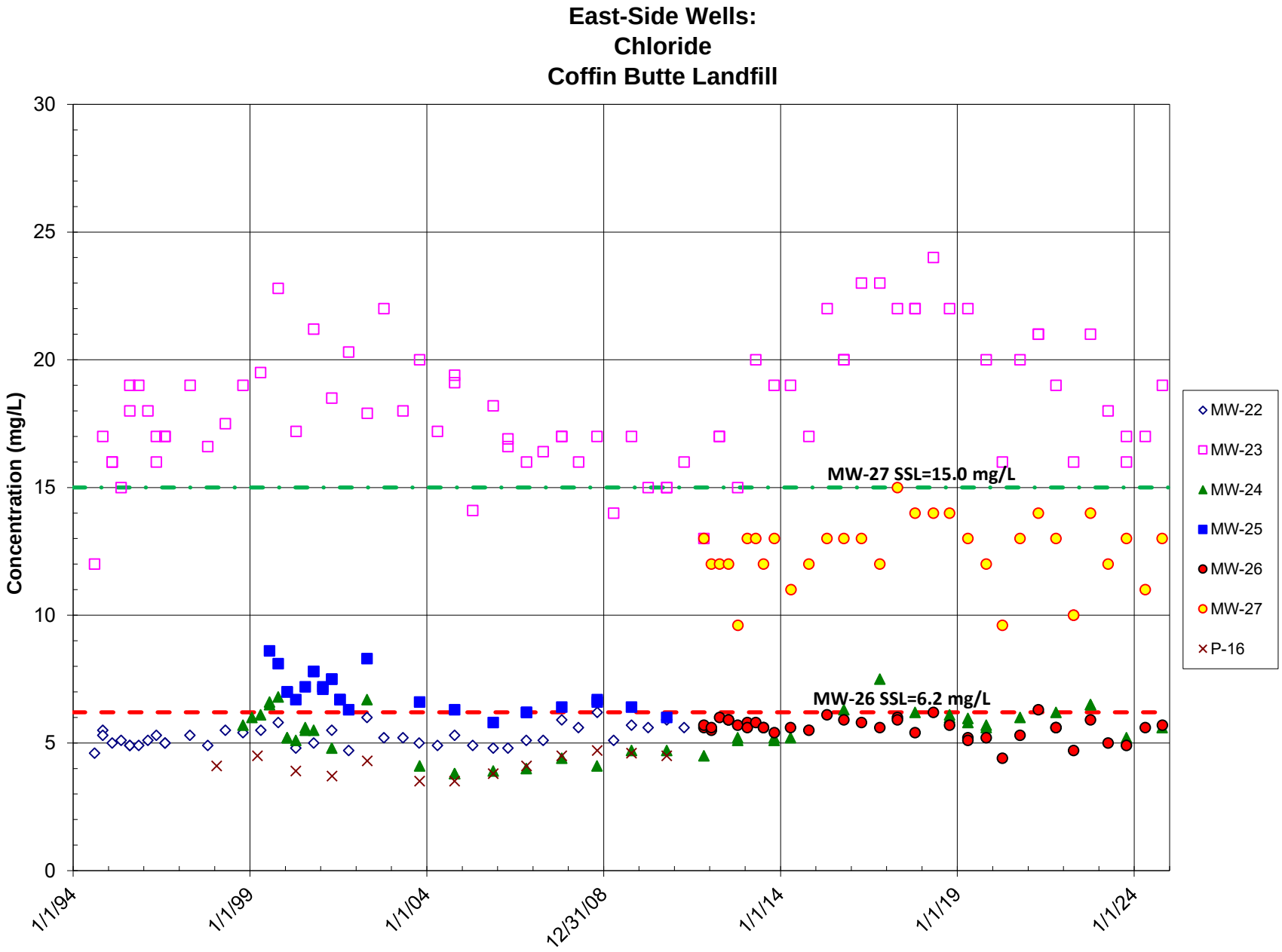
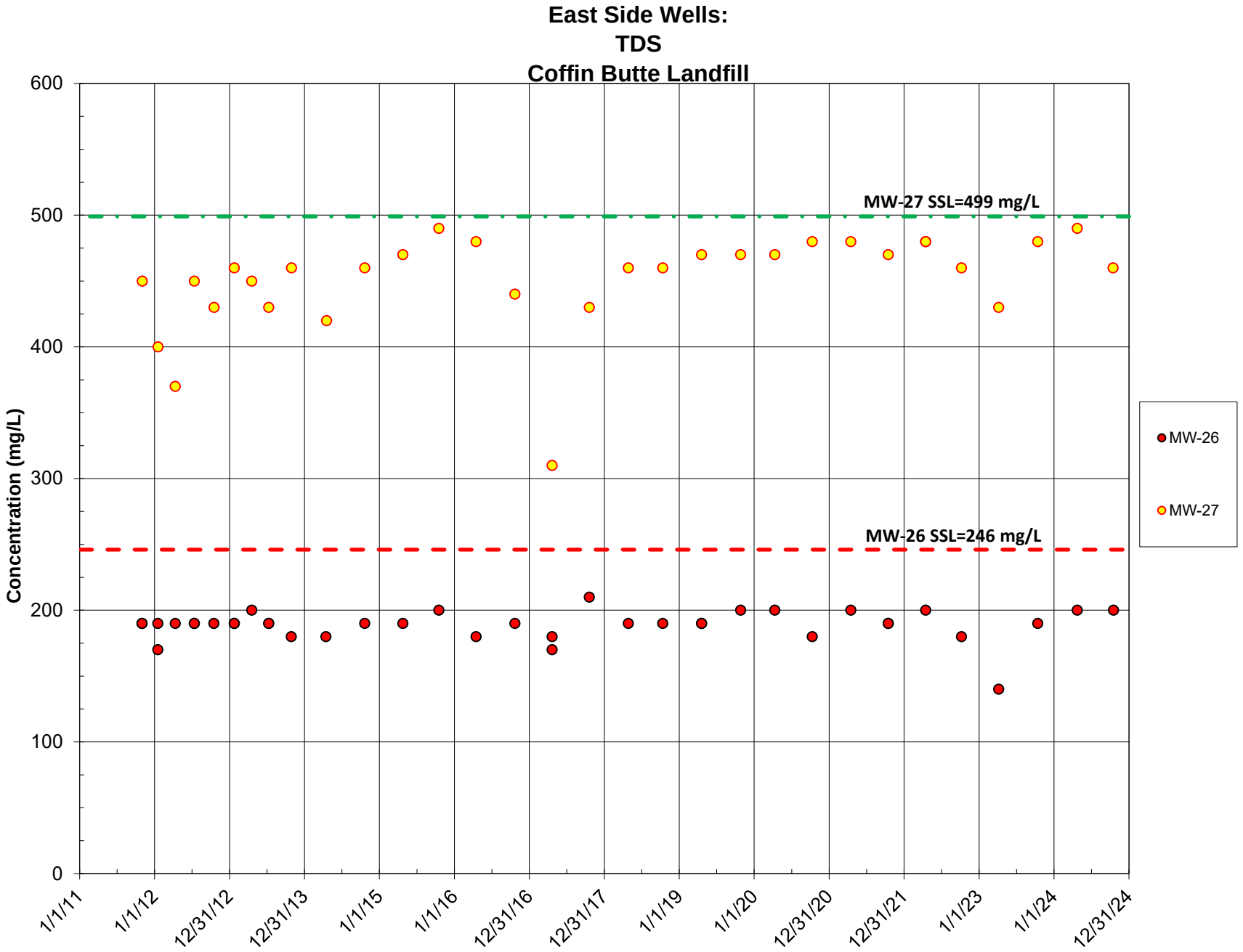

East-Side Wells:
Chloride
Coffin Butte Landfill
Concentration (mg/L)
20
15
10
5
0
MW-27 SSL = 15.0 mg/L
MW-26 SSL=6.2 mg/L
MW-26
MW-27
1/1/11
1/1/12
12/31/12
12/31/13
1/1/15
1/1/16
12/31/16
12/31/17
1/1/19
1/1/20
12/31/20
12/31/21
1/1/23
1/1/24
12/31/24

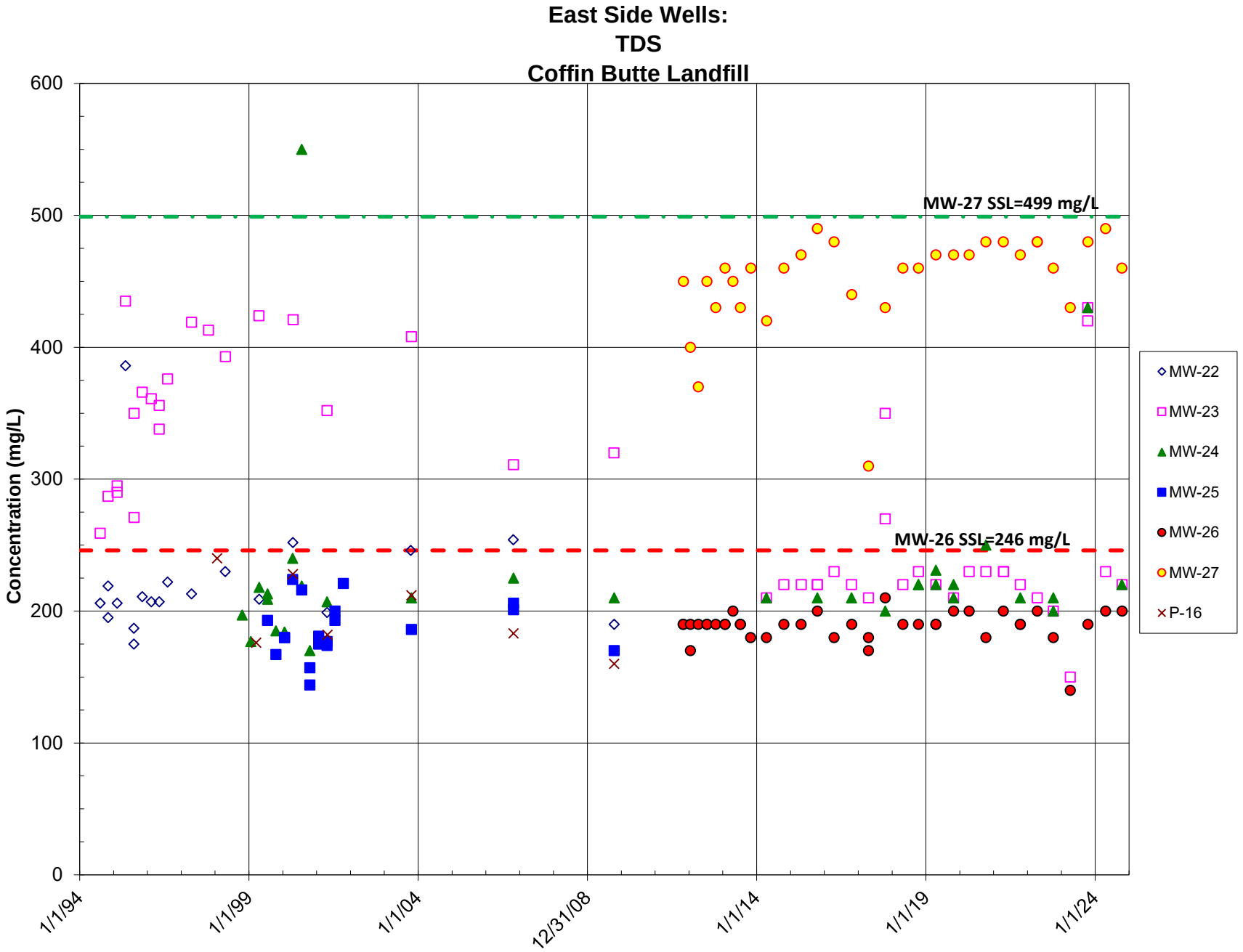
Figure 4
Chloride in East Side Wells
Coffin Butte Landfill




East-Side Wells:
Chloride
Coffin Butte Landfill
Concentration (mg/L)
30
25
20
15
10
5
0
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
1/1/24
MW-27 SSL=15.0 mg/L
MW-26 SSL=6.2 mg/L
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
P-16

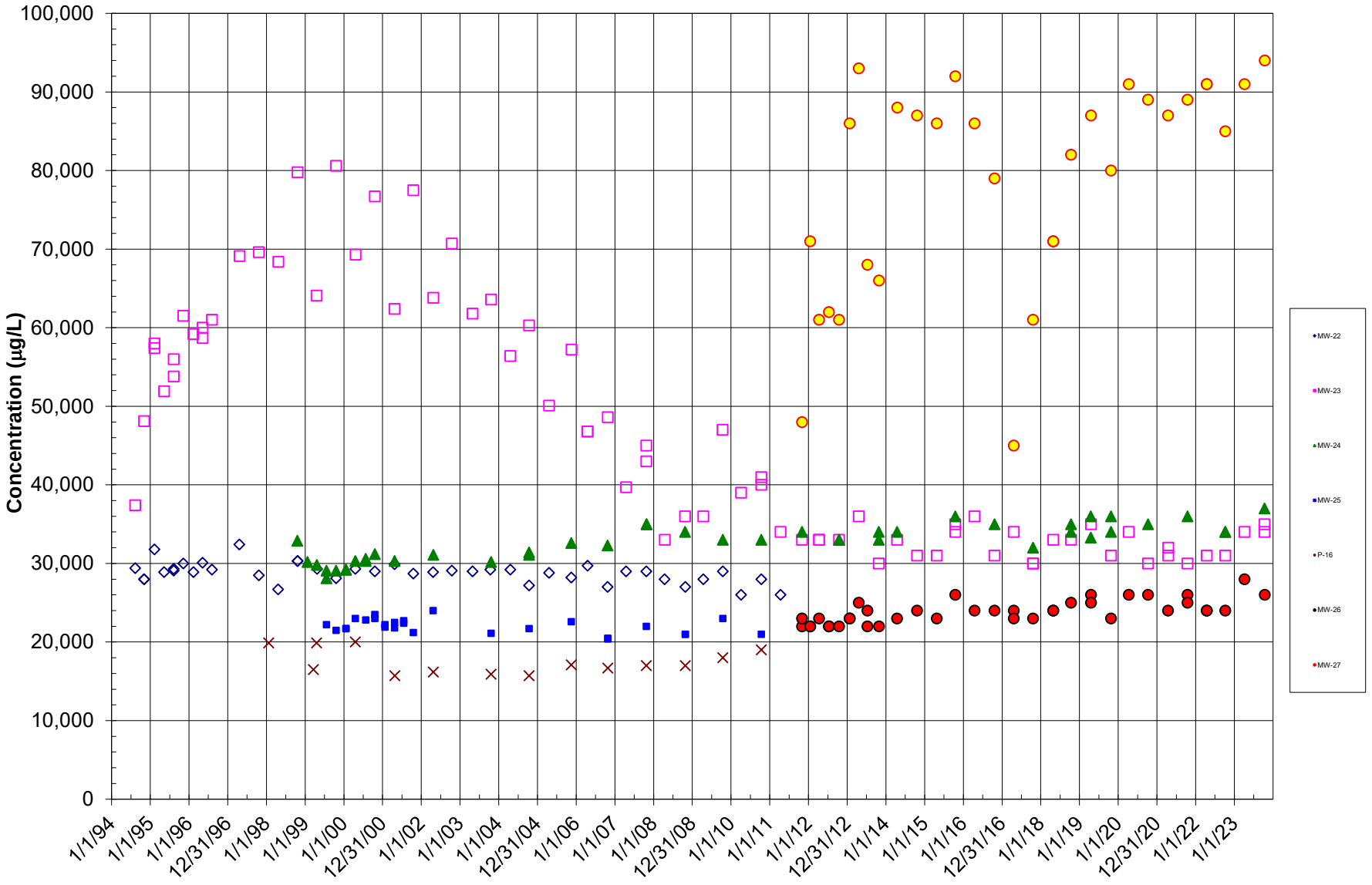


MW-26-27_new SSLs/TDS

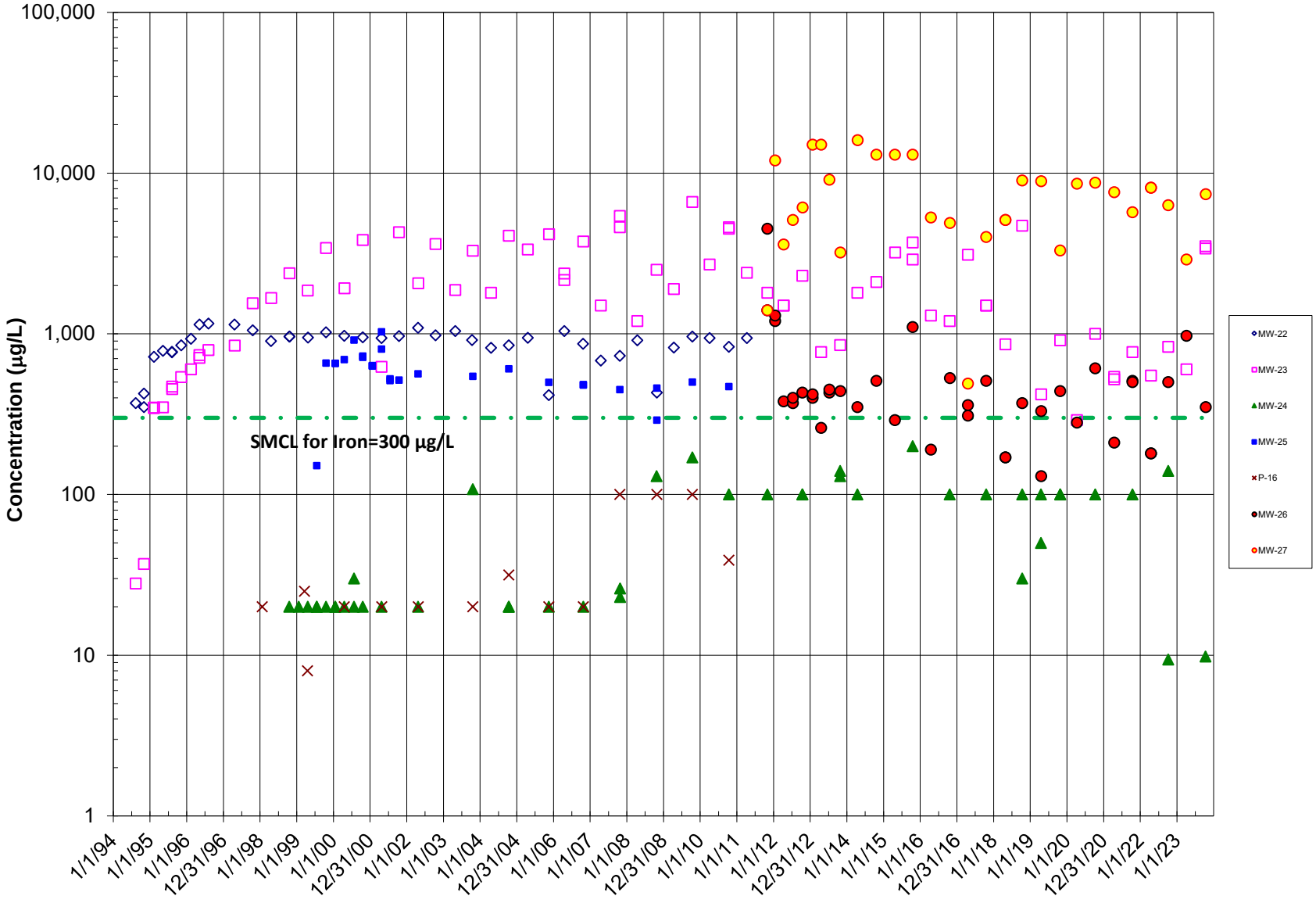


MW-26-27_new SSLs/TDS

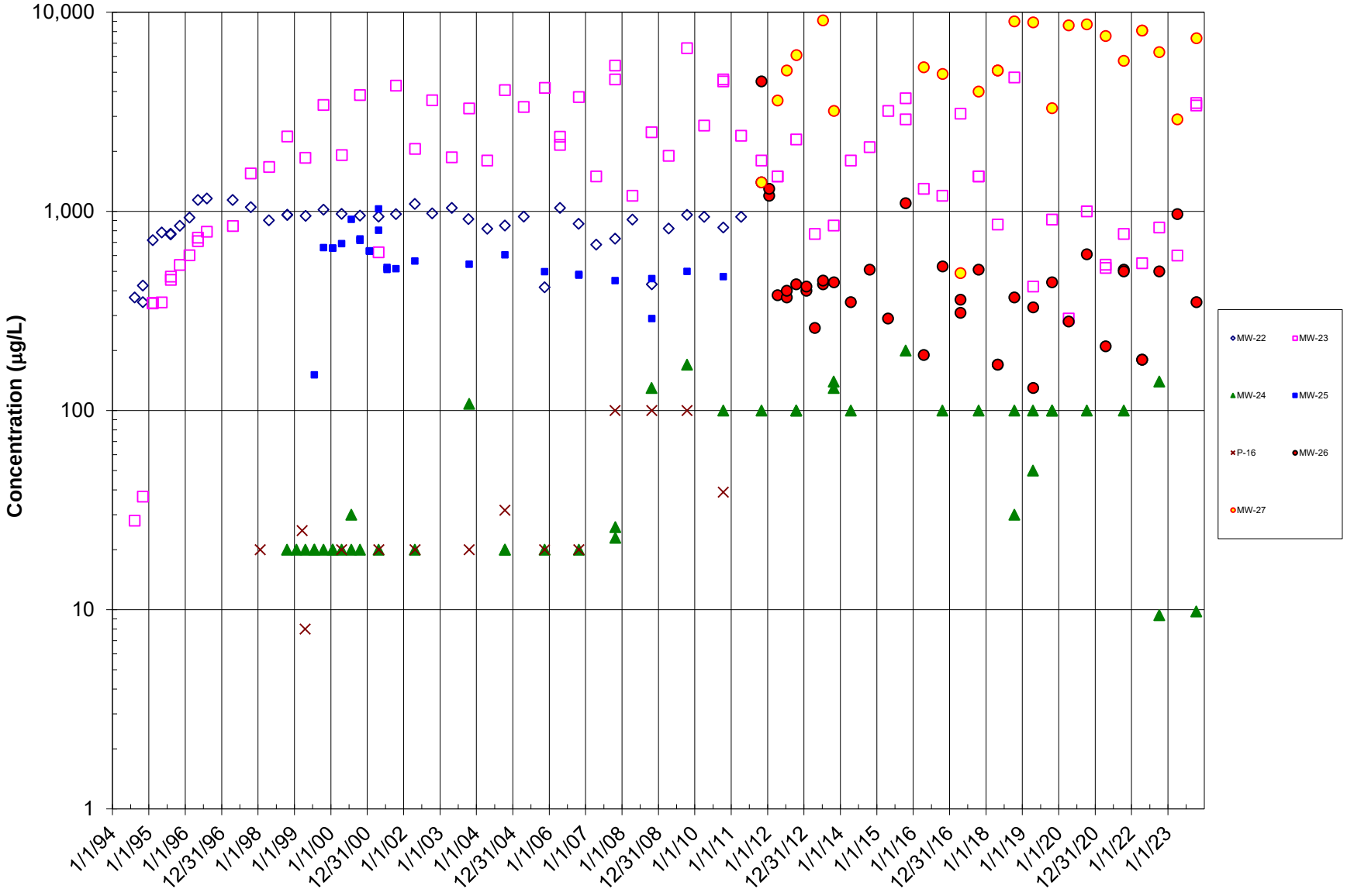
MW-23, MW-24, MW-26, and MW-27:
Calcium
Coffin Butte Landfill



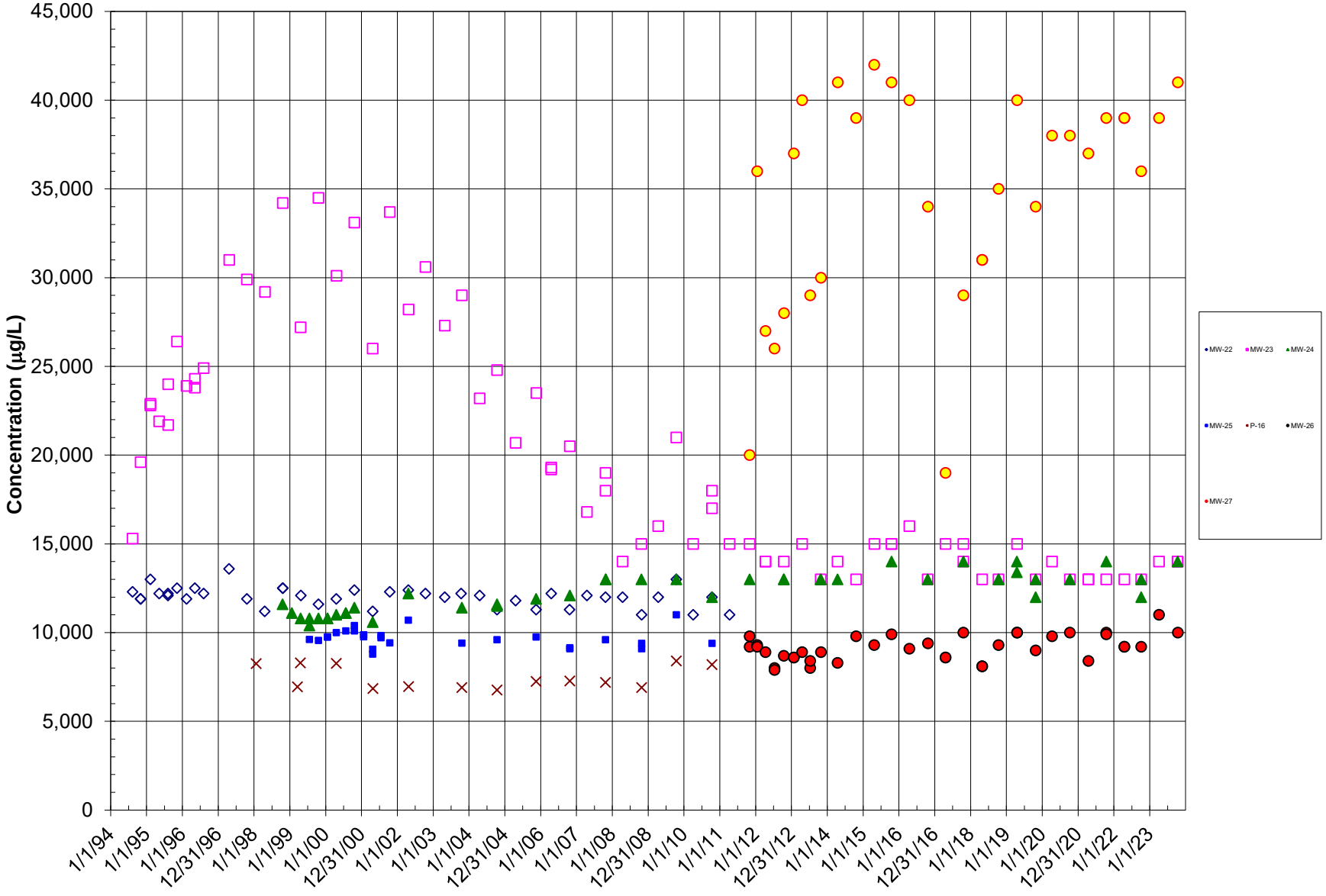
MW-23, MW-24, MW-26, and MW-27:
Iron (SMCL)
Coffin Butte Landfill



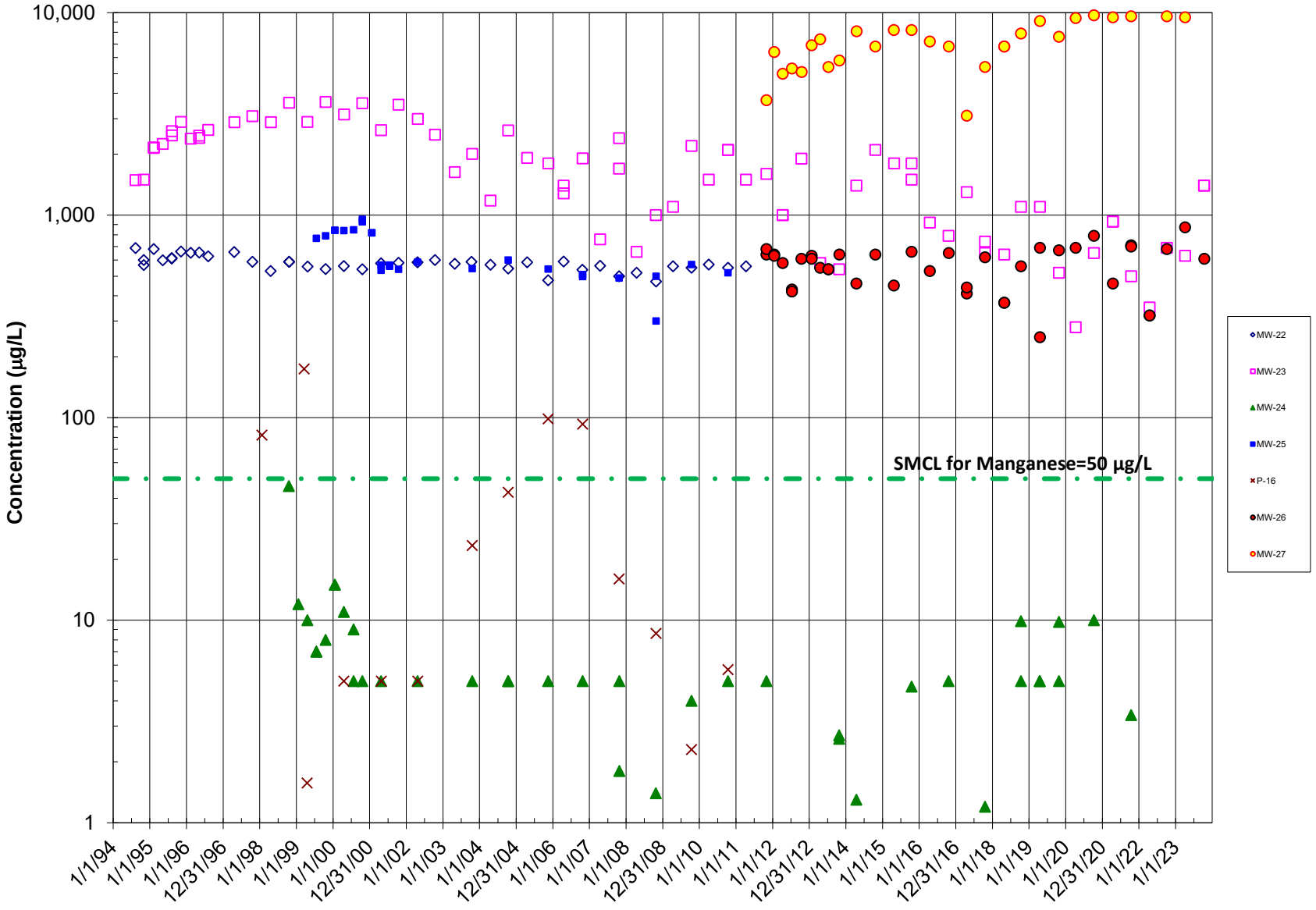
MW-23, MW-24, MW-26, and MW-27:
Iron
Coffin Butte Landfill



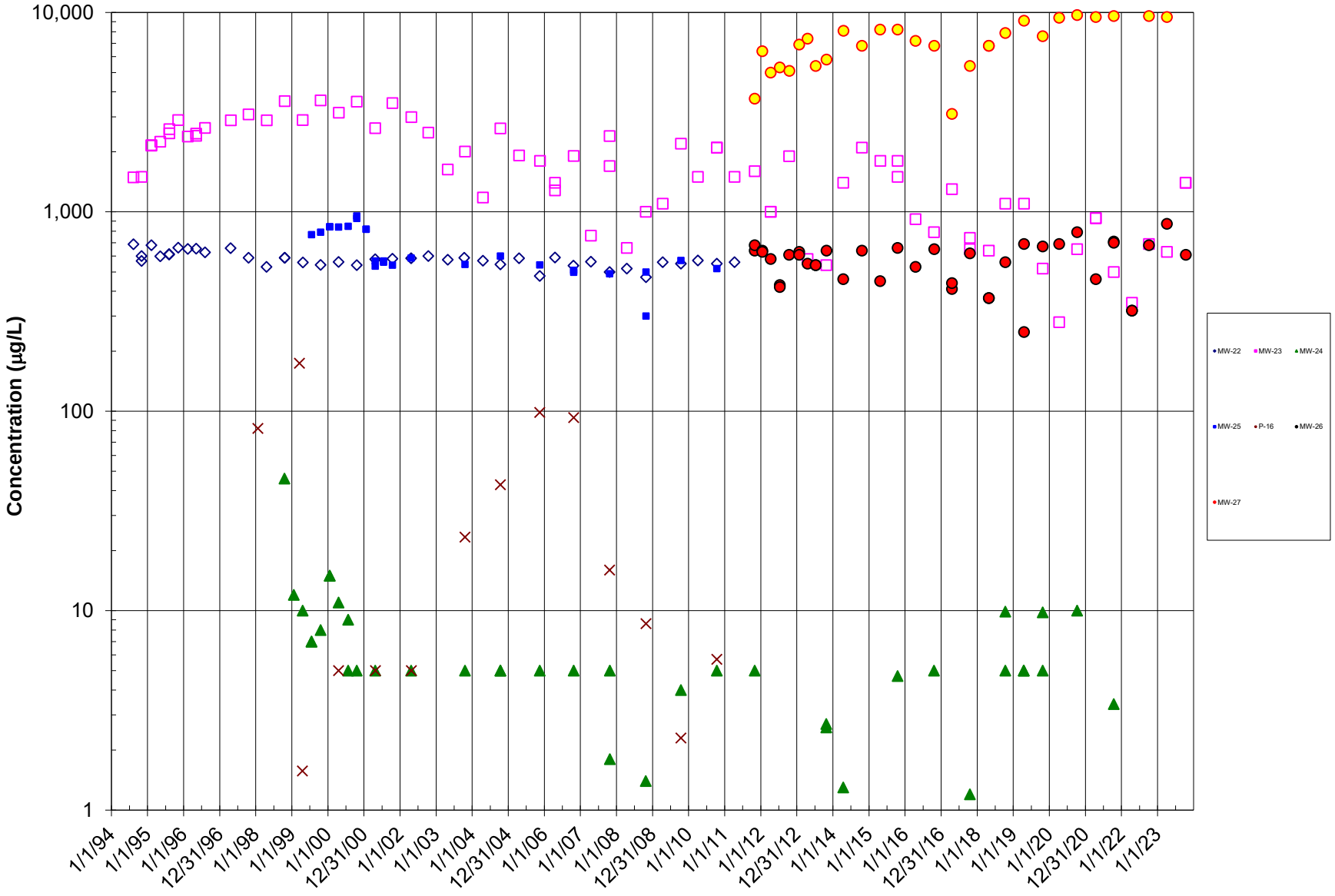
MW-23, MW-24, MW-26, and MW-27:
Magnesium
Coffin Butte Landfill



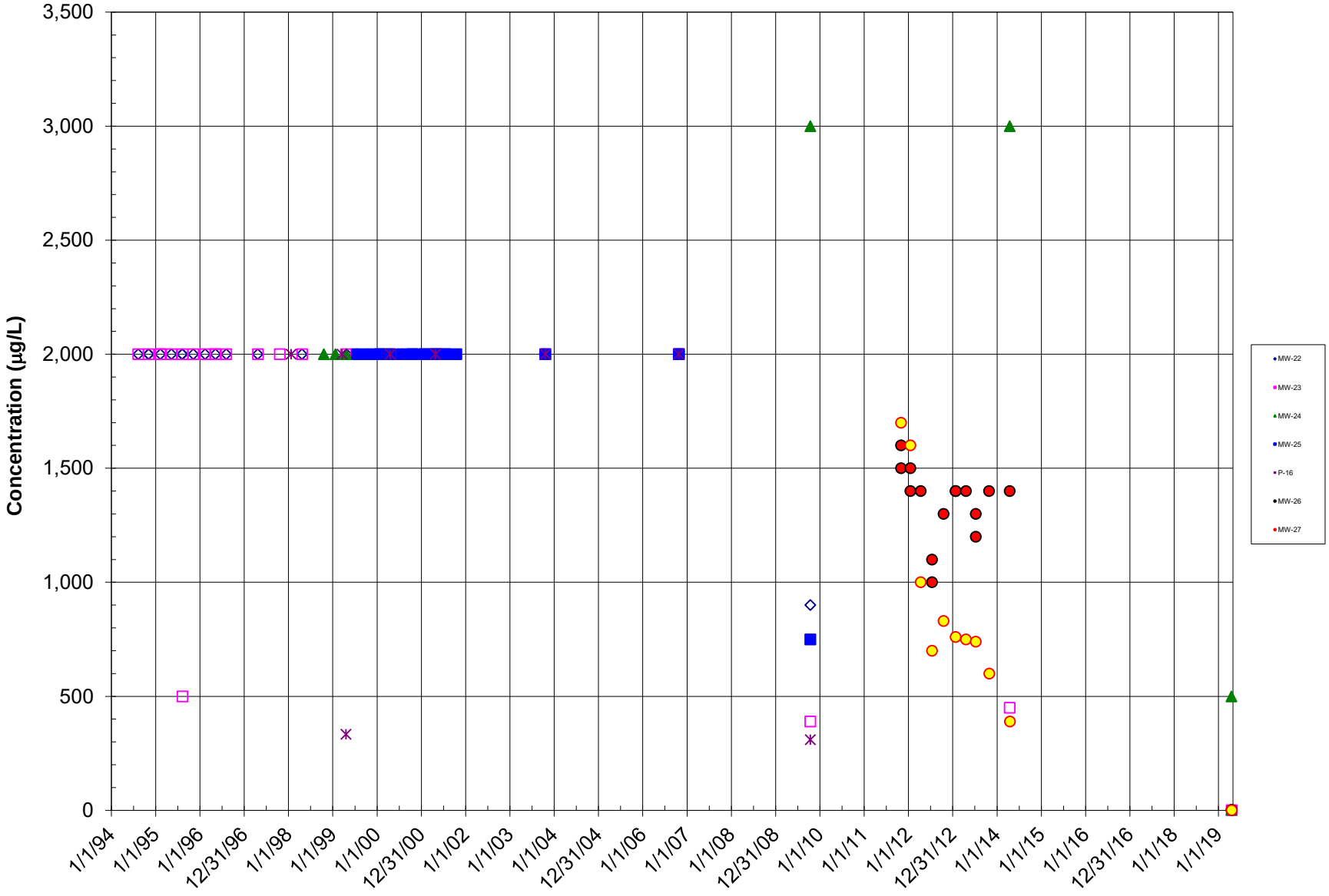
MW-23, MW-24, MW-26, and MW-27:
Manganese (SMCL)
Coffin Butte Landfill



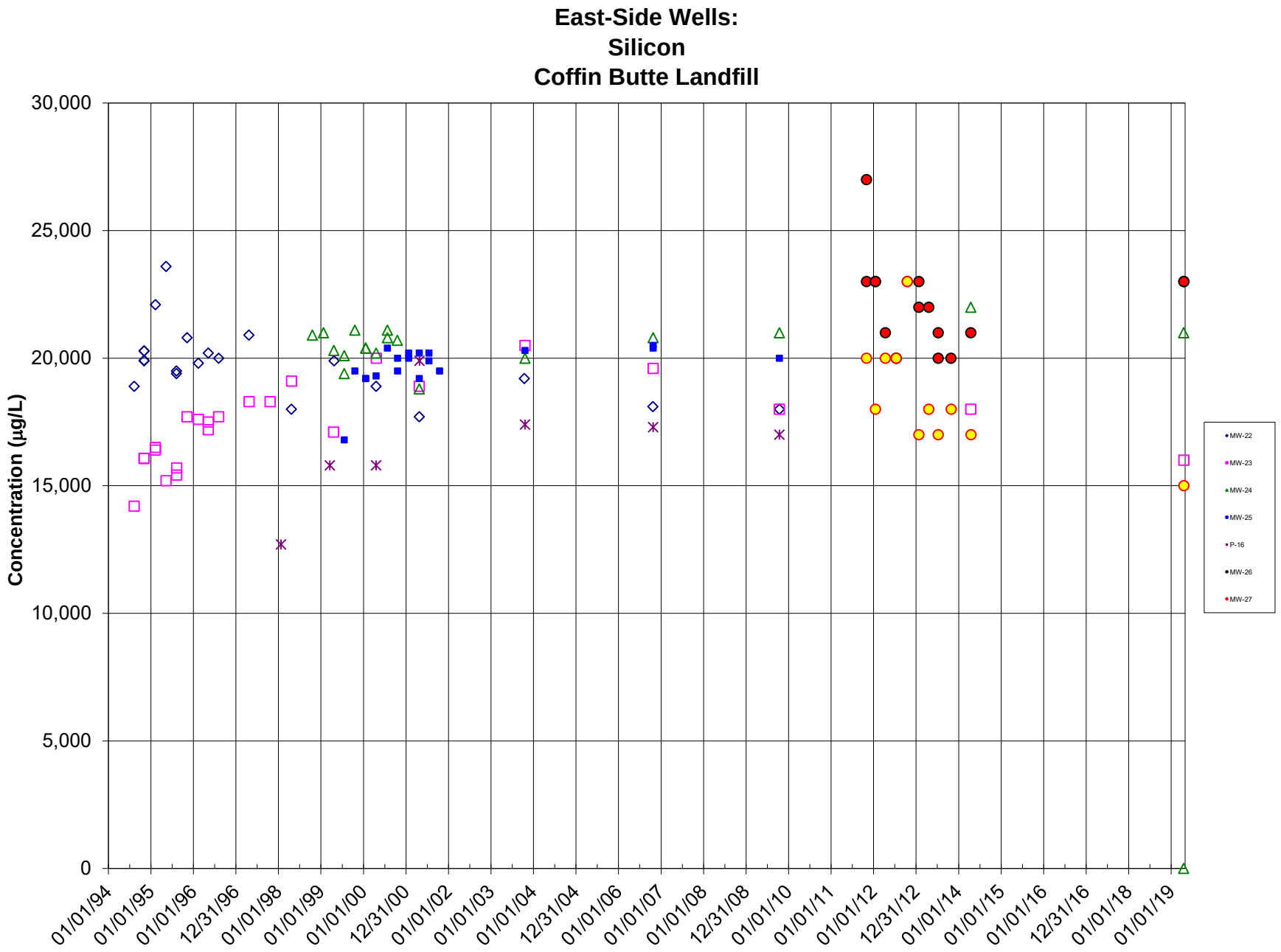
MW-23, MW-24, MW-26, and MW-27:
Manganese
Coffin Butte Landfill



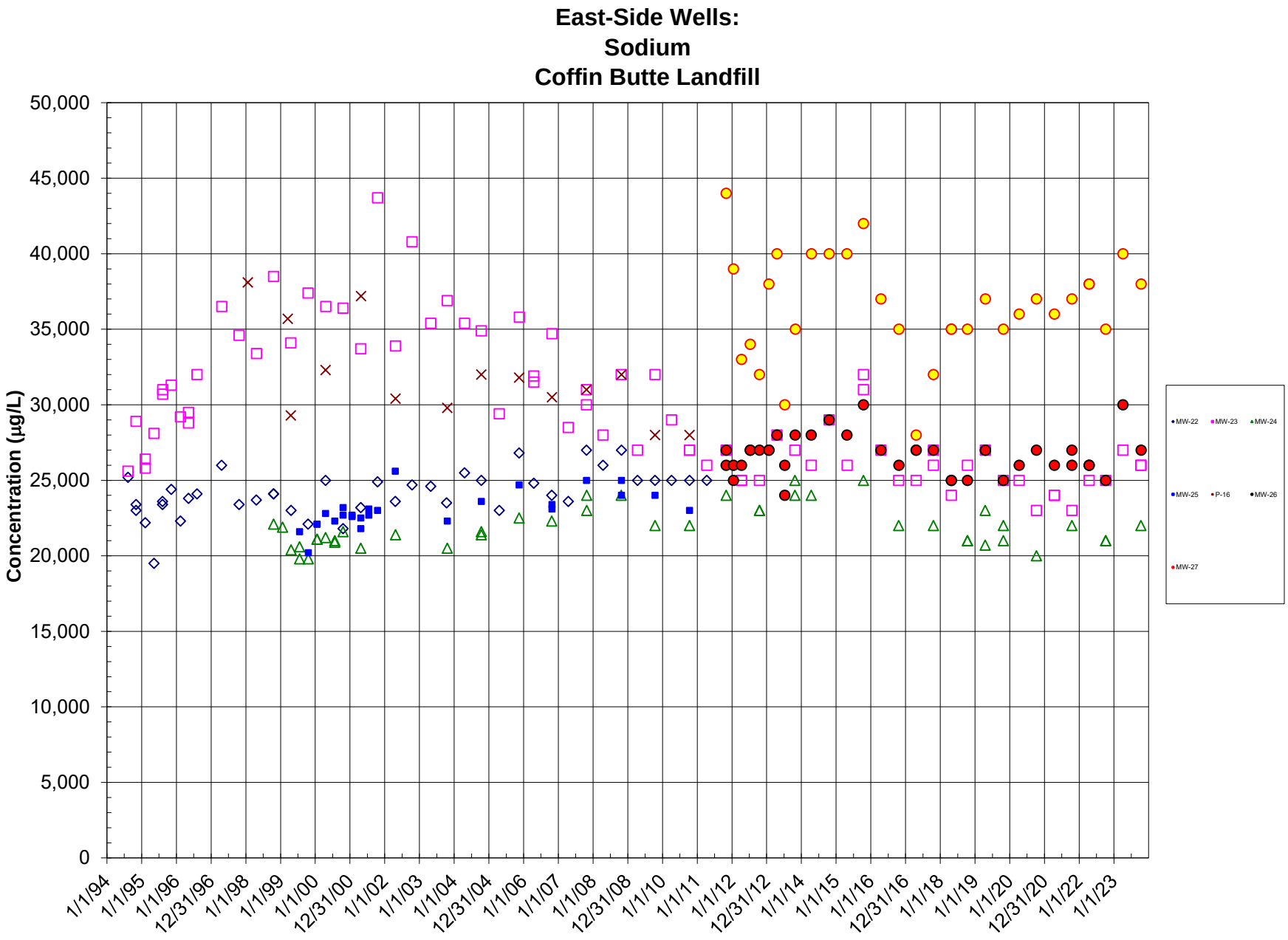
East-Side Wells:
Potassium
Coffin Butte Landfill

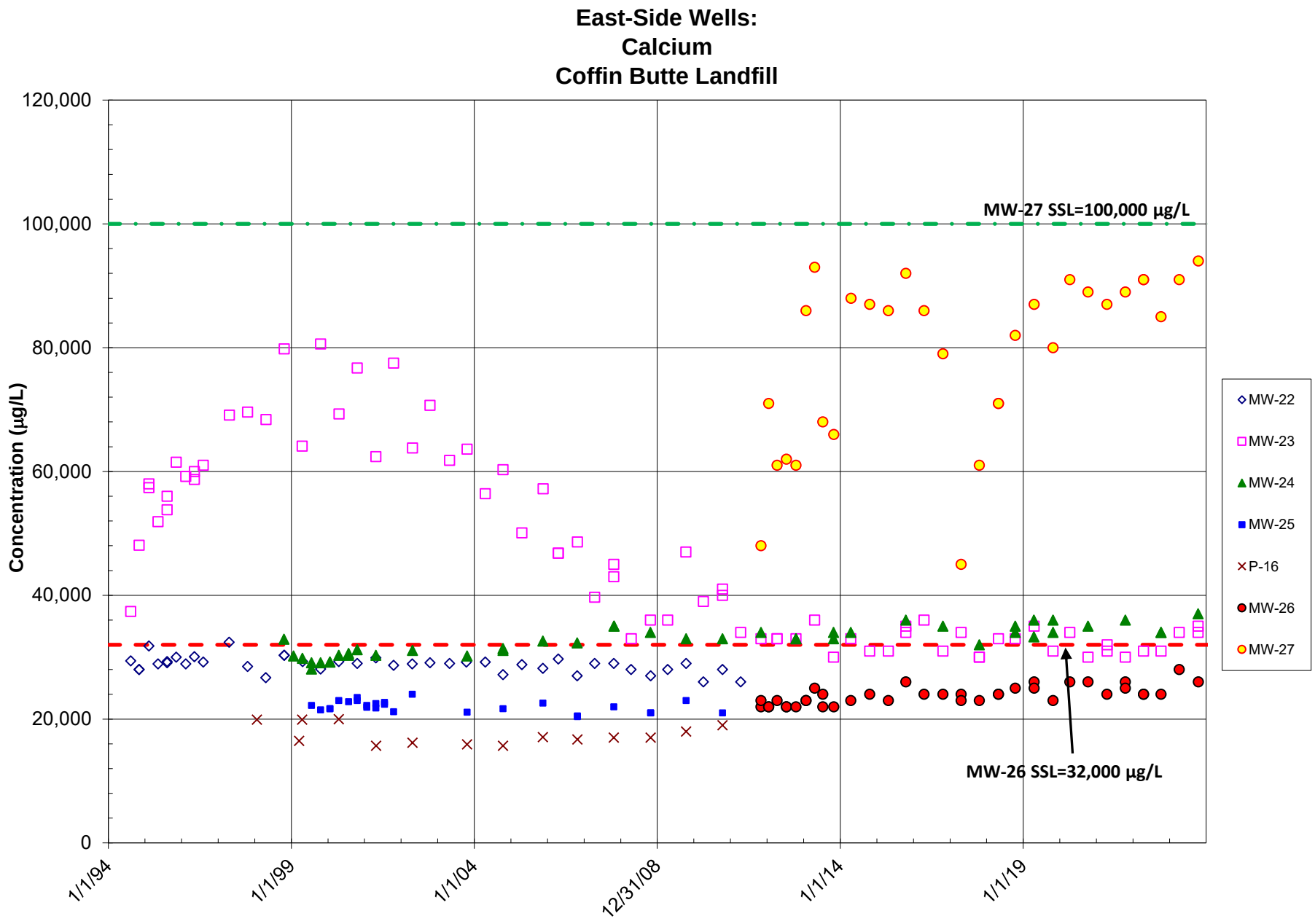


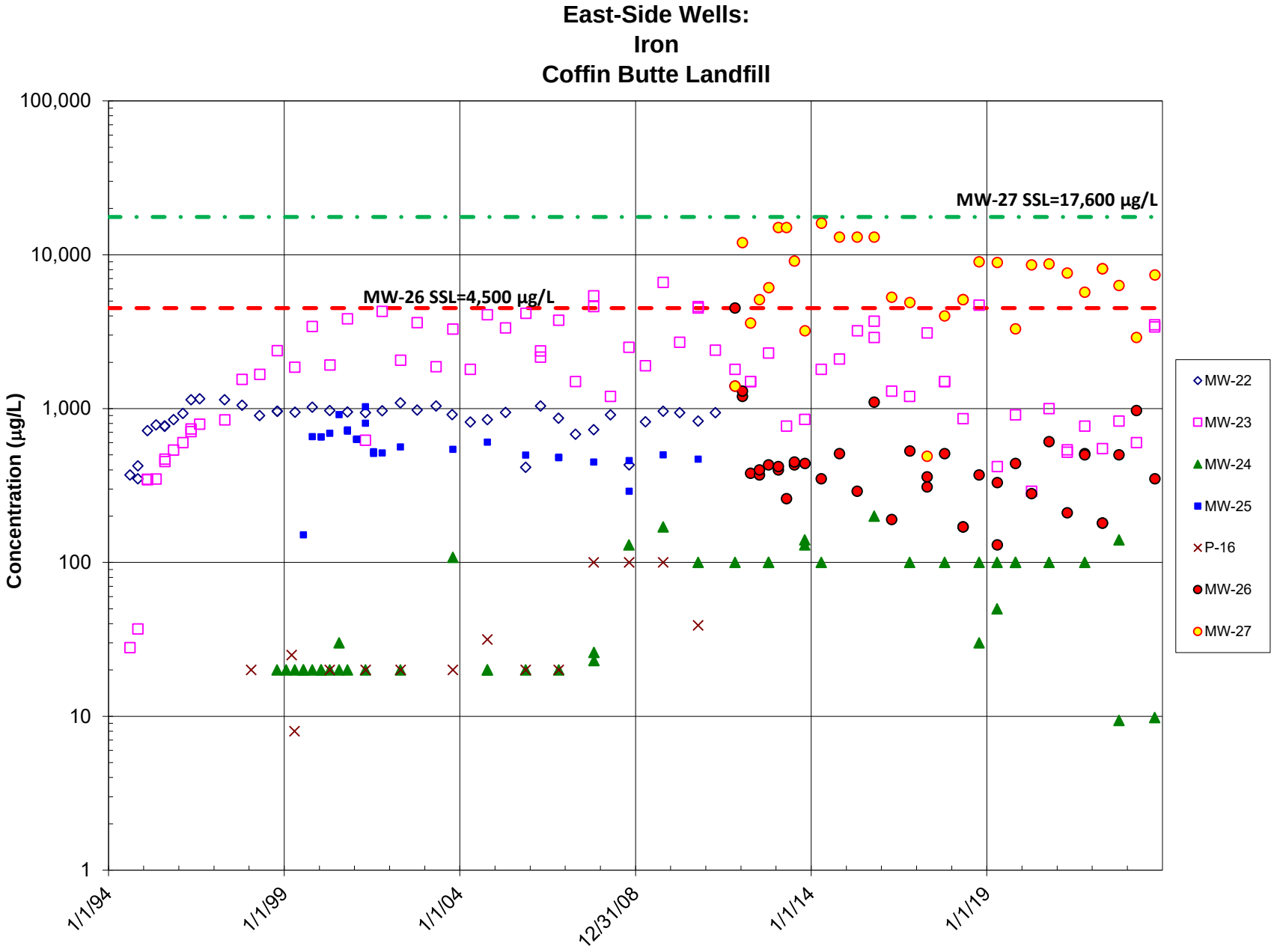
MW-26-27-new PSCLs/Potassium



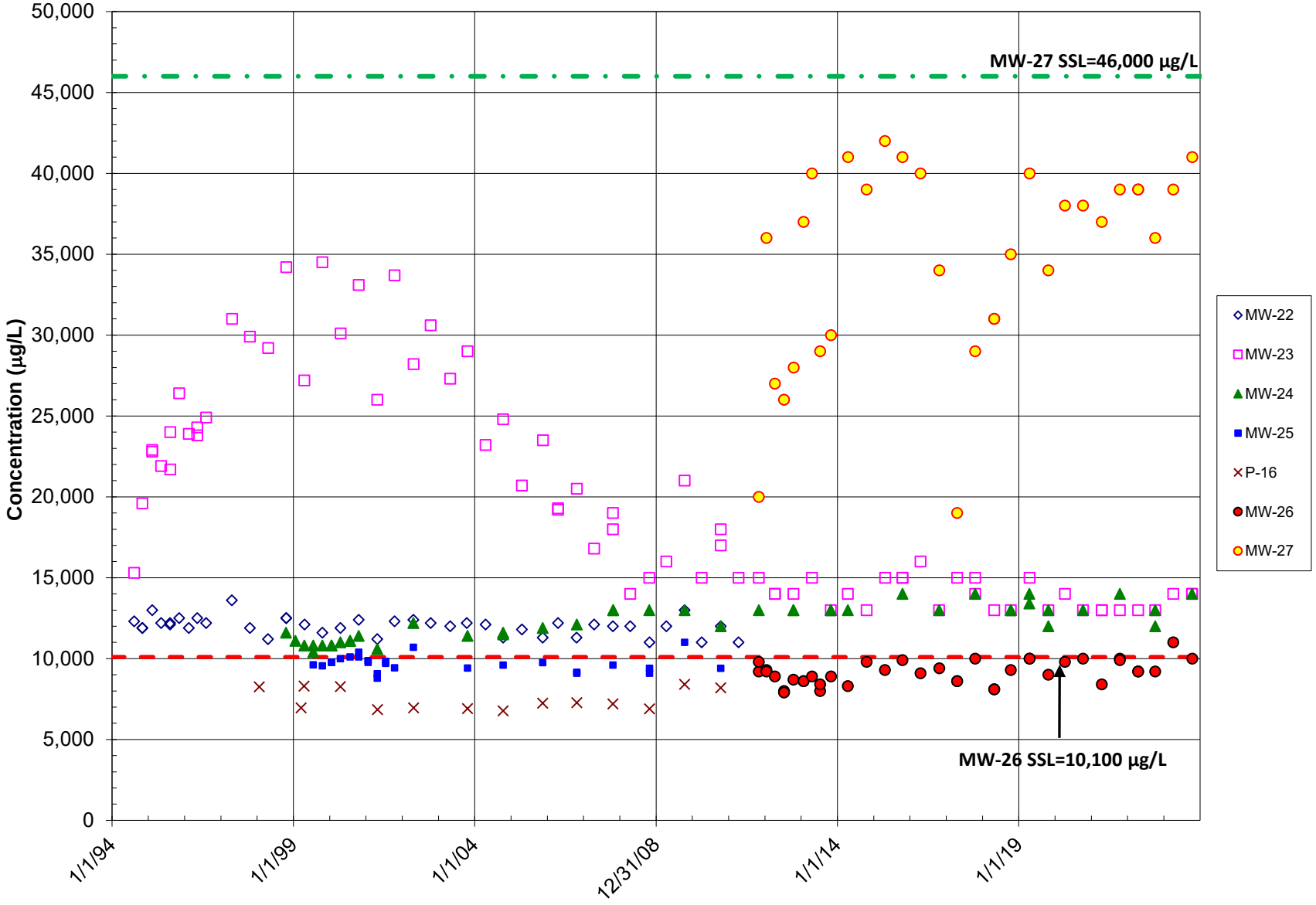
MW-26-27-new PSCLs/Silicon

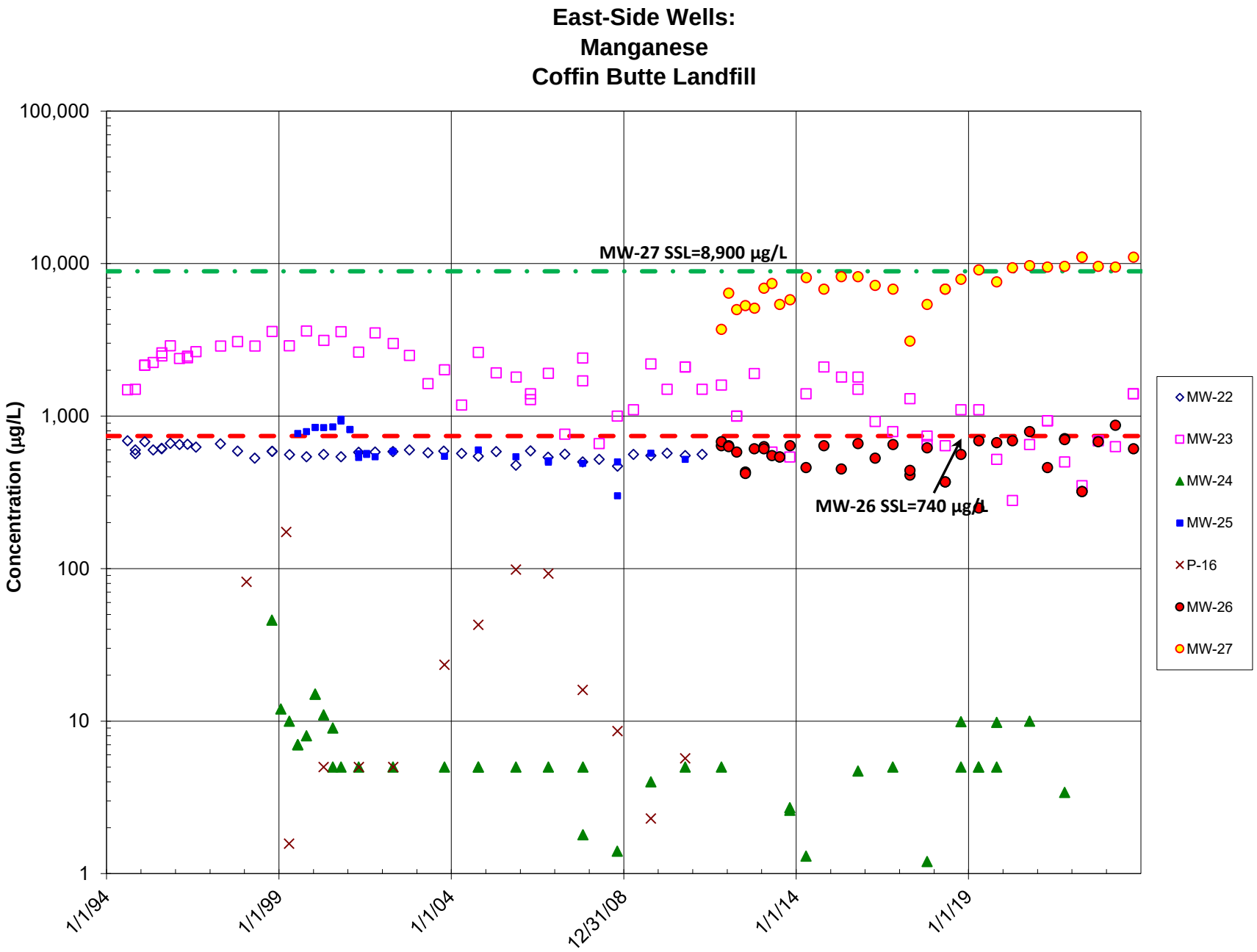

East-Side Wells:
Sodium
Coffin Butte Landfill
Concentration (µg/L)
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1/1/94
1/1/95
1/1/96
12/31/96
1/1/98
1/1/99
1/1/00
12/31/00
1/1/02
1/1/03
1/1/04
12/31/04
1/1/06
1/1/07
1/1/08
12/31/08
1/1/10
1/1/11
1/1/12
12/31/12
1/1/14
1/1/15
1/1/16
12/31/16
1/1/18
1/1/19
1/1/20
12/31/20
1/1/22
1/1/23
MW-22
MW-23
MW-24
MW-25
P-16
MW-26
MW-27


East-Side Wells:
Calcium
Coffin Butte Landfill
120,000
100,000
80,000
60,000
40,000
20,000
0
Concentration (µg/L)
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
MW-27 SSL=100,000 µg/L
MW-26 SSL=32,000 µg/L
MW-22
MW-23
MW-24
MW-25
P-16
MW-26
MW-27


East-Side Wells:
Iron
Coffin Butte Landfill
100,000
10,000
1,000
100
10
1
Concentration (µg/L)
MW-27 SSL=17,600 µg/L
MW-26 SSL=4,500 µg/L
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
MW-22
MW-23
MW-24
MW-25
P-16
MW-26
MW-27

East-Side Wells:
Magnesium
Coffin Butte Landfill




East-Side Wells:
Manganese
Coffin Butte Landfill
100,000
10,000
1,000
100
10
1
Concentration (µg/L)
MW-27 SSL=8,900 µg/L
MW-26 SSL=740 µg/L
1/1/94
1/1/99
1/1/04
12/31/08
1/1/14
1/1/19
MW-22
MW-23
MW-24
MW-25
P-16
MW-26
MW-27

East-Side Wells:
Sodium
Coffin Butte Landfill

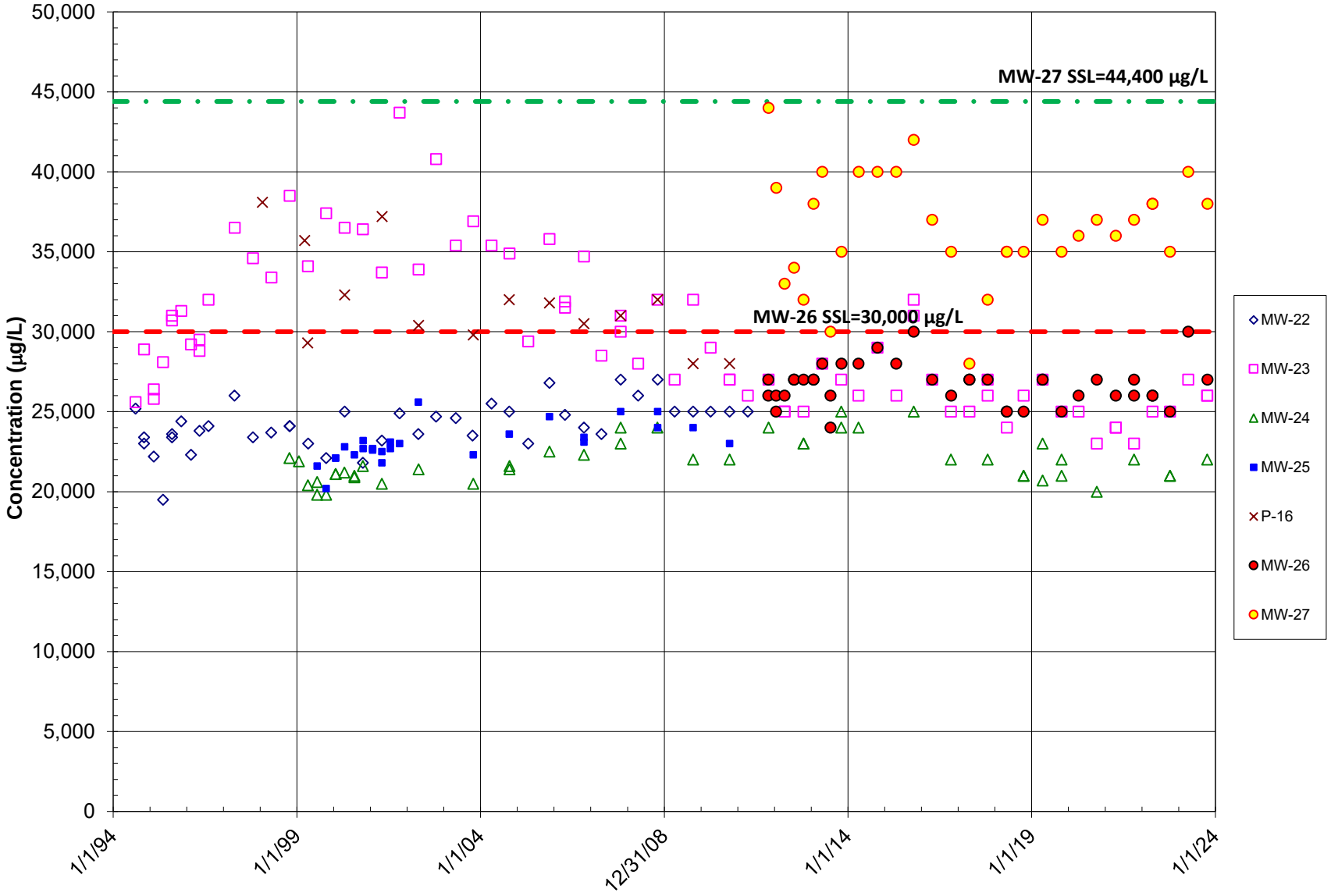
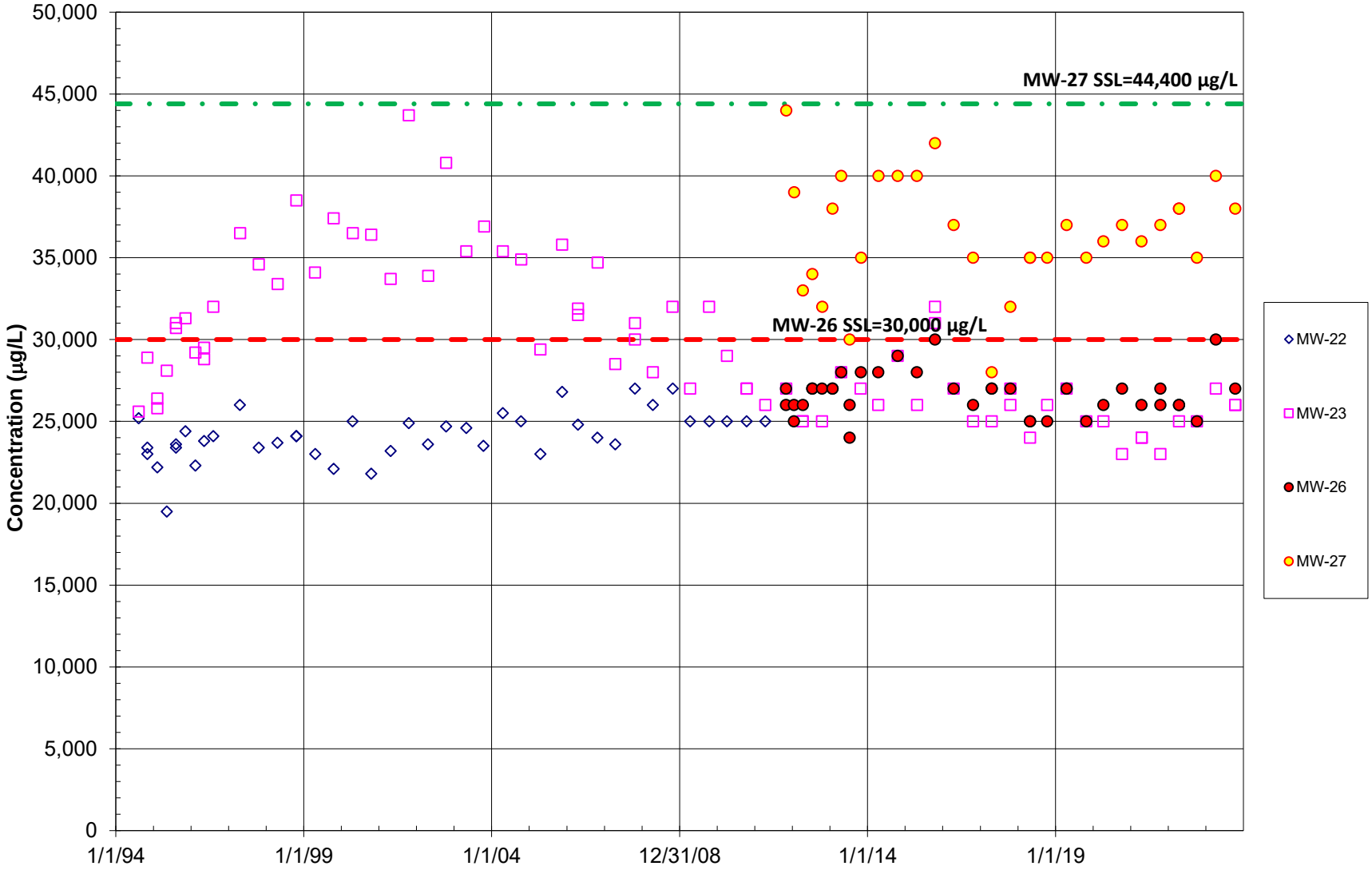
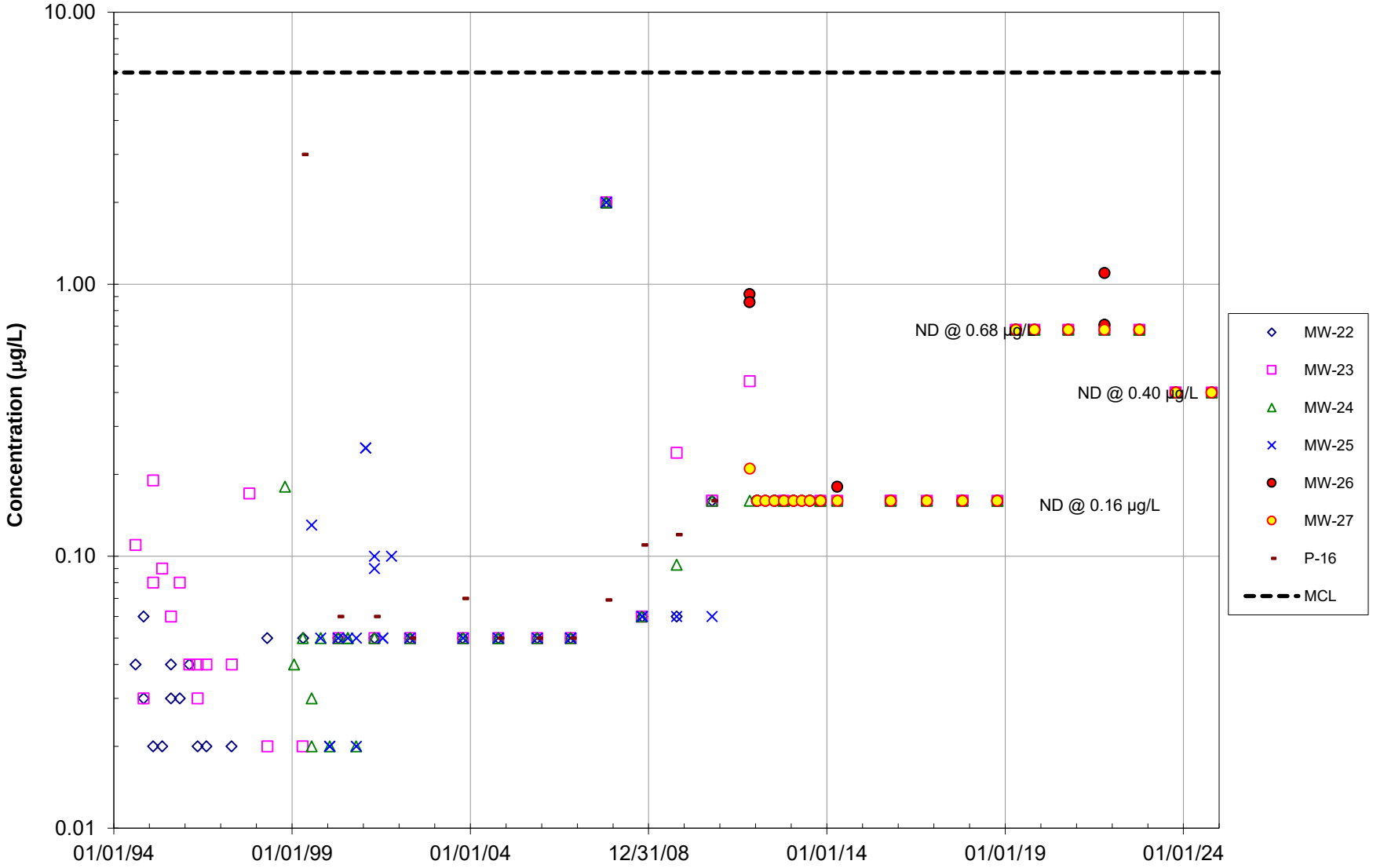
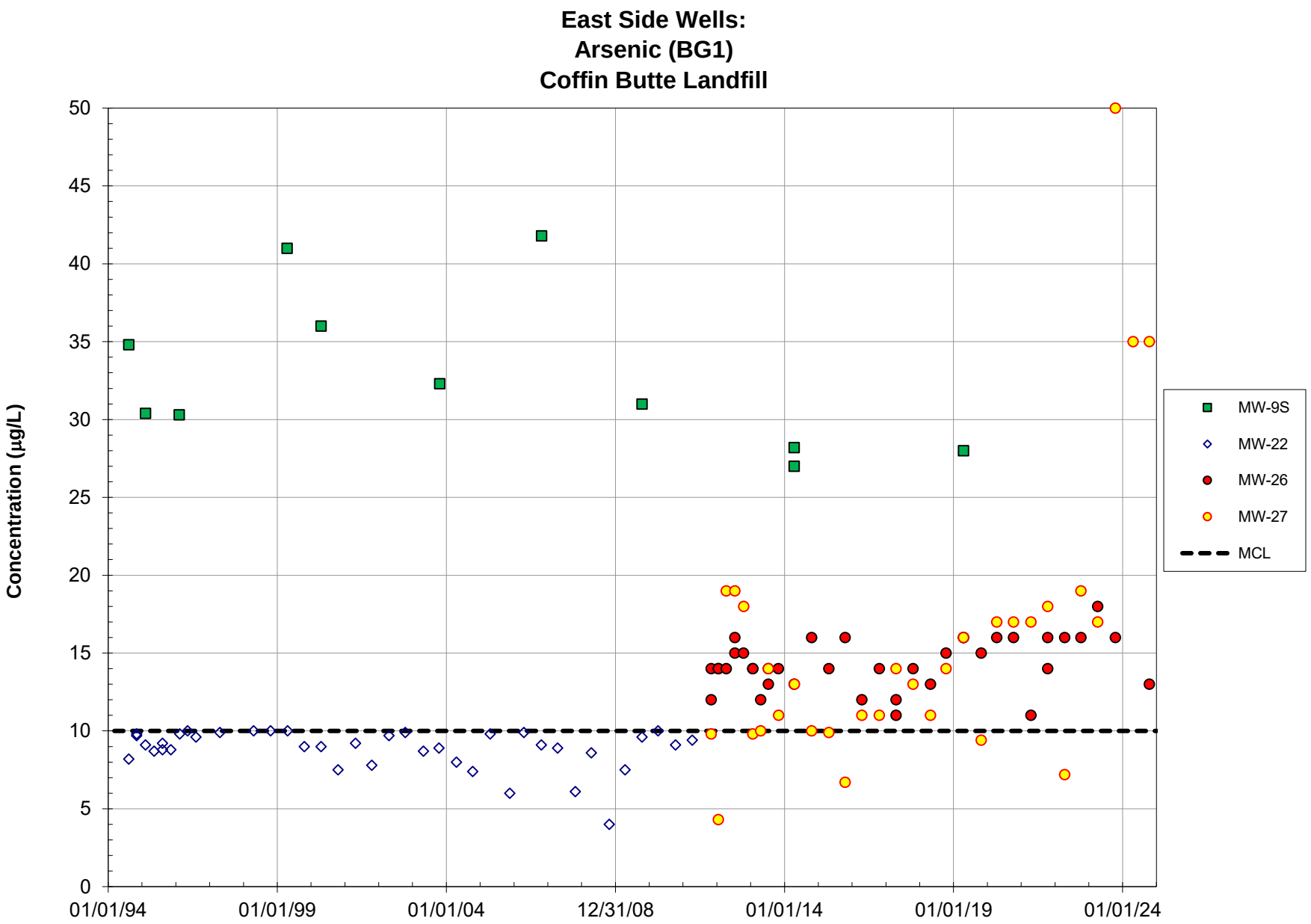


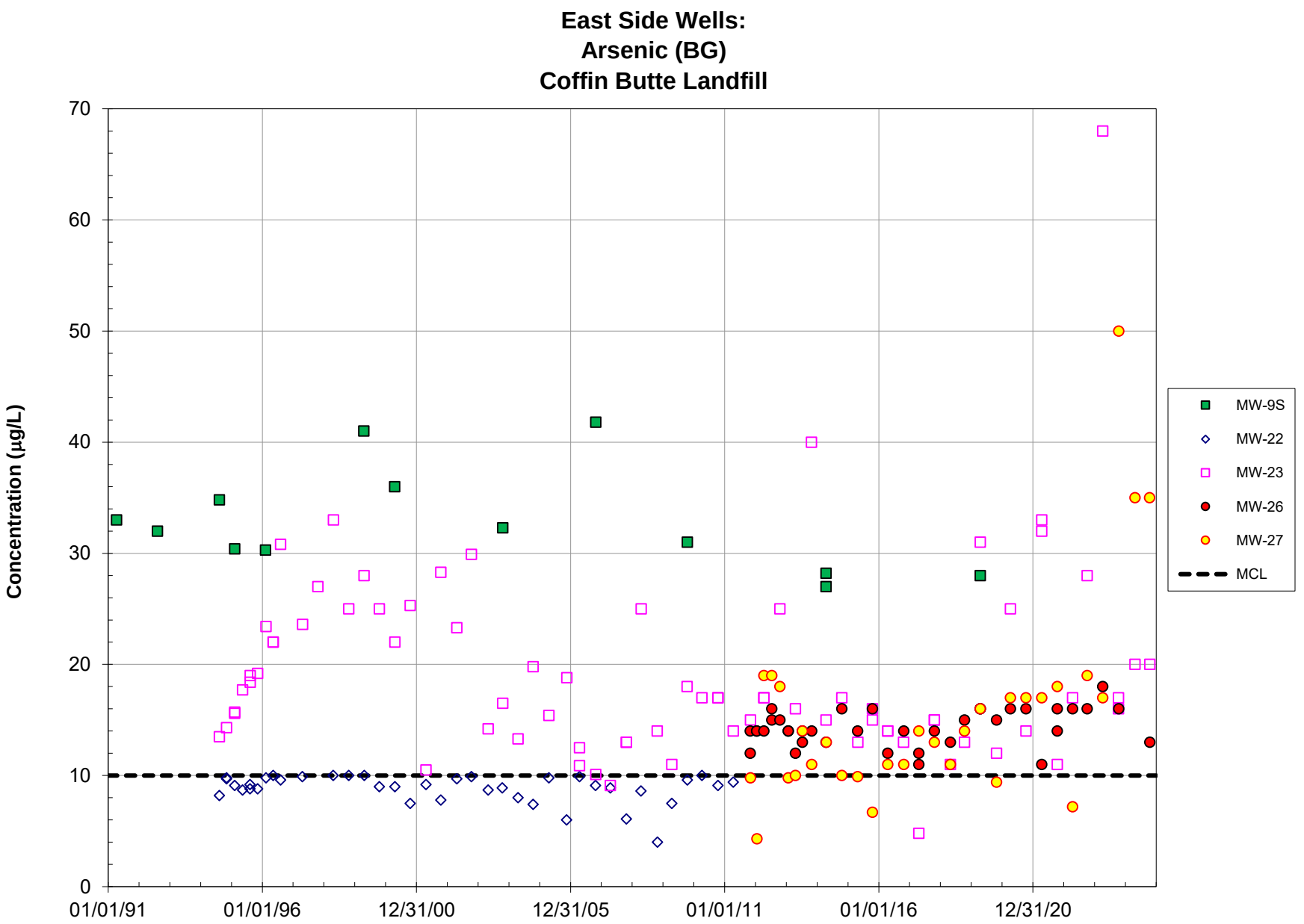
Figure 5
Dissolved Sodium in East Side Wells
Coffin Butte Landfill



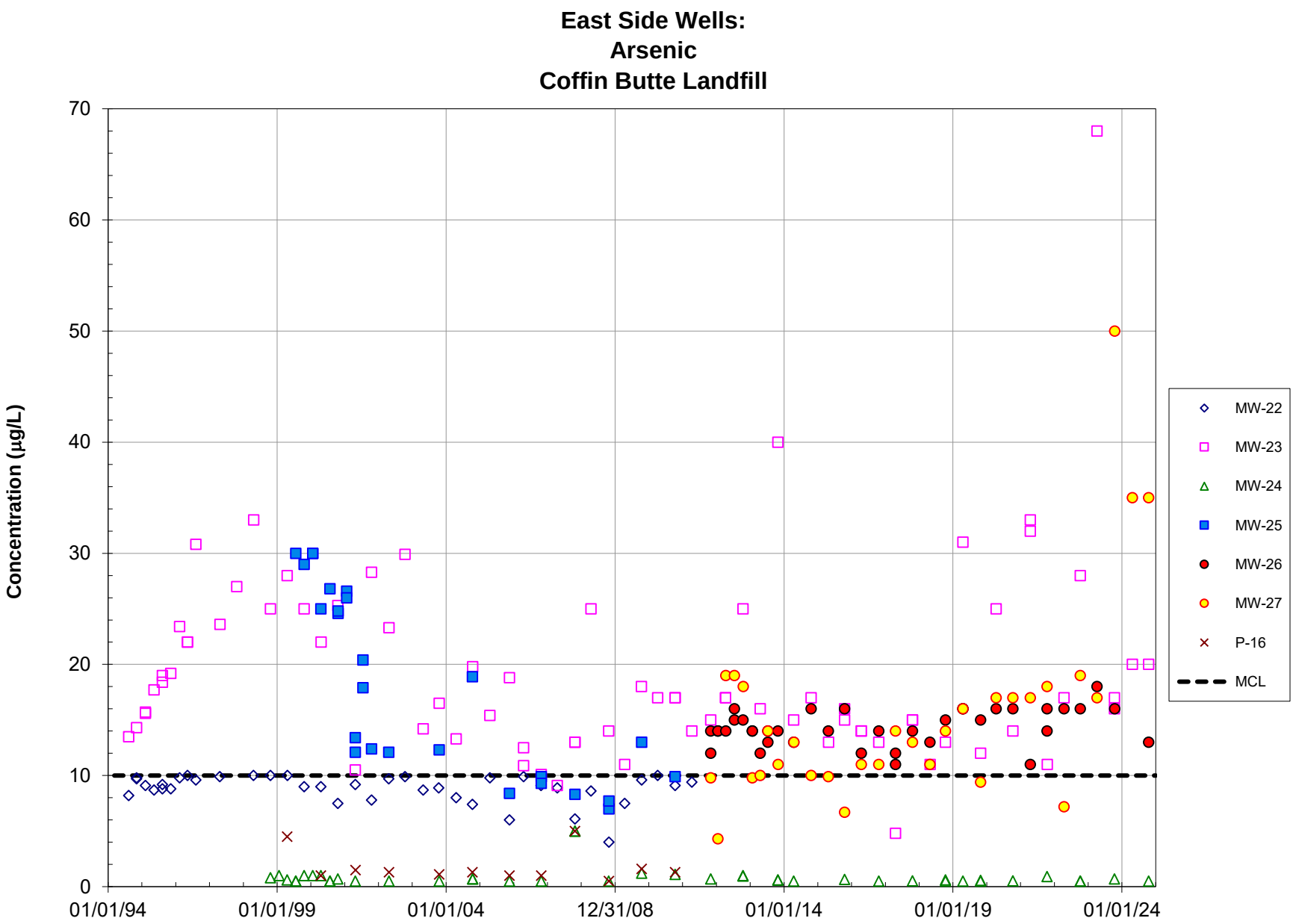
East Side Wells:
Antimony
Coffin Butte Landfill



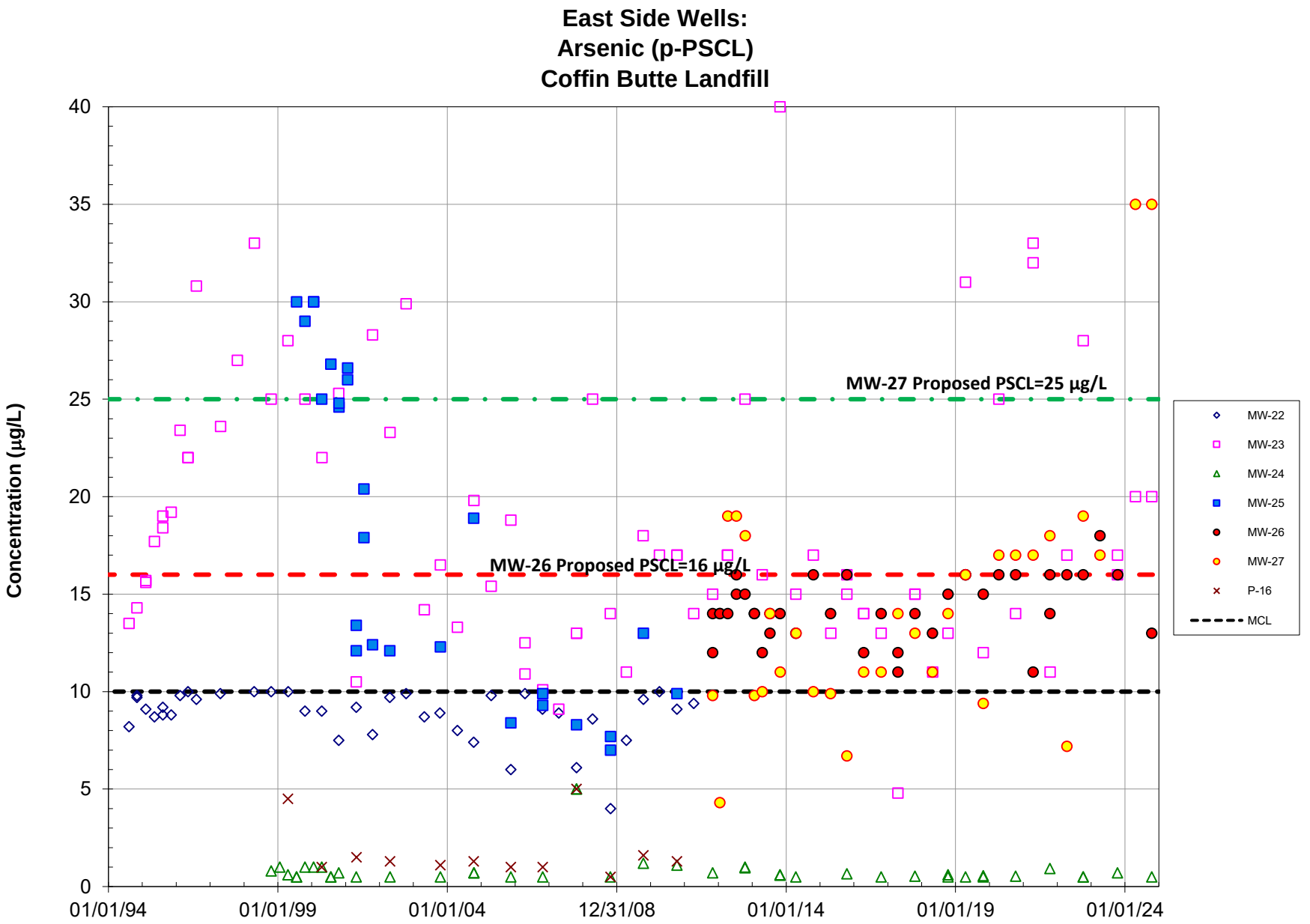

East Side Wells:
Arsenic (BG1)
Coffin Butte Landfill
Concentration (µg/L)
50
45
40
35
30
25
20
15
10
5
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
MW-9S
MW-22
MW-26
MW-27
MCL

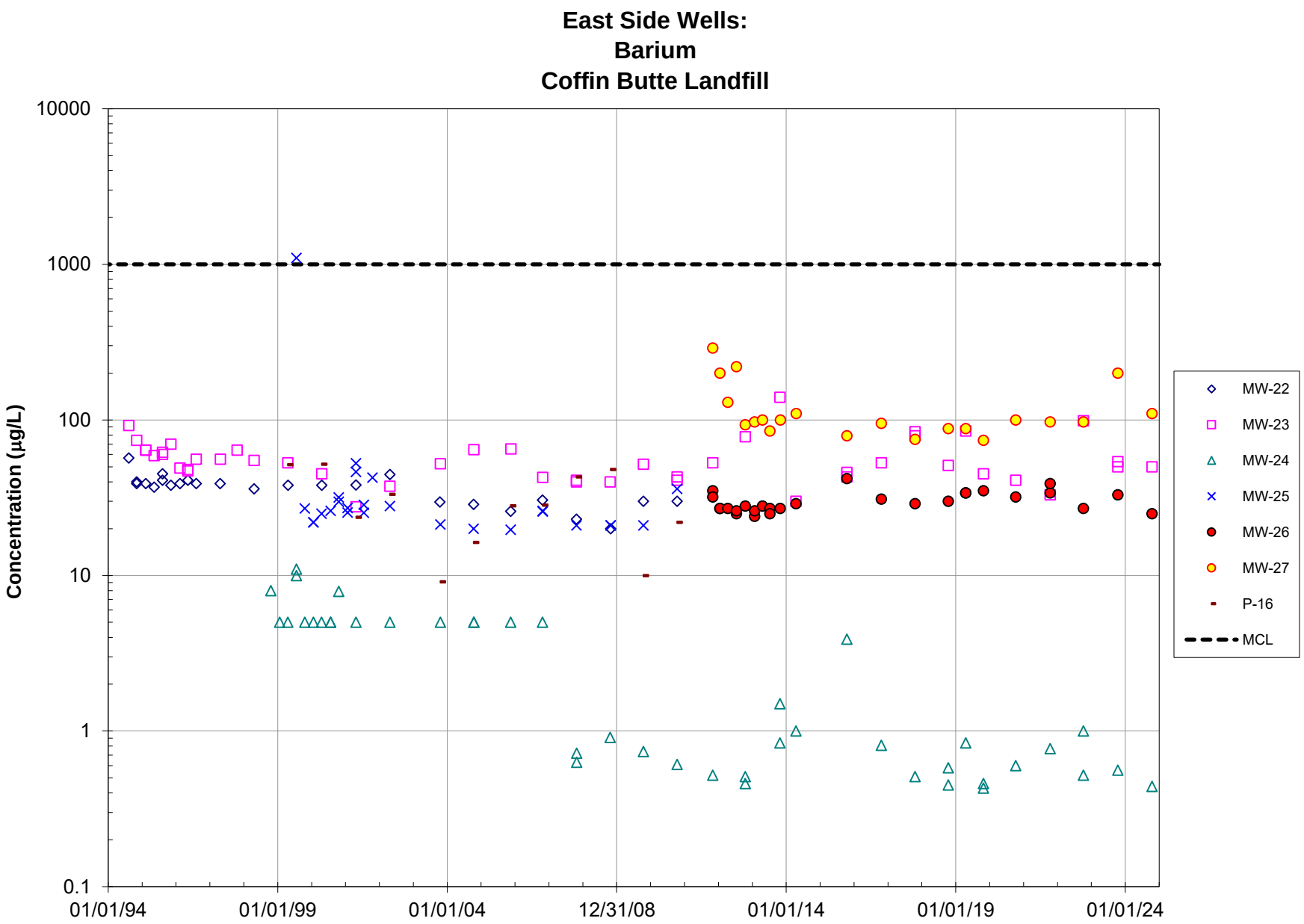


MW-23-27/Arsenic (BG)



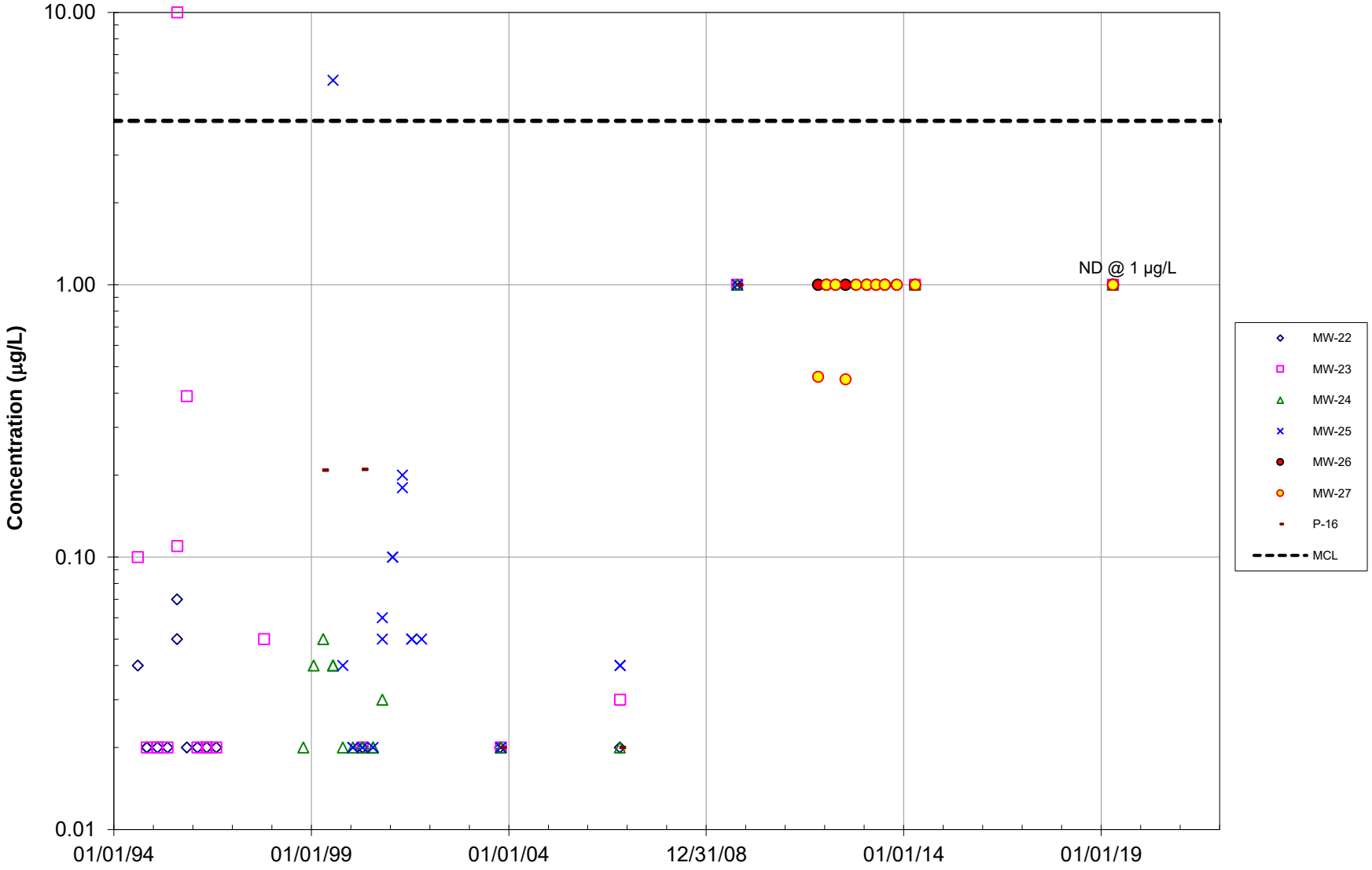
MW-23-27/Arsenic


East Side Wells:
Arsenic (p-PSCL)
Coffin Butte Landfill
Concentration (µg/L)
40
35
30
25
20
15
10
5
0
01/01/94
01/01/99
01/01/04
12/31/08
01/01/14
01/01/19
01/01/24
MW-27 Proposed PSCL=25 µg/L
MW-26 Proposed PSCL=16 µg/L
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
P-16
MCL



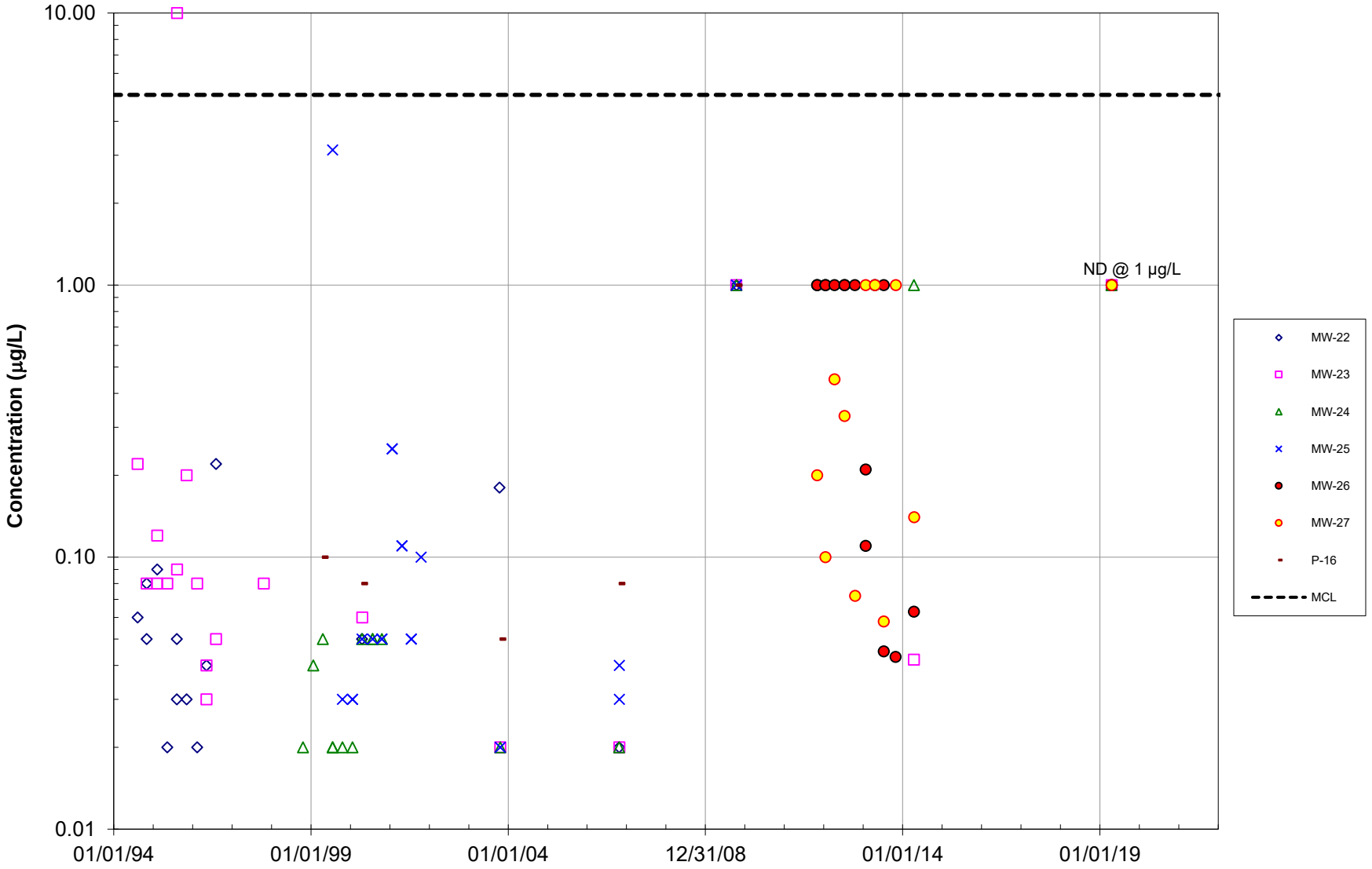
MW-23-27/Barium

East Side Wells:
Beryllium
Coffin Butte Landfill

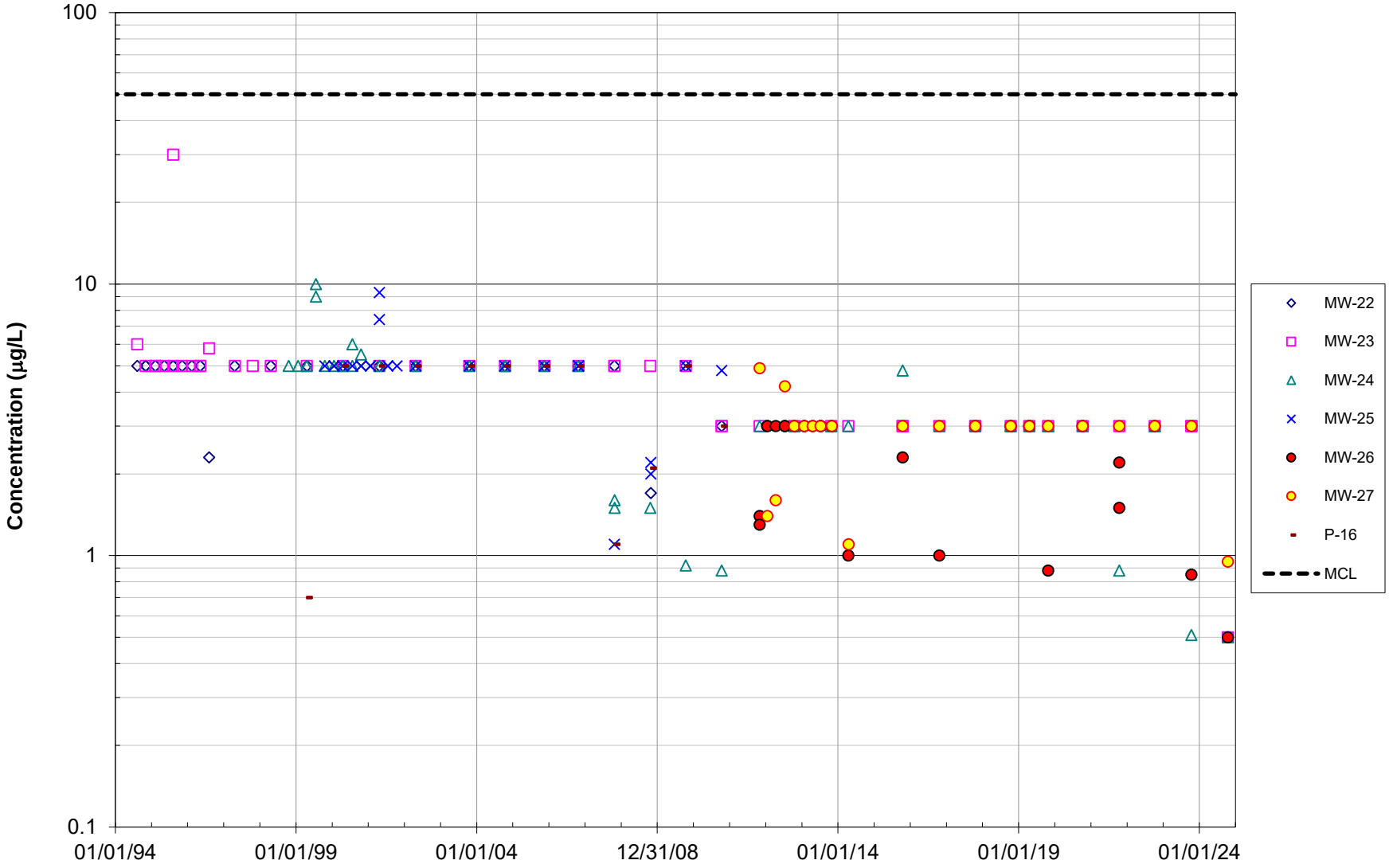


MW-23-27/Beryllium

East Side Wells:
Cadmium
Coffin Butte Landfill

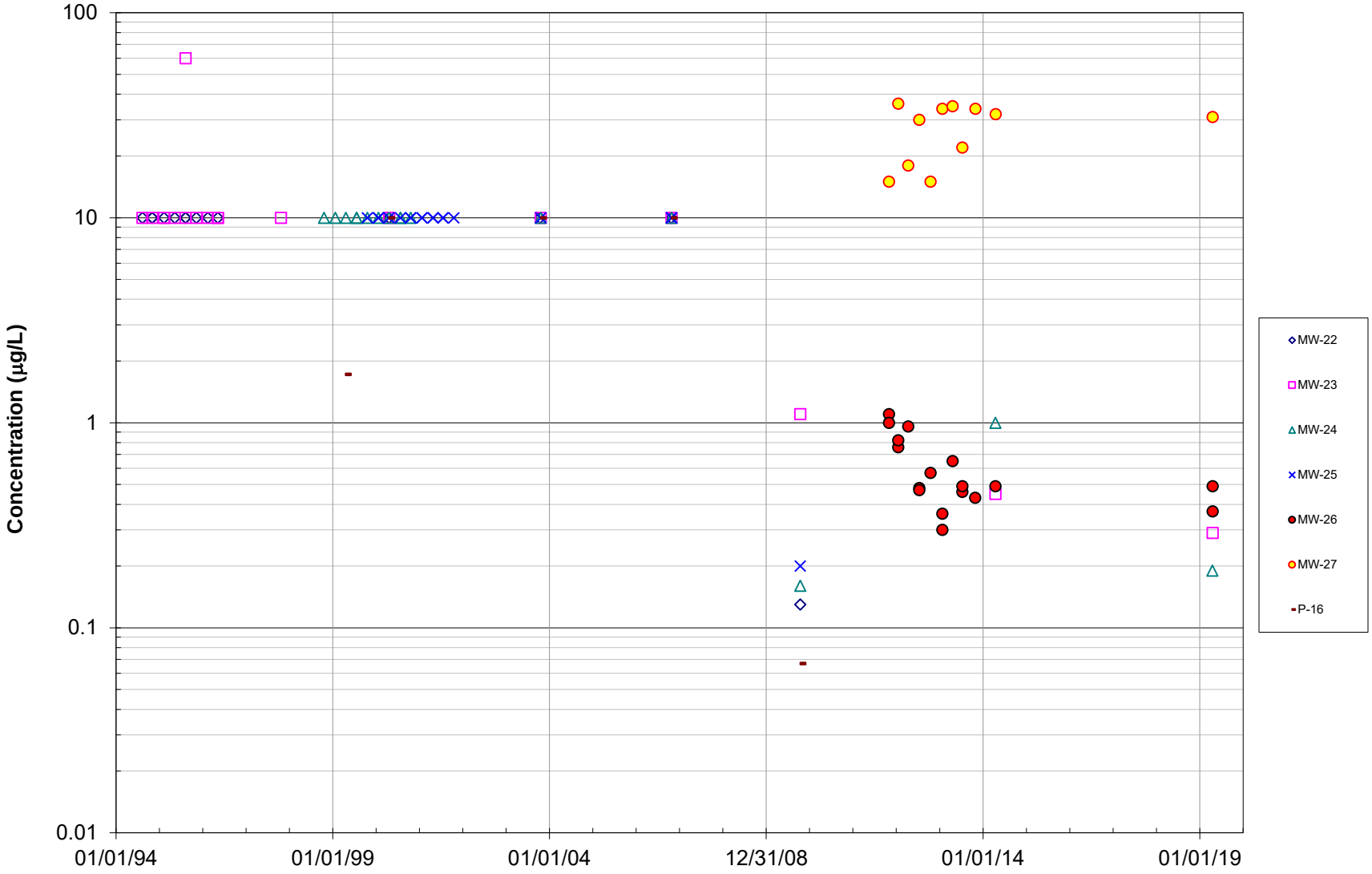


East Side Wells:
Chromium
Coffin Butte Landfill



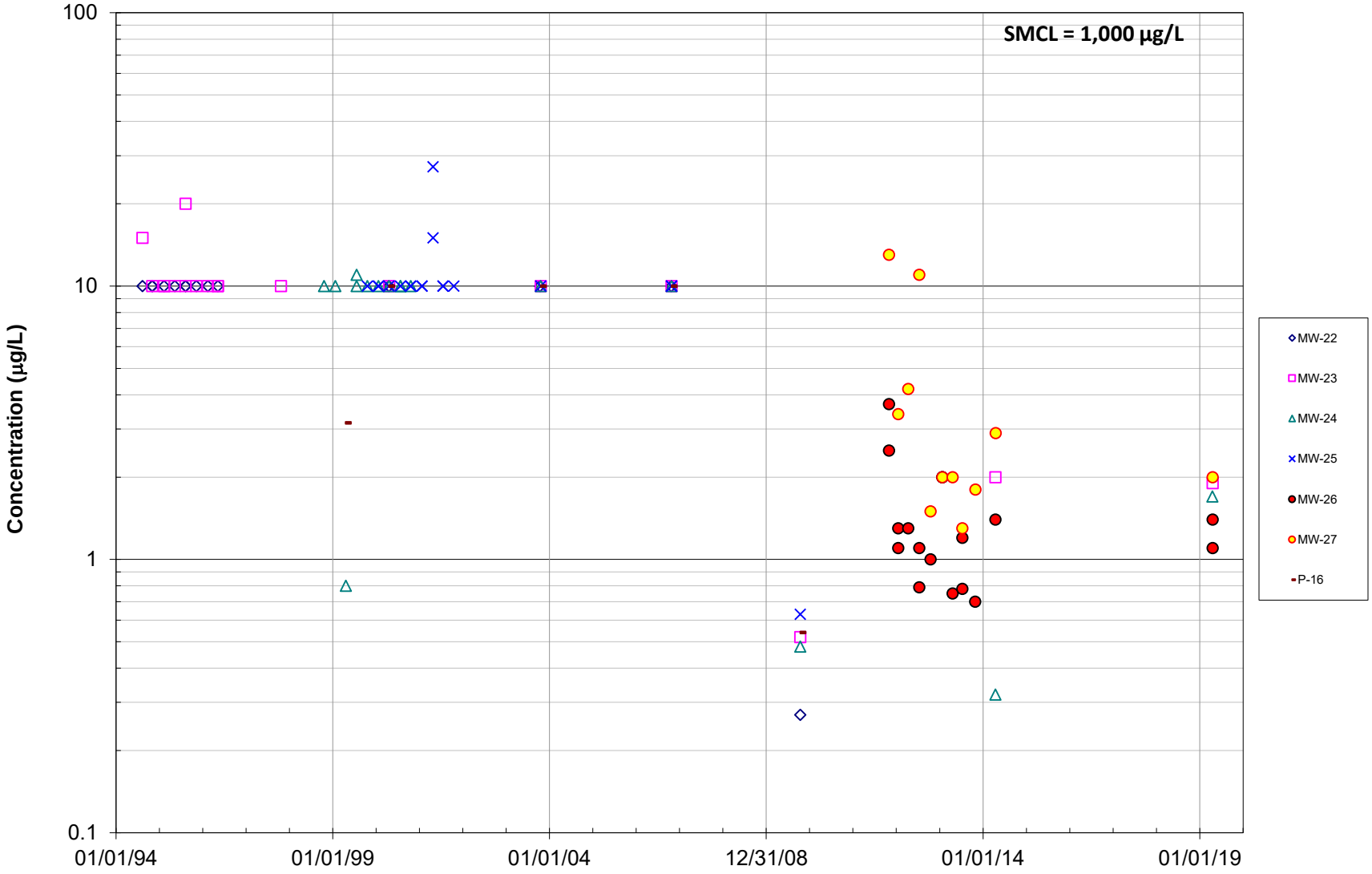
MW-23-27/Chromium

East Side Wells:
Cobalt
Coffin Butte Landfill



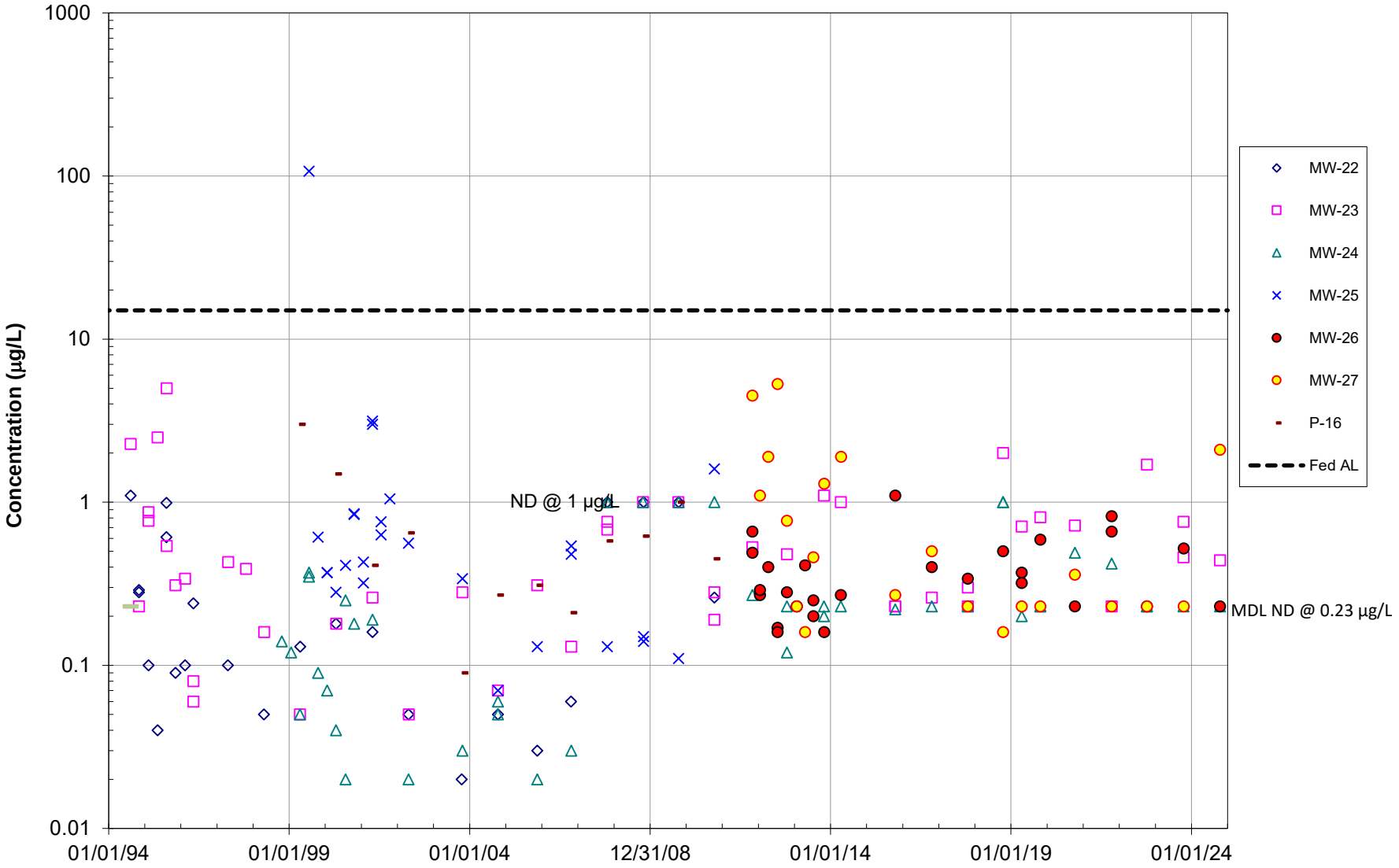
MW-23-27/Cobalt

East Side Wells:
Copper
Coffin Butte Landfill



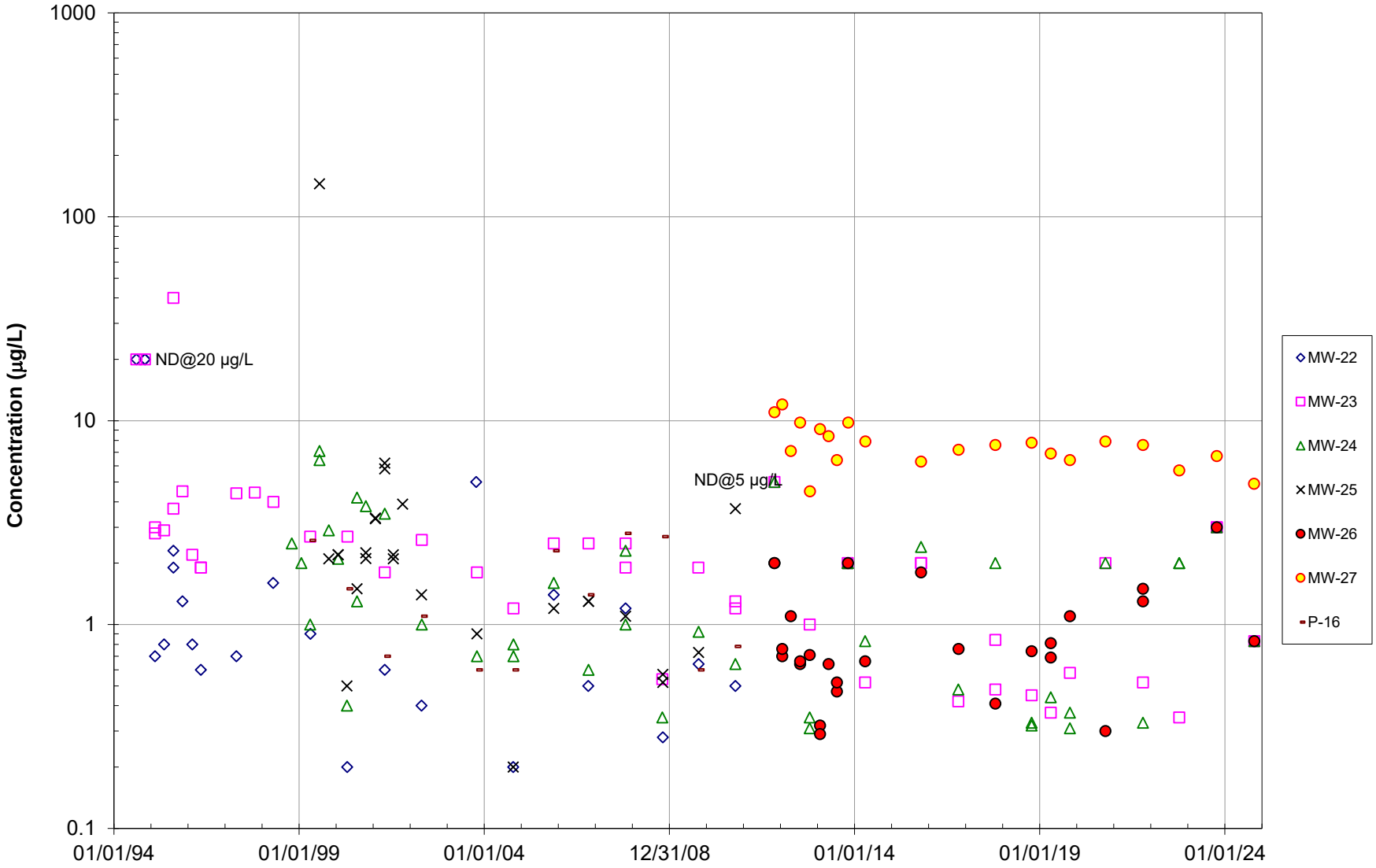
MW-23-27/Copper

East Side Wells:
Lead
Coffin Butte Landfill



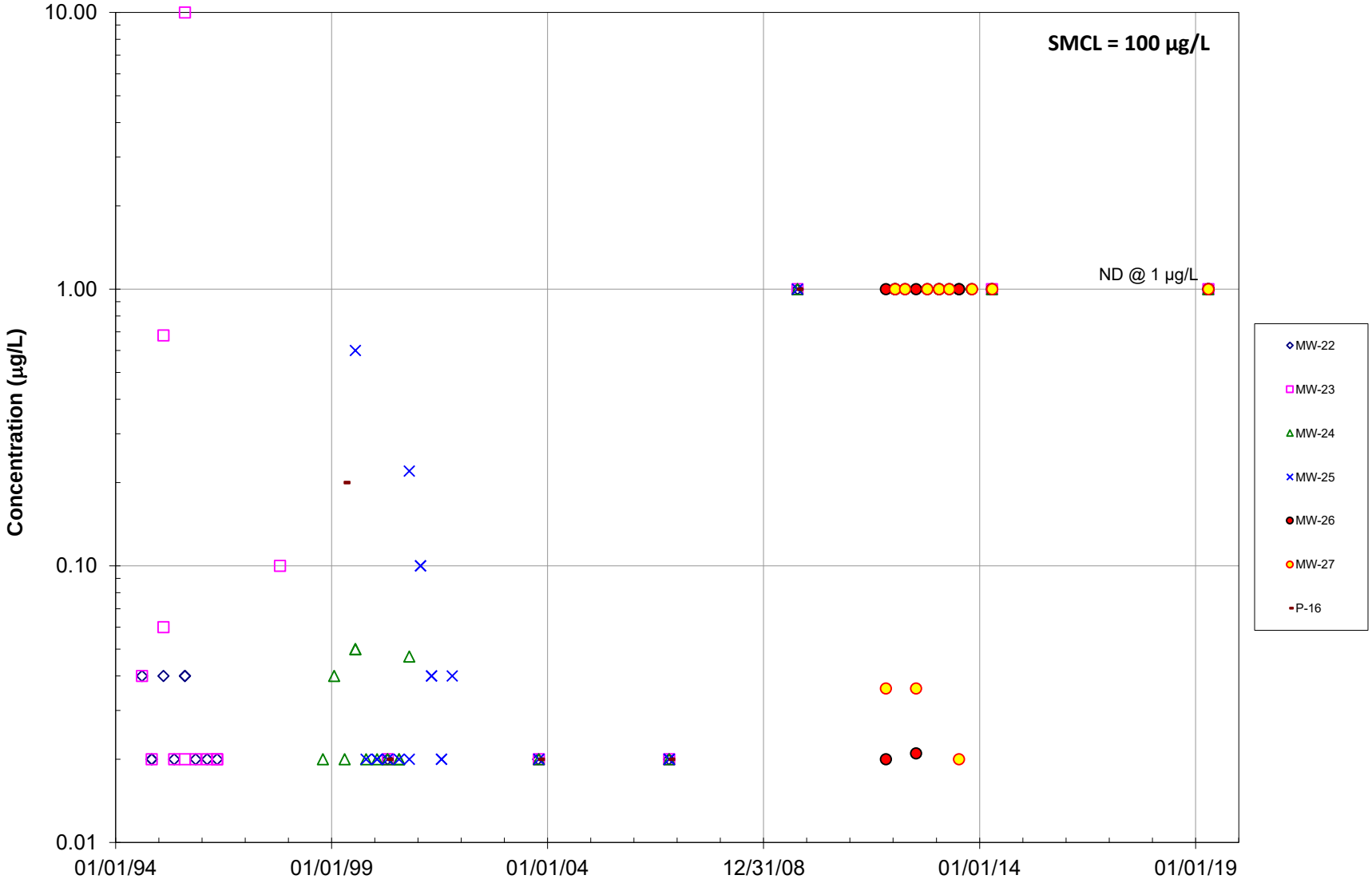
MW-23-27/Lead

East Side Wells:
Nickel
Coffin Butte Landfill



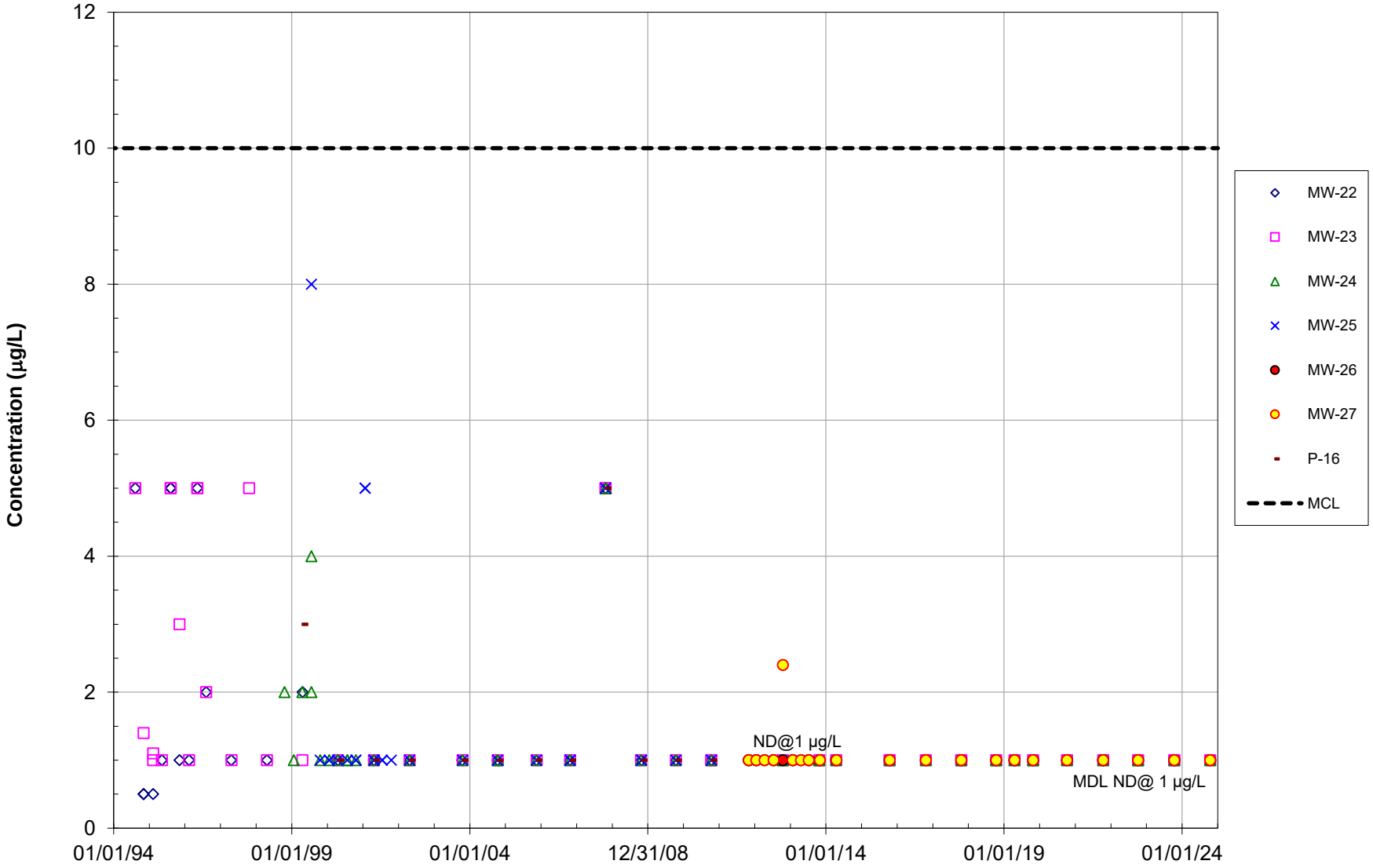
MW-23-27/Nickel

East Side Wells:
Silver
Coffin Butte Landfill

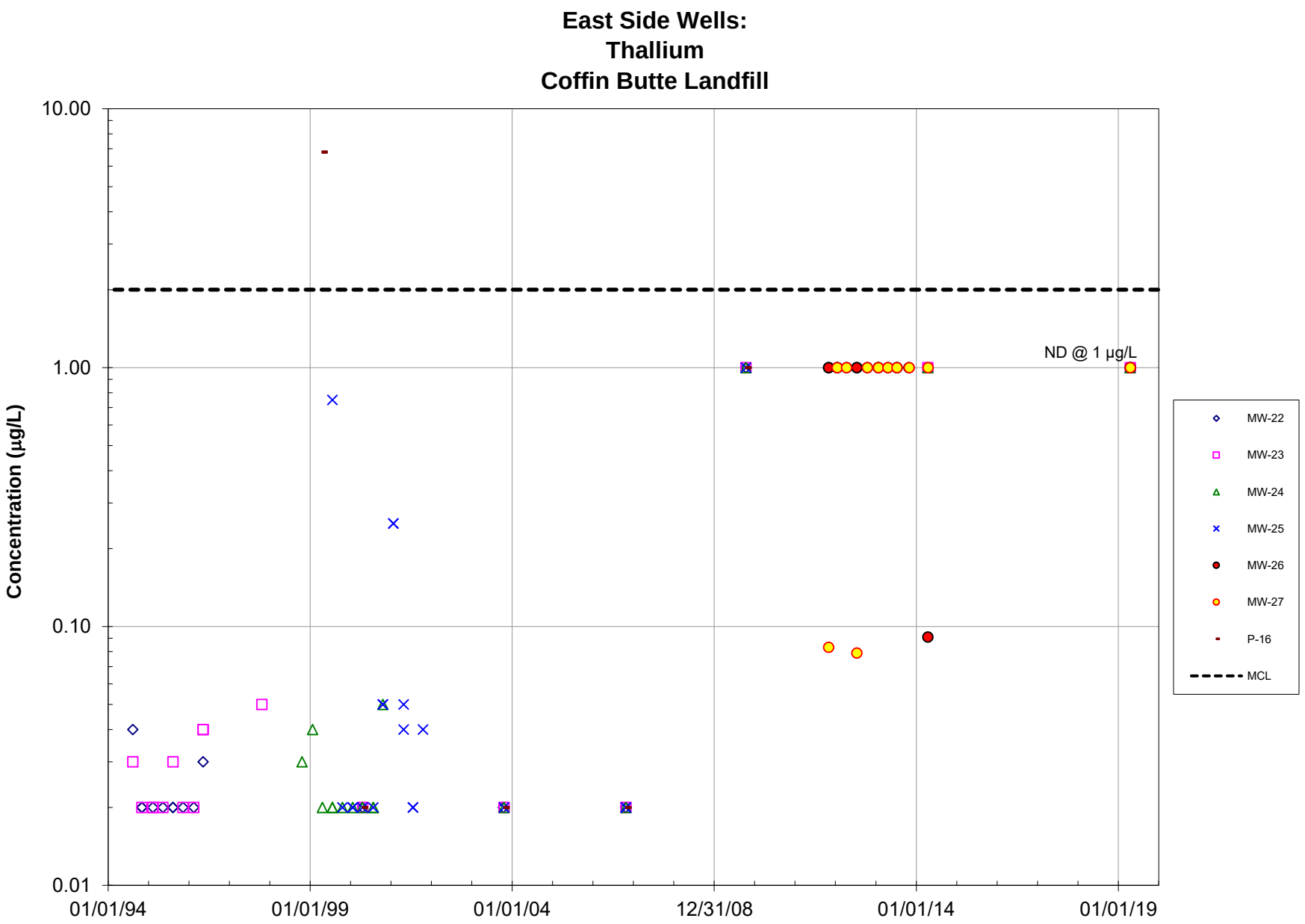


MW-23-27/Silver

East Side Wells:
Selenium
Coffin Butte Landfill

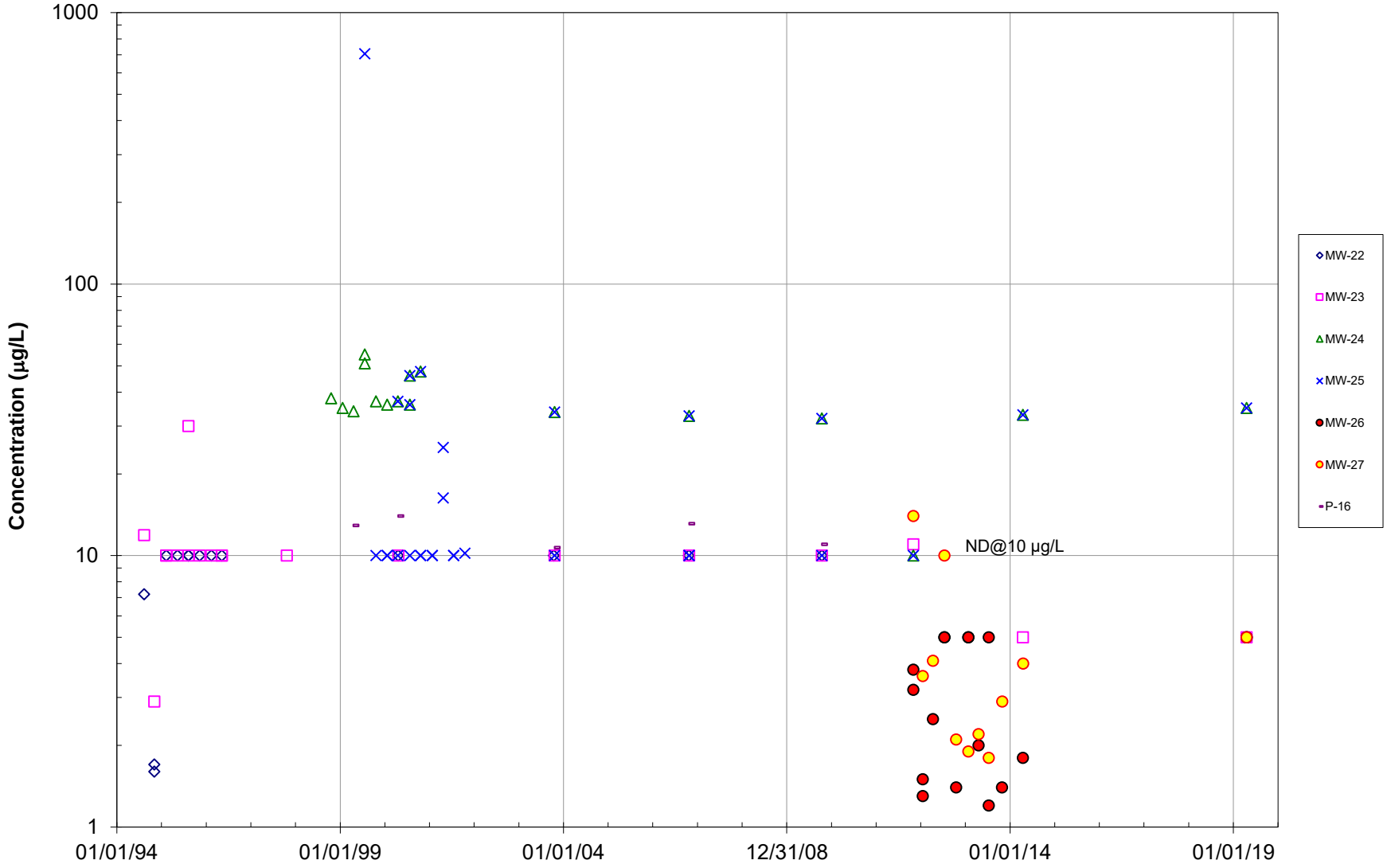


MW-23-27/Selenium



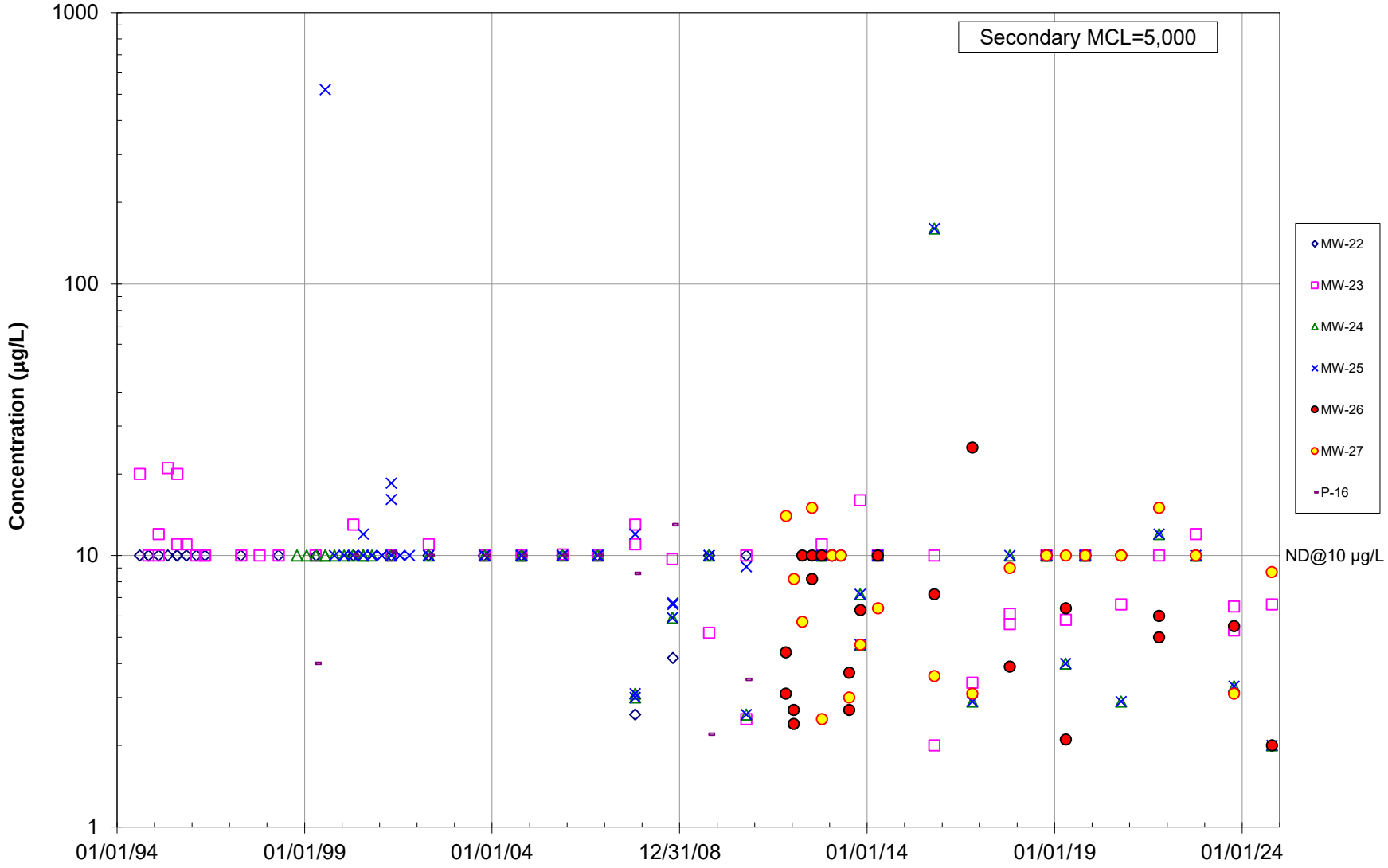
MW-23-27/Thallium

East Side Wells:
Vanadium
Coffin Butte Landfill



MW-23-27/Vanadium

East Side Wells:
Zinc
Coffin Butte Landfill



MW-23-27/Zinc

Appendix C

Facility SLCS and LCRS Data and Time-Series Plots

Geo-Logic ASSOCIATES

Cell 2		
Date	3" Meter	Total Gallons
	8,461,140	
01/02/24	8,461,140	0
01/09/24	8,461,140	0
01/18/24	8,461,140	0
01/23/24	8,461,140	0
02/01/24	8,461,140	0
02/05/24	8,461,140	0
02/13/24	8,461,140	0
02/20/24	8,461,140	0
03/01/24	8,461,140	0
03/05/24	8,461,140	0
03/12/24	8,461,140	0
03/19/24	8,461,140	0
03/26/24	8,461,140	0
04/01/24	8,461,140	0
04/09/24	8,461,140	0
04/16/24	8,461,140	0
04/23/24	8,461,140	0
05/01/24	8,461,140	0
05/07/24	8,461,140	0
05/14/24	8,461,140	0
05/21/24	8,461,140	0
05/29/24	8,461,140	0
06/03/24	8,461,140	0
06/11/24	8,461,140	0
06/18/24	8,461,140	0
06/25/24	8,461,140	0
07/01/24	8,461,140	0
07/09/24	8,461,140	0
07/16/24	8,461,140	0
07/23/24	8,461,140	0
07/31/24	8,461,140	0
08/06/24	8,461,140	0
08/13/24	8,461,140	0
08/20/24	8,461,140	0
08/27/24	8,461,140	0
09/03/24	8,461,140	0
09/10/24	8,461,140	0
09/17/24	8,461,140	0
09/24/24	8,461,140	0
10/01/24	8,461,140	0
10/08/24	8,461,140	0
10/15/24	8,461,140	0
10/22/24	8,461,140	0
11/01/24	8,461,140	0
11/05/24	8,461,140	0
11/12/24	8,461,140	0
11/19/24	8,461,140	0
11/26/24	8,461,140	0
12/02/24	8,461,140	0
12/10/24	8,461,140	0
12/17/24	8,461,140	0
12/24/24	8,461,140	0
01/02/25	8,461,140	0
Total		**0**

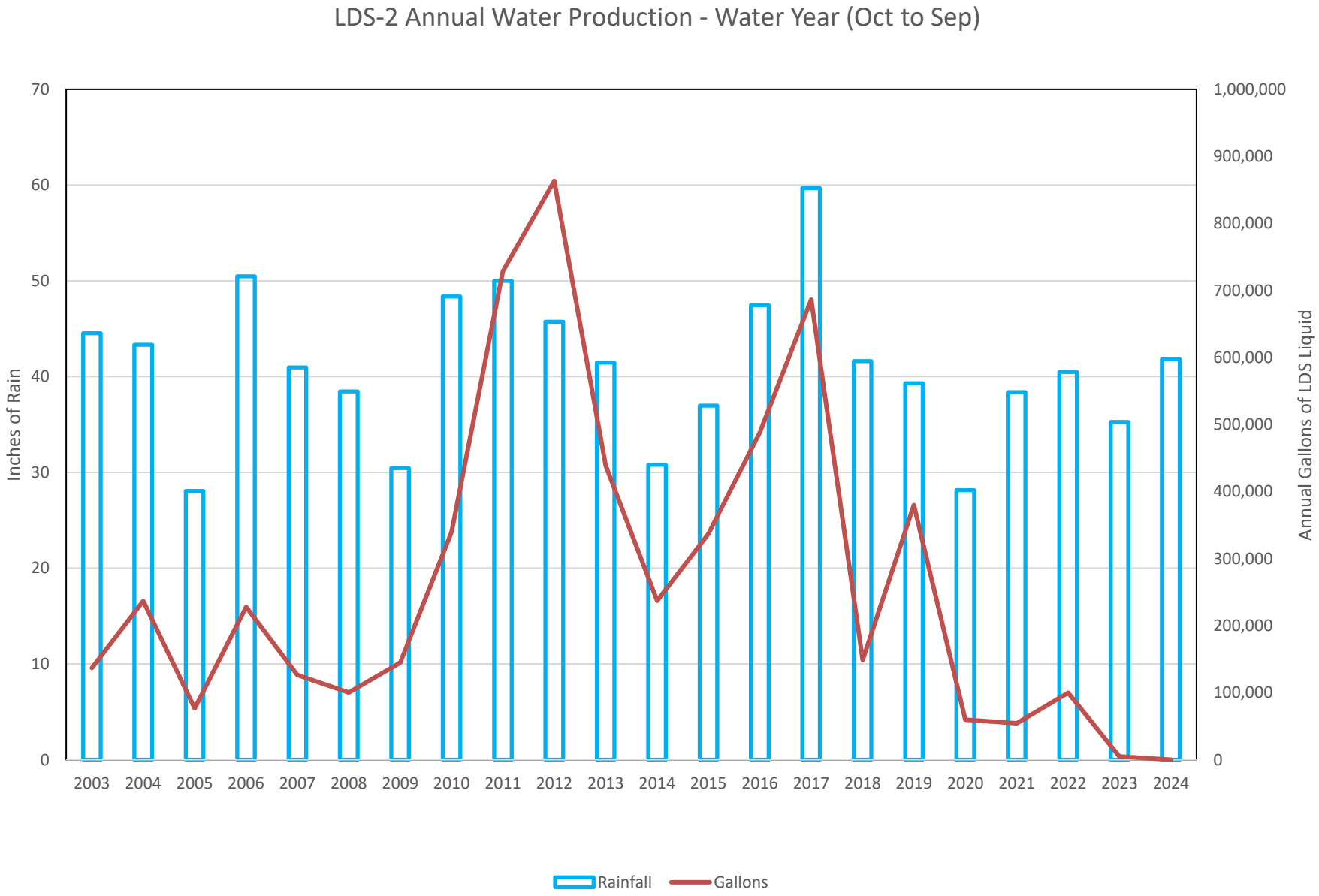
Cell 3		
Date	Reading	Gallons
	646,661	
01/02/24	745,212	98,551
01/09/24	750,557	5,345
01/18/24	758,225	7,668
01/23/24	762,858	4,633
02/01/24	769,186	6,328
02/05/24	770,862	1,676
02/13/24	772,604	1,742
02/20/24	772,604	0
03/01/24	783,093	10,489
03/05/24	786,643	3,550
03/12/24	790,192	3,549
03/19/24	791,891	1,699
03/26/24	792,750	859
04/01/24	795,335	2,585
04/09/24	797,020	1,685
04/16/24	797,850	830
04/23/24	797,852	2
05/01/24	798,736	884
05/07/24	802,950	4,214
05/14/24	803,841	891
05/21/24	804,614	773
05/29/24	804,615	1
06/03/24	805,495	880
06/11/24	806,287	792
06/18/24	806,287	0
06/25/24	806,287	0
07/01/24	807,121	834
07/09/24	807,121	0
07/16/24	807,126	5
07/23/24	807,126	0
07/31/24	807,899	773
08/06/24	807,899	0
08/13/24	807,899	0
08/20/24	807,899	0
08/27/24	808,663	764
09/03/24	808,663	0
09/10/24	808,663	0
09/17/24	808,663	0
09/24/24	809,440	777
10/01/24	809,440	0
10/08/24	810,217	777
10/15/24	810,217	0
10/22/24	810,578	361
11/01/24	814,805	4,227
11/05/24	818,284	3,479
11/12/24	819,950	1,666
11/19/24	827,963	8,013
11/26/24	837,253	9,290
12/02/24	838,114	861
12/10/24	838,917	803
12/17/24	845,200	6,283
12/24/24	852,256	7,056
01/02/25	862,961	10,705
Total		**216,300**

Cell 4		
Date	Reading	Gallons
	837,755	
01/02/24	941,444	103,689
01/09/24	947,613	6,169
01/18/24	947,613	0
01/23/24	953,674	6,061
02/01/24	953,674	0
02/05/24	953,674	0
02/13/24	953,674	0
02/20/24	953,674	0
03/01/24	959,988	6,314
03/05/24	959,988	0
03/12/24	959,988	0
03/19/24	959,988	0
03/26/24	959,988	0
04/01/24	966,116	6,128
04/09/24	966,116	0
04/16/24	966,116	0
04/23/24	966,121	5
05/01/24	966,274	153
05/07/24	966,274	0
05/14/24	972,561	6,287
05/21/24	972,561	0
05/29/24	972,561	0
06/03/24	972,561	0
06/11/24	972,561	0
06/18/24	972,561	0
06/25/24	972,561	0
07/01/24	972,561	0
07/09/24	972,561	0
07/16/24	972,570	9
07/23/24	972,570	0
07/31/24	972,570	0
08/06/24	972,570	0
08/13/24	972,570	0
08/20/24	972,570	0
08/27/24	972,570	0
09/03/24	972,570	0
09/10/24	972,570	0
09/17/24	972,570	0
09/24/24	972,570	0
10/01/24	972,570	0
10/08/24	972,570	0
10/15/24	972,570	0
10/22/24	980,380	7,810
11/01/24	987,226	6,846
11/05/24	994,081	6,855
11/12/24	994,081	0
11/19/24	1,007,409	13,328
11/26/24	1,021,114	13,705
12/02/24	1,021,114	0
12/10/24	1,027,778	6,664
12/17/24	1,034,323	6,545
12/24/24	1,040,713	6,390
01/02/25	1,060,108	19,395
Total		**222,353**

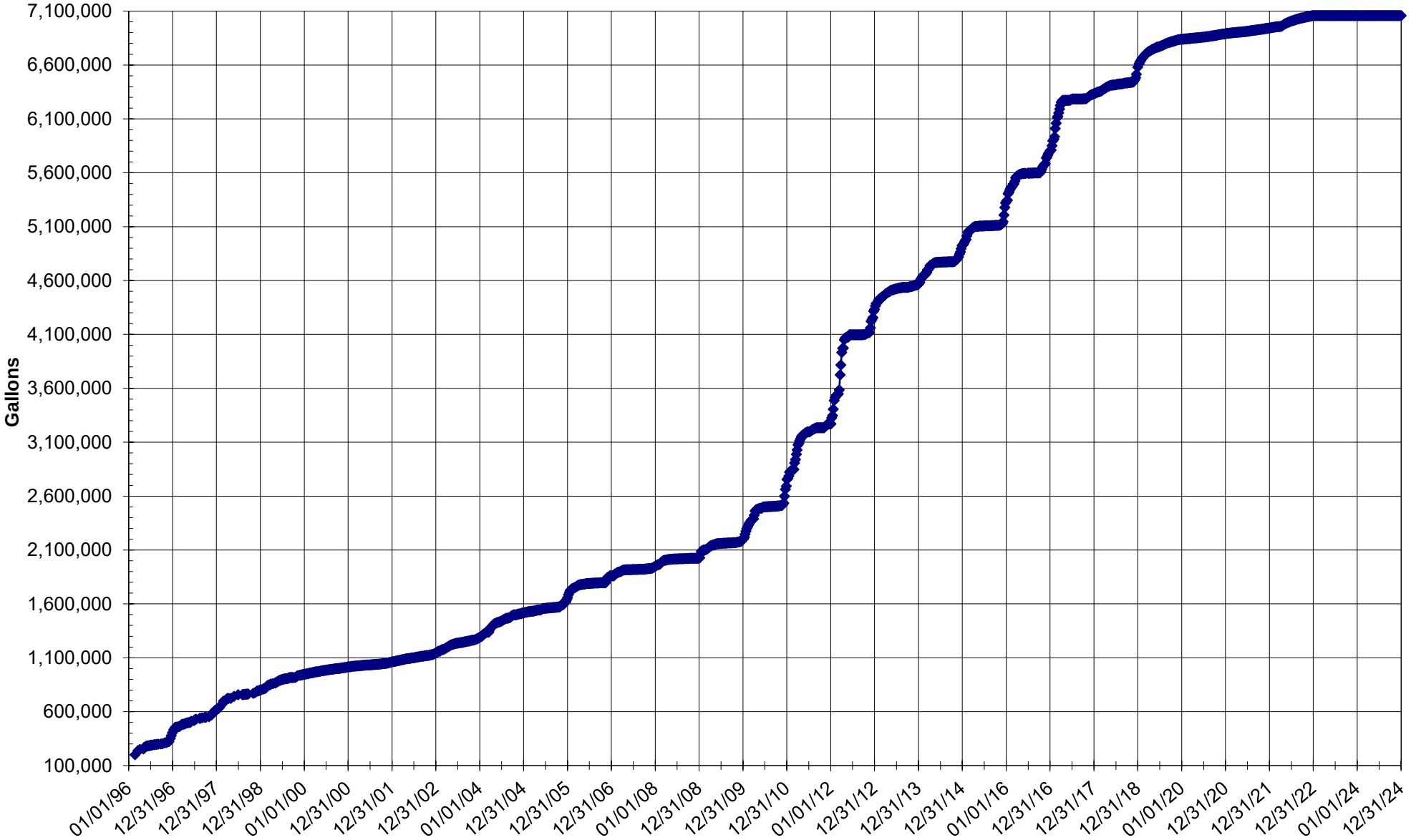
Cell 5		
Date	Reading	Gallons
	252,993	
01/02/24	255,134	2,141
01/09/24	255,134	0
01/18/24	255,134	0
01/23/24	255,409	275
02/01/24	255,550	141
02/05/24	255,550	0
02/13/24	255,684	134
02/20/24	255,684	0
03/01/24	255,865	181
03/05/24	256,159	294
03/12/24	256,584	425
03/19/24	257,046	462
03/26/24	257,504	458
04/01/24	257,954	450
04/09/24	258,360	406
04/16/24	258,637	277
04/23/24	258,774	137
05/01/24	259,034	260
05/07/24	259,397	363
05/14/24	259,647	250
05/21/24	259,769	122
05/29/24	259,872	103
06/03/24	259,872	0
06/11/24	260,001	129
06/18/24	260,001	0
06/25/24	260,093	92
07/01/24	260,093	0
07/09/24	260,227	134
07/16/24	260,227	0
07/23/24	260,227	0
07/31/24	260,227	0
08/06/24	260,227	0
08/13/24	260,227	0
08/20/24	260,312	85
08/27/24	260,312	0
09/03/24	260,312	0
09/10/24	260,434	122
09/17/24	260,434	0
09/24/24	260,434	0
10/01/24	260,434	0
10/08/24	260,477	43
10/15/24	260,477	0
10/22/24	260,654	177
11/01/24	260,654	0
11/05/24	260,654	0
11/12/24	260,654	0
11/19/24	260,654	0
11/26/24	260,654	0
12/02/24	260,654	0
12/10/24	260,654	0
12/17/24	260,654	0
12/24/24	260,766	112
01/02/25	260,766	0
Total		**7,773**

East Pond		
Date	Reading	Gallons
	410	
01/02/24	410	0
01/09/24	410	0
01/18/24	410	0
01/23/24	410	0
02/01/24	410	0
02/05/24	410	0
02/13/24	410	0
02/20/24	410	0
03/01/24	410	0
03/05/24	410	0
03/12/24	410	0
03/19/24	410	0
03/26/24	410	0
04/01/24	410	0
04/09/24	410	0
04/16/24	410	0
04/23/24	410	0
05/01/24	410	0
05/07/24	410	0
05/14/24	410	0
05/21/24	410	0
05/29/24	410	0
06/03/24	410	0
06/11/24	410	0
06/18/24	410	0
06/25/24	410	0
07/01/24	410	0
07/09/24	410	0
07/16/24	410	0
07/23/24	410	0
07/31/24	410	0
08/06/24	410	0
08/13/24	410	0
08/20/24	410	0
08/27/24	410	0
09/03/24	410	0
09/10/24	410	0
09/17/24	410	0
09/24/24	410	0
10/01/24	410	0
10/08/24	410	0
10/15/24	410	0
10/22/24	410	0
11/01/24	410	0
11/05/24	460	50
11/12/24	460	0
11/19/24	460	0
11/26/24	460	0
12/02/24	460	0
12/10/24	460	0
12/17/24	460	0
12/24/24	460	0
01/02/25	460	0
Total		**50**

West Pond		
Date	Reading	Gallons
	1,170	
01/02/24	1,170	0
01/09/24	1,170	0
01/18/24	1,170	0
01/23/24	1,170	0
02/01/24	1,170	0
02/05/24	1,170	0
02/13/24	1,170	0
02/20/24	1,170	0
03/01/24	1,170	0
03/05/24	1,170	0
03/12/24	1,170	0
03/19/24	1,170	0
03/26/24	1,170	0
04/01/24	1,170	0
04/09/24	1,170	0
04/16/24	1,170	0
04/23/24	1,170	0
05/01/24	1,170	0
05/07/24	1,170	0
05/14/24	1,170	0
05/21/24	1,170	0
05/29/24	1,170	0
06/03/24	1,170	0
06/11/24	1,170	0
06/18/24	1,170	0
06/25/24	1,170	0
07/01/24	1,170	0
07/09/24	1,170	0
07/16/24	1,170	0
07/23/24	1,170	0
07/31/24	1,170	0
08/06/24	1,170	0
08/13/24	1,170	0
08/20/24	1,170	0
08/27/24	1,170	0
09/03/24	1,170	0
09/10/24	1,170	0
09/17/24	1,170	0
09/24/24	1,170	0
10/01/24	1,170	0
10/08/24	1,170	0
10/15/24	1,170	0
10/22/24	1,170	0
11/01/24	1,170	0
11/05/24	1,170	0
11/12/24	1,170	0
11/19/24	1,170	0
11/26/24	1,170	0
12/02/24	1,170	0
12/10/24	1,170	0
12/17/24	1,170	0
12/24/24	1,170	0
01/02/25	1,170	0
Total		**0**

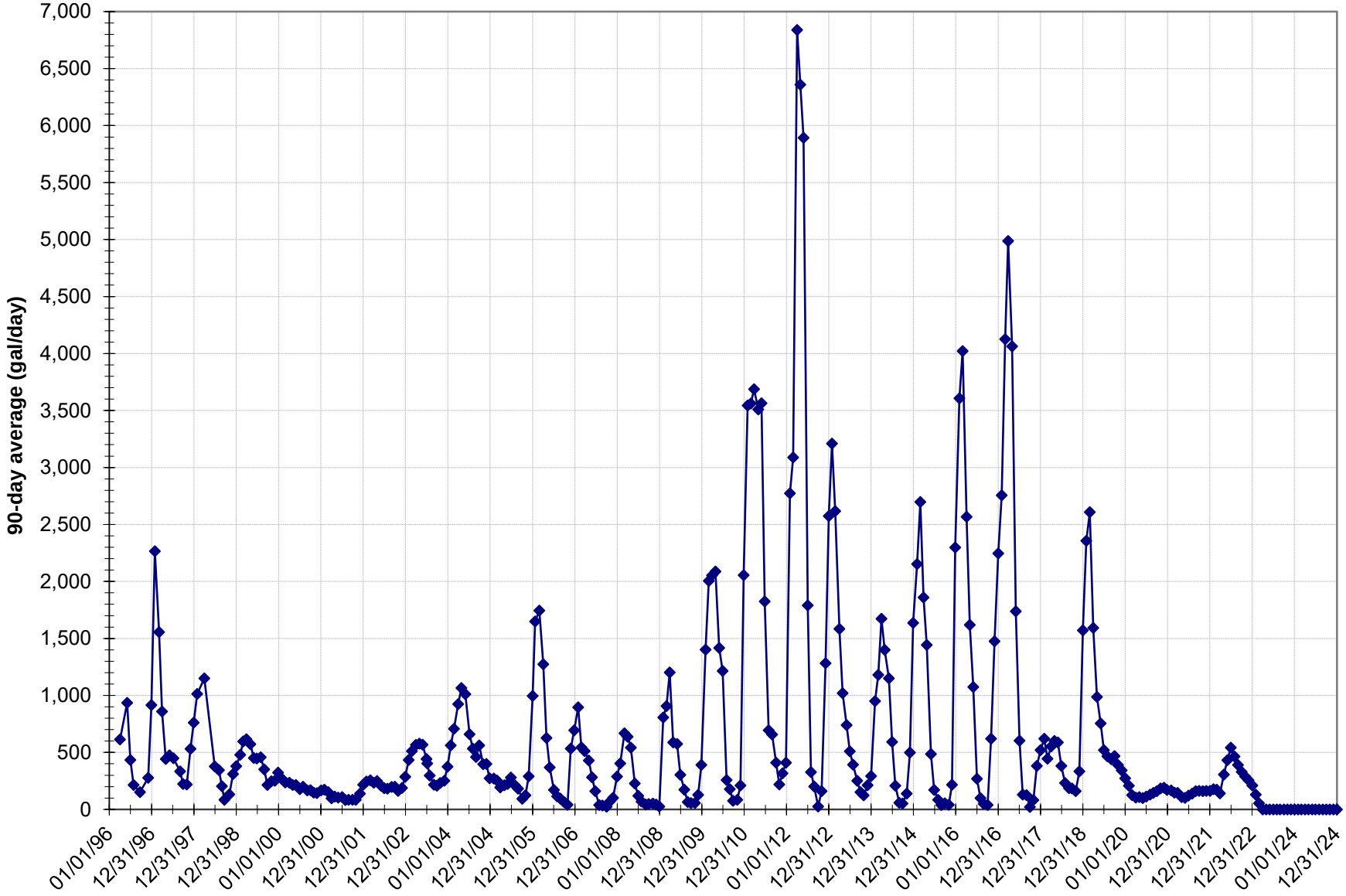

LDS-2 Annual Water Production - Water Year (Oct to Sep)
Inches of Rain
Annual Gallons of LDS Liquid
70
60
50
40
30
20
10
0
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Rainfall
Gallons

Cumulative Water Purged from Leak Detection System - Cell 2 (LDS-2B)
Coffin Butte Landfill

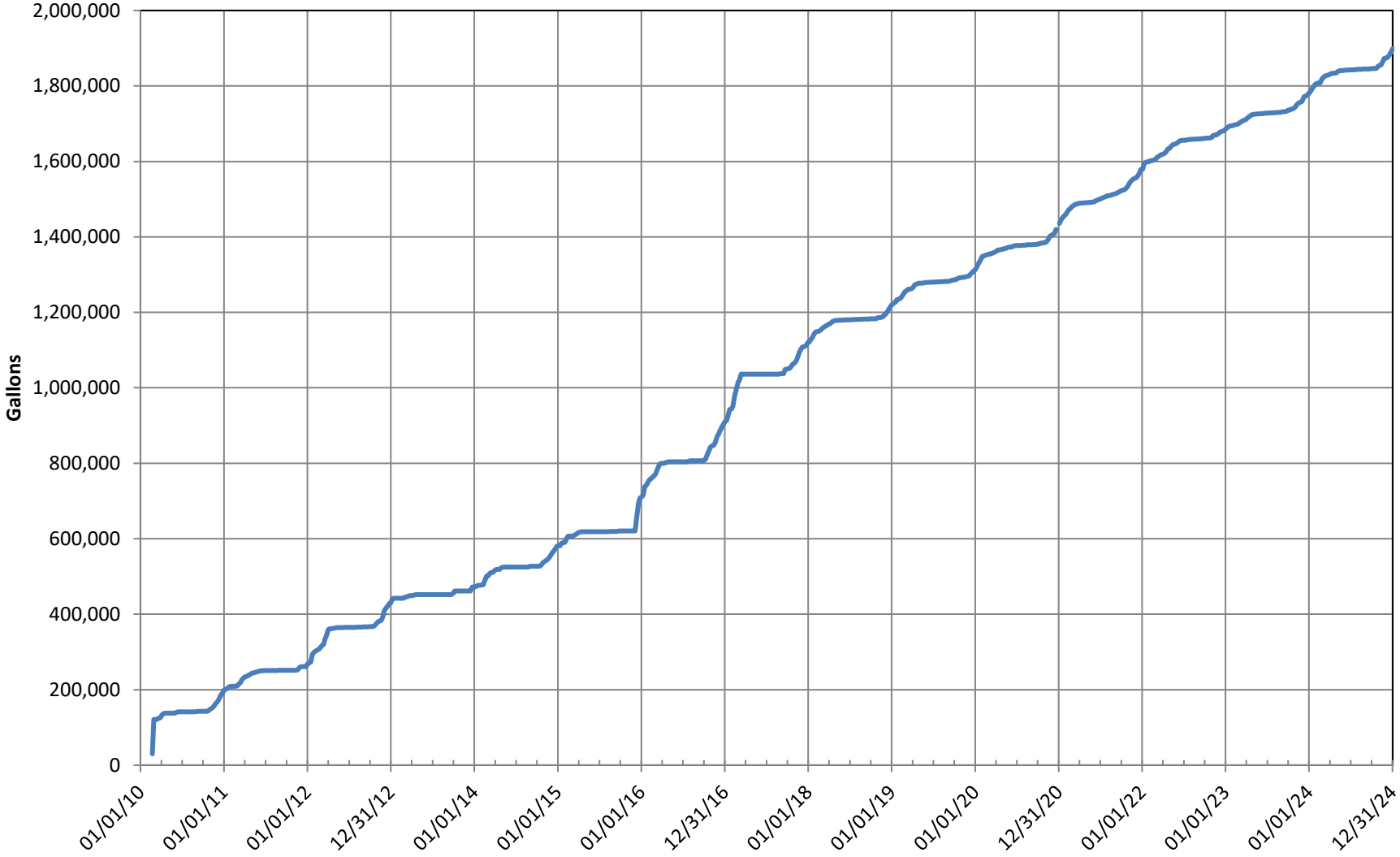


VLI\LDS\vol\LDS-2-VOL\Cell-2 cumulative

90-Day Running Average Infiltration Rate to Leak Detection System Cell 2
Coffin Butte Landfill

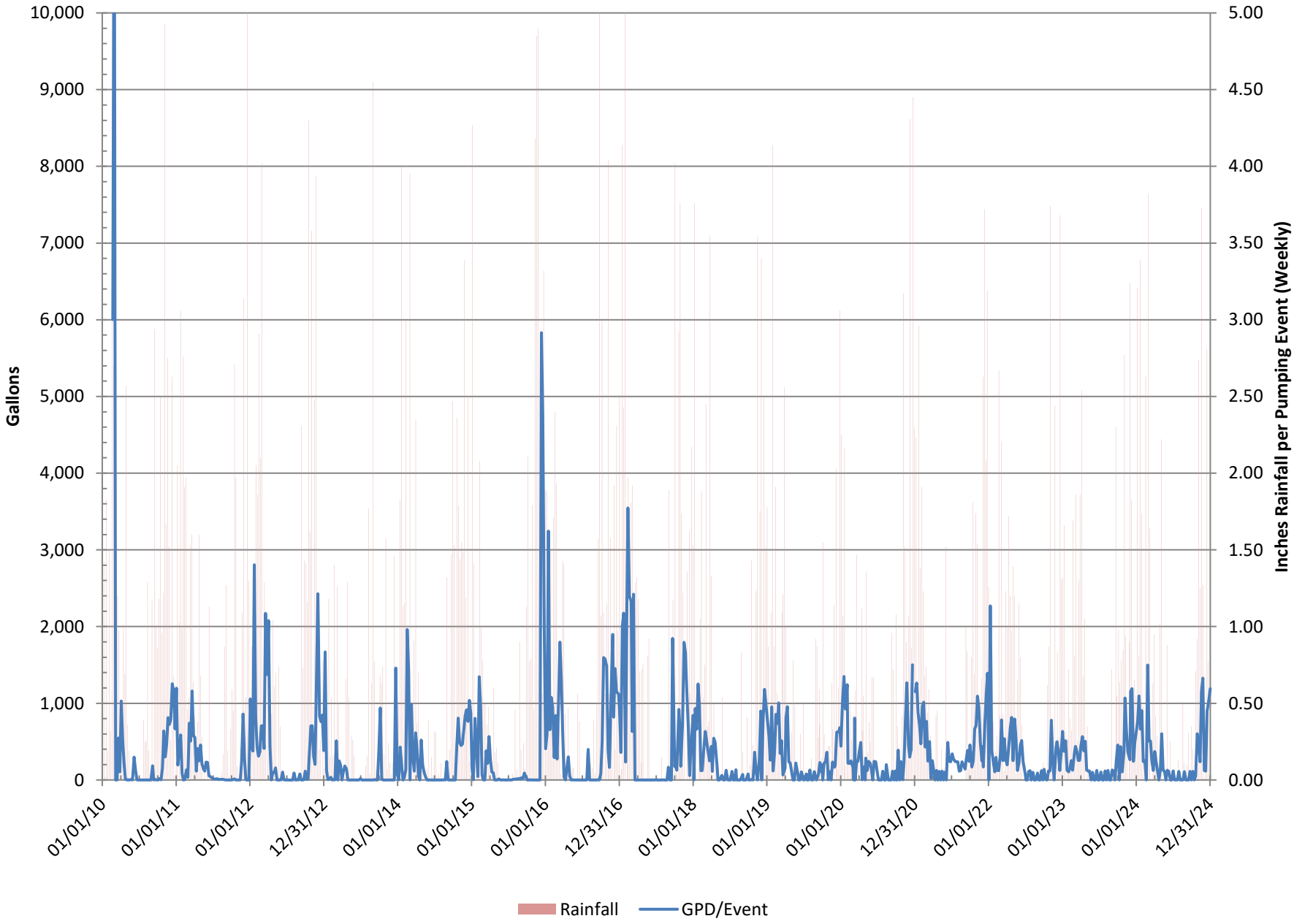


Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-3

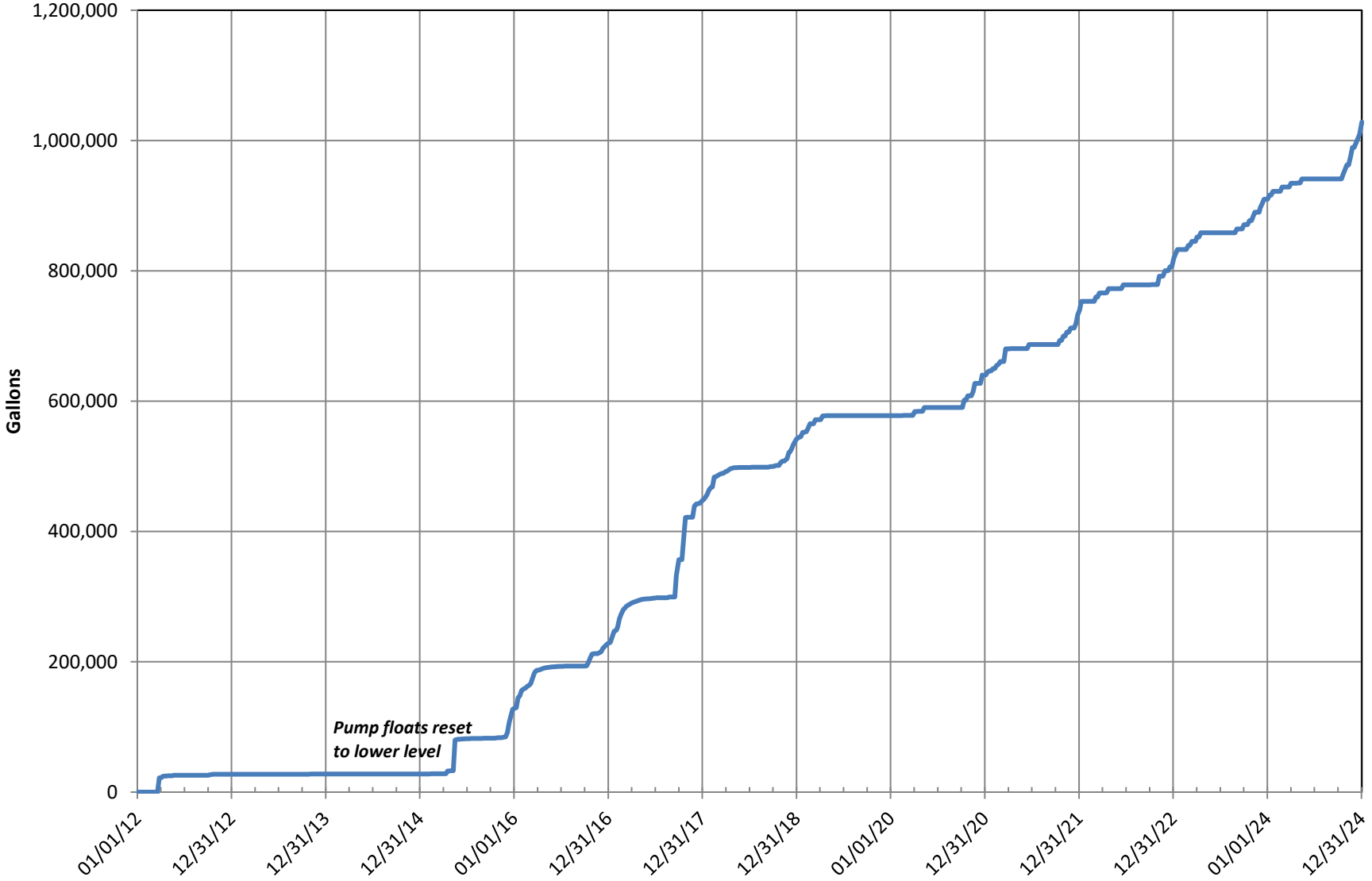


Cell3_LDS\LDS-3_Cum

Cell 3 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill

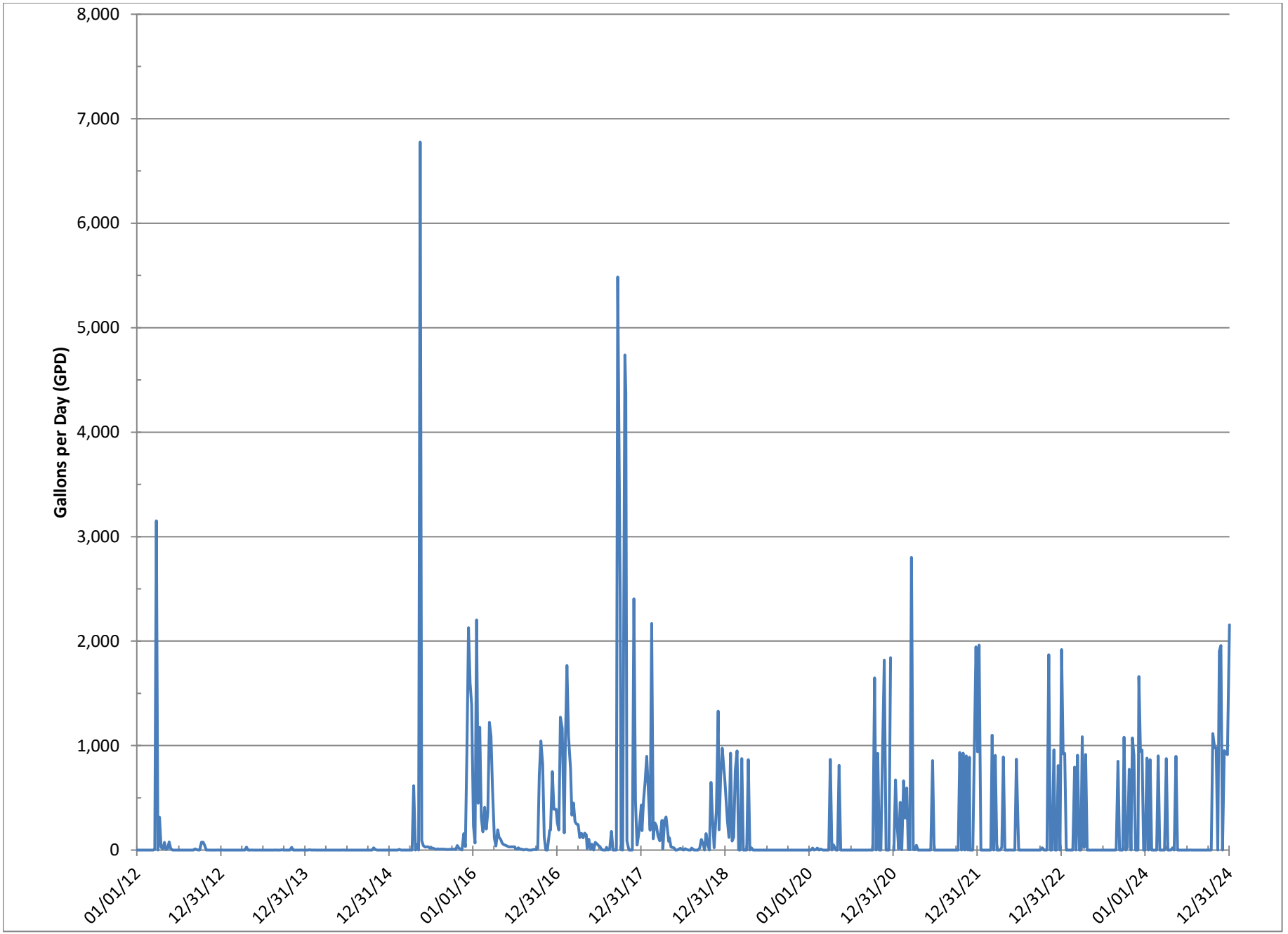


Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-4

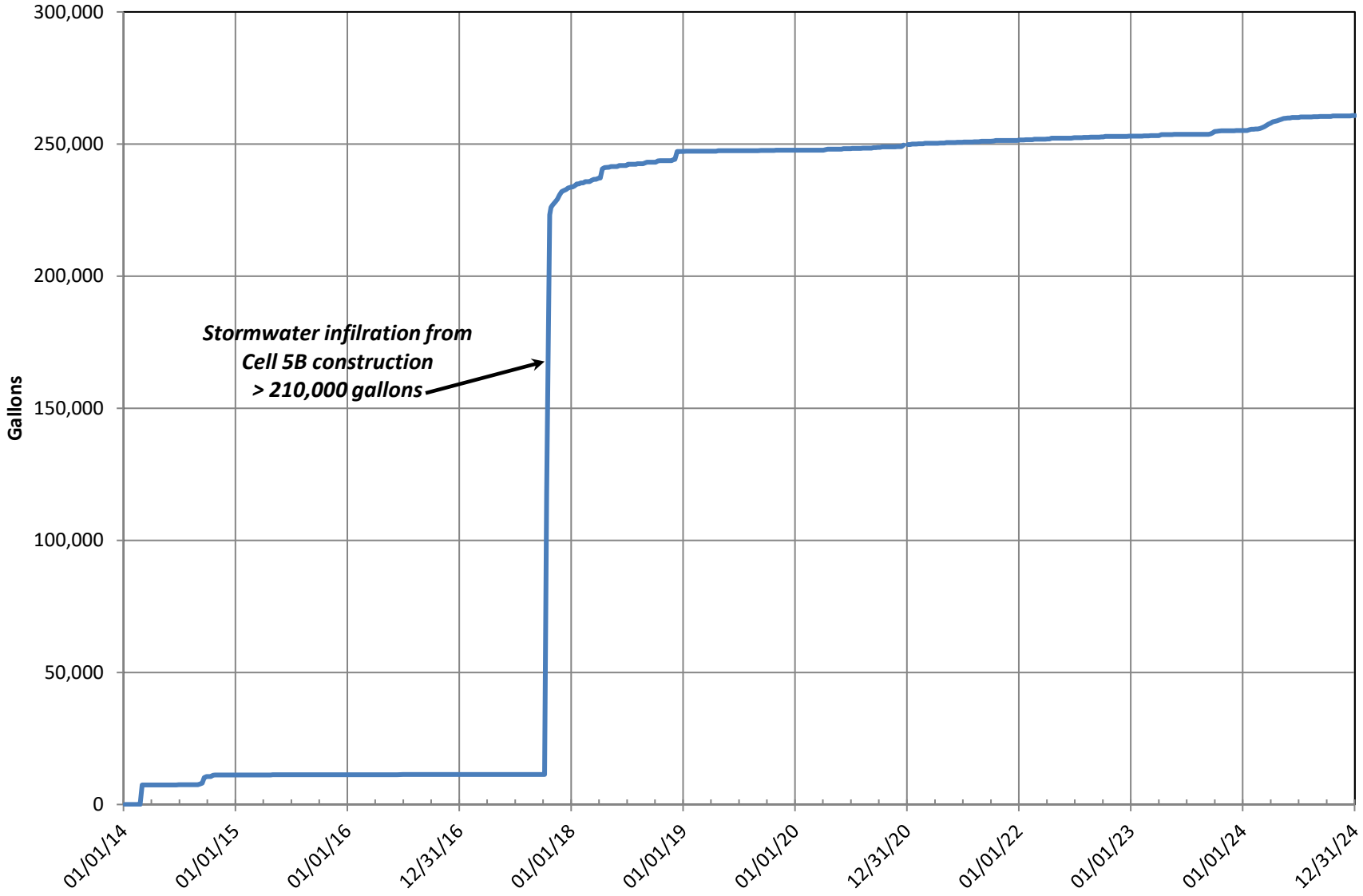


Cell4_LDS\LDS-4_Cum

Cell 4 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill

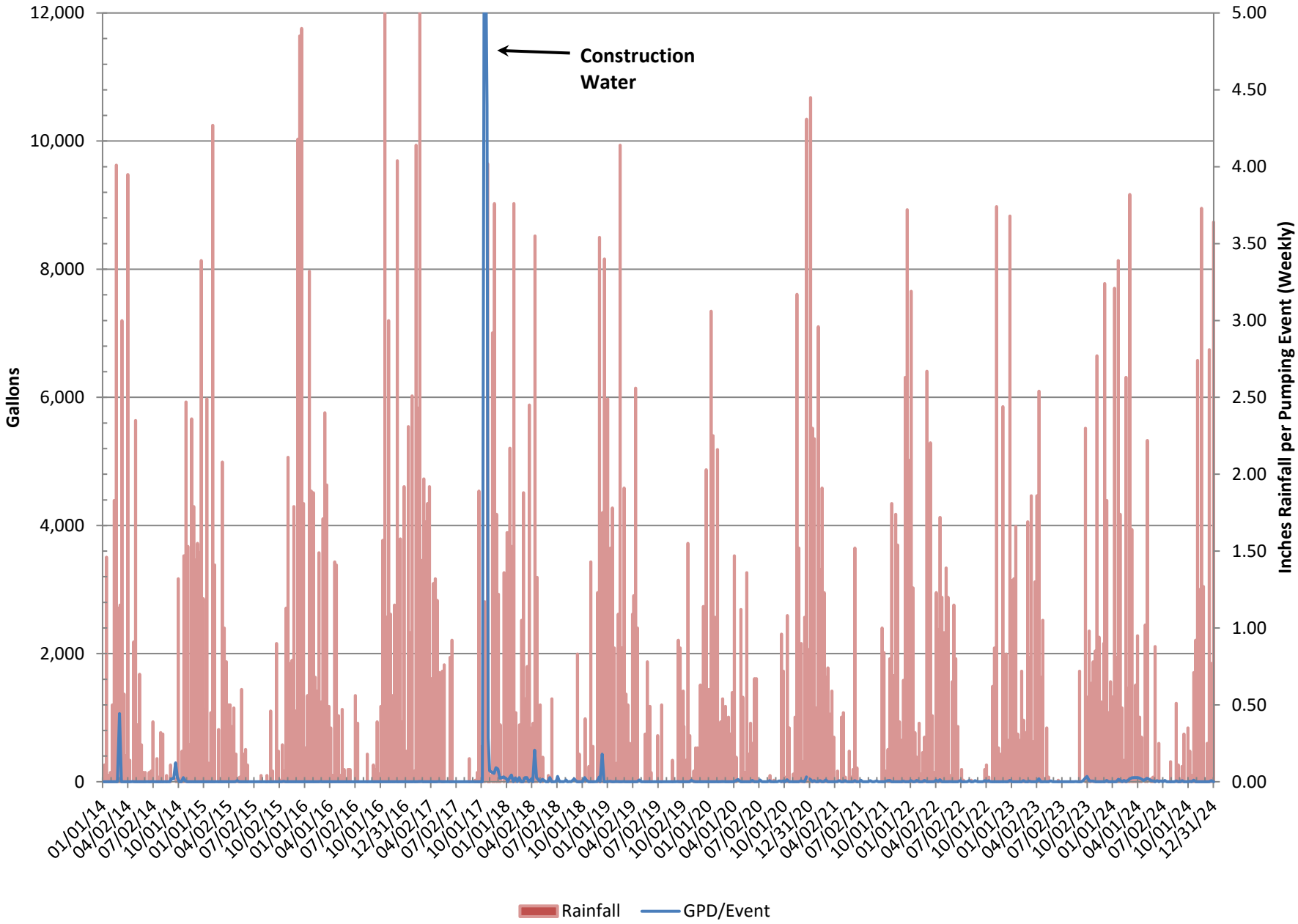


Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-5



Cell5_LDS\LDS-5_Cum

Cell 4 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill



Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.65	2.40	0.82	0.72	3.47	0.35	0.01	40,820	0	0	0	45,250	35,000	4,864	22,472	10,488	4,468	22,257	64,549	10,036	3,121	4,791	963	18,911	2,610	0	86,070	
2	2.67	-	0.82	-	3.49		0.17	65,445	0	0	0	39,236	84,000	4,480	28,631	10,429	6,591	25,062	75,193	16,941	3,309	4,656	1,103	26,009	3,479	0	104,681	
3	2.64	2.40	0.82	0.72	3.46	0.34	0.15	80,844	58,500	0	58,500	-43,314	70,000	4,480	23,978	10,847	6,564	24,552	70,421	13,677	2,832	4,656	965	22,130	3,479	0	96,030	
4	2.57	-	0.82	-	3.39		0.04	80,832	79,500	0	79,500	-64,870	82,500	4,674	23,196	10,773	7,093	25,060	70,796	12,919	2,893	4,656	719	21,187	3,479	0	95,462	
5	2.51	-	0.82	-	3.33		0.69	92,216	58,500	0	58,500	-38,357	117,500	4,674	23,398	10,823	9,995	38,300	87,190	12,809	3,198	4,656	1,027	21,690	3,479	0	112,359	
6	2.61	-	0.82	-	3.43		0.09	57,988	7,000	0	7,000	63,726	21,000	4,674	25,240	13,479	22,133	36,817	102,343	14,025	3,179	4,656	1,032	22,892	3,479	0	128,714	
7	2.67	-	0.82	-	3.49		0.17	55,143	0	0	0	45,206	42,000	4,674	24,130	12,770	8,520	26,348	76,442	11,838	2,904	4,656	1,030	20,428	3,479	0	100,349	
8	2.67	2.51	0.82	0.72	3.50	0.27	1.04	126,298	29,000	0	29,000	8,721	126,000	4,674	27,038	12,808	31,296	53,023	128,839	15,749	3,337	4,656	959	24,701	3,479	7,000	157,019	
9	2.72	-	0.82	-	3.54		1.03	138,188	36,000	0	36,000	66,331	161,000	8,820	32,691	18,266	61,734	86,579	208,090	19,115	3,196	4,656	1,028	27,995	4,434	0	240,519	
10	2.75	2.60	0.82	0.72	3.57	0.25	0.08	124,574	29,000	0	29,000	-1,822	91,000	8,820	32,451	19,127	38,008	9,326	107,732	17,179	3,223	4,656	1,028	26,086	4,434	13,500	138,252	
11	2.78	-	0.82	-	3.60		0.24	140,488	14,000	0	14,000	18,122	131,000	6,710	30,658	16,374	42,520	46,492	142,754	16,562	3,244	4,656	960	25,422	4,434	0	172,610	
12	2.77	-	0.82	-	3.60		0.03	98,122	0	0	0	52,422	154,000	6,710	30,211	14,907	20,176	49,463	121,467	15,891	3,065	4,656	1,031	24,643	4,434	0	150,544	
13	2.90	-	0.82	-	3.73		0.00	44,488	0	0	0	84,643	0	6,710	28,415	14,192	16,394	38,320	104,031	11,683	3,434	4,656	893	20,666	4,434	0	129,131	
14	3.02	-	0.82	-	3.84		0.00	24,180	0	0	0	88,114	0	6,710	25,125	11,891	16,970	31,885	92,581	6,934	2,513	4,656	1,176	15,279	4,434	0	112,294	
15	3.14	-	0.82	-	3.97		0.13	277	0	0	0	126,152	0	6,710	25,205	11,023	31,916	30,087	104,941	8,989	2,583	4,656	826	17,054	4,434	0	126,429	
16	3.27	-	0.82	-	4.10		0.33	945	0	0	0	130,729	0	6,710	27,089	13,051	27,423	33,326	107,599	10,928	3,082	4,656	975	19,641	4,434	0	131,674	
17	3.56	3.27	0.82	0.72	4.39	0.40	1.37	9,688	0	0	0	281,104	0	6,710	35,970	17,137	109,488	91,410	260,715	17,254	2,780	4,656	953	25,643	4,434	0	290,792	
18	3.40	-	1.20	-	4.60		0.51	113,132	7,000	0	7,000	250,725	154,000	10,872	41,502	23,912	170,008	90,799	337,093	22,112	2,927	4,656	957	30,652	3,112	0	370,857	
19	3.20	-	1.48	-	4.68		0.00	151,200	66,500	0	66,500	66,767	138,500	10,872	46,281	20,640	81,378	80,413	239,584	32,336	3,817	4,656	962	41,771	3,112	0	284,467	
20	3.01	-	1.69	-	4.70		0.19	147,176	25,000	0	25,000	39,838	163,500	10,872	40,569	16,821	47,219	57,288	172,769	26,590	3,914	4,656	973	36,133	3,112	0	212,014	
21	2.88	-	1.92	-	4.80		0.53	144,436	0	0	0	84,295	126,000	10,872	40,539	18,127	43,135	78,762	191,435	24,782	3,732	4,656	1,014	34,184	3,112	0	228,731	
22	2.75	2.51	2.14	1.91	4.89	0.47	0.36	140,768	11,000	0	11,000	72,885	130,000	10,872	42,124	20,372	39,338	72,479	185,185	20,640	3,032	4,656	1,028	29,356	3,112	7,000	217,653	
23	2.57	-	2.37	-	4.94		0.43	133,768	18,000	0	18,000	85,616	170,500	10,095	50,749	17,688	36,990	72,141	187,663	29,282	3,061	5,674	1,030	39,047	3,674	7,000	230,384	
24	2.37	2.40	2.59	2.35	4.96	0.21	0.33	144,432	50,000	0	50,000	22,231	145,500	10,095	41,480	18,310	40,825	65,462	176,172	27,142	3,112	5,674	889	36,817	3,674	0	216,663	
25	2.17	-	2.77	-	4.93		0.07	142,376	68,000	0	68,000	-30,434	135,500	10,650	38,722	16,772	26,154	51,269	143,567	23,394	2,743	5,674	890	32,701	3,674	0	179,942	
26	2.19	-	2.77	-	4.96		0.70	109,312	30,500	0	30,500	63,412	147,000	10,650	39,391	16,477	35,111	64,211	165,840	23,994	3,010	5,674	1,032	33,710	3,674	0	203,224	
27	2.36	-	2.77	-	5.12		0.58	82,024	7,000	0	7,000	152,505	70,000	10,650	40,535	19,949	63,334	69,280	203,748	24,567	2,838	5,674	1,028	34,107	3,674	0	241,529	
28	2.45	-	2.77	-	5.21		0.01	137,292	35,000	0	35,000	36,002	84,000	10,650	37,635	19,301	51,539	55,591	174,716	20,098	3,101	5,674	1,031	29,904	3,674	0	208,294	
29	2.48	2.71	2.77	2.35	5.24	0.18	0.01	117,890	19,500	0	19,500	79,588	166,500	10,650	37,501	16,059	52,776	50,295	167,281	19,653	3,094	5,674	1,102	29,523	3,674	16,500	200,478	
30	2.46	-	2.77	-	5.23		0.04	126,140	72,000	0	72,000	950	147,000	8,930	37,429	15,585	42,394	62,716	167,054	18,844	3,619	5,674	1,249	29,386	2,650	0	199,090	
31	2.41	2.65	2.77	2.35	5.18	0.18	0.08	110,474	94,500	0	94,500	-48,573	109,000	8,930	37,223	14,659	21,952	42,730	125,494	18,059	3,348	5,674	1,176	28,257	2,650	0	156,401	
Total	2.41		2.77		5.18		9.41	2,980,956	815,500	0	815,500	1,777,200	3,002,000	247,464	1,037,578	483,057	1,213,442	1,581,740	4,563,281	564,023	97,241	153,632	31,029	845,925	113,450	51,000	5,522,656	
							Average:	96,160	26,306			57,329	96,839	7,983	33,470	15,582	39,143	51,024	147,203	18,194	3,137	4,956	1,001	27,288	3,660	0.92%	178,150	

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.37	-	2.77	-	5.14		0.00	96,796	89,000	0	89,000	-23,222	114,500	8,003	39,220	14,667	15,166	45,084	122,140	27,314	3,432	5,544	920	37,210	3,225	0	162,575	
2	2.39	-	2.77	-	5.16		0.00	68,828	56,000	0	56,000	7,813	56,000	8,003	33,813	12,587	11,447	35,951	101,801	18,067	3,046	5,544	958	27,615	3,225	0	132,641	
3	2.44	-	2.77	-	5.21		0.00	63,966	0	0	0	61,978	77,000	8,003	33,527	11,523	10,138	31,173	94,364	18,966	2,890	5,544	955	28,355	3,225	0	125,944	
4	2.53	3.27	2.77	2.35	5.30	-0.32	0.16	54,355	14,000	0	14,000	60,208	21,000	8,003	34,334	12,246	10,568	29,692	94,843	20,073	3,691	5,544	1,187	30,495	3,225	0	128,563	
5	2.50	-	2.77	-	5.27		0.15	90,066	49,000	0	49,000	-9,821	112,000	6,233	33,407	12,510	15,185	30,746	98,081	21,094	3,166	3,131	1,056	28,447	2,718	0	129,245	
6	2.47	-	2.77	-	5.24		0.09	64,099	79,500	0	79,500	-25,539	68,500	6,233	30,956	12,513	10,912	29,017	89,631	18,174	3,227	3,131	1,180	25,712	2,718	0	118,060	
7	2.46	2.71	2.77	2.35	5.23	0.17	0.04	33,914	129,500	0	129,500	-47,069	0	6,233	29,865	11,208	10,932	30,338	88,576	17,998	2,884	3,131	1,039	25,052	2,718	0	116,345	
8	2.44	-	2.77	-	5.21		0.02	7,140	127,000	0	127,000	-23,960	0	5,168	27,579	10,488	8,279	32,913	84,427	16,147	2,751	3,131	1,007	23,036	2,718	0	110,180	
9	2.42	-	2.77	-	5.19		0.06	35,049	43,000	0	43,000	29,661	84,000	5,168	26,418	11,089	9,267	30,840	82,782	15,462	2,667	3,131	951	22,211	2,718	0	107,710	
10	2.43	-	2.77	-	5.20		0.00	61,511	22,000	0	22,000	15,506	70,000	5,168	25,534	9,746	7,560	26,140	74,148	15,224	2,788	3,131	1,009	22,152	2,718	0	99,017	
11	2.50	-	2.77	-	5.27		0.02	44,114	14,000	0	14,000	38,809	14,000	5,168	25,267	9,737	7,005	25,678	72,855	14,514	2,654	3,131	1,052	21,351	2,718	0	96,923	
12	2.45	2.51	2.77	2.35	5.21	0.35	0.00	47,111	71,000	0	71,000	-14,808	84,000	5,168	25,270	9,645	7,126	23,730	70,939	15,583	2,864	3,131	1,069	22,647	2,718	7,000	96,303	
13	2.39	-	2.77	-	5.16		0.00	56,764	115,500	0	115,500	-58,773	56,000	6,105	28,398	10,494	7,042	28,298	80,337	18,903	3,053	6,556	1,027	29,539	3,615	0	113,491	
14	2.36	2.60	2.77	2.35	5.13	0.18	0.72	105,208	86,000	0	86,000	-27,508	105,000	6,105	31,872	10,470	17,493	59,519	125,459	23,783	3,198	6,556	1,089	34,626	3,615	0	163,700	
15	2.42	-	2.77	-	5.19		0.77	135,076	64,000	0	64,000	34,428	112,000	5,265	31,326	13,223	28,395	121,106	199,315	20,553	2,564	6,556	901	30,574	3,615	0	233,504	
16	2.40	-	2.77	-	5.17		0.02	102,328	14,000	0	14,000	43,263	161,000	5,265	29,033	14,997	14,849	57,775	121,919	16,651	2,821	6,556	1,029	27,057	3,615	7,000	152,591	
17	2.51	-	2.77	-	5.27		0.33	63,611	0	0	0	94,316	56,000	5,265	29,364	13,719	15,404	61,942	125,694	17,959	2,911	6,556	1,192	28,618	3,615	0	157,927	
18	2.61	2.65	2.77	2.35	5.38	0.38	0.01	49,298	14,000	0	14,000	77,053	21,000	5,265	27,383	13,924	20,911	45,683	113,166	12,846	2,942	6,556	1,226	23,570	3,615	0	140,351	
19	2.61	-	2.77	-	5.38		0.16	102,844	37,500	0	37,500	4,169	105,000	5,330	29,709	13,501	17,994	44,609	111,143	20,537	2,887	5,875	1,161	30,460	2,910	0	144,513	
20	2.63	-	2.77	-	5.39		0.62	117,674	28,000	0	28,000	28,023	133,000	5,330	28,962	11,970	26,822	61,355	134,439	19,592	2,816	5,875	1,065	29,348	2,910	7,000	166,697	
21	2.60	2.80	2.77	2.35	5.37	0.22	0.14	134,872	30,500	0	30,500	-7,541	151,000	5,330	26,502	14,255	21,442	63,830	131,359	14,247	2,500	5,875	940	23,562	2,910	0	157,831	
22	2.55	-	2.77	-	5.31		0.00	104,558	44,500	0	44,500	-32,477	130,000	5,626	23,626	12,956	10,107	42,412	94,727	9,724	2,598	5,875	747	18,944	2,910	0	116,581	
23	2.52	-	2.77	-	5.28		0.00	86,162	43,000	0	43,000	-16,787	98,000	5,626	25,027	10,899	7,480	37,575	86,607	13,314	2,660	5,875	1,009	22,858	2,910	0	112,375	
24	2.57	-	2.77	-	5.34		0.01	69,336	0	0	0	40,336	56,000	5,626	24,845	11,720	7,288	34,331	83,810	13,210	2,804	5,875	1,063	22,952	2,910	0	109,672	
25	2.62	-	2.77	-	5.38		0.40	63,312	28,000	0	28,000	30,836	49,000	5,626	27,192	10,728	8,869	39,362	91,777	17,392	3,098	5,875	1,096	27,461	2,910	0	122,148	
26	2.62	2.80	2.77	2.35	5.39	0.24	0.06	80,510	28,000	0	28,000	8,320	82,000	5,626	25,611	11,516	11,829	34,796	89,378	14,786	2,756	5,875	1,125	24,542	2,910	0	116,830	
27	2.54	-	2.77	-	5.30		0.00	86,050	79,500	0	79,500	-59,285	110,500	6,230	24,487	10,460	8,468	31,475	81,120	12,529	2,732	5,875	1,099	22,235	2,910	0	106,265	
28	2.50	-	2.77	-	5.27		1.30	121,830	85,000	0	85,000	-58,152	98,000	6,230	29,072	12,588	17,928	50,116	115,934	19,476	3,261	5,875	1,222	29,834	2,910	0	148,678	
29	2.52	2.95	2.77	2.35	5.28	-0.02	0.89	145,312	37,500	0	37,500	16,846	147,000	6,230	28,384	18,057	36,074	74,019	162,764	11,457	1,565	5,875	1,087	19,984	2,910	14,000	185,658	
Total	2.52		2.77		5.28		5.97	2,291,694	1,429,000	0	1,429,000	186,623	2,371,500	172,630	835,983	353,436	401,980	1,259,501	3,023,530	495,576	83,226	151,184	30,461	760,447	88,340	35,000	3,872,317	
							Average:	79,024	49,276			6,435	81,776	5,953	28,827	12,187	13,861	43,431	104,260	17,089	2,870	5,213	1,050	26,222	3,046	0.90%	133,528	

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.58	-	2.77	-	5.34		0.65	110,284	28,000	0	28,000	103,922	157,500	8,263	50,558	21,250	37,755	79,943	197,768	23,350	3,476	5,875	1,169	33,870	3,568	7,000	235,206	
2	2.74	-	2.77	-	5.50		0.44	54,968	0	0	0	149,417	42,000	8,263	43,894	18,622	29,586	69,524	169,888	21,178	2,852	5,875	1,024	30,929	3,568	0	204,385	
3	2.88	-	2.77	-	5.64		0.34	75,436	0	0	0	117,836	56,000	8,263	40,942	16,562	29,520	64,511	159,797	20,319	2,682	5,875	1,031	29,907	3,568	0	193,272	
4	2.88	3.28	2.77	2.35	5.64	0.01	0.19	145,372	33,000	0	33,000	5,681	150,000	8,263	41,243	15,897	25,035	62,849	153,286	17,622	2,708	5,875	994	27,199	3,568	0	184,053	
5	2.85	-	2.77	-	5.61		0.01	136,552	44,500	0	44,500	-34,852	131,500	6,740	40,696	14,251	15,811	41,701	119,199	17,343	2,244	6,178	893	26,658	343	0	146,200	
6	2.66	3.02	2.89	2.63	5.55	-0.10	0.00	117,218	39,000	0	39,000	-28,715	149,500	6,740	38,042	12,352	10,293	35,742	103,169	14,285	2,641	6,178	887	23,991	343	0	127,503	
7	2.45	-	3.01	-	5.46		0.00	98,002	80,500	0	80,500	-61,378	130,000	6,622	34,428	11,754	8,283	33,509	94,596	12,015	3,084	6,178	908	22,185	343	0	117,124	
8	2.33	-	3.12	-	5.45		0.00	82,630	71,000	0	71,000	-32,988	56,000	6,622	31,949	11,208	7,117	34,070	90,966	11,756	3,441	6,178	958	22,333	343	7,000	113,642	
9	2.25	-	3.23	-	5.48		0.46	75,016	0	0	0	35,146	77,000	6,622	29,959	10,508	7,416	33,351	87,856	11,615	3,175	6,178	995	21,963	343	0	110,162	
10	2.15	-	3.38	-	5.53		0.49	125,998	0	0	0	22,383	105,000	6,622	35,659	12,618	19,600	43,750	118,249	19,479	3,101	6,178	1,031	29,789	343	0	148,381	
11	1.98	2.51	3.53	3.35	5.51	-0.35	0.62	139,852	14,000	0	14,000	4,243	157,500	6,622	34,929	13,635	20,985	45,754	121,925	18,492	3,127	6,178	1,030	28,827	343	7,000	151,095	
12	1.98	-	3.53	-	5.52		0.07	112,130	14,000	0	14,000	22,310	133,000	5,810	35,356	15,061	22,051	40,422	118,700	20,451	2,656	5,684	949	29,740	0	0	148,440	
13	1.92	2.37	3.53	3.35	5.45	-0.27	0.00	121,208	35,000	0	35,000	-36,970	147,000	5,810	31,536	11,505	11,509	34,783	95,143	15,012	2,507	5,684	892	24,095	0	0	119,238	
14	1.90	-	3.53	-	5.43		0.01	90,286	50,000	0	50,000	-18,514	91,000	5,770	31,654	11,122	8,219	35,729	92,494	19,677	2,912	5,684	1,005	29,278	0	0	121,772	
15	1.87	-	3.53	-	5.41		0.00	85,354	55,500	0	55,500	-17,062	95,000	5,770	32,226	11,803	7,953	34,078	91,830	21,946	3,271	5,684	1,061	31,962	0	0	123,792	
16	1.93	-	3.53	-	5.46		0.00	54,902	0	0	0	57,796	56,000	5,770	30,041	10,348	7,408	31,302	84,869	18,059	3,044	5,684	1,042	27,829	0	0	112,698	
17	2.03	-	3.53	-	5.57		0.00	32,082	0	0	0	71,259	0	5,770	27,768	9,934	7,202	28,993	79,667	13,966	3,047	5,684	977	23,674	0	0	103,341	
18	2.04	2.60	3.53	3.35	5.58	-0.37	0.00	66,382	0	0	0	42,417	98,000	5,770	26,173	9,979	6,667	30,467	79,056	12,766	3,299	5,684	994	22,743	0	7,000	101,799	
19	2.01	-	3.53	-	5.54		0.00	63,059	86,500	0	86,500	-43,061	56,000	5,895	27,288	9,542	6,504	29,678	78,907	16,302	3,070	5,688	1,087	26,147	1,444	0	106,498	
20	2.02	2.51	3.53	3.35	5.55	-0.31	0.00	61,811	0	0	0	42,445	95,000	5,895	26,642	9,445	6,128	29,158	77,268	15,760	3,006	5,688	1,090	25,544	1,444	0	104,256	
21	1.96	-	3.53	-	5.49		0.02	57,277	107,500	0	107,500	-66,817	53,000	4,796	24,783	9,562	6,051	28,819	74,011	12,673	3,161	5,688	983	22,505	1,444	0	97,960	
22	1.91	-	3.53	-	5.44		0.13	66,076	79,500	0	79,500	-43,078	68,500	4,796	24,796	9,788	8,164	29,717	77,261	13,470	3,410	5,688	1,225	23,793	1,444	0	102,498	
23	1.96	-	3.53	-	5.49		0.15	57,333	0	0	0	47,900	56,000	4,796	24,551	11,210	10,256	29,943	80,756	13,033	3,199	5,688	1,113	23,033	1,444	0	105,233	
24	1.98	-	3.53	-	5.52		0.02	57,443	7,000	0	7,000	30,515	63,000	4,796	22,214	9,671	8,574	28,656	73,911	10,102	2,825	5,688	988	19,603	1,444	0	94,958	
25	1.95	2.60	3.53	3.35	5.49	-0.46	0.08	66,764	60,000	0	60,000	-30,739	65,500	4,796	24,309	9,229	7,444	28,331	74,109	10,928	2,874	5,688	982	20,472	1,444	0	96,025	
26	1.96	-	3.53	-	5.49		0.23	71,980	39,000	0	39,000	-4,435	65,500	4,665	29,736	9,188	8,266	28,272	80,127	13,688	2,948	6,197	1,053	23,886	2,532	0	106,545	
27	1.90	2.60	3.53	3.35	5.44	-0.51	0.49	135,012	56,000	0	56,000	-45,249	143,500	4,665	27,864	10,265	24,015	45,024	111,833	21,107	3,015	6,197	1,079	31,398	2,532	0	145,763	
28	1.87	-	3.53	-	5.40		0.44	146,116	37,500	0	37,500	-27,953	152,500	4,365	31,363	12,059	21,040	48,600	117,427	25,720	2,723	6,197	1,064	35,704	2,532	0	155,663	
29	1.84	-	3.53	-	5.37		0.00	97,400	35,000	0	35,000	-9,964	119,000	4,365	27,076	12,656	14,409	35,043	93,549	16,176	2,914	6,197	1,068	26,355	2,532	0	122,436	
30	1.89	-	3.53	-	5.42		0.00	50,424	0	0	0	56,173	56,000	4,365	25,217	10,667	7,958	32,556	80,763	13,335	2,692	6,197	1,078	23,302	2,532	0	106,597	
31	1.99	2.65	3.53	3.35	5.52	-0.48	0.00	42,897	0	0	0	55,180	0	4,365	24,004	9,789	6,352	29,808	74,318	11,441	2,600	6,197	989	21,227	2,532	0	98,077	
Total	1.99		3.53		5.52		4.84	2,697,264	972,500	0	972,500	362,846	2,825,500	182,670	976,896	371,480	417,571	1,204,082	3,152,699	503,066	91,704	183,532	31,639	809,941	41,970	28,000	4,004,610	
							Average:	87,009	31,371			11,705	91,145	5,893	31,513	11,983	13,470	38,841	101,700	16,228	2,958	5,920	1,021	26,127	1,354	0.70%	129,181	

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.94	-	3.53	-	5.47		0.00	68,692	49,000	0	49,000	-11,496	107,000	4,227	26,427	9,183	6,340	27,881	74,057	19,392	2,577	7,041	917	29,927	2,211	0	106,196	
2	1.87	-	3.53	-	5.40		0.02	64,664	95,000	0	95,000	-60,983	72,500	4,227	24,634	9,124	5,890	26,523	70,397	15,416	2,613	7,041	1,002	26,072	2,211	0	98,681	
3	1.81	2.65	3.53	3.35	5.34	-0.66	0.14	69,814	88,000	0	88,000	-57,542	71,000	4,227	24,263	8,728	7,655	26,984	71,856	15,059	2,938	7,041	1,166	26,204	2,211	0	100,272	
4	1.75	-	3.53	-	5.28		0.11	80,674	81,000	0	81,000	-54,432	86,500	3,922	25,158	10,634	10,095	27,029	76,838	17,085	2,886	7,041	1,181	28,193	2,211	0	107,242	
5	1.71	-	3.53	-	5.25		0.00	62,211	67,000	0	67,000	-30,184	67,000	3,922	22,026	8,937	8,161	25,231	68,277	10,823	2,597	7,041	1,078	21,539	2,211	7,000	92,027	
6	1.75	-	3.53	-	5.29		0.10	56,955	0	0	0	31,788	49,000	3,922	21,247	8,805	7,583	24,211	65,768	10,316	2,332	7,041	1,075	20,764	2,211	0	88,743	
7	1.80	-	3.53	-	5.33		0.07	62,697	0	0	0	24,588	42,000	3,922	20,695	8,917	7,618	23,785	64,937	9,785	2,371	7,041	940	20,137	2,211	0	87,285	
8	1.74	2.37	3.53	3.35	5.27	-0.45	0.00	58,236	49,000	0	49,000	-14,776	101,500	3,922	22,071	9,077	6,849	23,591	65,510	14,145	2,518	7,041	1,035	24,739	2,211	0	92,460	
9	1.67	-	3.53	-	5.20		0.00	57,130	96,500	0	96,500	-67,703	64,000	3,780	20,383	8,298	5,508	22,766	60,735	12,742	3,026	6,229	1,016	23,013	2,179	0	85,927	
10	1.62	2.45	3.53	3.35	5.15	-0.65	0.00	54,084	70,000	0	70,000	-40,784	63,000	3,780	19,124	8,497	5,330	22,853	59,584	11,292	3,026	6,229	990	21,537	2,179	0	83,300	
11	1.56	-	3.53	-	5.09		0.15	60,833	96,500	0	96,500	-64,958	54,000	3,890	22,716	8,573	5,567	23,659	64,405	11,292	7,165	6,229	1,105	25,791	2,179	0	92,375	
12	1.51	-	3.53	-	5.04		0.01	59,973	91,000	0	91,000	-56,891	52,500	3,890	20,346	9,222	8,038	23,604	65,100	13,205	6,481	6,229	888	26,803	2,179	0	94,082	
13	1.53	-	3.53	-	5.06		0.13	54,629	21,000	0	21,000	15,518	49,000	3,890	20,138	9,951	6,466	22,922	63,367	12,531	5,905	6,229	936	25,601	2,179	0	91,147	
14	1.61	-	3.53	-	5.15		0.00	36,864	0	0	0	46,890	0	3,890	19,054	8,464	5,921	22,027	59,356	10,026	5,136	6,229	828	22,219	2,179	0	83,754	
15	1.56	2.37	3.53	3.35	5.10	-0.62	0.00	52,754	26,500	0	26,500	-318	103,000	3,890	18,148	7,984	4,570	21,267	55,859	9,035	4,886	6,229	748	20,898	2,179	0	78,936	
16	1.53	-	3.53	-	5.06		0.00	48,615	49,000	0	49,000	-16,217	65,500	3,415	19,008	8,116	3,908	20,772	55,219	13,650	4,973	4,394	891	23,908	2,271	0	81,398	
17	1.51	2.37	3.53	3.35	5.04	-0.68	0.00	49,572	67,000	0	67,000	-39,386	33,500	3,415	17,018	7,742	4,175	20,836	53,186	10,978	5,480	4,394	877	21,729	2,271	0	77,186	
18	1.45	-	3.53	-	4.99		0.00	50,156	60,000	0	60,000	-31,527	72,500	3,552	17,451	8,293	4,202	21,342	54,840	10,793	5,324	4,394	1,007	21,518	2,271	0	78,629	
19	1.43	-	3.53	-	4.96		0.00	47,092	56,000	0	56,000	-25,691	46,000	3,552	20,942	8,494	3,831	21,572	58,391	5,617	5,728	4,394	1,000	16,739	2,271	0	77,401	
20	1.46	-	3.53	-	5.00		0.00	42,871	7,000	0	7,000	21,176	28,000	3,552	15,399	8,381	3,617	21,121	52,070	6,750	4,595	4,394	967	16,706	2,271	0	71,047	
21	1.51	-	3.53	-	5.04		0.00	34,215	21,000	0	21,000	14,943	7,000	3,552	15,142	7,868	3,801	20,778	51,141	6,364	4,981	4,394	1,007	16,746	2,271	0	70,158	
22	1.48	2.37	3.53	3.35	5.02	-0.70	0.00	45,650	19,500	0	19,500	7,933	78,000	3,552	16,271	8,192	4,263	21,619	53,897	5,794	5,551	4,394	1,176	16,915	2,271	0	73,083	
23	1.47	-	3.53	-	5.01		0.00	45,980	46,000	0	46,000	-4,756	50,000	3,420	17,285	8,251	3,410	22,858	55,224	12,759	5,526	3,705	993	22,983	2,018	7,000	80,224	
24	1.44	2.37	3.53	3.35	4.98	-0.74	0.10	45,187	63,000	0	63,000	-32,382	42,000	3,420	15,924	8,543	3,993	23,203	55,083	8,692	5,234	3,705	1,074	18,705	2,018	0	75,805	
25	1.41	-	3.53	-	4.95		0.56	58,318	67,000	0	67,000	-17,143	71,000	3,752	22,703	11,429	17,843	25,591	81,317	13,602	6,147	3,705	1,387	24,841	2,018	0	108,175	
26	1.43	-	3.53	-	4.96		0.04	55,519	53,000	0	53,000	-548	39,000	3,752	17,471	9,975	17,128	26,618	74,943	13,602	5,520	3,705	1,184	24,011	2,018	7,000	100,971	
27	1.47	-	3.53	-	5.00		0.02	48,082	0	0	0	46,622	56,000	3,752	17,564	8,851	15,611	26,719	72,496	9,954	5,369	3,705	1,162	20,190	2,018	0	94,704	
28	1.49	-	3.53	-	5.03		0.08	51,745	42,000	0	42,000	127	28,000	3,752	18,699	8,895	14,325	26,166	71,836	9,897	5,247	3,705	1,169	20,018	2,018	0	93,872	
29	1.44	-	3.53	-	4.97		0.19	63,705	70,000	0	70,000	-41,046	77,000	3,752	16,813	9,378	15,064	25,600	70,606	9,930	5,248	3,705	1,152	20,035	2,018	0	92,659	
30	1.35	2.13	3.53	3.35	4.88	-0.60	0.03	56,960	124,000	0	124,000	-86,035	64,000	3,752	16,779	9,624	16,532	26,263	72,949	9,897	5,124	3,705	1,232	19,958	2,018	0	94,925	
Total	1.35		3.53		4.88		1.75	1,643,877	1,575,000	0	1,575,000	-545,215	1,739,500	113,240	590,902	266,426	233,294	715,385	1,919,247	340,426	136,504	160,323	31,183	668,435	64,980	21,000	2,652,662	
							Average:	54,796	52,500			-18,174	57,983	3,775	19,697	8,881	7,776	23,846	63,975	11,348	4,550	5,344	1,039	22,281	2,166	0.79%	88,422	

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwelt Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.27	-	3.53	-	4.80		0.58	78,072	124,000	0	124,000	-96,425	58,500	6,878	18,887	10,783	15,904	39,598	92,050	3,103	4,933	4,348	1,213	13,597	0	0	105,647	
2	1.22	-	3.53	-	4.76		0.33	83,488	86,500	0	86,500	-17,364	110,000	6,878	17,832	16,874	37,131	62,288	141,003	646	5,368	4,348	1,259	11,621	0	0	152,624	SCADA issue 5/2-5/6. total gallons from period divided
3	1.25	-	3.53	-	4.78		0.68	65,273	56,000	0	56,000	31,351	75,000	6,878	17,832	16,874	37,131	62,288	141,003	646	5,368	4,348	1,259	11,621	0	0	152,624	equally between days of outage.
4	1.36	-	3.53	-	4.89		0.27	45,751	0	0	0	106,873	42,000	6,878	17,832	16,874	37,131	62,288	141,003	646	5,368	4,348	1,259	11,621	0	0	152,624	
5	1.51	-	3.53	-	5.04		0.11	45,364	0	0	0	107,260	0	6,878	17,832	16,874	37,131	62,288	141,003	646	5,368	4,348	1,259	11,621	0	0	152,624	
6	1.54	2.24	3.53	3.35	5.07	-0.52	0.20	83,340	7,000	0	7,000	68,784	121,000	6,878	17,832	16,874	37,131	62,288	141,003	646	5,368	4,348	1,259	11,621	0	6,500	152,624	
7	1.53	-	3.53	-	5.06		0.05	87,544	33,500	0	33,500	7,043	104,500	8,040	21,598	12,134	25,768	41,139	108,679	9,138	5,046	4,209	1,015	19,408	0	0	128,087	
8	1.50	2.24	3.53	3.35	5.04	-0.55	0.00	74,800	67,000	0	67,000	-30,234	71,000	8,040	19,820	10,442	22,071	34,794	95,167	6,122	5,000	4,209	1,068	16,399	0	0	111,566	
9	1.51	-	3.53	-	5.04		0.00	62,237	56,000	0	56,000	-12,858	42,000	6,624	18,809	9,845	26,430	27,844	89,552	4,742	5,701	4,209	1,175	15,827	0	0	105,379	
10	1.48	-	3.53	-	5.01		0.00	61,157	35,000	0	35,000	3,792	100,000	6,624	18,919	9,851	18,813	30,707	84,914	3,930	5,746	4,209	1,150	15,035	0	0	99,949	
11	1.53	-	3.53	-	5.06		0.00	55,665	0	0	0	38,790	42,000	6,624	17,835	9,508	17,079	29,525	80,571	2,467	5,984	4,209	1,224	13,884	0	0	94,455	
12	1.59	-	3.53	-	5.12		0.00	50,112	28,000	0	28,000	11,568	0	6,624	16,608	9,402	15,737	28,641	77,012	1,339	5,905	4,209	1,215	12,668	0	0	89,680	
13	1.56	2.24	3.53	3.35	5.09	-0.50	0.00	54,556	26,500	0	26,500	8,266	97,500	6,624	16,878	9,201	14,794	28,381	75,878	2,558	5,470	4,209	1,207	13,444	0	0	89,322	
14	1.49	-	3.53	-	5.03		0.00	53,532	49,000	0	49,000	-18,512	96,000	4,935	15,600	9,296	14,013	27,499	71,343	1,674	5,535	4,209	1,259	12,677	0	0	84,020	
15	1.49	2.24	3.53	3.35	5.02	-0.57	0.00	52,038	67,000	0	67,000	-23,400	37,500	4,935	17,859	8,847	14,792	27,812	74,245	7,983	7,968	4,209	1,233	21,393	0	0	95,638	
16	1.48	-	3.53	-	5.01		0.00	50,979	60,000	0	60,000	13,587	71,000	4,516	17,094	9,026	14,682	36,810	82,128	8,122	29,014	4,209	1,093	42,438	0	0	124,566	
17	1.48	-	3.53	-	5.02		0.00	39,219	65,500	0	65,500	12,407	47,500	4,516	17,908	8,613	17,886	39,773	88,696	8,636	14,411	4,209	1,174	28,430	0	0	117,126	
18	1.56	-	3.53	-	5.09		0.00	46,665	14,000	0	14,000	39,120	14,000	4,516	16,227	9,294	17,402	34,393	81,832	4,731	7,954	4,209	1,059	17,953	0	0	99,785	
19	1.62	-	3.53	-	5.16		0.00	46,454	21,000	0	21,000	21,072	0	4,516	14,609	8,487	15,104	33,160	75,876	2,549	4,807	4,209	1,085	12,650	0	0	88,526	
20	1.60	2.37	3.53	3.35	5.13	-0.59	0.00	44,824	33,500	0	33,500	16,631	83,500	4,516	13,876	8,263	14,733	41,365	82,753	1,950	4,953	4,209	1,090	12,202	0	0	94,955	
21	1.56	-	3.53	-	5.09		0.02	45,899	74,000	0	74,000	-24,492	64,000	4,625	16,973	8,717	15,432	30,734	76,481	7,991	5,092	4,647	1,196	18,926	0	0	95,407	
22	1.52	2.24	3.53	3.35	5.05	-0.54	0.01	54,870	51,500	0	51,500	-25,051	70,000	4,625	16,345	8,494	7,904	25,918	63,286	7,222	5,042	4,647	1,122	18,033	0	0	81,319	
23	1.47	-	3.53	-	5.01		0.00	46,349	70,000	0	70,000	-39,486	52,500	3,650	16,659	8,823	1,565	28,589	59,286	8,375	3,306	4,647	1,249	17,577	0	0	76,863	
24	1.43	-	3.53	-	4.97		0.02	39,532	81,000	0	81,000	-42,333	36,000	3,650	17,589	8,774	1,114	27,972	59,099	10,090	3,109	4,647	1,254	19,100	0	0	78,199	
25	1.48	-	3.53	-	5.01		0.00	39,367	0	0	0	37,732	35,000	3,650	17,308	8,493	3,482	26,651	59,584	8,688	2,957	4,647	1,223	17,515	0	0	77,099	
26	1.51	-	3.53	-	5.05		0.00	39,513	21,000	0	21,000	12,458	14,000	3,650	15,862	8,402	3,301	25,818	57,033	7,102	2,944	4,647	1,245	15,938	0	0	72,971	
27	1.59	2.30	3.53	3.35	5.12	-0.53	0.00	28,362	0	0	0	43,712	0	3,650	15,580	8,559	3,370	25,903	57,062	6,068	3,059	4,647	1,238	15,012	0	0	72,074	
28	1.51	-	3.53	-	5.05		0.00	42,717	56,000	0	56,000	-21,396	94,500	3,650	18,222	8,219	3,094	26,868	60,053	8,825	2,883	4,457	1,103	17,268	0	0	77,321	
29	1.48	2.10	3.53	3.35	5.02	-0.43	0.00	42,473	63,000	0	63,000	-38,121	35,000	3,650	15,404	7,674	3,009	25,450	55,187	4,103	2,664	4,457	941	12,165	0	0	67,352	
30	1.43	-	3.53	-	4.96		0.00	41,581	79,500	0	79,500	-51,106	46,000	3,743	14,596	8,224	3,003	25,449	55,015	6,459	2,921	4,457	1,124	14,961	0	0	69,976	
31	1.40	2.10	3.53	3.35	4.94	-0.51	0.00	42,290	60,000	0	60,000	-29,087	36,000	3,743	15,056	8,703	3,239	25,914	56,655	7,411	3,460	4,457	1,221	16,549	0	0	73,204	
Total	1.40		3.53		4.94		2.27	1,644,023	1,385,500	0	1,385,500	110,584	1,696,000	165,205	531,280	320,443	499,378	1,108,145	2,624,451	154,604	182,705	135,375	36,472	509,156	0	6,500	3,133,607	
							Average:	53,033	44,694			3,567	54,710	5,329	17,138	10,337	16,109	35,747	84,660	4,987	5,894	4,367	1,177	16,424	0	0.21%	101,084	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.41	-	3.53	-	4.94		0.00	41,368	21,000	0	21,000	11,589	49,000	3,743	15,408	8,752	3,394	26,074	57,371	7,556	3,327	4,457	1,246	16,586	0	0	73,957	
2	1.51	2.30	3.53	3.35	5.04	-0.61	0.81	79,608	7,000	0	7,000	64,178	42,000	3,743	21,299	9,790	12,087	56,903	103,822	17,176	24,041	4,457	1,290	46,964	0	0	150,786	
3	1.54	-	3.53	-	5.07		0.07	68,568	21,000	0	21,000	53,373	96,000	3,430	19,953	10,315	19,687	56,977	110,362	9,995	14,486	6,861	1,237	32,579	0	0	142,941	
4	1.56	-	3.53	-	5.09		0.00	57,701	47,500	0	47,500	26,198	61,000	3,430	24,917	8,810	7,688	43,894	88,739	24,931	9,784	6,861	1,084	42,660	0	0	131,399	
5	1.57	2.37	3.53	3.35	5.10	-0.62	0.00	48,432	74,000	0	74,000	1,461	42,000	3,430	16,790	9,062	21,560	40,850	91,692	16,469	7,807	6,861	1,064	32,201	0	0	123,893	
6	1.53	-	3.53	-	5.07		0.00	46,607	77,000	0	77,000	-10,225	70,000	3,432	12,242	9,299	20,878	39,632	85,483	11,910	8,011	6,861	1,117	27,899	0	0	113,382	
7	1.49	-	3.53	-	5.03		0.00	44,801	91,000	0	91,000	-25,725	59,500	3,432	16,079	9,024	18,385	40,439	87,359	6,790	7,842	6,861	1,224	22,717	0	0	110,076	
8	1.53	-	3.53	-	5.06		0.00	42,563	42,000	0	42,000	16,000	21,000	3,432	15,100	9,465	17,412	36,796	82,205	3,639	6,711	6,861	1,147	18,358	0	0	100,563	
9	1.62	-	3.53	-	5.16		0.00	26,967	0	0	0	68,154	0	3,432	14,714	8,752	15,919	35,442	78,259	2,756	6,138	6,861	1,107	16,862	0	0	95,121	
10	1.64	2.37	3.53	3.35	5.18	-0.54	0.00	5	78,000	0	78,000	17,531	0	3,432	17,850	8,725	3,167	36,832	70,006	10,223	7,311	6,861	1,135	25,530	0	0	95,536	
11	1.61	-	3.53	-	5.14		0.00	15	134,000	0	134,000	-31,391	0	3,275	20,908	8,373	2,586	35,060	70,202	20,191	6,280	4,844	1,107	32,422	0	0	102,624	
12	1.58	2.24	3.53	3.35	5.11	-0.48	0.00	0	134,000	0	134,000	-35,856	0	3,275	19,466	8,376	3,495	34,435	69,047	17,172	5,902	4,844	1,179	29,097	0	0	98,144	
13	1.57	-	3.53	-	5.10		0.00	0	99,000	0	99,000	-6,767	0	3,216	18,061	8,083	3,306	34,720	67,386	13,309	5,683	4,844	1,011	24,847	0	0	92,233	
14	1.52	-	3.53	-	5.05		0.07	0	148,000	0	148,000	-52,288	0	3,216	19,687	8,515	3,299	35,893	70,610	13,751	5,411	4,844	1,096	25,102	0	0	95,712	
15	1.55	-	3.53	-	5.08		0.00	0	56,000	0	56,000	33,960	0	3,216	16,837	7,949	4,241	34,872	67,115	11,445	5,289	4,844	1,267	22,845	0	0	89,960	
16	1.62	-	3.53	-	5.15		0.12	0	28,000	0	28,000	65,973	0	3,216	17,779	7,226	4,779	35,894	68,894	12,334	5,757	4,844	2,144	25,079	0	0	93,973	
17	1.61	2.13	3.53	3.35	5.14	-0.34	0.06	0	106,000	0	106,000	-9,868	0	3,216	17,954	7,533	5,523	36,059	70,285	13,184	5,591	4,844	2,228	25,847	0	0	96,132	
18	1.57	-	3.53	-	5.11		0.00	0	134,000	0	134,000	-33,254	0	3,800	18,594	7,498	4,475	37,072	71,439	17,276	6,342	3,442	2,248	29,307	0	0	100,746	
19	1.51	2.01	3.53	3.35	5.05	-0.31	0.00	16	156,500	0	156,500	-59,887	0	3,800	17,508	7,674	3,917	38,198	71,097	14,014	5,827	3,442	2,250	25,532	0	0	96,629	
20	1.44	-	3.53	-	4.97		0.00	0	162,000	0	162,000	-72,302	0	3,000	16,905	7,505	3,916	33,465	64,791	13,225	5,886	3,442	2,355	24,907	0	0	89,698	
21	1.42	-	3.53	-	4.95		0.00	0	120,000	0	120,000	-21,159	0	3,000	19,241	7,459	4,114	39,398	73,212	13,397	6,472	3,442	2,319	25,629	0	0	98,841	
22	1.47	-	3.53	-	5.01		0.00	0	42,000	0	42,000	52,285	0	3,000	16,958	7,659	4,133	39,457	71,207	11,473	5,843	3,442	2,321	23,078	0	0	94,285	
23	1.54	-	3.53	-	5.07		0.00	3,663	28,000	0	28,000	60,621	0	3,000	16,700	7,216	3,752	39,884	70,552	10,296	5,806	3,442	2,189	21,732	0	0	92,284	
24	1.50	1.90	3.53	3.35	5.03	-0.22	0.00	38,035	78,000	0	78,000	-11,623	63,000	3,000	25,376	7,011	3,928	39,587	78,902	13,270	6,413	3,441	2,386	25,510	0	0	104,412	
25	1.46	-	3.53	-	4.99		0.00	37,625	114,500	0	114,500	-46,742	33,500	2,505	24,270	7,348	3,678	39,907	77,708	16,835	5,729	2,627	2,484	27,675	0	0	105,383	
26	1.40	1.90	3.53	3.35	4.93	-0.32	0.00	35,930	107,500	0	107,500	-54,537	40,500	2,505	20,140	6,940	3,183	30,662	63,430	15,424	5,185	2,627	2,227	25,463	0	0	88,893	Cell 5 gallons adjusted to account for check valve
27	1.34	-	3.53	-	4.87		0.00	36,182	113,000	0	113,000	-62,486	35,000	2,778	19,286	7,192	3,363	28,497	61,116	14,776	5,883	2,627	2,295	25,581	0	0	86,697	issue that resulted in over estimation
28	1.32	-	3.53	-	4.85		0.00	37,224	35,000	0	35,000	13,611	68,500	2,778	17,274	6,934	2,996	33,795	63,777	11,291	5,643	2,627	2,497	22,058	0	0	85,835	
29	1.34	-	3.53	-	4.87		0.00	36,584	42,000	0	42,000	2,220	21,000	2,778	17,736	6,969	3,184	26,414	57,081	13,245	5,486	2,627	2,365	23,723	0	0	80,804	
30	1.39	1.90	3.53	3.35	4.92	-0.33	0.00	33,613	14,000	0	14,000	32,864	14,000	2,778	18,149	7,051	2,978	25,176	56,132	13,943	5,389	2,627	2,386	24,345	0	0	80,477	
Total	1.39		3.53		4.92		1.13	715,507	2,310,000	0	2,310,000	-14,094	716,000	96,285	553,181	242,505	215,023	1,112,284	2,219,278	391,295	211,275	137,560	52,005	792,135	0	0	3,011,413	
							Average:	23,850	77,000			-470	23,867	3,210	18,439	8,084	7,167	37,076	73,976	13,043	7,043	4,585	1,734	26,405	0	0.00%	100,380	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.35	-	3.53	-	4.88		0.00	36,186	78,000	0	78,000	-30,041	49,000	2,793	22,428	6,321	2,461	23,412	57,415	14,510	5,379	4,426	2,416	26,731	0	0	84,146	
2	1.28	-	3.53	-	4.81		0.00	36,346	120,000	0	120,000	-77,720	28,000	2,793	17,080	6,330	3,187	25,094	54,484	11,964	5,350	4,426	2,403	24,143	0	0	78,627	
3	1.21	-	3.53	-	4.74		0.00	42,016	85,000	0	85,000	-56,293	56,000	2,793	15,870	6,494	3,192	25,078	53,427	7,654	2,996	4,426	2,221	17,297	0	0	70,724	
4	1.16	-	3.53	-	4.69		0.00	33,777	63,000	0	63,000	-23,790	56,000	2,793	16,149	6,656	2,820	24,272	52,690	9,439	3,992	4,426	2,441	20,298	0	0	72,988	
5	1.12	-	3.53	-	4.65		0.00	34,762	98,000	0	98,000	-50,890	28,000	2,793	18,071	6,866	3,013	24,735	55,478	14,157	5,174	4,426	2,638	26,395	0	0	81,873	
6	1.14	-	3.53	-	4.67		0.00	35,027	35,000	0	35,000	12,331	28,000	2,793	18,266	6,906	2,886	25,340	56,191	14,629	4,525	4,426	2,587	26,167	0	0	82,358	
7	1.22	-	3.53	-	4.75		0.00	25,497	0	0	0	55,591	0	2,793	17,672	7,011	2,821	25,441	55,738	14,178	3,942	4,426	2,804	25,350	0	0	81,088	
8	1.20	1.71	3.53	3.35	4.73	-0.33	0.00	36,840	56,000	0	56,000	-4,750	49,000	2,793	17,550	6,840	3,016	25,656	55,855	13,758	4,314	4,426	2,738	25,236	0	7,000	81,091	
9	1.16	-	3.53	-	4.70		0.00	35,400	105,000	0	105,000	-49,912	21,000	2,600	21,011	7,291	2,678	25,798	59,378	20,707	3,421	4,426	2,556	31,110	0	0	90,488	
10	1.12	1.60	3.53	3.35	4.65	-0.30	0.00	30,419	98,000	0	98,000	-48,894	28,000	2,600	18,331	6,636	2,688	24,444	54,699	14,719	3,198	4,426	2,483	24,826	0	0	79,525	
11	1.07	-	3.53	-	4.60		0.00	36,594	77,000	0	77,000	-35,590	49,000	2,584	17,988	6,904	2,638	24,044	54,158	13,767	3,130	4,426	2,523	23,846	0	0	78,004	
12	1.04	-	3.53	-	4.57		0.00	34,233	91,000	0	91,000	-43,982	21,000	2,584	18,326	6,490	2,635	24,275	54,310	14,841	5,026	4,426	2,648	26,941	0	0	81,251	
13	1.05	-	3.53	-	4.58		0.00	35,512	21,000	0	21,000	21,408	49,000	2,584	17,462	6,681	2,627	25,162	54,516	13,316	3,019	4,426	2,643	23,404	0	0	77,920	
14	1.10	-	3.53	-	4.64		0.00	25,791	21,000	0	21,000	29,859	0	2,584	17,146	6,832	2,660	24,813	54,035	12,824	2,757	4,426	2,608	22,615	0	0	76,650	
15	1.09	1.60	3.53	3.35	4.62	-0.33	0.00	34,983	28,000	0	28,000	15,294	63,000	2,584	17,801	6,757	3,006	24,776	54,924	13,416	3,066	4,426	2,445	23,353	0	0	78,277	
16	1.08	-	3.53	-	4.61		0.00	33,352	77,000	0	77,000	-25,829	21,000	2,491	20,559	7,406	2,265	25,249	57,970	17,496	3,296	3,620	2,141	26,553	0	0	84,523	
17	1.04	-	3.53	-	4.58		0.00	37,139	49,000	0	49,000	-6,424	63,000	2,491	19,261	6,762	2,442	23,141	54,097	16,616	3,110	3,620	2,272	25,618	0	0	79,715	
18	1.03	-	3.53	-	4.57		0.00	34,936	77,000	0	77,000	-32,387	14,000	2,491	17,142	7,009	2,616	28,330	57,588	12,976	3,226	3,620	2,139	21,961	0	0	79,549	
19	1.01	-	3.53	-	4.54		0.00	35,200	42,000	0	42,000	-4,984	56,000	2,491	16,062	7,951	2,661	24,410	53,575	11,108	2,947	3,620	966	18,641	0	0	72,216	
20	1.01	-	3.53	-	4.55		0.00	31,910	42,000	0	42,000	3,376	28,000	2,491	19,909	8,065	2,444	17,621	50,530	18,785	3,261	3,620	1,090	26,756	0	0	77,286	
21	1.09	-	3.53	-	4.62		0.00	28,829	0	0	0	44,591	0	2,491	17,120	7,883	2,269	24,201	53,964	11,973	2,805	3,620	1,058	19,456	0	0	73,420	
22	1.08	1.53	3.53	3.35	4.61	-0.27	0.00	35,023	28,000	0	28,000	9,986	56,000	2,491	16,634	7,464	2,279	23,705	52,573	12,000	3,060	3,620	1,756	20,436	0	0	73,009	
23	1.06	-	3.53	-	4.60		0.00	34,085	70,000	0	70,000	-21,400	28,000	2,630	19,874	7,720	2,557	24,205	56,986	19,000	2,796	2,811	1,092	25,699	0	0	82,685	
24	1.04	1.49	3.53	3.35	4.57	-0.27	0.00	33,776	63,000	0	63,000	-22,342	35,000	2,630	17,090	7,985	2,080	23,941	53,726	14,048	2,862	2,811	987	20,708	0	0	74,434	
25	1.01	-	3.53	-	4.54		0.00	34,794	56,000	0	56,000	-17,561	49,000	2,412	16,979	7,691	2,297	23,707	53,086	13,503	2,766	2,811	1,067	20,147	0	0	73,233	
26	1.02	-	3.53	-	4.55		0.00	34,310	21,000	0	21,000	18,741	42,000	2,412	16,348	8,362	2,492	24,897	54,511	12,169	3,310	2,811	1,250	19,540	0	0	74,051	
27	1.02	-	3.53	-	4.56		0.00	33,603	42,000	0	42,000	78	28,000	2,412	16,502	8,096	2,713	25,892	55,615	12,774	3,343	2,811	1,138	20,066	0	0	75,681	
28	1.06	-	3.53	-	4.60		0.00	32,927	14,000	0	14,000	26,495	21,000	2,412	15,641	9,068	3,076	24,304	54,501	11,721	3,240	2,811	1,149	18,921	0	0	73,422	
29	1.06	1.60	3.53	3.35	4.59	-0.36	0.13	38,095	35,000	0	35,000	-912	42,000	2,412	14,828	8,097	4,424	25,353	55,114	10,333	2,878	2,811	1,047	17,069	0	0	72,183	
30	1.61	-	2.96	-	4.57		0.00	35,702	63,000	0	63,000	-27,807	28,000	2,455	15,261	7,988	3,491	23,191	52,386	11,446	3,222	2,811	1,030	18,509	0	0	70,895	570,000 gallons transferred from east pond to west pond
31	1.58	2.01	2.96	2.95	4.54	-0.42	0.00	33,668	70,000	0	70,000	-31,533	28,000	2,455	14,930	8,128	2,917	25,989	54,419	10,448	3,315	2,811	1,142	17,716	0	0	72,135	
Total	1.58		2.96		4.54		0.13	1,060,732	1,725,000	0	1,725,000	-375,286	1,064,000	80,130	545,291	226,690	85,351	760,476	1,697,938	420,278	108,726	117,025	59,478	705,508	0	7,000	2,403,446	
							Average:	34,217	55,645			-12,106	34,323	2,585	17,590	7,313	2,753	24,531	54,772	13,557	3,507	3,775	1,919	22,758	0	0.29%	77,531	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.85	-	2.66	-	4.51		0.00	35,431	42,000	0	42,000	-6,220	63,000	2,468	15,090	7,878	2,778	25,199	53,413	11,288	3,001	2,476	1,033	17,798	0	0	71,211	
2	1.85	-	2.66	-	4.51		0.00	35,174	42,000	0	42,000	-10,220	21,000	2,468	14,030	8,000	2,499	24,165	51,162	9,337	2,935	2,476	1,044	15,792	0	0	66,954	
3	2.26	-	2.28	-	4.54		0.00	34,020	0	0	0	35,302	42,000	2,468	14,084	7,820	2,502	25,769	52,643	9,888	3,156	2,476	1,159	16,679	0	0	69,322	
4	2.29	-	2.28	-	4.58		0.00	33,373	14,000	0	14,000	23,130	21,000	2,468	14,366	8,114	2,548	25,854	53,350	10,471	2,977	2,476	1,229	17,153	0	0	70,503	
5	2.29	2.65	2.28	2.28	4.58	-0.35	0.00	33,735	42,000	0	42,000	-5,657	28,000	2,468	14,651	7,476	2,338	25,569	52,502	11,058	2,763	2,476	1,279	17,576	0	0	70,078	
6	2.36	-	2.16	-	4.53		0.00	35,068	91,000	0	91,000	-49,649	35,000	2,155	17,154	7,812	2,304	25,651	55,076	15,619	2,544	2,281	899	21,343	0	0	76,419	
7	2.45	2.90	2.02	2.02	4.47	-0.45	0.00	34,912	91,000	0	91,000	-53,323	35,000	2,155	14,499	7,811	2,366	27,893	54,724	10,877	3,427	2,281	1,280	17,865	0	0	72,589	
8	2.42	-	2.02	-	4.44		0.00	34,533	56,000	0	56,000	-22,628	42,000	2,474	13,054	7,997	2,330	27,647	53,502	8,297	2,845	2,281	980	14,403	0	0	67,905	
9	2.43	-	2.02	-	4.46		0.00	34,016	49,000	0	49,000	-7,014	14,000	2,474	20,128	7,931	2,969	27,716	61,218	8,492	2,874	2,281	1,137	14,784	0	0	76,002	
10	2.47	-	1.97	-	4.44		0.00	33,001	21,000	0	21,000	15,378	63,000	2,474	15,419	8,033	2,523	27,677	56,126	7,074	2,866	2,281	1,032	13,253	0	0	69,379	
11	2.51	-	1.97	-	4.48		0.00	33,922	14,000	0	14,000	19,622	14,000	2,474	13,996	7,899	2,325	27,526	54,220	7,099	2,944	2,281	1,000	13,324	0	0	67,544	
12	2.52	2.50	1.97	1.97	4.49	0.02	0.00	31,821	49,000	0	49,000	-10,325	14,000	2,474	14,623	7,521	2,743	27,231	54,592	8,961	3,438	2,281	1,224	15,904	0	0	70,496	
13	2.45	-	1.97	-	4.43		0.00	10,224	113,000	0	113,000	-30,359	42,000	2,070	17,279	7,600	15,518	27,191	69,658	11,949	4,342	5,786	1,130	23,207	0	0	92,865	
14	2.39	2.36	1.97	1.97	4.37	0.04	0.00	75	134,000	0	134,000	-62,009	0	2,070	15,222	7,718	1,480	27,307	53,797	7,937	3,473	5,786	1,073	18,269	0	0	72,066	
15	2.34	-	1.97	-	4.31		0.00	0	127,000	0	127,000	-52,252	0	2,360	12,090	7,802	13,725	27,822	63,799	7,427	2,598	0	924	10,949	0	0	74,748	
16	2.28	-	1.97	-	4.25		0.00	24,592	113,000	0	113,000	-62,683	21,000	2,360	10,537	7,828	16,719	28,805	66,249	4,561	3,033	0	1,066	8,660	0	0	74,909	
17	2.34	-	1.97	-	4.31		0.51	37,189	0	0	0	71,193	49,000	2,360	12,023	22,557	20,447	39,601	96,988	6,228	4,063	0	1,103	11,394	0	0	108,382	
18	2.42	-	1.97	-	4.40		0.00	35,613	0	0	0	47,882	0	2,360	11,096	9,702	21,317	30,777	75,252	4,444	2,871	0	928	8,243	0	0	83,495	
19	2.50	2.71	1.97	1.97	4.47	-0.21	0.00	21,132	0	0	0	55,732	0	2,360	10,758	7,983	18,623	28,909	68,633	4,103	3,255	0	873	8,231	0	0	76,864	
20	2.52	-	1.97	-	4.50		0.00	24,871	0	0	0	53,300	56,000	2,260	12,475	7,713	15,956	28,330	66,734	6,904	3,415	0	1,118	11,437	0	0	78,171	
21	2.55	2.59	1.97	1.97	4.52	-0.04	0.05	33,883	0	0	0	41,869	49,000	2,260	10,674	8,638	17,460	28,309	67,341	4,426	3,013	0	972	8,411	0	0	75,752	
22	2.50	-	1.97	-	4.47		0.01	34,734	120,000	0	120,000	-72,124	14,000	2,264	14,541	8,178	17,242	29,571	71,796	6,619	3,179	0	1,016	10,814	0	0	82,610	
23	2.44	-	1.97	-	4.42		0.05	39,235	106,000	0	106,000	-59,043	35,000	2,264	12,051	8,259	17,830	30,615	71,019	7,412	6,665	0	1,096	15,173	0	0	86,192	
24	2.47	-	1.97	-	4.45		0.00	37,583	7,000	0	7,000	33,364	42,000	2,264	10,466	8,194	17,885	30,378	69,187	4,641	3,370	0	749	8,760	0	0	77,947	
25	2.55	-	1.97	-	4.52		0.00	32,184	0	0	0	42,456	0	2,264	9,969	7,722	16,505	29,870	66,330	4,394	3,027	0	889	8,310	0	0	74,640	
26	2.50	2.65	1.97	1.97	4.48	-0.14	0.00	36,002	64,000	0	64,000	-22,612	56,000	2,264	9,697	7,976	16,234	29,921	66,092	4,642	5,660	0	996	11,298	0	0	77,390	
27	2.46	-	1.97	-	4.44		0.00	34,178	92,000	0	92,000	-45,976	28,000	2,217	12,001	7,389	12,633	30,212	64,452	8,084	6,841	0	825	15,750	0	0	80,202	
28	2.46	-	1.97	-	4.43		0.00	34,974	35,000	0	35,000	7,889	49,000	2,217	10,862	7,909	15,001	30,537	66,526	5,640	4,611	0	1,086	11,337	0	0	77,863	
29	2.42	-	1.97	-	4.39		0.00	33,556	84,000	0	84,000	-41,433	35,000	2,217	10,411	7,645	14,961	30,537	65,771	4,682	4,612	0	1,058	10,352	0	0	76,123	
30	2.41	-	1.97	-	4.38		0.01	32,890	63,000	0	63,000	-16,946	21,000	2,217	12,520	7,928	13,259	30,210	66,134	7,173	4,594	0	1,043	12,810	0	0	78,944	
31	2.44	-	1.97	-	4.42		0.00	32,932	0	0	0	42,838	42,000	2,217	11,456	7,515	10,593	29,864	61,645	6,292	6,766	0	1,067	14,125	0	0	75,770	
Total	2.44		1.97		4.42		0.63	944,853	1,569,000	0	1,569,000	-140,517	931,000	71,886	407,222	260,548	323,613	886,663	1,949,932	236,019	115,158	39,919	32,308	423,404	0	0	2,373,336	
							Average:	30,479	50,613			-4,533	30,032	2,319	13,136	8,405	10,439	28,602	62,901	7,614	3,715	1,288	1,042	13,658	0	0.00%	76,559	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.52	-	1.97	-	4.49		0.00	32,474	0	0	0	42,378	0	2,217	11,142	8,048	9,553	29,670	60,630	6,344	6,936	0	942	14,222	0	0	74,852	
2	2.55	2.90	1.97	1.97	4.52	-0.35	0.00	33,841	0	0	0	41,818	49,000	2,217	10,670	7,878	15,725	28,818	65,308	5,601	3,754	0	996	10,351	0	0	75,659	
3	2.51	-	1.97	-	4.49		0.00	36,167	91,000	0	91,000	-47,280	21,000	2,470	20,618	7,425	13,828	28,556	72,897	2,909	3,274	0	807	6,990	0	0	79,887	
4	2.46	2.50	1.97	1.97	4.43	-0.04	0.00	35,318	106,000	0	106,000	-70,334	21,000	2,470	13,597	7,311	2,370	30,134	55,882	6,101	3,242	4,848	911	15,102	0	0	70,984	
5	2.41	-	1.97	-	4.38		0.00	34,637	92,000	0	92,000	-58,251	28,000	2,102	13,972	7,563	360	29,059	53,056	5,982	3,553	4,848	947	15,330	0	0	68,386	
6	2.36	-	1.97	-	4.33		0.00	34,443	64,000	0	64,000	-27,196	56,000	2,102	13,748	7,910	1,636	29,661	55,057	6,215	4,088	4,848	1,039	16,190	0	0	71,247	
7	2.40	-	1.97	-	4.37		0.00	33,502	14,000	0	14,000	30,980	21,000	2,102	15,979	7,365	2,038	29,755	57,239	11,459	3,778	4,848	1,158	21,243	0	0	78,482	
8	2.48	-	1.97	-	4.45		0.00	29,330	0	0	0	48,081	0	2,102	15,279	8,030	2,206	29,714	57,331	11,143	3,102	4,848	987	20,080	0	0	77,411	
9	2.45	2.59	1.97	1.97	4.43	-0.13	0.00	34,449	50,000	0	50,000	-4,007	56,000	2,102	16,500	7,377	1,968	29,429	57,376	14,080	3,116	4,848	1,022	23,066	0	0	80,442	
10	2.42	-	1.97	-	4.39		0.10	34,581	92,000	0	92,000	-38,820	28,000	2,670	17,940	7,810	2,201	31,025	61,646	16,908	3,282	5,046	879	26,115	0	0	87,761	
11	2.40	2.59	1.97	1.97	4.37	-0.19	0.14	36,759	92,000	0	92,000	-31,713	28,000	2,670	18,433	7,765	7,755	33,348	69,971	17,465	3,599	5,046	965	27,075	0	0	97,046	
12	2.33	-	1.97	-	4.30		0.01	43,362	79,500	0	79,500	-41,706	70,000	2,048	13,873	7,474	7,877	31,096	62,368	9,843	2,603	5,046	1,296	18,788	0	0	81,156	
13	2.31	-	1.97	-	4.29		0.00	36,835	63,000	0	63,000	-16,161	35,000	2,048	15,859	6,885	4,209	30,978	59,979	14,486	2,746	5,046	1,417	23,695	0	0	83,674	
14	2.34	-	1.97	-	4.31		0.00	35,123	28,000	0	28,000	13,699	28,000	2,048	14,006	7,402	3,119	30,948	57,523	10,474	2,818	5,046	961	19,299	0	0	76,822	
15	2.37	-	1.97	-	4.34		0.00	34,703	14,000	0	14,000	27,540	28,000	2,048	13,908	7,447	2,941	30,871	57,215	10,232	2,776	5,046	974	19,028	0	0	76,243	
16	2.28	2.42	1.97	1.97	4.25	-0.14	0.00	35,155	148,000	0	148,000	-101,508	28,000	2,048	15,406	7,196	2,675	30,864	58,189	14,393	2,852	5,046	1,167	23,458	0	0	81,647	
17	2.20	-	1.97	-	4.18		0.16	39,814	135,500	0	135,500	-76,774	35,000	2,590	21,325	7,337	4,218	31,713	67,183	20,645	3,241	6,554	917	31,357	0	0	98,540	
18	2.12	2.30	1.97	1.97	4.09	-0.18	0.00	38,148	127,000	0	127,000	-74,859	49,000	2,590	18,067	7,193	8,435	29,720	66,005	14,004	2,590	6,554	1,136	24,284	0	0	90,289	
19	2.05	-	1.97	-	4.02		0.00	36,624	120,000	0	120,000	-74,308	35,000	2,058	17,152	7,290	4,224	29,427	60,151	11,698	2,448	6,554	1,465	22,165	0	0	82,316	
20	2.00	-	1.97	-	3.97		0.00	36,988	120,000	0	120,000	-64,473	21,000	2,058	24,963	7,062	2,933	29,851	66,867	15,815	2,442	6,554	837	25,648	0	0	92,515	
21	2.02	-	1.97	-	4.00		0.00	33,650	42,000	0	42,000	7,142	14,000	2,058	16,991	6,690	2,555	30,221	58,515	13,937	2,568	6,554	1,218	24,277	0	0	82,792	
22	2.05	-	1.97	-	4.03		0.00	51,506	0	0	0	27,281	49,000	2,058	15,553	7,031	2,393	30,295	57,330	11,234	2,806	6,554	863	21,457	0	0	78,787	
23	1.98	2.30	1.97	1.97	3.96	-0.31	0.00	34,718	120,000	0	120,000	-70,926	35,000	2,058	16,944	7,216	2,220	30,418	58,856	14,190	3,161	6,554	1,031	24,936	0	0	83,792	
24	1.91	-	1.97	-	3.89		0.00	34,318	134,000	0	134,000	-67,746	35,000	2,265	21,545	7,591	2,274	31,565	65,240	30,481	3,949	0	902	35,332	0	0	100,572	
25	1.87	2.10	1.97	1.97	3.85	-0.22	0.32	36,505	106,000	0	106,000	-42,017	35,000	2,265	18,386	7,541	7,227	39,380	74,799	16,156	2,885	5,776	872	25,689	0	0	100,488	
26	1.82	-	1.97	-	3.80		0.00	32,325	133,000	0	133,000	-69,326	14,000	2,064	18,443	7,358	8,936	31,660	68,461	15,941	4,860	5,776	961	27,538	0	0	95,999	
27	1.78	-	1.97	-	3.76		0.03	38,445	91,000	0	91,000	-37,491	42,000	2,064	18,261	7,545	5,571	30,822	64,263	15,875	5,215	5,776	825	27,691	0	0	91,954	
28	1.81	-	1.97	-	3.79		0.00	32,468	42,000	0	42,000	11,041	14,000	2,064	16,634	7,441	4,071	31,209	61,419	13,138	4,311	5,776	865	24,090	0	0	85,509	
29	1.83	-	1.97	-	3.81		0.00	32,810	0	0	0	44,895	56,000	2,064	15,372	6,808	2,740	29,484	56,468	11,050	3,693	5,776	718	21,237	0	0	77,705	
30	1.88	2.30	1.85	1.85	3.73	-0.42	0.00	37,694	113,000	0	113,000	-70,568	42,000	2,064	15,302	7,107	2,556	29,312	56,341	11,728	5,513	5,775	769	23,785	0	0	80,126	
Total	1.88		1.85		3.73		0.76	1,076,692	2,217,000	0	2,217,000	-790,608	973,000	65,784	495,868	222,096	140,814	919,003	1,843,565	379,529	105,201	144,941	29,847	659,518	0	0	2,503,084	
							Average:	35,890	73,900			-26,354	32,433	2,193	16,529	7,403	4,694	30,633	61,452	12,651	3,507	4,831	995	21,984	0	0.00%	83,436	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	1.99	-	1.67	-	3.66		0.00	35,833	119,000	0	119,000	-63,718	42,000	2,265	18,100	6,919	2,439	29,930	59,653	19,031	6,012	5,688	731	31,462	0	0	91,115	
2	2.06	2.36	1.51	1.51	3.58	-0.29	0.00	33,815	155,000	0	155,000	-105,761	14,000	2,265	16,102	7,039	2,377	29,383	57,166	13,875	5,308	5,688	1,017	25,888	0	0	83,054	
3	1.99	-	1.51	-	3.50		0.00	35,865	113,000	0	113,000	-65,032	42,000	2,064	15,345	6,671	2,728	29,610	56,418	12,429	7,700	5,688	1,598	27,415	0	0	83,833	
4	2.07	-	1.38	-	3.45		0.20	39,454	104,500	0	104,500	-59,041	35,000	2,064	16,354	8,380	4,238	31,944	62,980	11,505	3,961	5,688	779	21,933	0	0	84,913	
5	2.11	-	1.38	-	3.50		0.00	35,652	14,000	0	14,000	31,206	21,000	2,064	15,841	8,428	4,037	28,517	58,887	9,855	5,510	5,688	918	21,971	0	0	80,858	
6	2.26	-	1.26	-	3.53		0.00	36,034	7,000	0	7,000	34,892	42,000	2,064	15,713	7,108	3,094	28,446	56,425	9,861	5,087	5,688	865	21,501	0	0	77,926	
7	2.16	2.50	1.26	1.26	3.43	-0.33	0.00	35,188	147,000	0	147,000	-100,160	35,000	2,064	15,965	7,541	2,634	29,481	57,685	11,636	6,204	5,687	816	24,343	0	0	82,028	
8	2.09	-	1.26	-	3.35		0.00	35,442	147,000	0	147,000	-92,287	14,000	2,270	19,073	7,205	2,383	28,838	59,769	18,126	4,154	7,106	1,000	30,386	0	0	90,155	
9	2.27	2.30	0.96	1.26	3.23	-0.33	0.00	35,516	169,000	0	169,000	-122,742	33,500	2,270	16,780	7,078	2,168	28,499	56,795	13,186	3,268	7,106	1,419	24,979	0	0	81,774	
10	2.17	-	0.96	-	3.13		0.00	35,349	134,000	0	134,000	-87,605	49,000	2,040	16,122	7,017	2,353	29,552	57,084	11,275	4,730	7,106	1,549	24,660	0	0	81,744	
11	2.25	-	0.81	-	3.06		0.00	35,680	127,000	0	127,000	-81,145	28,000	2,040	16,149	6,877	2,176	28,714	55,956	11,955	5,138	7,106	1,380	25,579	0	0	81,535	
12	2.47	-	0.61	-	3.09		0.00	32,940	49,000	0	49,000	-6,027	0	2,040	14,673	7,273	2,004	28,236	54,226	8,711	4,333	7,106	1,537	21,687	0	0	75,913	
13	2.47	-	0.61	-	3.09		0.00	30,610	28,000	0	28,000	18,694	49,000	2,040	13,991	6,470	2,954	28,162	53,617	7,550	6,869	7,106	2,162	23,687	0	0	77,304	
14	2.48	2.71	0.48	0.48	2.96	-0.23	0.02	35,468	170,500	0	170,500	-132,154	28,000	2,040	13,737	6,066	358	28,009	50,210	6,895	7,406	7,106	2,197	23,604	0	0	73,814	
15	2.35	-	0.48	-	2.83		0.02	35,315	169,000	0	169,000	-122,444	42,000	2,180	15,534	6,319	2,175	29,036	55,244	8,602	7,741	7,916	2,368	26,627	0	0	81,871	
16	2.22	2.36	0.48	0.48	2.71	-0.13	0.36	41,513	169,000	0	169,000	-124,076	42,000	2,180	8,579	7,083	3,141	35,353	56,336	12,051	7,813	7,916	2,321	30,101	0	0	86,437	
17	2.24	-	0.38	-	2.62		0.00	39,391	134,000	0	134,000	-82,841	42,000	2,086	21,055	11,377	7,660	29,722	71,900	12,227	4,387	0	2,036	18,650	0	0	90,550	
18	2.19	-	0.38	-	2.57		0.01	36,356	112,000	0	112,000	-59,802	28,000	2,086	19,806	8,592	12,122	28,858	71,464	12,292	2,781	0	2,017	17,090	0	0	88,554	
19	2.39	-	0.20	-	2.59		0.00	33,397	42,000	0	42,000	1,956	14,000	2,086	17,092	7,155	2,955	28,922	58,210	13,139	3,786	0	2,218	19,143	0	0	77,353	
20	2.40	-	0.20	-	2.61		0.32	39,259	35,000	0	35,000	9,596	35,000	2,086	14,741	8,805	3,905	36,474	66,011	11,306	4,308	0	2,230	17,844	0	0	83,855	
21	2.36	2.71	0.12	0.12	2.48	-0.35	0.02	44,945	155,000	0	155,000	-119,339	49,000	2,086	12,790	12,472	9,112	31,413	67,873	7,856	2,786	0	2,091	12,733	0	0	80,606	
22	2.27	-	0.12	-	2.39		0.00	37,458	147,000	0	147,000	-92,229	35,000	2,140	17,655	10,310	5,029	30,470	65,604	10,958	5,379	8,126	2,162	26,625	0	0	92,229	
23	2.26	2.36	0.02	0.02	2.29	-0.09	0.01	36,793	176,000	0	176,000	-115,526	28,000	2,140	22,131	7,482	3,325	29,543	64,621	17,763	4,554	8,126	2,203	32,646	0	0	97,267	
24	2.18	-	0.02	-	2.21		0.00	36,740	113,000	0	113,000	-59,478	56,000	2,424	18,887	7,388	2,902	30,166	61,767	12,278	5,755	8,126	2,336	28,495	0	0	90,262	
25	2.15	-	0.02	-	2.18		0.01	35,630	91,000	0	91,000	-36,984	28,000	2,424	17,587	7,351	2,561	32,779	62,702	10,574	5,879	8,126	2,365	26,944	0	0	89,646	
26	2.19	-	0.02	-	2.21		0.63	39,293	49,000	0	49,000	9,020	14,000	2,424	15,850	12,481	2,577	40,436	73,768	7,909	5,258	8,126	2,252	23,545	0	0	97,313	
27	2.27	-	0.02	-	2.29		0.25	55,187	0	0	0	75,860	49,000	2,424	20,609	25,178	30,584	26,453	105,248	13,197	2,304	8,126	2,172	25,799	0	0	131,047	
28	2.17	2.36	0.02	0.02	2.19	-0.19	0.02	56,493	183,000	0	183,000	-98,496	61,500	2,424	25,968	15,224	27,088	41,724	112,428	9,646	5,205	8,126	2,092	25,069	0	3,500	137,497	
29	2.04	-	0.02	-	2.06		0.00	46,202	184,500	0	184,500	-120,751	56,000	2,630	21,896	10,273	12,984	35,387	83,170	8,771	7,983	8,126	1,901	26,781	0	0	109,951	
30	1.97	-	0.02	-	1.99		0.69	73,122	183,000	0	183,000	-100,369	42,000	2,630	23,072	25,182	11,710	64,226	126,820	9,132	9,325	8,126	2,350	28,933	0	0	155,753	
31	2.00	2.30	0.02	0.02	2.02	-0.30	1.07	107,250	148,000	0	148,000	-14,979	63,000	2,630	25,868	36,297	33,933	107,950	206,678	12,093	11,021	8,126	2,353	33,593	0	0	240,271	
Total	2.00		0.02		2.02		3.63	1,287,190	3,574,500	0	3,574,500	-1,881,762	1,117,000	68,670	543,065	319,041	209,706	1,066,233	2,206,715	355,690	171,945	186,643	55,435	769,713	0	3,500	2,976,428	
							Average:	41,522	115,306			-60,702	36,032	2,215	17,518	10,292	6,765	34,395	71,184	11,474	5,547	6,021	1,788	24,829	0	0.12%	96,014	

3.75

Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwelt Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.15	-	0.02	-	2.17		0.67	128,260	58,500	0	58,500	171,566	151,000	2,583	34,702	77,791	53,389	145,626	314,091	26,396	10,781	5,310	1,748	44,235	0	0	358,326	
2	2.25	-	0.02	-	2.28		0.20	79,308	21,000	0	21,000	119,223	91,000	2,583	28,617	28,656	40,569	89,505	189,930	13,022	9,067	5,310	2,202	29,601	0	0	219,531	
3	2.32	-	0.02	-	2.35		0.01	62,432	21,000	0	21,000	62,360	56,000	2,583	24,200	17,200	20,696	57,706	122,385	8,536	7,675	5,310	1,886	23,407	0	0	145,792	
4	2.23	2.71	0.02	0.02	2.25	-0.48	0.10	52,464	175,000	0	175,000	-96,532	49,000	2,583	23,811	14,629	15,331	49,357	105,711	11,738	6,164	5,310	2,010	25,222	0	0	130,933	
5	2.13	-	0.02	-	2.16		0.00	47,153	175,000	0	175,000	-101,812	42,000	2,400	24,459	11,096	11,459	43,346	92,760	12,714	7,035	5,882	1,950	27,581	0	0	120,341	
6	2.00	2.36	0.02	0.02	2.02	-0.36	0.00	44,577	196,000	0	196,000	-135,710	42,000	2,400	19,287	10,581	9,251	40,695	82,214	5,335	9,319	5,882	2,117	22,653	0	0	104,867	
7	1.93	-	0.02	-	1.95		0.00	42,611	147,000	0	147,000	-87,342	28,000	2,352	17,543	10,693	9,251	37,706	77,545	5,517	11,030	5,882	2,295	24,724	0	0	102,269	
8	1.90	-	0.02	-	1.92		0.01	40,144	98,000	0	98,000	-30,399	35,000	2,352	17,271	9,758	15,327	36,432	81,140	5,654	12,732	5,882	2,337	26,605	0	0	107,745	
9	1.92	-	0.02	-	1.94		0.00	38,873	28,000	0	28,000	28,757	49,000	2,352	15,140	9,770	6,677	36,113	70,052	5,162	12,185	5,882	2,349	25,578	0	0	95,630	
10	1.95	-	0.02	-	1.97		0.14	43,308	21,000	0	21,000	35,208	49,000	2,352	14,792	9,893	6,678	38,670	72,385	4,778	13,844	5,882	2,627	27,131	0	0	99,516	
11	1.89	2.36	0.02	0.02	1.92	-0.46	0.44	53,130	161,000	0	161,000	-73,931	35,000	2,352	16,139	18,963	16,912	63,716	118,082	3,779	10,138	5,882	2,318	22,117	0	0	140,199	
12	1.83	-	0.02	-	1.85		0.66	77,748	196,000	0	196,000	-86,318	56,000	3,435	24,023	28,424	20,652	85,597	162,131	1,862	11,693	9,422	2,322	25,299	0	0	187,430	
13	1.90	2.30	0.02	0.02	1.92	-0.40	1.25	137,236	182,000	0	182,000	16,844	84,000	3,435	27,601	108,802	68,060	104,127	312,025	1,560	10,696	9,422	2,377	24,055	0	0	336,080	
14	1.98	-	0.02	-	2.00		0.01	95,444	91,000	0	91,000	111,097	126,000	3,504	29,452	51,429	83,536	99,106	267,027	18,649	9,572	0	2,293	30,514	0	0	297,541	
15	1.96	-	0.02	-	1.98		0.02	69,654	91,000	0	91,000	-7,043	84,000	3,504	23,679	19,794	24,283	57,597	128,857	13,465	9,093	0	2,196	24,754	0	0	153,611	
16	2.06	-	0.02	-	2.09		0.62	58,733	0	0	0	88,930	42,000	3,504	21,089	17,854	22,281	57,430	122,158	10,690	12,425	0	2,390	25,505	0	0	147,663	
17	2.26	-	0.02	-	2.28		0.42	87,388	0	0	0	165,667	56,000	3,504	21,073	59,764	37,336	108,426	230,103	9,065	11,494	0	2,393	22,952	0	0	253,055	
18	2.27	2.71	0.02	0.02	2.30	-0.43	0.78	132,032	147,000	0	147,000	-14,829	105,000	3,504	27,394	58,293	44,417	109,348	242,956	8,081	10,870	0	2,296	21,247	0	0	264,203	
19	2.33	-	0.02	-	2.36		0.63	141,212	119,000	0	119,000	71,883	154,000	3,953	26,380	80,769	59,628	132,387	303,117	10,934	15,356	0	2,688	28,978	0	0	332,095	
20	2.40	-	0.02	-	2.42		0.09	123,098	98,000	0	98,000	52,286	112,000	3,953	27,365	54,355	66,150	97,558	249,381	10,253	11,324	0	2,426	24,003	0	0	273,384	
21	2.41	-	0.02	-	2.44		0.82	125,528	105,000	0	105,000	19,581	126,000	3,953	26,924	43,245	47,936	103,185	225,243	9,041	13,191	0	2,634	24,866	0	0	250,109	
22	2.56	-	0.02	-	2.58		0.17	146,836	56,000	0	56,000	119,463	126,000	3,953	26,888	65,189	67,316	135,457	298,803	8,642	12,217	0	2,637	23,496	0	0	322,299	
23	2.64	-	0.02	-	2.66		0.01	99,760	21,000	0	21,000	82,390	98,000	3,953	25,531	27,240	34,040	89,966	180,730	8,331	11,565	0	2,524	22,420	0	0	203,150	
24	2.70	-	0.02	-	2.72		0.18	95,520	7,000	0	7,000	59,553	98,000	3,953	24,418	21,855	17,320	71,891	139,437	8,355	11,762	0	2,519	22,636	0	0	162,073	
25	2.66	2.95	0.02	0.02	2.68	-0.29	0.00	74,662	140,000	0	140,000	-66,365	49,000	3,953	22,985	19,452	13,670	66,746	126,806	8,027	11,029	0	2,435	21,491	0	0	148,297	
26	2.61	-	0.02	-	2.63		0.00	63,806	91,000	0	91,000	-33,608	77,000	3,335	21,331	15,539	9,827	52,383	102,415	8,002	8,540	0	2,241	18,783	0	0	121,198	
27	2.59	-	0.02	-	2.61		0.01	56,366	91,000	0	91,000	-33,251	42,000	3,335	19,535	13,371	14,823	47,128	98,192	3,994	9,678	0	2,251	15,923	0	0	114,115	
28	2.63	-	0.02	-	2.66		0.00	49,420	14,000	0	14,000	51,295	56,000	3,335	19,582	12,583	14,568	44,430	94,498	6,118	11,769	0	2,330	20,217	0	0	114,715	
29	2.71	-	0.02	-	2.73		0.00	46,161	14,000	0	14,000	54,128	28,000	3,335	19,654	12,347	14,322	41,891	91,549	8,944	11,506	0	2,290	22,740	0	0	114,289	
30	2.72	3.11	0.02	0.02	2.74	-0.39	0.00	44,969	21,000	0	21,000	35,436	70,000	3,335	15,379	11,589	13,804	40,360	84,467	3,148	11,448	0	2,342	16,938	0	0	101,405	
Total	2.72		0.02		2.74		7.24	2,357,833	2,585,500	0	2,585,500	578,525	2,216,000	95,625	686,244	940,924	879,509	2,183,885	4,786,187	259,794	325,198	81,256	69,423	735,671	0	0	5,521,858	
							Average:	78,594	86,183			19,284	73,867	3,188	22,875	31,364	29,317	72,796	159,540	8,660	10,840	2,709	2,314	24,522	0	0.00%	184,062	

3.75

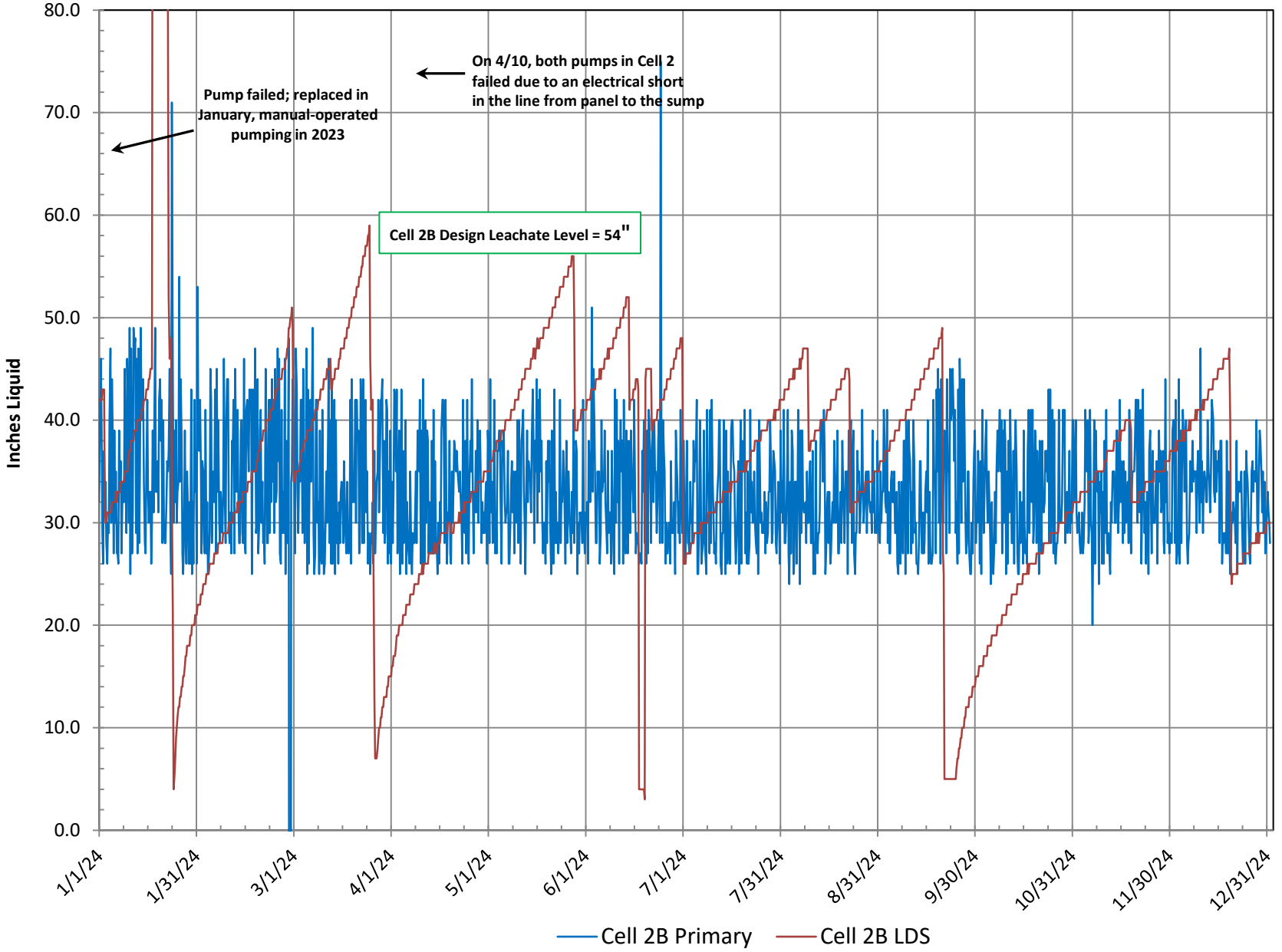
Day of Month	West Pond Calculated (MG)	Approx. West Pond Visual Inv. (MG)	East Pond Calculated (MG)	Approx. East Pond Visual Inv. (MG)	Total Pond (Million Gallons)	Variance (Calculated -Visual) (MG)	Rain	Disposal: Corvallis	Disposal: Salem - ATI	Disposal: Salem - 3rd Party	Disposal: Salem - Total	Leachate Delta (Generated - Disposed)	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC Leachate	Total Gallons	Comments
1	2.74	3.11	0.02	0.02	2.76	-0.37	0.00	45,690	28,000	0	28,000	24,309	49,000	3,335	14,748	10,773	13,408	39,322	81,586	2,707	11,387	0	2,319	16,413	0	0	97,999	
2	2.66	-	0.02	-	2.69		0.00	46,469	146,500	0	146,500	-92,555	28,000	3,005	17,043	10,865	12,793	38,077	81,783	4,780	11,509	0	2,342	18,631	0	0	100,414	
3	2.59	-	0.02	-	2.61		0.00	44,021	146,500	0	146,500	-84,028	35,000	3,005	17,045	11,287	20,409	35,609	87,355	5,290	11,494	0	2,354	19,138	0	0	106,493	
4	2.51	-	0.02	-	2.53		0.01	43,375	139,500	0	139,500	-80,340	42,000	3,005	19,325	10,420	11,240	35,248	79,238	9,207	11,735	0	2,355	23,297	0	0	102,535	
5	2.48	-	0.02	-	2.51		0.00	41,982	99,000	0	99,000	-41,611	28,000	3,005	15,942	10,270	12,122	31,571	72,910	6,348	10,837	0	2,276	19,461	0	7,000	92,371	
6	2.45	-	0.02	-	2.47		0.00	41,700	69,500	0	69,500	-10,267	63,000	3,005	14,748	9,529	23,760	30,000	81,042	4,760	12,697	0	2,434	19,891	0	0	100,933	
7	2.48	-	0.02	-	2.51		0.21	46,828	42,000	0	42,000	21,301	35,000	3,005	14,865	0	46,677	30,000	94,547	4,128	11,454	0	0	15,582	0	0	110,129	Pump failures at cells 3 responsible for 12/7-12/9 no pumping
8	2.57	-	0.02	-	2.59		0.02	42,446	28,000	0	28,000	40,513	0	3,005	14,245	0	49,043	30,000	96,293	3,930	10,736	0	0	14,666	0	0	110,959	**Electrical Failure at cell 5 responsible for 12/6-12/9**
9	2.46	2.65	0.02	0.02	2.49	-0.18	0.01	45,888	133,000	0	133,000	-71,022	77,000	3,005	13,298	0	46,222	30,000	92,525	4,034	11,307	0	0	15,341	0	0	107,866	**SCADA outage. Leachate numbers estimates.**
10	2.44	-	0.02	-	2.46		0.00	36,889	142,500	0	142,500	-29,517	35,000	4,165	12,438	48,482	42,841	22,943	130,869	3,921	12,729	0	2,353	19,003	0	0	149,872	
11	2.33	2.36	0.02	0.02	2.36	-0.02	0.21	48,777	162,000	0	162,000	-117,845	35,000	4,165	12,731	12,187	23,203	18,943	71,229	3,827	14,914	0	2,962	21,703	0	0	92,932	
12	2.30	-	0.02	-	2.32		0.04	48,731	112,000	0	112,000	-35,012	49,000	3,838	13,770	14,110	33,344	40,837	105,899	4,252	12,839	0	2,729	19,820	0	0	125,719	
13	2.33	-	0.02	-	2.36		0.61	45,088	84,000	0	84,000	26,117	35,000	3,838	16,434	20,988	30,219	62,475	133,954	5,537	12,816	0	2,898	21,251	0	0	155,205	
14	2.44	-	0.02	-	2.46		0.44	46,715	28,000	0	28,000	107,450	49,000	3,838	19,812	26,395	30,485	83,504	164,034	6,617	9,102	0	2,412	18,131	0	0	182,165	
15	2.55	-	0.02	-	2.57		0.44	84,696	21,000	0	21,000	78,367	56,000	3,838	18,895	29,953	29,662	83,441	165,789	3,883	11,801	0	2,590	18,274	0	0	184,063	
16	2.59	2.65	0.02	0.02	2.61	-0.06	0.59	112,210	70,000	0	70,000	46,837	119,000	3,838	20,180	32,407	38,874	115,901	211,200	4,497	11,190	0	2,160	17,847	0	0	229,047	
17	2.58	-	0.02	-	2.60		0.48	109,186	119,000	0	119,000	-22,136	98,000	4,310	18,642	43,157	44,953	79,931	190,993	1,380	11,121	0	2,556	15,057	0	0	206,050	
18	2.61	2.90	0.02	0.02	2.63	-0.29	0.02	102,484	126,000	0	126,000	-194	70,000	4,310	19,059	25,206	75,005	84,893	208,473	148	10,205	0	2,464	12,817	0	7,000	221,290	
19	2.61	-	0.02	-	2.64		0.00	91,358	77,000	0	77,000	17,588	105,000	4,056	27,884	17,963	43,528	62,209	155,640	9,170	11,495	0	2,641	23,306	0	7,000	178,946	
20	2.65	-	0.02	-	2.67		0.02	67,720	28,000	0	28,000	32,234	63,000	4,056	18,882	16,196	18,586	51,021	108,741	3,664	12,791	0	2,758	19,213	0	0	127,954	
21	2.70	-	0.02	-	2.72		0.25	84,120	7,000	0	7,000	50,394	84,000	4,056	18,590	18,760	23,220	58,384	123,010	4,033	11,866	0	2,605	18,504	0	0	141,514	
22	2.76	-	0.02	-	2.78		0.18	87,908	14,000	0	14,000	46,180	77,000	4,056	18,137	19,320	25,949	62,217	129,679	3,792	11,972	0	2,645	18,409	0	0	148,088	
23	2.76	2.95	0.02	0.02	2.79	-0.18	0.30	66,756	91,000	0	91,000	11,286	70,000	4,056	18,455	22,548	32,491	64,130	141,680	4,795	12,813	0	2,754	20,362	0	7,000	162,042	
24	2.84	-	0.02	-	2.87		0.00	61,421	49,000	0	49,000	66,989	49,000	4,323	17,222	21,988	42,965	72,614	159,112	3,040	12,654	0	2,604	18,298	0	0	177,410	
25	3.04	-	0.02	-	3.06		1.27	41,752	21,000	0	21,000	154,880	0	4,323	21,887	43,325	50,698	70,606	190,839	8,581	15,163	0	3,049	26,793	0	0	217,632	
26	3.21	-	0.02	-	3.24		0.81	129,800	49,000	0	49,000	160,550	119,000	4,323	26,269	66,761	143,104	71,127	311,584	11,002	13,831	0	2,933	27,766	0	0	339,350	
27	3.48	-	0.02	-	3.50		0.52	112,612	35,000	0	35,000	266,272	112,000	4,323	25,882	65,280	195,864	87,259	378,608	7,887	12,580	0	2,809	23,276	0	12,000	401,884	
28	3.73	-	0.02	-	3.75		0.68	85,964	0	0	0	276,888	112,000	4,323	26,802	43,841	179,819	83,590	338,375	8,599	13,088	0	2,790	24,477	0	0	362,852	
29	3.68	-	0.34	-	4.02		0.22	83,244	0	0	0	234,919	49,000	4,323	25,115	44,727	135,848	88,546	298,559	5,742	11,345	0	2,517	19,604	0	0	318,163	
30	3.51	4.10	0.61	0.90	4.11	-0.89	0.02	136,904	56,000	0	56,000	88,595	133,000	4,323	21,750	26,060	122,131	75,172	249,436	3,946	11,622	0	2,495	18,063	0	14,000	267,499	
31	3.33	3.90	0.84	1.50	4.17	-1.23	0.12	115,750	63,000	0	63,000	51,922	112,000	3,790	21,862	20,291	119,316	44,375	209,634	4,830	13,481	0	2,727	21,038	0	0	230,672	
Total	3.33		0.84		4.17		7.47	2,198,484	2,186,500	0	2,186,500	1,219,063	1,988,000	117,845	581,957	743,089	1,717,779	1,783,945	4,944,615	158,327	374,574	0	72,531	605,432	0	54,000	5,550,047	
							Average:	70,919	70,532			39,325	64,129	3,801	18,773	23,971	55,412	57,547	159,504	5,107	12,083	0	2,340	19,530	0	0.97%	179,034	

3.75

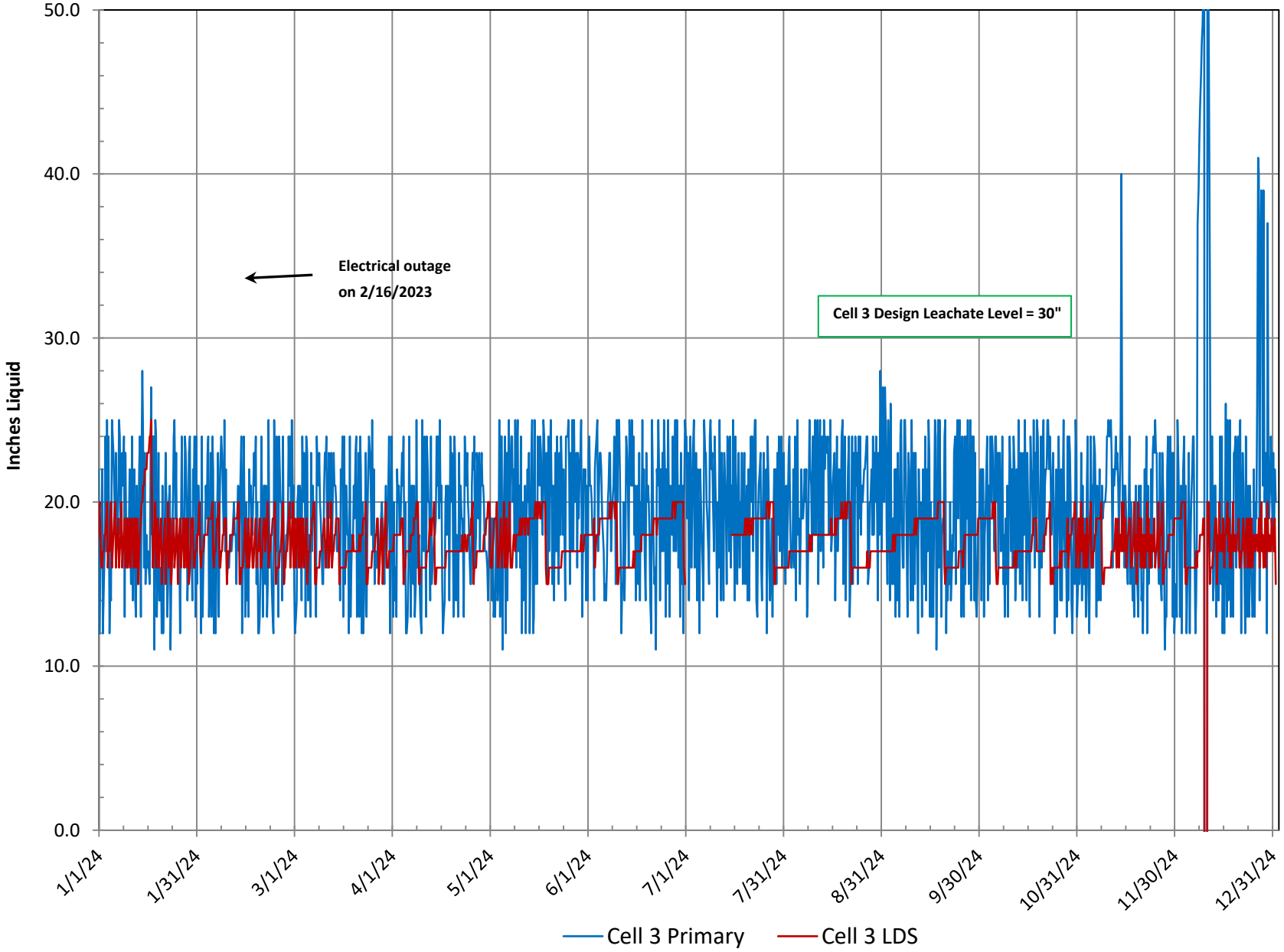
Year	Month	West Pond*	East Pond*	Total Pond	Rain	Disposal: Corvallis	Disposal: Salem	Leachate Delta (Generated - Disposed)	IRR	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC	Total Gallons	Comments	Quarters	
2007	**AVG/Total**	**2.3**	**2.4**	**4.7**	**32.0**	**28,415,135**	**0**	**0**	**33,700**	**4,310,900**	**2,479,579**	**10,985,319**	**9,686,040**	**0**	**0**	**23,150,938**	**2,982,939**	**0**	**0**	**0**	**4,937,059**	**0**		**28,087,997**			
2008	**AVG/Total**	**1.3**	**0.9**	**2.2**	**33.7**	**26,528,413**	**0**	**0**	**0**	**9,745,000**	**3,283,717**	**6,879,323**	**7,861,395**	**0**	**0**	**18,024,435**	**3,003,110**	**1,180,765**	**0**	**0**	**7,727,354**	**0**		**25,751,789**			
2009	**AVG/Total**	**1.6**	**0.6**	**2.2**	**36.0**	**24,565,492**	**0**	**0**	**460,190**	**17,966,500**	**2,716,138**	**6,576,974**	**7,741,578**	**0**	**0**	**17,034,690**	**4,141,513**	**2,477,945**	**0**	**0**	**8,102,079**	**0**		**25,136,769**			
2010	**AVG/Total**	**2.1**	**2.1**	**4.2**	**53.7**	**29,012,559**	**0**	**-2,903,063**	**65,000**	**28,651,600**	**2,708,505**	**7,224,093**	**13,531,681**	**0**	**0**	**23,464,279**	**6,207,719**	**3,557,740**	**0**	**239,370**	**11,637,680**	**0**		**35,101,959**			
2011	**AVG/Total**	**2.1**	**1.7**	**3.9**	**40.5**	**24,755,950**	**0**	**-1,315,429**	**72,000**	**25,015,000**	**2,010,768**	**6,670,318**	**7,037,997**	**0**	**0**	**15,719,083**	**2,591,554**	**2,938,550**	**0**	**3,254,360**	**9,687,586**	**0**		**25,406,669**			
2012	**AVG/Total**	**1.0**	**2.2**	**3.2**	**57.6**	**25,219,204**	**5,402,224**	**-390,180**	**0**	**25,656,800**	**2,010,336**	**11,685,697**	**6,871,550**	**4,540,012**	**0**	**25,107,595**	**1,868,110**	**1,310,590**	**0**	**1,704,493**	**5,114,190**	**0**		**30,221,785**			
2013	**AVG/Total**	**0.5**	**0.2**	**0.7**	**22.8**	**13,292,999**	**2,495,000**	**-1,317,579**	**0**	**13,370,000**	**1,416,815**	**4,641,187**	**3,082,407**	**2,833,044**	**0**	**11,973,453**	**1,073,908**	**711,620**	**31,787**	**550,218**	**2,487,344**	**9,630**		**14,470,427**			
2014	**AVG/Total**	**1.0**	**0.0**	**1.0**	**44.6**	**14,566,544**	**3,097,200**	**1,348,162**	**0**	**14,773,000**	**1,370,095**	**5,764,414**	**3,223,487**	**4,348,274**	**2,307,342**	**17,013,611**	**1,018,857**	**613,427**	**165,602**	**250,775**	**2,174,646**	**28,777**	**270,600**	**19,217,035**			
2015	**AVG/Total**	**1.0**	**0.1**	**1.1**	**41.0**	**15,849,529**	**1,446,500**	**1,798,592**	**0**	**15,870,000**	**1,117,536**	**5,422,709**	**2,696,154**	**3,921,201**	**3,259,711**	**16,417,311**	**1,518,039**	**601,525**	**269,557**	**141,489**	**2,667,352**	**42,969**	**572,500**	**19,084,663**			
2016	January	3.0	0.0	3.0	7.8	3,154,143	195,000	-184,801	0	3,120,000	151,573	1,087,077	364,166	627,810	632,511	2,863,137	217,391	39,822	29,599	14,394	301,206	8,450	142,000	3,164,343		**2016**	
2016	February	2.5	0.0	2.5	3.5	2,478,238	208,000	-453,937	0	2,498,000	123,480	753,381	264,574	261,773	571,232	1,974,440	181,275	38,093	25,366	13,127	257,861	2,810	94,500	2,232,301			
2016	March	2.7	0.0	2.7	6.3	2,637,723	169,000	87,596	0	2,608,500	145,930	874,416	345,439	391,678	808,893	2,566,356	226,357	36,500	45,037	9,330	327,963	7,490	120,000	2,894,319		**Q1**	8,290,963
2016	April	2.4	0.0	2.4	3.7	1,897,390	117,000	-191,213	0	1,892,000	102,017	496,848	212,028	238,672	518,922	1,568,487	155,634	38,827	47,812	12,417	254,690	3,263	24,500	1,823,177			
2016	May	2.1	0.0	2.1	0.6	1,458,323	266,500	-249,192	0	1,504,000	88,913	387,973	165,090	244,683	290,794	1,177,453	230,905	42,272	11,925	13,076	298,178	277	31,000	1,475,631			
2016	June	1.8	0.0	1.9	0.7	1,161,060	286,000	-260,546	0	1,175,000	68,460	325,064	133,651	113,463	298,153	938,791	134,387	52,234	38,457	11,145	236,223	260	11,500	1,175,014		**Q2**	4,473,822
2016	July	1.50	0.0	1.5	0.4	1,085,381	468,000	-346,765	0	1,064,000	67,480	355,446	136,176	119,202	271,385	949,689	154,722	29,386	41,722	10,656	237,927	160	19,000	1,187,616			
2016	August	1.5	0.0	1.5	0.2	1,004,977	133,000	27,994	0	1,025,500	64,550	367,113	115,294	129,863	255,854	932,674	122,112	29,312	72,537	9,337	233,297	0	0	1,165,971			
2016	September	1.4	0.0	1.5	0.6	114,650	1,003,500	-58,253	0	126,000	59,901	300,790	107,242	123,038	198,465	789,436	165,072	25,561	63,256	8,277	270,461	720	0	1,059,897		**Q3**	3,413,484
2016	October	0.3	0.3	0.6	11.3	2,532,276	461,000	-795,954	0	2,583,500	114,009	495,291	297,885	367,966	495,534	1,770,685	226,316	24,380	60,720	9,251	370,137	14,740	56,500	2,140,822			
2016	November	0.2	0.0	0.2	6.8	2,443,957	370,000	-402,517	0	2,478,000	171,290	536,336	272,203	311,053	670,228	1,961,110	236,049	26,304	52,089	10,164	358,830	27,810	91,500	2,319,940			
2016	December	0.5	0.0	0.6	4.6	2,689,303	161,000	-23,883	0	2,772,000	184,873	542,941	483,322	290,604	888,118	2,389,858	277,522	27,351	34,340	9,681	376,562	16,920	60,000	2,766,420		**Q4**	7,227,182
2016	**AVG/Total**	**1.7**	**0.1**	**1.7**	**46.6**	**22,657,421**	**3,838,000**	**-2,851,470**	**0**	**22,846,500**	**1,342,476**	**6,522,676**	**2,897,070**	**3,219,805**	**5,900,089**	**19,882,116**	**2,327,742**	**410,042**	**522,860**	**130,855**	**3,523,334**	**82,900**	**650,500**	**23,405,451**			
2017	January	0.8	0.0	0.8	5.9	2,420,544	216,000	275,711	0	2,469,000	182,257	567,343	330,828	439,972	976,393	2,496,792	230,730	28,320	29,642	10,096	339,962	6,000	75,500	2,836,755			
2017	February	1.5	0.0	1.5	13.3	2,912,502	28,000	753,154	0	2,928,000	174,360	724,304	509,211	550,278	1,093,968	3,052,121	318,429	26,568	34,652	11,814	472,535	118,960	169,000	3,524,656			
2017	March	1.1	0.0	1.2	8.0	3,125,350	151,000	-292,904	0	3,183,500	164,750	733,942	395,319	458,377	717,045	2,469,434	284,183	36,763	38,523	13,023	382,012	2,950	132,000	2,851,446			
2017	April	1.8	0.0	1.8	4.6	2,153,828	224,000	622,543	0	2,171,500	143,570	644,466	361,151	337,867	1,117,197	2,604,251	232,165	28,229	38,940	12,845	325,620	0	70,500	2,929,871			
2017	May	2.3	0.0	2.3	1.6	1,535,091	287,000	562,790	0	1,589,000	110,930	553,861	238,037	303,716	841,441	2,047,985	213,292	30,330	44,355	14,233	308,896	0	28,000	2,356,881			
2017	June	3.0	0.0	3.0	1.7	1,046,936	392,000	807,623	0	1,124,500	87,170	421,762	404,472	369,246	676,423	1,959,073	178,218	29,736	46,417	12,114	266,486	0	21,000	2,225,559			
2017	July	3.1	0.2	3.3	0.0	677,695	929,500	269,001	0	698,000	85,350	498,582	300,192	280,472	441,860	1,606,456	160,903	30,973	33,213	11,815	269,740	0	0	1,876,196			
2017	August	3.1	0.2	3.3	0.2	1,033,781	837,522	80,426	0	1,059,000	83,550	145,309	324,988	169,228	435,297	1,158,372	370,934	158,010	39,437	11,664	793,357	0	0	1,951,729			
2017	September	2.2	0.2	2.3	2.2	1,051,839	2,109,378	-808,878	0	1,085,000	84,432	255,420	317,909	270,351	678,200	1,606,312	630,494	32,988	36,363	11,777	739,027	0	7,000	2,345,339			
2017	October	2.7	0.2	2.9	5.3	1,670,594	1,981,382	623,211	0	1,687,000	189,538	276,047	612,304	913,391	1,485,747	3,477,027	549,760	34,240	46,295	12,417	770,660	0	27,500	4,247,687			
2017	November	2.5	0.2	2.7	9.4	2,738,896	1,716,742	-240,363	0	2,754,000	315,710	330,735	985,184	309,518	1,256,922	3,198,069	594,434	33,149	57,641	12,993	895,206	0	122,000	4,093,275			
2017	December	1.5	0.2	1.7	3.6	2,064,536	1,382,104	-651,493	0	2,084,500	186,145	359,718	506,534	183,389	700,671	1,936,457	511,638	30,795	66,604	14,278	799,690	0	59,000	2,736,147			
2017	**AVG/Total**	**2.1**	**0.1**	**2.2**	**55.6**	**22,431,592**	**10,254,628**	**2,000,821**	**-**	**22,833,000**	**1,807,762**	**5,511,489**	**5,286,130**	**4,585,805**	**10,421,164**	**27,612,350**	**4,275,181**	**500,101**	**512,082**	**149,069**	**6,363,191**	**127,910**	**711,500**	**33,975,541**			
2018	January	1.1	0.2	1.3	8.48	2,748,622	1,050,000	-379,078	0	2,747,000	316,875	458,888	638,416	276,530	673,976	2,364,685	536,893	55,649	55,726	15,256	932,859	0	122,000	3,297,544			
2018	February	0.9	0.2	1.1	3.1	1,086,090	1,561,000	-245,768	0	1,051,000	153,020	506,658	345,712	169,577	493,877	1,668,844	570,380	38,257	59,683	15,433	700,378	0	34,000	2,367,322			
2018	March	0.8	0.1	1.0	4.2	2,281,307	742,000	-115,058		2,321,000	182,829	686,473	429,380	189,321	765,330	2,253,333	482,528	15,657	57,808	46,058	602,051	3,865	49,000	2,859,249			
2018	April	1.2	0.1	1.3	5.8	2,315,828	1,008,000	345,087	0	2,316,000	192,041	613,650	504,122	552,416	1,108,616	2,970,845	540,320	16,102	49,317	34,925	644,635	6,435	45500	3621915			
2018	May	1.4	0.1	1.5	0.2	1,331,486	259,000	294,277		1,389,500	112,865	616,171	298,585	86,102	424,693	1,538,416	247,078	9,555	44,410	38,344	339,715	132	6,500	1,878,263			
2018	June	2.2	0.1	2.4	0.5	515,202	98,000	794,728		483,000	87,750	253,038	275,880	102,896	296,388	1,015,952	311,853	7,907	33,562	21,291	378,513	6,665	6,800	1,395,553			
2018	July	2.2	0.1	2.3	0.0	752,279	637,000	18,596		819,000	85,020	259,438	304,828	96,410	288,290	1,033,986	327,693	8,031	30,657	7,428	373,809	80	0	1,407,875			
2018	August	1.7	0.1	1.9	0.0	1,068,484	1,134,000	-421,247		1,094,000	88,127	268,396	347,386	67,321	256,631	1,027,862	712,271	8,383	25,720	2	746,376	0	7,000	1,774,237			
2018	September	0.7	0.1	0.9	1.0	1,440,078	1,141,000	-994,206		1,432,000	82,263	159,047	322,232	77,969	242,143	883,654	635,163	7,565	21,355	0	667,098	1,120	0	1,551,872			
2018	October	0.3	0.1	0.4	1.9	1,415,305	721,000	-611,543		1,403,000	76,024	254,750	326,713	99,230	239,487	998,760	460,595	8,038	25,654	0	517,252	1,750	7,000	1,517,762			
2018	November	1.0	0.1	1.1	5.0	1,072,175	231,000	731,761		1,085,000	89,397	376,774	391,506	242,724	395,716	1,496,117	456,200	6,901	28,062	0	519,962	4,857	14,000	2,020,936			
2018	December	1.5	0.1	1.6	7.8	2,298,852	735,000	482,578		2,303,000	222,839	530,415	482,109	662,737	853,037	2,751,136	652,486	8,258	28,131	0	738,346	9,648	19,300	3,499,130			
2018	**AVG/Total**	**1.3**	**0.1**	**1.4**	**38.0**	**18,325,708**	**9,317,000**	**(99,872)**	**-**	**18,443,500**	**1,689,051**	**4,983,697**	**4,666,869**	**2,623,233**	**6,038,184**	**20,003,589**	**5,933,460**	**190,303**	**460,084**	**178,737**	**7,160,995**	**34,552**	**311,100**	**27,191,659**			
2019	January	0.7	0.1	0.7	4.2	2,523,166	700,000	-205,678		2,537,000	207,234	591,573	421,141	442,770	732,454	2,395,172	522,757	7,889	25,655	0	582,211	5,405	34,700	2,982,788			
2019	February	0.9	0.1	1.0	8.1	2,720,175	357,000	256,264		2,714,000	200,270	468,245	368,691	413,376	1,278,937	2,729,519	519,139	6,884	21,851	1	561,200	8,220	34,500	3,298,939			
2019	March	0.3	0.1	0.4	1.8	2,290,770	551,500	-549,233		2,319,000	163,440	281,823	347,919	141,075	719,467	1,653,724	585,041	3,673	29,930	0	618,644	1,170	19,500	2,273,537			
2019	April	0.4	0.1	0.4	5.4	2,729,292	98,000	-64,801		2,668,500	184,119	360,573	385,709	223,137	779,708	1,933,246	631,138	37,729	53,108	0	721,975	7,770	99,500	2,662,991			
2019	May	1.2	0.1	1.3	1.6	1,132,066	77,000	-896,412		1,127,000	126,432	276,860	522,624	93,918	408,114	1,427,948	561,439	37,126	31,099	0	629,664	866	47,000	2,058,478			
2019	June	1.6	0.1	1.7	0.4	814,631	317,500	578,852		770,500	111,568	246,055	506,064	68,130	292,573	1,224,390	395,989	34,412	31,584	5,375	467,359	234	19,000	1,691,983			
2019	July	1.8	0.1	1.9	0.5	895,161	518,000	305,215		987,000	106,320	315,201	440,734	73,737	278,758	1,214,750	391,390	34,267	21,570	0	447,227	400	56,000	1,662,376			
2019	August	2.1	0.1	2.2	0.1	774,168	364,000	271,639		784,000	98,503	276,711	363,150	42,352	269,217	1,049,932	272,900	36,488	22,294	2	331,694	180	28,000	1,381,807			
2019	September	3.1	0.1	3.2	2.7	555,995	112,000	985,696		539,000	94,728	313,866	376,274	135,689	273,214	1,193,770	264,617	36,595	41,795	0	373,920	2,000	84,000	1,569,691			
2019	October	2.6	0.1	2.7	2.4	1,264,815	1,057,000	-353,008		1,377,000	109,070	350,317	427,822	141,968	452,713	1,481,890	320,561	39,850	29,078	23,884	450,177	1,740	35,000	1,933,807			
2019	November	2.0	0.1	2.0	1.0	699,502	1,610,000	-715,611		654,000	97,625	265,558	364,748	89,189	349,930	1,167,050	260,853	39,415	22,624	49,695	405,211	630	21,000	1,572,891			
2019	December	1.5	0.1	1.5	4.3	1,722,858	1,247,500	-474,805		1,768,500	128,537	344,481	371,966	199,884	924,356	1,969,223	321,262	39,765	24,277	42,413	480,396	17,933	28,000	2,467,553			
2019	**AVG/Total**	**1.5**	**0.1**	**1.6**	**32.4**	**18,122,599**	**7,009,500**	**(861,883)**	**-**	**18,245,500**	**1,627,845**	**4,091,261**	**4,896,842**	**2,065,225**	**6,759,441**	**19,440,613**	**5,047,087**	**354,093**	**354,865**	**121,370**	**6,069,678**	**46,548**	**506,200**	**25,556,840**			
2020	January	1.4	0.1	1.5	8.4	3,234,657	357,000	65,364		3,363,500	272,890	435,198	454,176	474,340	1,339,887	2,976,492	397,275	42,173	39,991	40,768	593,041	46,989	40,500	3,616,521			
2020	February	0.7	0.1	0.8	1.7	1,913,210	819,000	-632,926		1,959,500	177,493	314,918	379,831	129,562	591,549	1,593,353	360,051	42,928	28,956	37,701	490,573	2,358	13,000	2,086,284			
2020	March	0.8	0.1	0.8	2.9	1,161,139	840,000	-1,382,109		1,256,500	128,615	289,790	402,540	148,119	655,563	1,624,627	370,839	47,915	42,339	39,256	527,568	2,400	21,000	2,154,595			
2020	April	1.3	0.1	1.4	1.5	601,283	833,000	-579,873		644,000	127,300	270,267	396,227	103,329	515,827	1,412,950	383,301	59,224	50,080	47,096	560,486	1,720	39,000	1,975,156			
2020	May	1.6	0.1	1.6	2.6	1,145,850	875,000	-251,072		1,153,000	127,790	288,538	471,412	121,977	623,362	1,633,079	372,695	72,671	42,032	49,484	552,613	3,230	83,000	2,188,922			
2020	June	1.7	0.1	1.8	1.6	1,216,368	763,000	-223,053		1,295,000	112,340	280,556	507,846	93,595	717,272	1,711,609	241,779	70,086	42,244	47,001	447,602	1,210	42,000	2,160,421			
2020	July	2.6	0.1	2.6	0.0	860,895	455,000	-926,831		910,000	101,591	281,798	523,721	36,743	665,586	1,609,439	347,300	62,250	30,988	37,970	600,780	7	32,500	2,210,226			
2020	August	2.3	1.6	3.9	0.1	211,885	287,000	-1,349,137		213,500	89,739	283,313	417,172	42,049	515,288	1,347,561	304,425	64,127	33,019	35,601	472,458	3	28,000	1,820,022			
2020	September	2.3	1.7	4.0	1.7	997,071	627,000	101,320		987,000	80,010	295,071	347,203	96,453	477,668	1,296,405	249,628	60,798	30,118	32,560	395,486	0	33,500	1,691,891			
2020	October	0.7	2.4	3.0	1.5	1,187,193	1,556,000	-916,857		1,201,000	94,021	324,428	335,452	123,179	565,799	1,442,879	221,308	61,646	41,295	31,189	355,957	0	27,500	1,798,836			

Year	Month	West Pond*	East Pond*	Total Pond	Rain	Disposal: Corvallis	Disposal: Salem	Leachate Delta (Generated - Disposed)	IRR	TR: Corvallis	Cell 1 Sump	Cell 2 Sump	Cell 3 Sump	Cell 4 Sump	Cell 5 Sump	Total Sump Gallons	Downwell Pumps (Vertical Wells)	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity Drains	Total Dewatering Gallons	Public Area	PRC	Total Gallons	Comments	Quarters	
2020	November	1.8	2.4	4.2	6.0	1,238,512	770,000	1,204,225		1,309,000	111,659	433,031	366,855	375,136	1,323,763	2,610,444	365,005	69,827	40,836	28,868	509,163	53,130	40,000	3,172,737			
2020	December	2.0	3.5	5.6	7.1	1,768,550	553,000	1,381,578		1,771,000	184,964	509,923	375,051	531,960	1,447,137	3,049,034	385,181	74,624	70,043	28,629	567,576	72,517	21,000	3,689,128			
2020	**AVG/Total**	**1.6**	**1.0**	**2.6**	**35.1**	**15,536,613**	**8,735,000**	**(3,509,371)**	**-**	**16,063,000**	**1,608,412**	**4,006,831**	**4,977,486**	**2,276,442**	**9,438,701**	**22,307,872**	**3,998,788**	**728,269**	**491,940**	**456,123**	**6,073,303**	**183,564**	**421,000**	**28,564,739**			
2021	January	1.1	4.1	5.2	11.3	2,775,537	2,014,500	-336,956		2,777,000	240,246	636,359	406,121	764,997	2,111,478	4,159,202	481,988	73,783	82,980	30,361	672,417	64,463	42,000	4,896,081			
2021	February	1.6	3.1	4.7	5.6	2,857,272	1,524,500	-398,123		2,981,000	196,780	553,795	344,998	525,837	1,659,245	3,280,655	384,586	60,270	92,378	27,942	601,984	73,010	28,000	3,955,649			
2021	March	1.5	2.3	3.4	2.1	1,873,628	1,951,000	-1,265,366		1,940,000	135,560	462,834	323,800	175,448	915,852	2,013,494	327,186	64,307	69,859	32,407	499,888	31,880	14,000	2,545,262			
2021	April	1.4	1.1	2.6	0.9	1,308,232	1,356,500	-776,559		1,338,500	97,973	353,640	274,357	81,525	613,044	1,420,539	277,238	57,008	69,870	30,488	453,514	120	14,000	1,874,173			
2021	May	1.3	0.8	2.1	0.3	1,126,465	1,234,500	-380,955		1,171,000	85,747	347,573	285,177	52,721	749,564	1,520,782	270,706	56,320	84,414	15,682	438,228	0	21,000	1,959,010			
2021	June	1.1	0.7	1.7	1.7	1,129,767	1,523,000	-364,065		1,152,500	81,300	341,931	346,399	119,393	928,821	1,817,844	281,896	54,219	84,743	171	447,858	0	23,000	2,265,702			
2021	July	1.3	0.4	1.7	0.0	1,086,748	952,000	-19,292		1,118,500	79,817	317,423	378,741	40,267	698,711	1,514,959	329,056	52,316	73,986	170	486,497	0	18,000	2,001,456			
2021	August	2.1	0.4	2.5	0.0	1,017,570	259,000	797,887		1,029,000	76,783	330,773	378,971	46,078	603,493	1,436,098	457,689	54,621	60,594	8,953	631,359	0	7,000	2,067,457			
2021	September	1.3	0.4	1.7	1.9	1,120,039	1,902,000	-768,930		1,146,000	70,210	346,040	372,432	131,040	652,820	1,572,542	439,706	58,430	82,420	36,972	659,567	0	21,000	2,232,109			
2021	October	1.0	0.1	1.0	3.3	1,349,250	1,738,000	-631,132		1,361,000	72,360	403,769	433,527	142,611	854,673	1,906,940	334,022	74,742	49,218	32,273	521,178	0	28,000	2,428,118			
2021	November	0.5	0.0	0.5	4.1	1,818,747	1,029,000	-451,339		1,873,000	93,440	496,321	445,827	194,518	684,809	1,914,915	273,796	83,727	60,844	34,646	460,493	0	21,000	2,375,408			
2021	December	2.2	0.0	2.2	9.8	1,271,416	1,211,000	745,210		1,355,500	197,310	663,663	529,080	509,646	861,462	2,761,161	240,805	89,449	68,603	39,827	455,465	0	11,000	3,216,626			
2021	**AVG/Total**	**1.4**	**1.1**	**2.4**	**41.0**	**18,734,671**	**16,695,000**	**(3,849,620)**	**-**	**19,243,000**	**1,427,526**	**5,254,121**	**4,519,430**	**2,784,081**	**11,333,972**	**25,319,131**	**4,098,674**	**779,192**	**879,908**	**289,892**	**6,328,448**	**169,473**	**248,000**	**31,817,051**			
2022	January	1.2	0.0	1.3	4.8	1,776,644	2,030,000	-905,797		1,843,000	188,780	629,524	476,976	281,597	798,637	2,375,514	252,708	93,317	64,892	40,554	471,833	0	53,500	2,847,347			
2022	February	0.6	0.0	0.6	3.0	381,439	2,275,000	-690,540		355,000	87,290	423,629	356,115	119,638	569,589	1,556,261	204,084	80,385	50,093	35,540	395,638	0	14,000	1,951,899			
2022	March	0.9	0.0	0.9	3.5	295,655	2,100,000	363,928		330,000	119,770	632,450	418,070	234,938	762,279	2,167,507	336,126	89,039	66,754	36,746	557,076	0	35,000	2,724,583			
2022	April	0.8	0.0	0.8	5.8	1,328,420	1,414,000	-44,281		1,382,000	125,163	642,886	384,815	235,600	690,994	2,079,458	353,768	85,093	93,816	35,340	597,681	0	21,000	2,677,139			
2022	May	1.1	0.0	1.1	3.6	1,519,119	812,000	375,180		1,590,000	129,997	655,668	366,163	194,610	706,434	2,052,872	337,145	91,835	136,831	37,280	625,697	730	27,000	2,679,299			
2022	June	1.9	0.0	2.0	2.3	1,032,450	308,000	919,077		1,115,000	107,700	613,183	338,217	158,182	440,764	1,658,046	308,656	93,166	135,278	39,495	581,981	0	19,500	2,240,027			
2022	July	2.5	0.0	2.5	0.1	1,089,527	539,000	280,098		1,088,000	89,350	424,244	323,945	53,713	491,276	1,382,528	250,841	95,614	124,876	42,496	526,097	0	0	1,908,625			
2022	August	2.7	1.5	4.2	0.0	410,653	149,000	1,714,713		420,000	77,450	499,830	306,700	41,133	690,646	1,615,759	453,244	82,452	81,863	37,564	658,607	0	0	2,274,366			
2022	September	1.2	3.5	4.7	0.2	760,631	651,000	638,504		859,500	69,247	354,633	278,585	28,910	720,976	1,452,351	405,963	73,613	49,786	33,392	562,784	0	35,000	2,015,135			
2022	October	2.1	0.8	2.9	1.1	1,073,938	2,623,500	-1,752,100		1,093,000	68,715	346,747	275,831	65,917	744,473	1,501,683	258,881	71,657	51,596	31,326	423,035	1,120	19,500	1,925,838			
2022	November	1.8	0.0	1.8	7.0	1,457,629	2,383,500	-1,044,139		1,534,000	88,030	617,165	318,921	283,563	975,045	2,282,724	344,742	68,083	56,300	27,178	498,426	1,840	14,000	2,782,990			
2022	December	2.5	0.0	2.5	5.9	1,601,349	1,421,000	114,950		1,711,500	127,807	635,287	382,788	291,222	1,153,837	2,590,941	342,932	80,122	81,285	23,426	528,861	660	14,000	3,120,462			
2022	**AVG/Total**	**1.6**	**0.5**	**2.1**	**37.2**	**12,727,454**	**16,706,000**	**(30,407)**	**-**	**13,321,000**	**1,279,299**	**6,475,246**	**4,227,126**	**1,989,023**	**8,744,950**	**22,715,644**	**3,849,089**	**1,004,376**	**993,368**	**420,337**	**6,427,716**	**4,350**	**252,500**	**29,147,710**			
2023	January	2.0	0.0	2.0	3.8	1,981,927	1,558,000	-539,901		1,971,000	162,223	700,687	409,534	244,643	905,445	2,422,532	364,620	94,445	98,487	5,942	563,494	0	14,000	2,986,026			
2023	February	0.7	0.0	0.7	3.1	1,505,534	1,981,000	-1,275,667		1,530,000	106,030	511,941	358,641	292,658	496,318	1,765,588	254,490	96,989	86,795	5	438,279	0	7,000	2,203,867			
2023	March	0.7	0.0	0.8	5.3	1,632,006	959,000	167,253		1,748,500	133,283	552,889	432,338	242,940	866,144	2,227,594	279,823	133,024	96,814	3	509,664	0	21,000	2,737,259			
2023	April	1.7	0.0	1.7	5.1	1,603,396	532,000	1,032,516		1,619,500	169,677	700,683	457,745	353,412	975,763	2,657,280	255,636	116,141	111,608	13,247	496,632	0	14,000	3,153,912			
2023	May	1.6	0.0	1.7	0.4	1,130,000	1,029,000	3,868		1,221,500	108,120	441,930	348,890	166,478	521,520	1,586,938	290,883	107,934	136,730	33,383	568,930	0	7,000	2,155,868			
2023	June	1.9	0.0	1.9	0.0	760,929	1,095,500	337,001		864,000	77,200	757,548	309,742	54,877	469,968	1,669,335	305,594	108,580	81,426	28,495	524,095	0	0	2,193,430			
2023	July	2.5	0.0	2.5	0.0	485,858	1,027,000	603,050		455,500	71,990	592,814	292,124	59,156	584,972	1,601,056	339,318	98,355	50,232	26,947	514,852	0	0	2,115,908			
2023	August	2.5	0.0	2.6	0.7	1,026,078	924,000	76,283		1,061,500	69,330	418,440	268,893	62,166	580,918	1,399,747	400,538	134,444	60,319	24,312	619,614	0	7,000	2,019,361			
2023	September	2.3	0.0	2.3	2.8	1,093,815	1,517,500	-226,404		1,148,000	65,520	467,465	271,942	142,212	654,354	1,601,493	499,720	87,343	98,505	22,340	707,907	5,511	70,000	2,314,911			
2023	October	1.8	0.0	1.8	2.8	1,388,884	1,375,500	-145,036		1,449,000	80,270	583,758	296,018	178,114	616,412	1,754,572	513,423	124,949	110,393	26,419	775,185	68,591	21,000	2,598,348			
2023	November	2.4	0.0	2.4	5.5	1,614,746	1,132,500	534,885		1,652,000	125,040	726,694	352,150	720,306	440,018	2,364,208	553,536	177,428	113,605	25,462	870,031	31,876	39,000	3,266,116			
2023	December	2.6	0.8	3.4	6.8	2,314,160	1,170,500	1,029,849		2,367,000	191,366	927,949	412,237	1,170,323	857,939	3,559,814	544,328	97,815	174,983	30,969	848,095	64,600	42,000	4,472,509			
2023	**AVG/Total**	**1.9**	**0.1**	**2.0**	**36.2**	**16,537,333**	**14,301,500**	**1,597,697**	**-**	**17,087,500**	**1,360,049**	**7,382,798**	**4,210,254**	**3,687,285**	**7,969,771**	**24,610,157**	**4,601,911**	**1,377,447**	**1,219,897**	**237,524**	**7,436,779**	**170,578**	**242,000**	**32,217,514**			
2024	January	2.4	2.8	5.2	9.4	2,980,956	815,500	1,777,200		3,002,000	247,464	1,037,578	483,057	1,213,442	1,581,740	4,563,281	564,023	97,241	153,632	31,029	845,925	113,450	51,000	5,522,656			
2024	February	2.5	2.8	5.3	6.0	2,291,694	1,429,000	186,623		2,371,500	172,630	835,983	353,436	401,980	1,259,501	3,023,530	530,523	83,226	116,237	30,461	760,447	88,340	35,000	3,872,317			
2024	March	2.0	3.5	5.5	4.8	2,697,264	972,500	362,846		2,825,500	182,670	976,896	371,480	417,571	1,204,082	3,152,699	503,066	91,704	183,532	31,639	809,941	41,970	28,000	4,004,610			
2024	April	1.3	3.5	4.9	1.8	1,643,877	1,575,000	-545,215		1,739,500	113,240	590,902	266,426	233,294	715,385	1,919,247	340,426	136,504	160,323	31,183	668,435	64,980	21,000	2,652,662			
2024	May	1.4	3.5	4.9	2.3	1,644,023	1,385,500	110,584		1,696,000	165,205	531,280	320,443	499,378	1,108,145	2,624,451	154,604	182,705	135,375	36,472	509,156	0	6,500	3,133,607			
2024	June	1.4	3.5	4.9	1.1	715,507	2,310,000	-14,094		716,000	96,285	553,181	242,505	215,023	1,112,284	2,219,278	391,295	211,275	137,560	52,005	792,135	0	0	3,011,413			
2024	July	1.6	3.0	4.5	0.1	988,492	1,725,000	-303,046		1,064,000	80,130	545,291	226,690	85,351	760,476	1,697,938	420,278	108,726	117,025	59,478	705,508	0	7,000	2,403,446			
2024	August	2.4	2.0	4.4	0.6	944,853	1,569,000	-140,517		931,000	71,886	407,222	260,548	323,613	886,663	1,949,932	236,019	115,158	39,919	32,308	423,404	0	7,000	2,373,336			
2024	September	1.9	1.9	3.7	0.8	1,076,692	2,217,000	-790,608		973,000	65,784	495,868	222,096	140,814	919,003	1,843,565	379,529	105,201	144,941	29,847	659,518	0	0	2,503,084			
2024	October	2.0	0.0	2.0	3.6	1,287,190	3,574,500	-1,881,762		1,117,000	68,670	543,065	319,041	209,706	1,066,233	2,206,715	355,690	171,945	186,643	55,435	769,713	0	3,500	2,976,428			
2024	November	2.7	0.0	2.7	7.2	2,357,833	2,475,000	689,025		2,181,000	95,625	686,244	940,924	879,509	2,183,885	4,786,187	259,794	325,198	81,256	69,423	735,671	0	0	5,521,858			
2024	December	3.3	0.8	4.2	7.5	2,198,484	2,186,500	1,219,063		1,988,000	117,845	581,957	743,089	1,717,779	1,783,945	4,944,615	158,327	374,574	0	72,531	605,432	0	54,000	5,550,047			
2024	**AVG/Total**	**2.1**	**2.3**	**4.4**	**45.2**	**20,826,865**	**22,234,500**	**670,098**	**-**	**20,604,500**	**1,477,434**	**7,785,467**	**4,749,735**	**6,337,460**	**14,581,342**	**34,931,438**	**4,293,575**	**2,003,457**	**1,456,443**	**531,811**	**8,285,285**	**308,740**	**213,000**	**43,525,463**			

Cell 2 Sump Levels - 2023
Coffin Butte Landfill

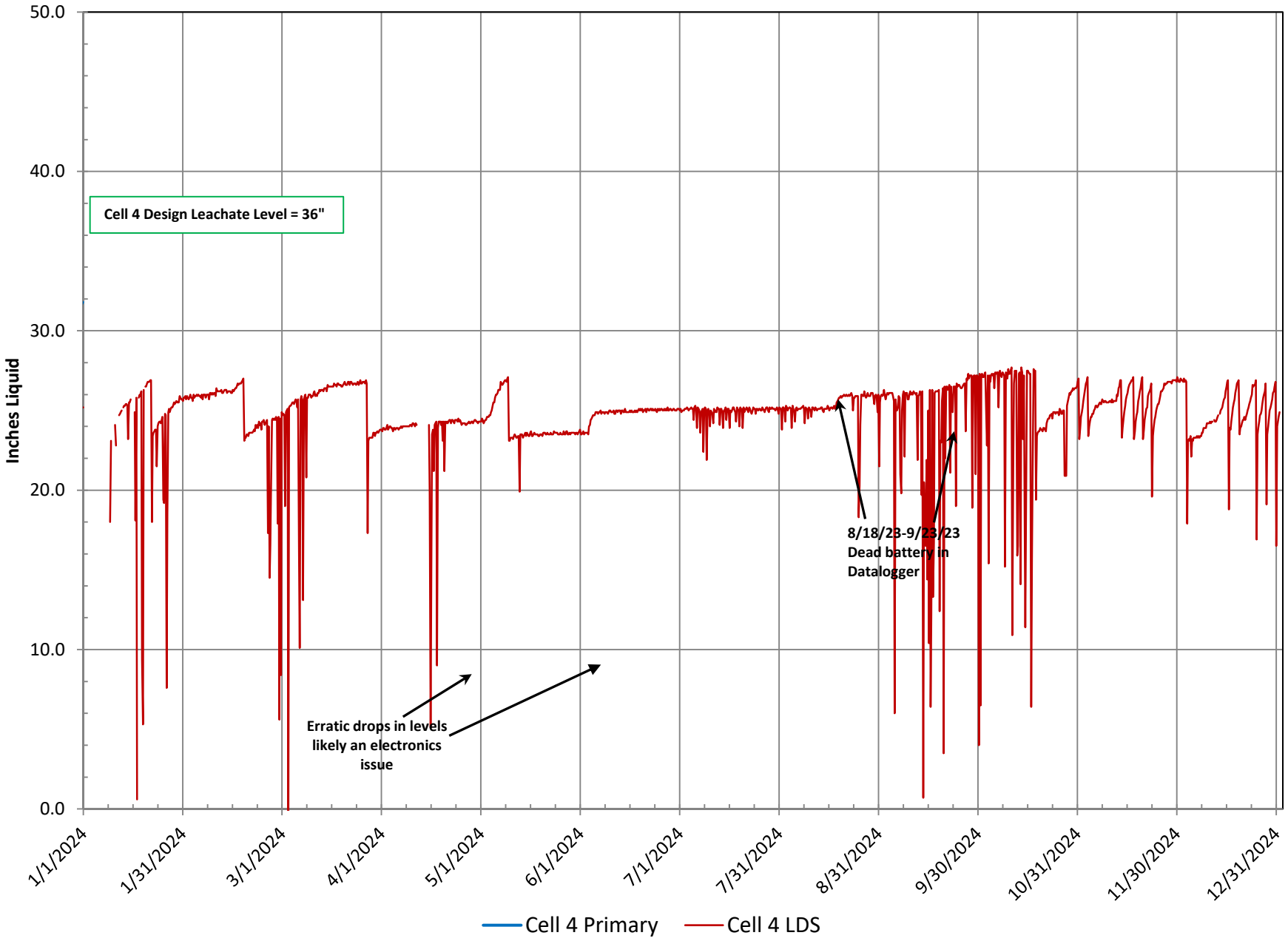


Cell 3 Sump Levels - 2023
Coffin Butte Landfill



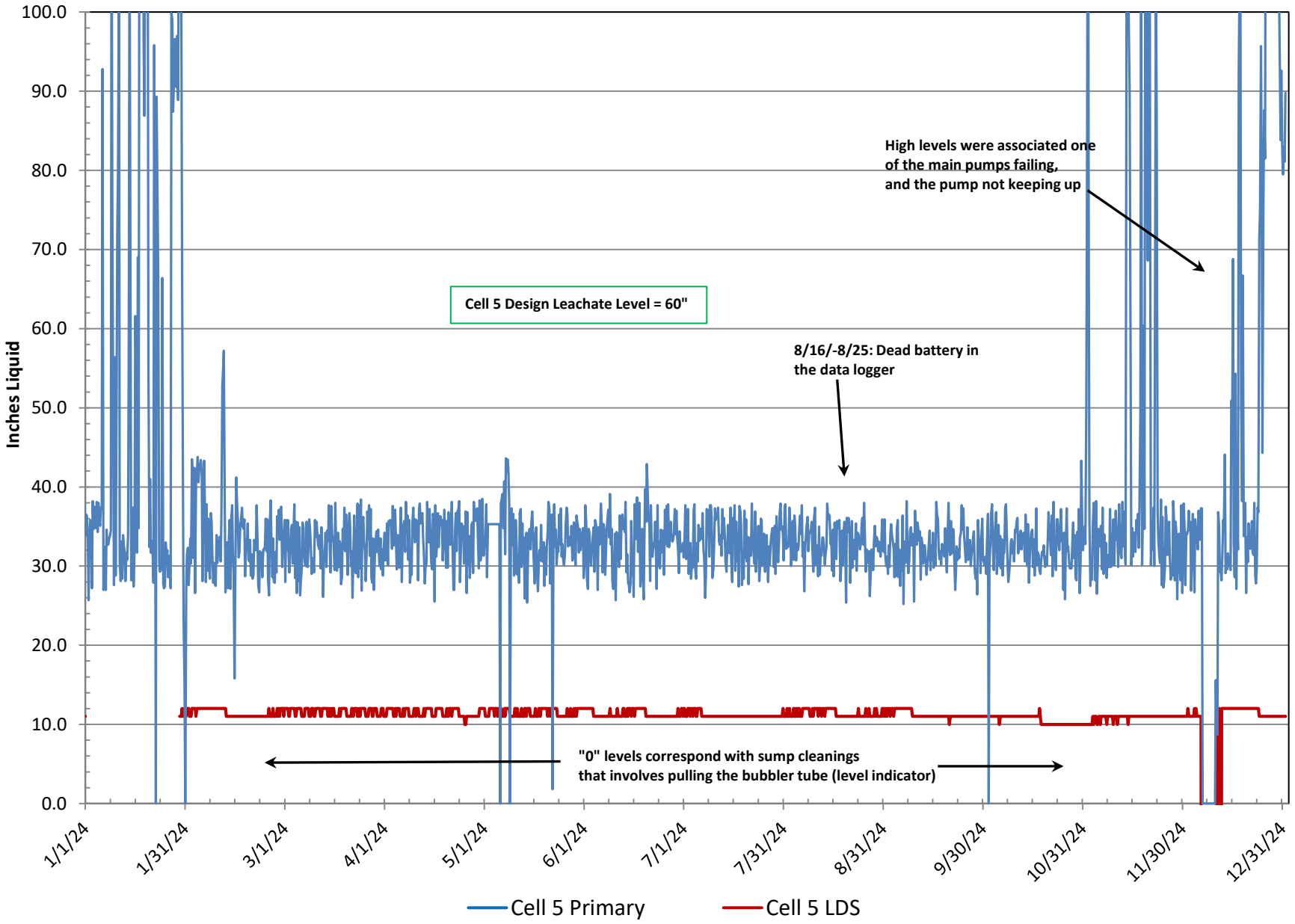
2023 Sump Plots\C3chart (jan-dec)

Cell 4 Sump Levels - 2023
Coffin Butte Landfill



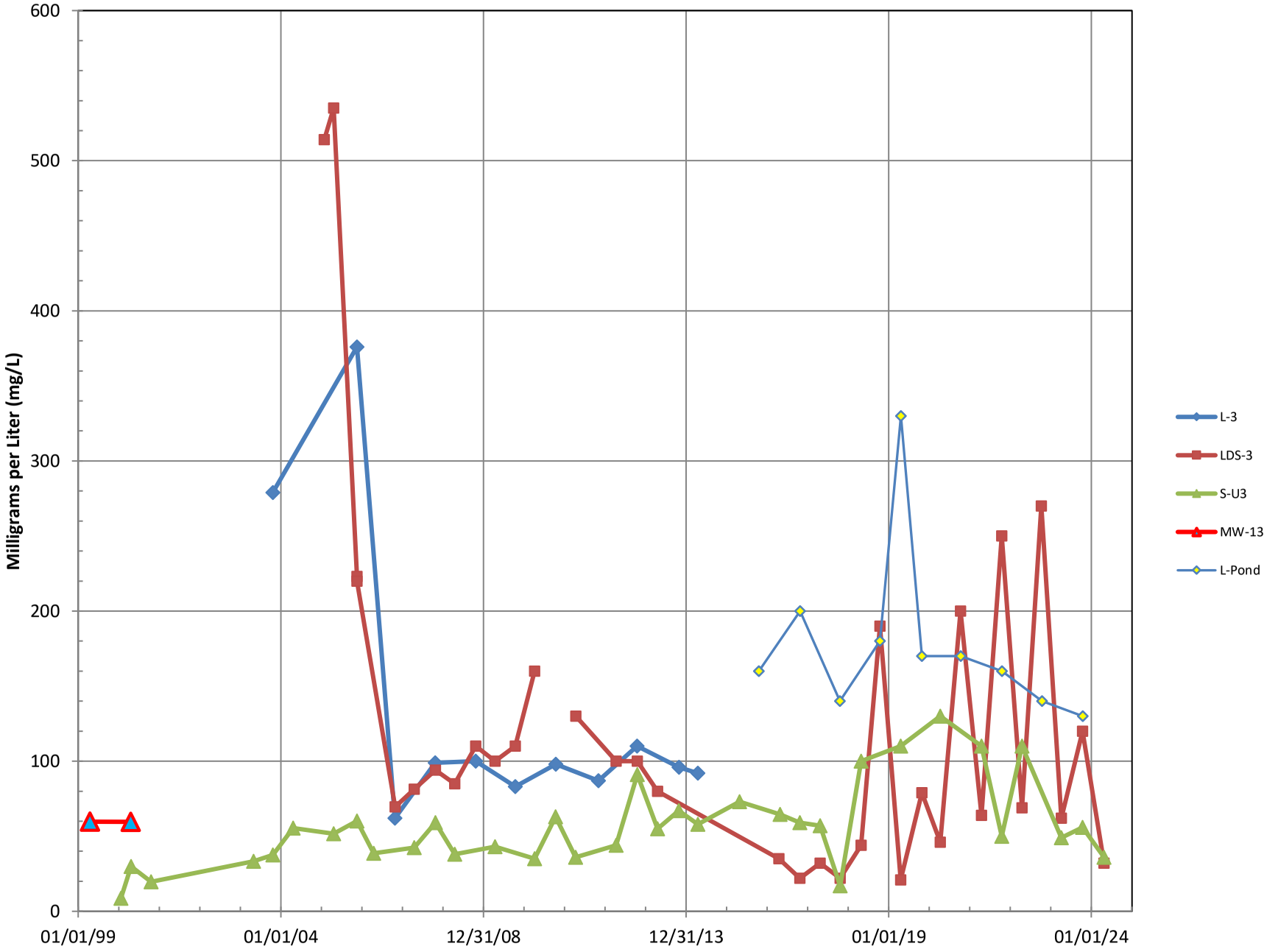
2023 Sump Plots\C4chart (jan-dec)

Cell 5 Sump Levels - 2023
Coffin Butte Landfill

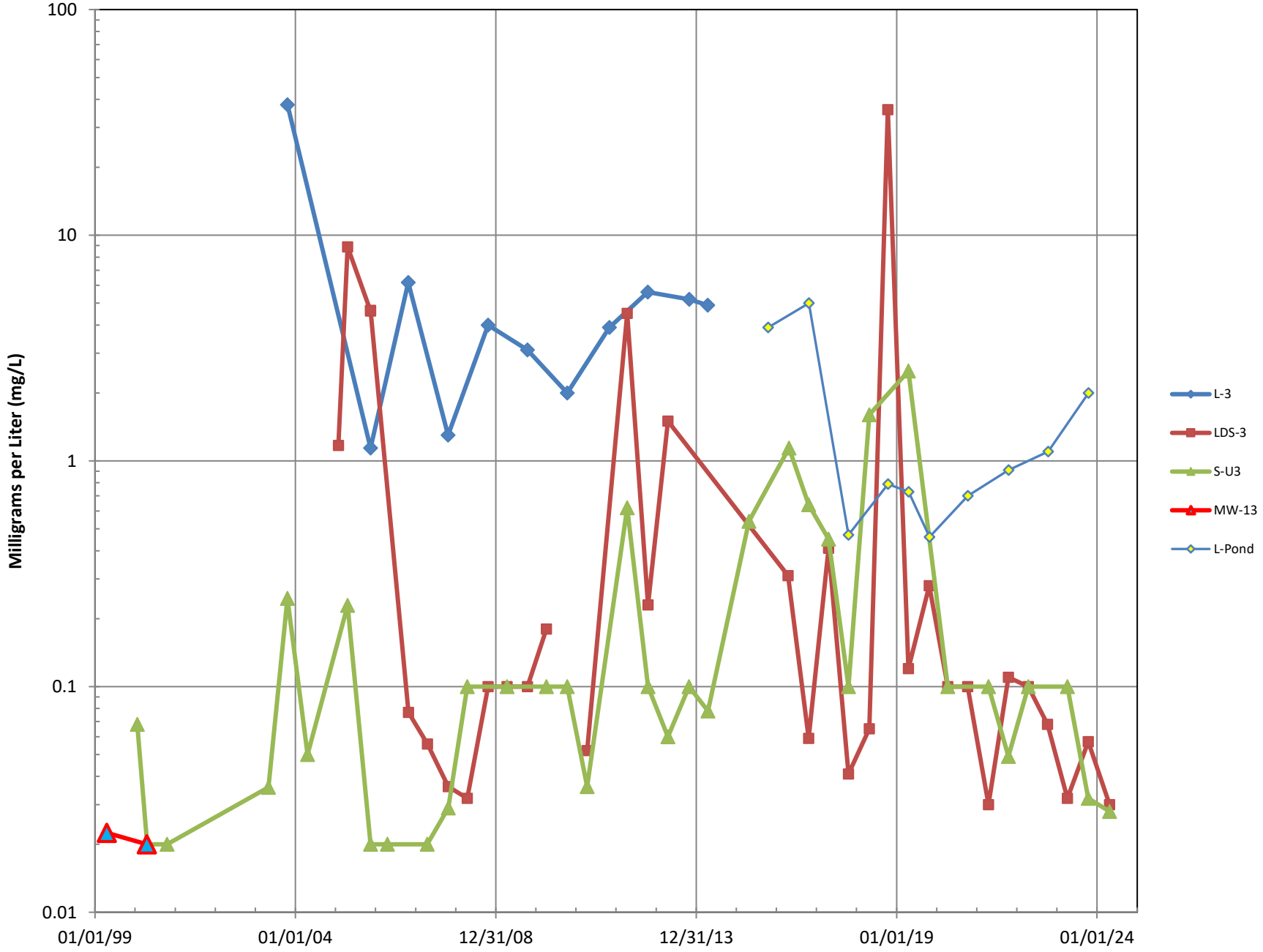


2023 Sump Plots\C5chart (jan-dec)

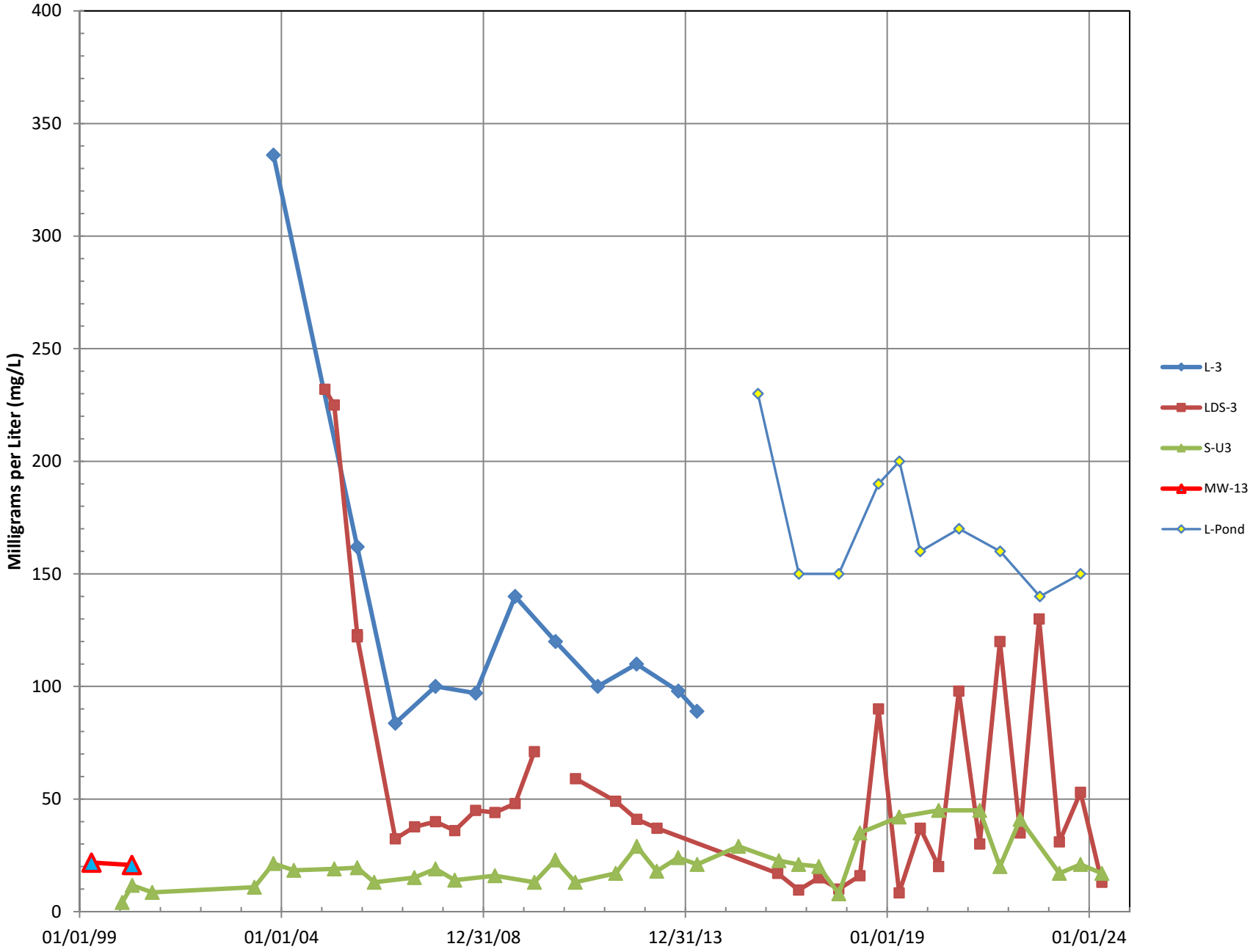
Cell 3 Underdrain Water Quality
Calcium
Coffin Butte Landfill



Cell 3 Underdrain Water Quality
Iron
Coffin Butte Landfill

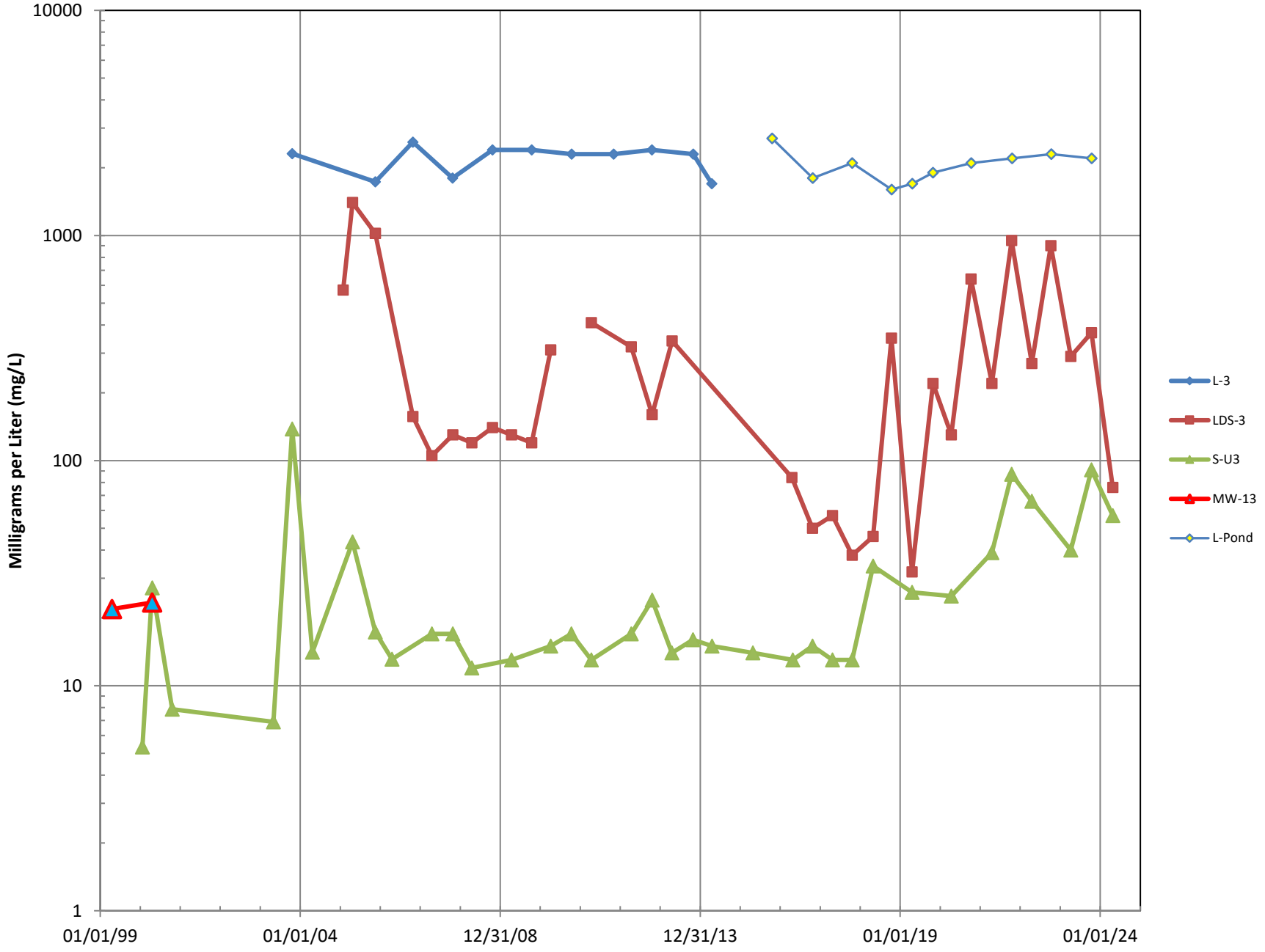


Cell 3 Underdrain Water Quality
Magnesium
Coffin Butte Landfill

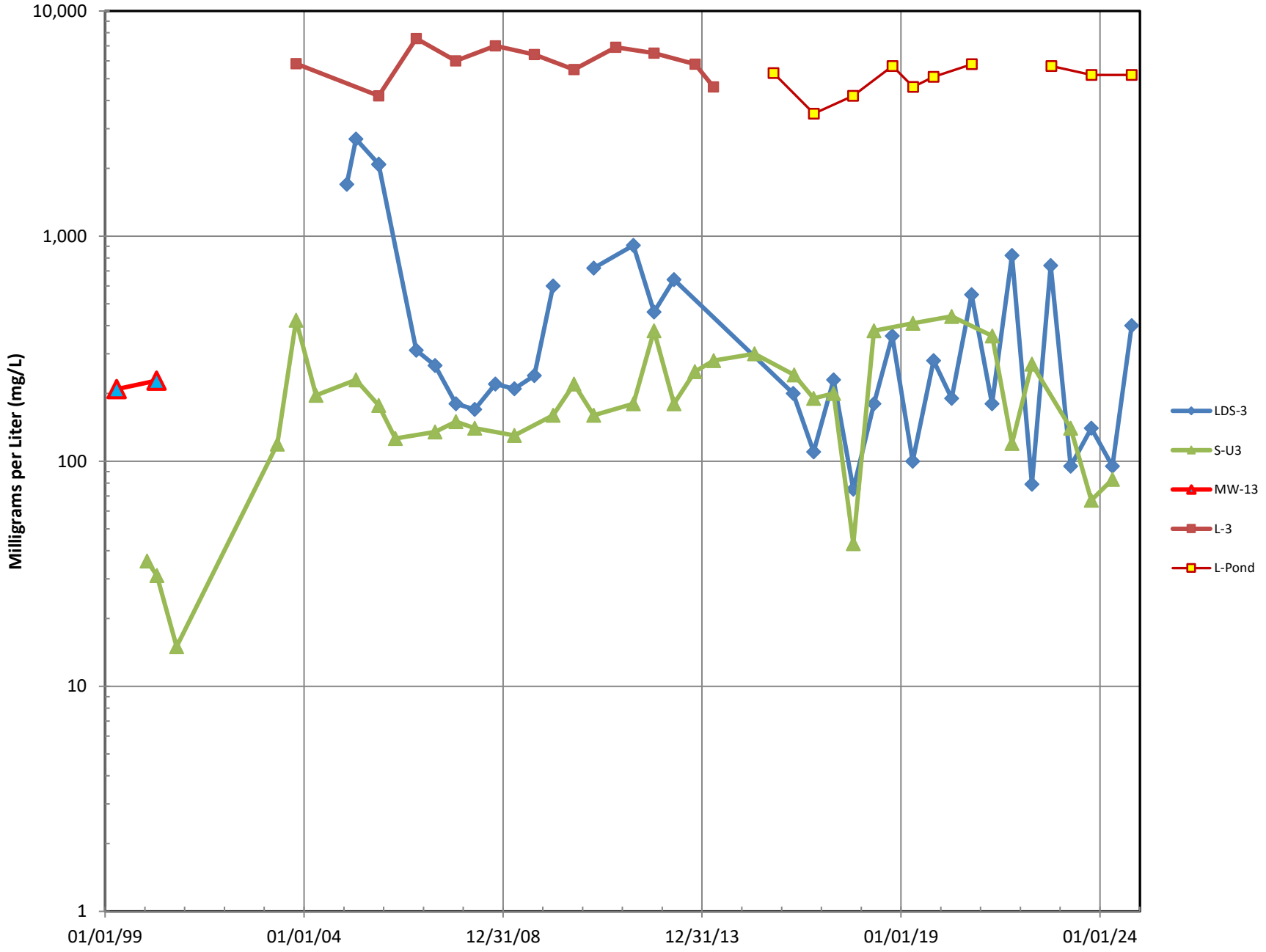


Cell 3 Underdrain Water Quality
Manganese
Coffin Butte Landfill

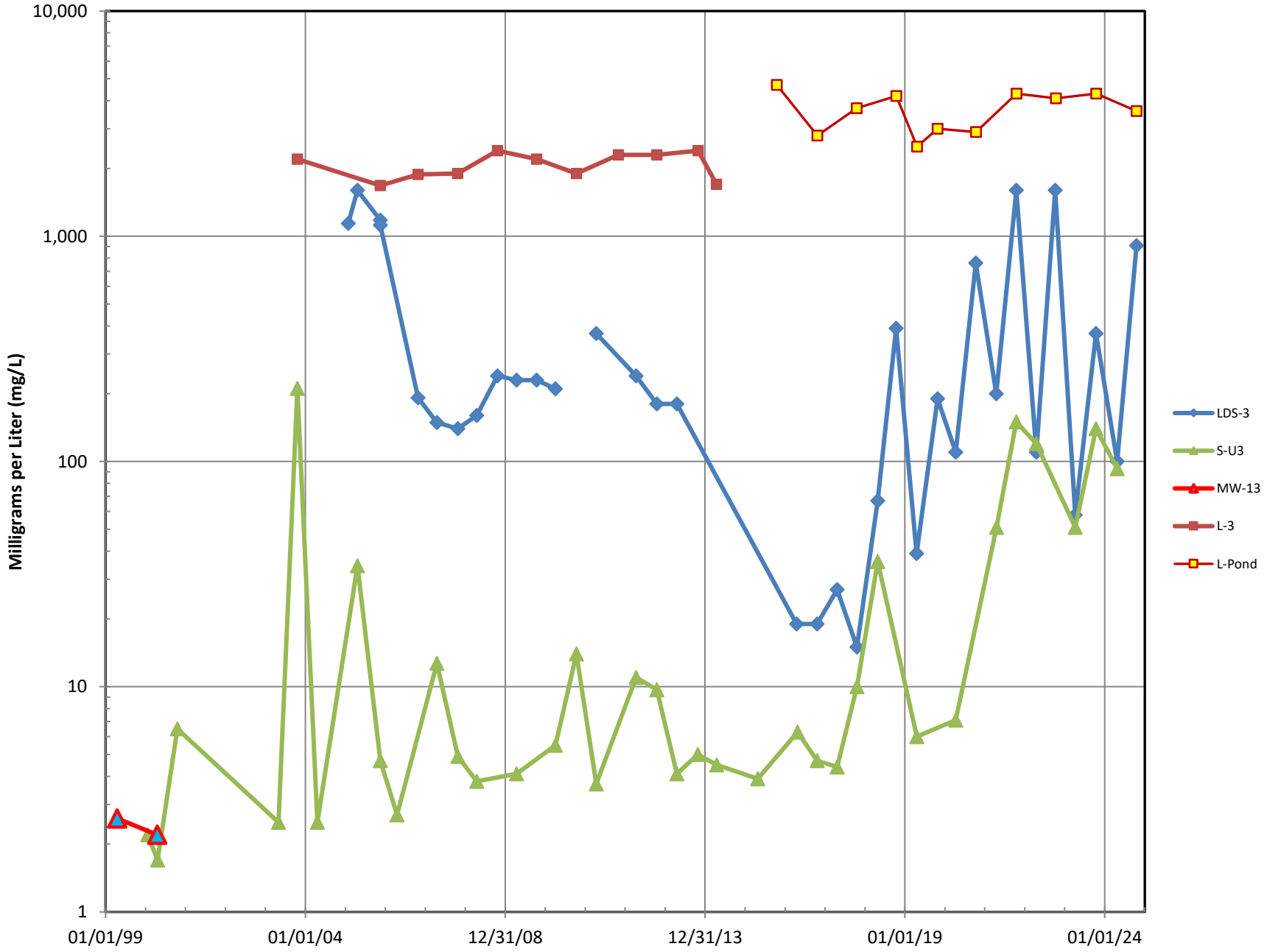
Cell 3 Underdrain Water Quality
Sodium
Coffin Butte Landfill



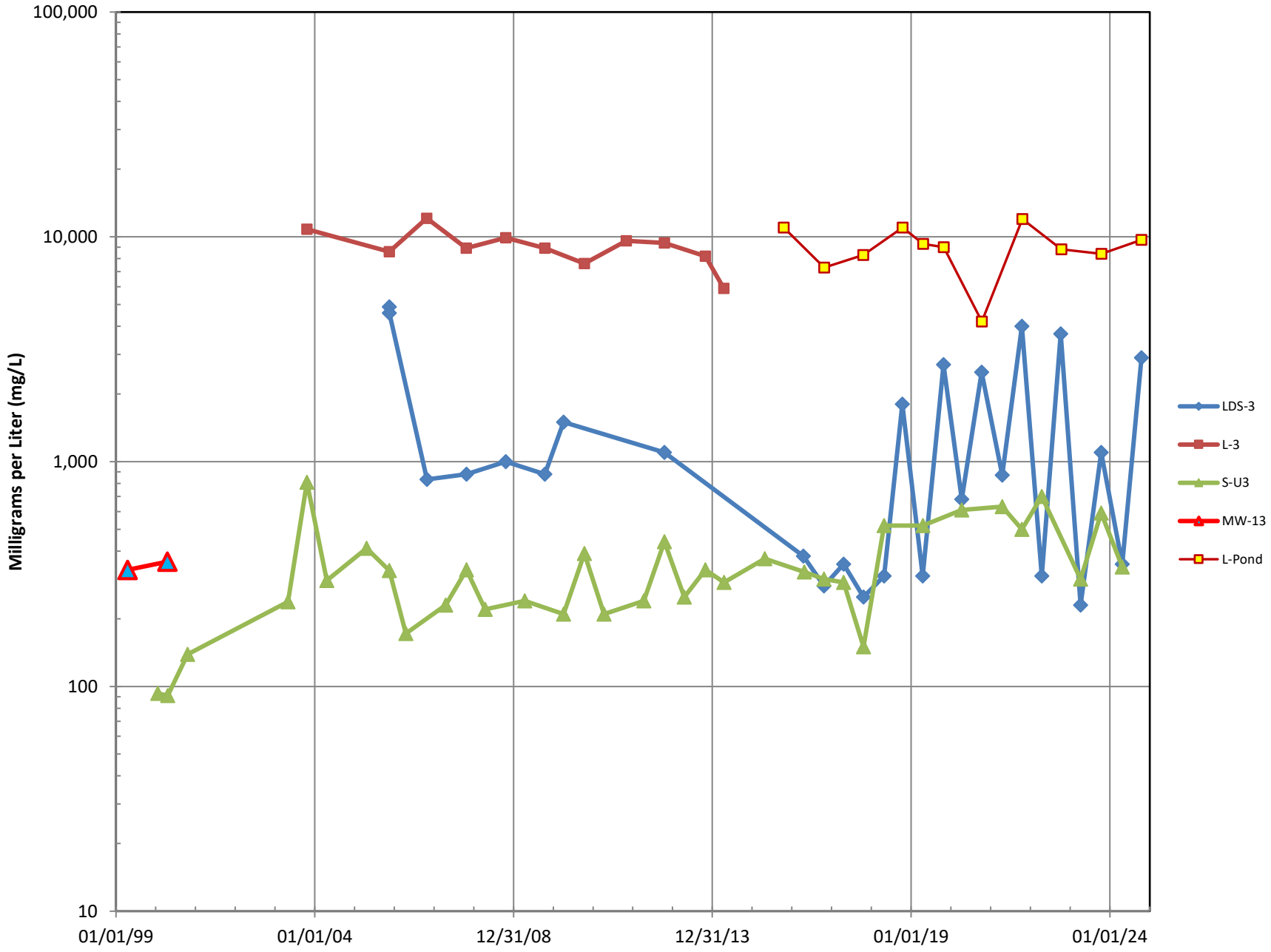
Cell 3 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



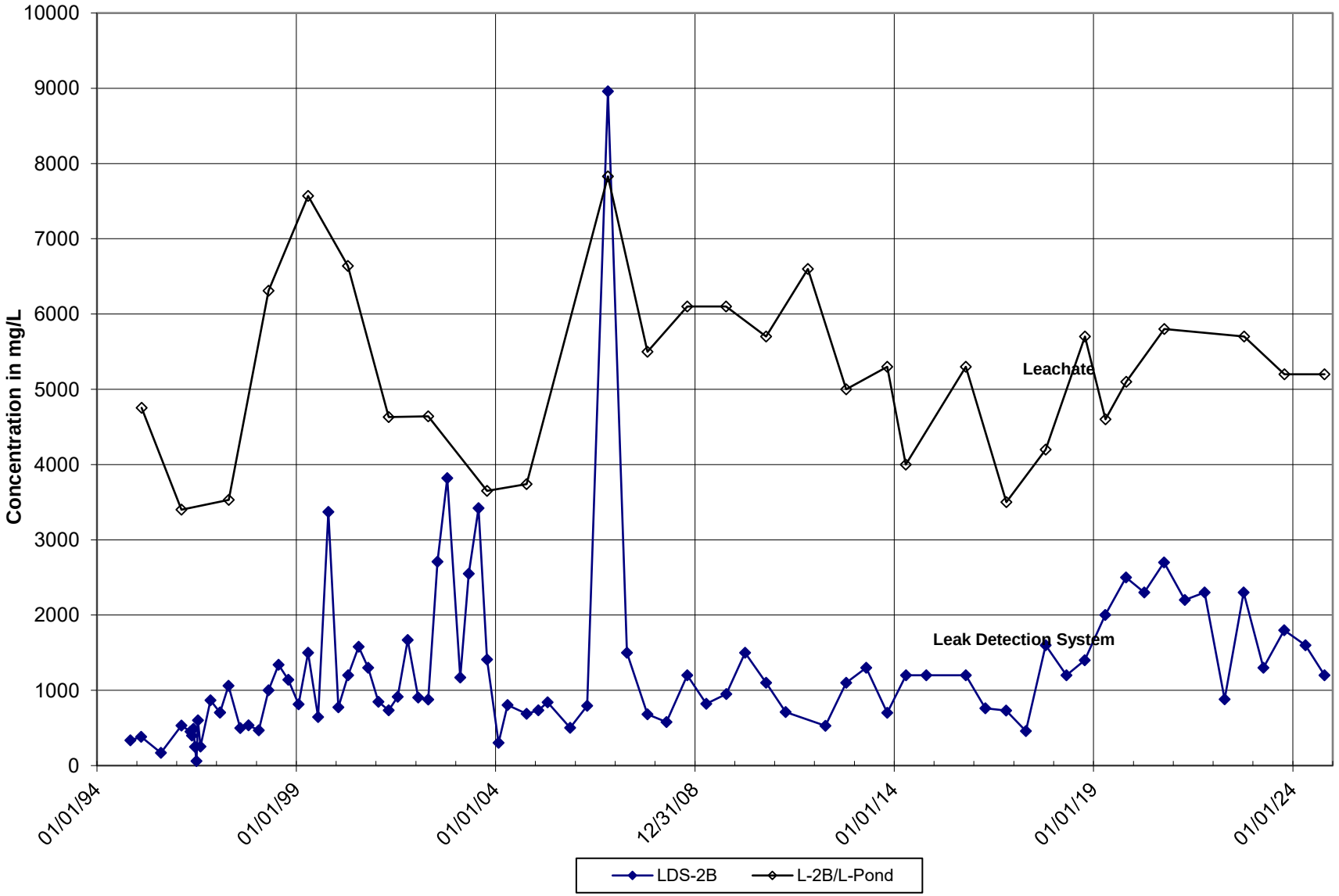
Cell 3 Underdrain Water Quality
Chloride
Coffin Butte Landfill



Cell 3 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill

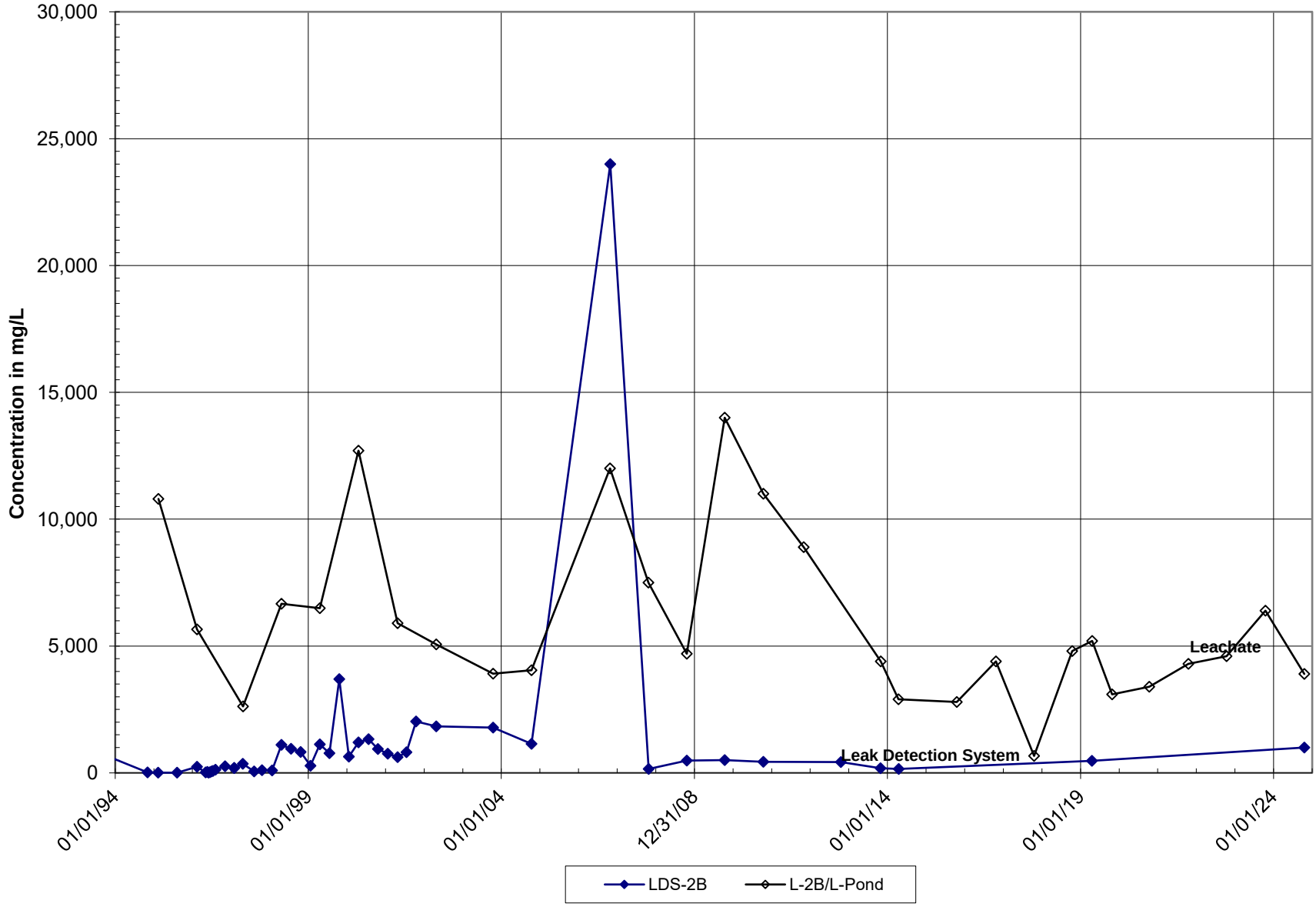


Cell 2 Leak Detection System (LDS-2B)
Bicarbonate
Coffin Butte Landfill



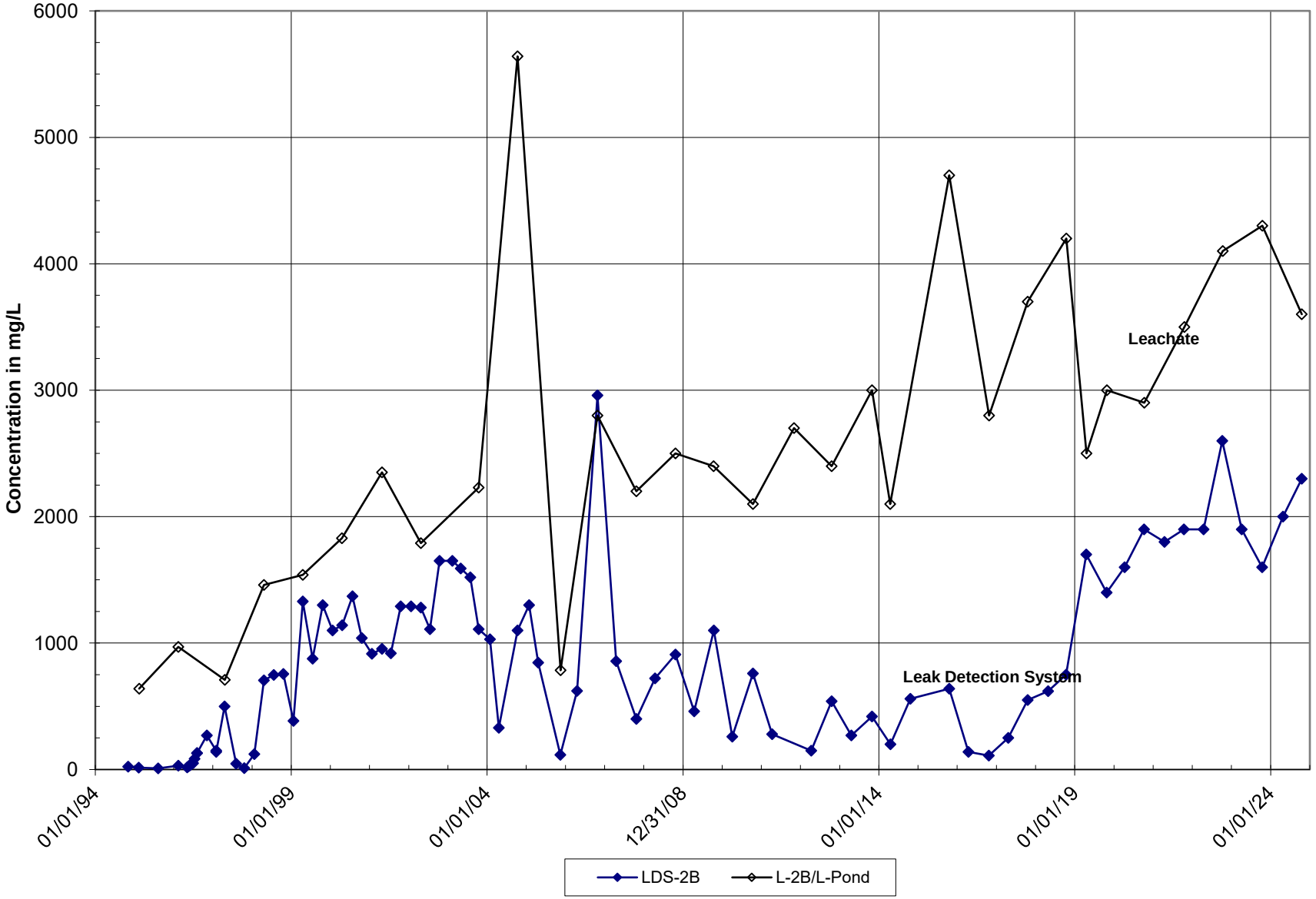
LDSData\WQ\LDS-2B_Inorg

Cell 2 Leak Detection System (LDS-2B)
Chemical Oxygen Demand
Coffin Butte Landfill



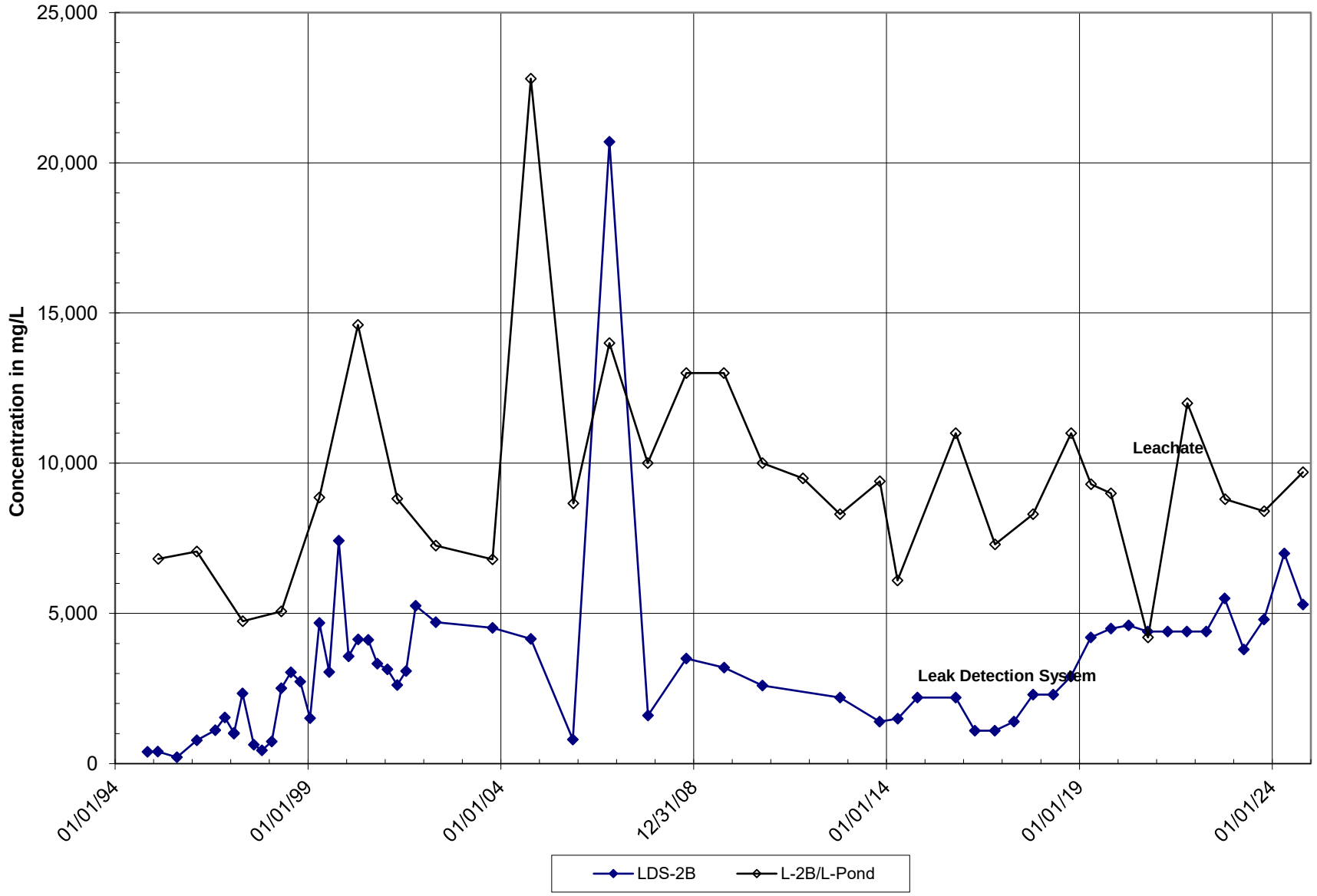
LDSData\WQ\LDS-2B_Inorg

Cell 2 Leak Detection System (LDS-2B)
Chloride
Coffin Butte Landfill



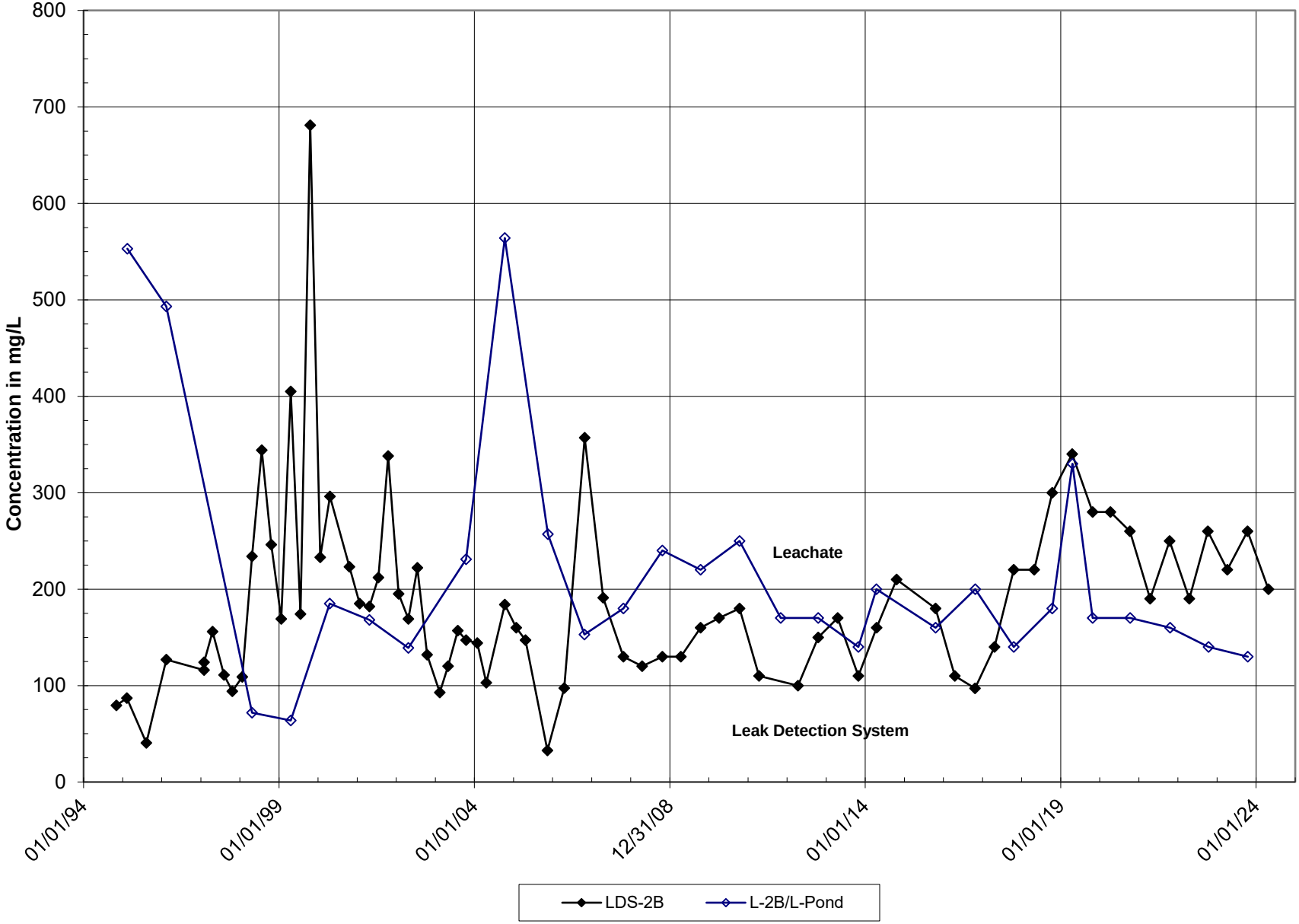
LDSData\WQ\LDS-2B_Inorg

Cell 2 Leak Detection System (LDS-2B)
Total Dissolved Solids
Coffin Butte Landfill



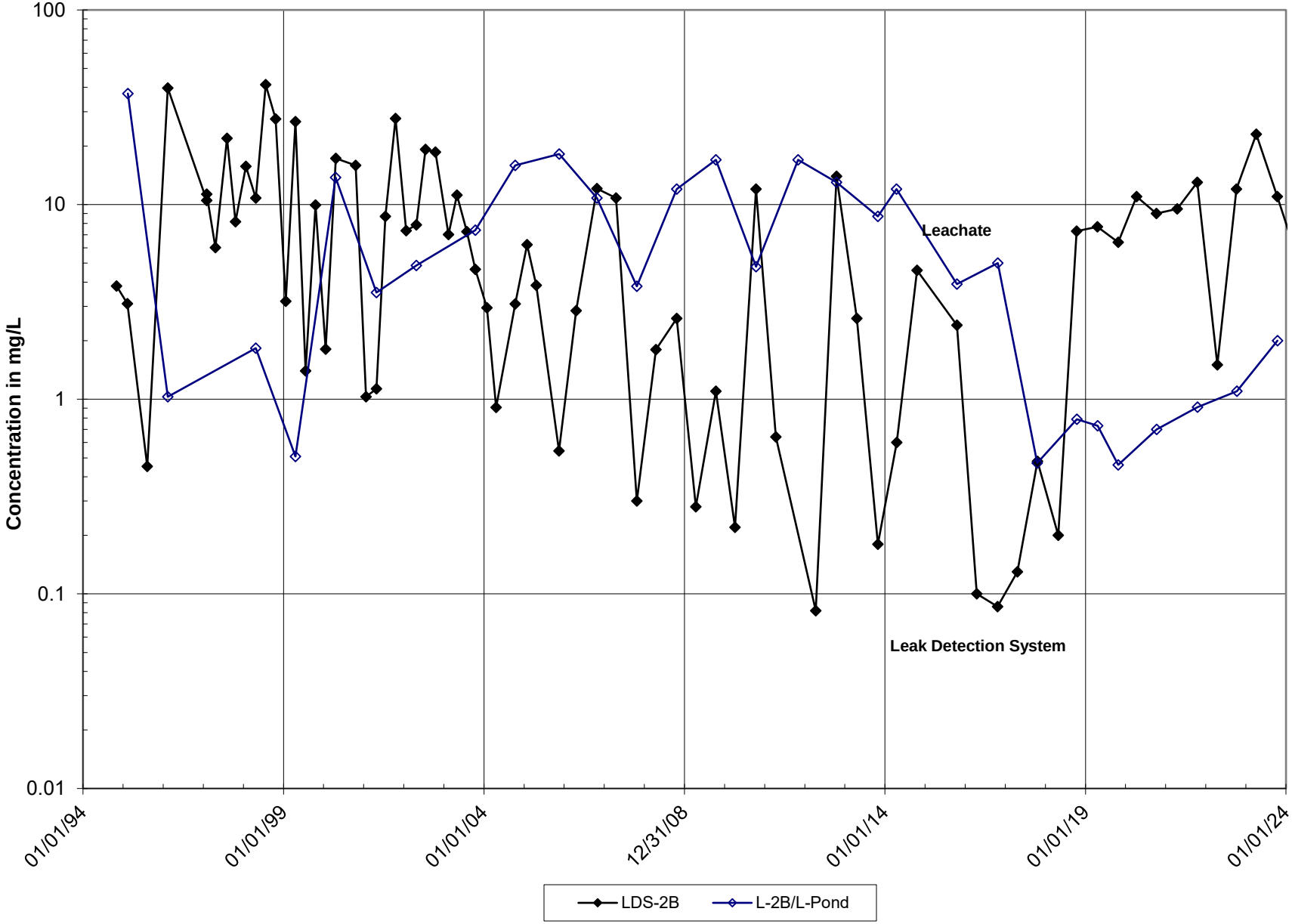
LDSData\WQ\LDS-2B_Inorg

Cell 2 Leak Detection System (LDS-2B)
Calcium
Coffin Butte Landfill

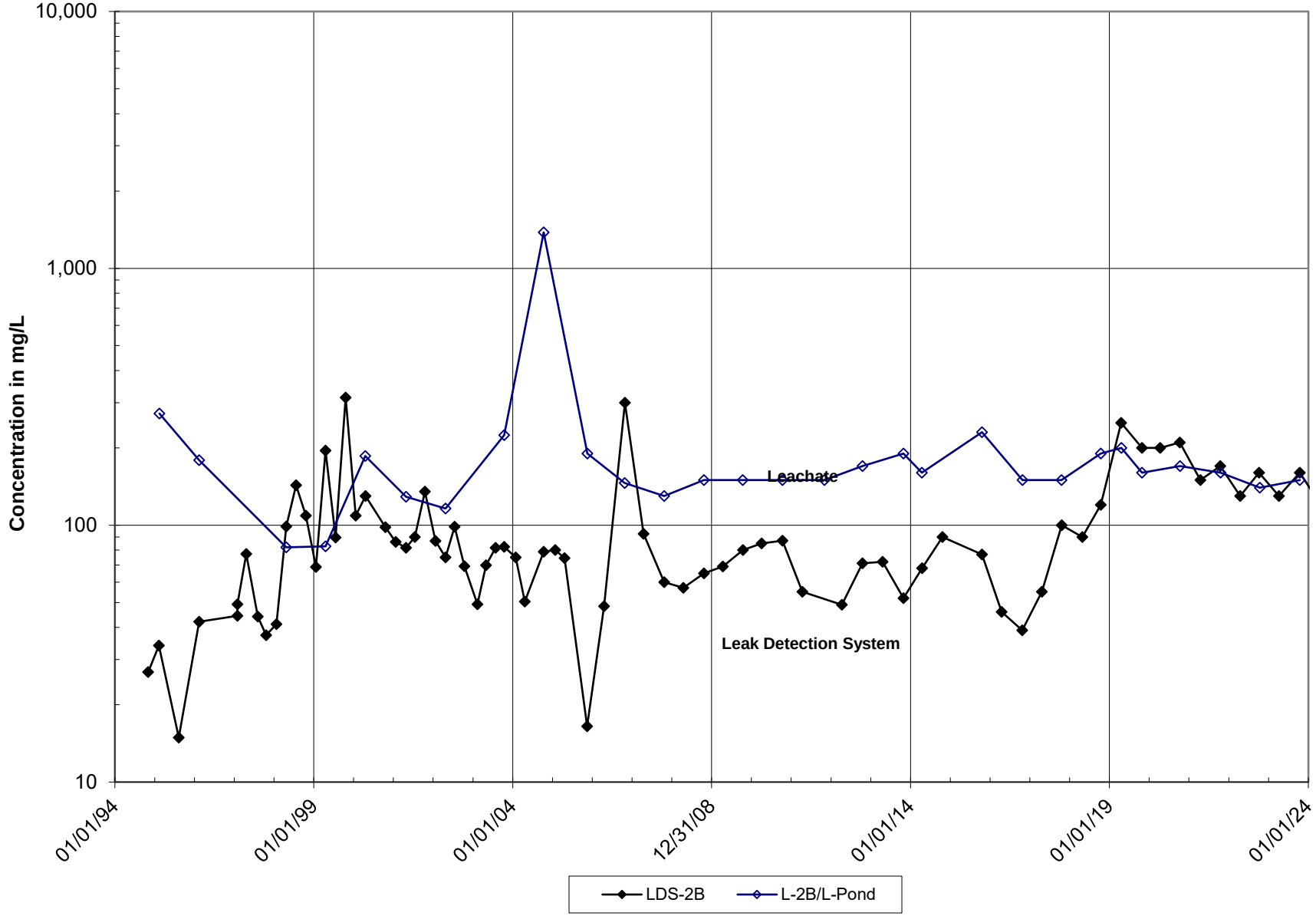


LDSData\WQ\LDS-2B_DM

Cell 2 Leak Detection System (LDS-2B)
Iron
Coffin Butte Landfill

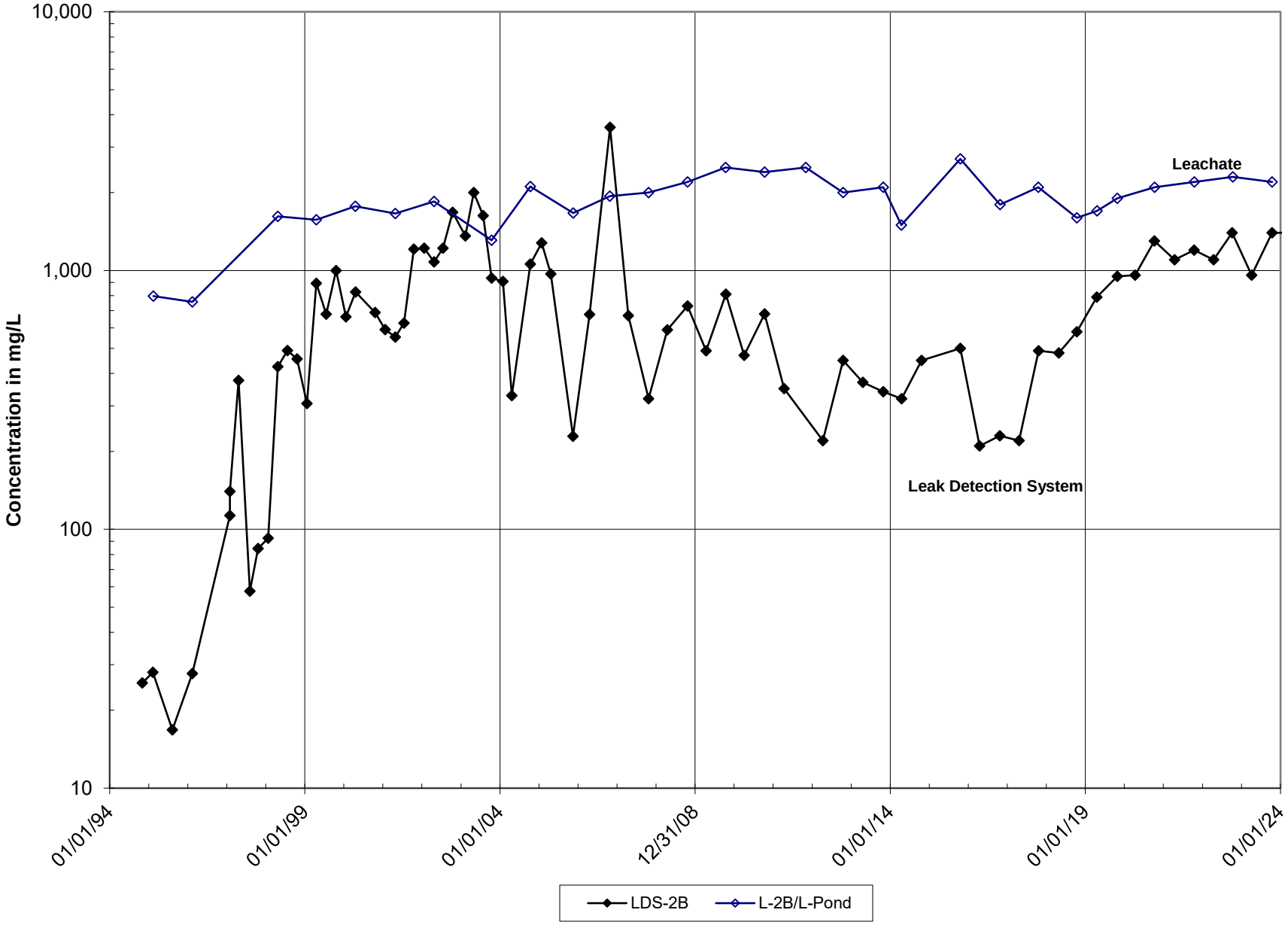


Cell 2 Leak Detection System (LDS-2B)
Magnesium
Coffin Butte Landfill



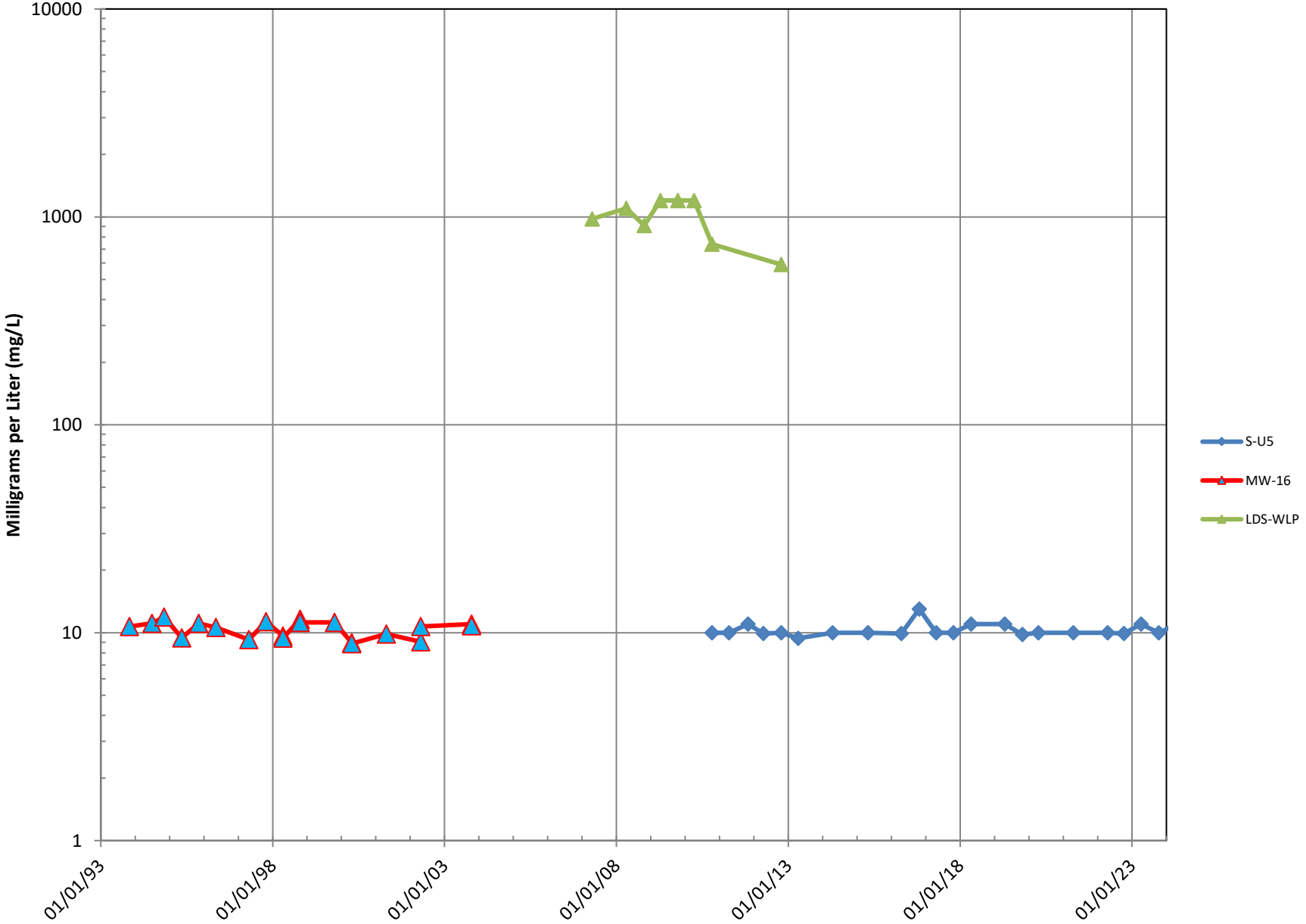
LDSData\WQ\LDS-2B_DM

Cell 2 Leak Detection System (LDS-2B)
Sodium
Coffin Butte Landfill

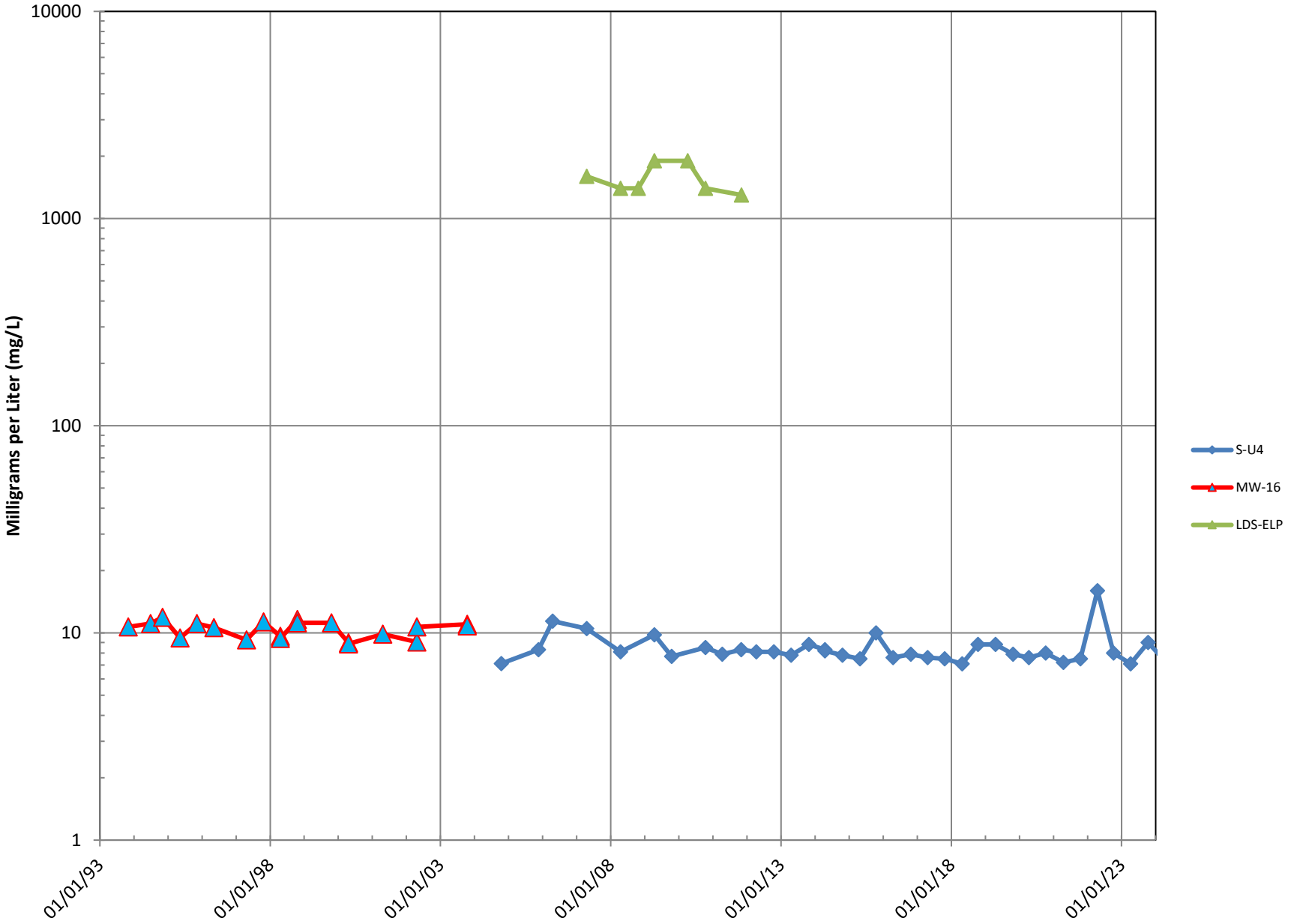


LDSData\WQ\LDS-2B_DM

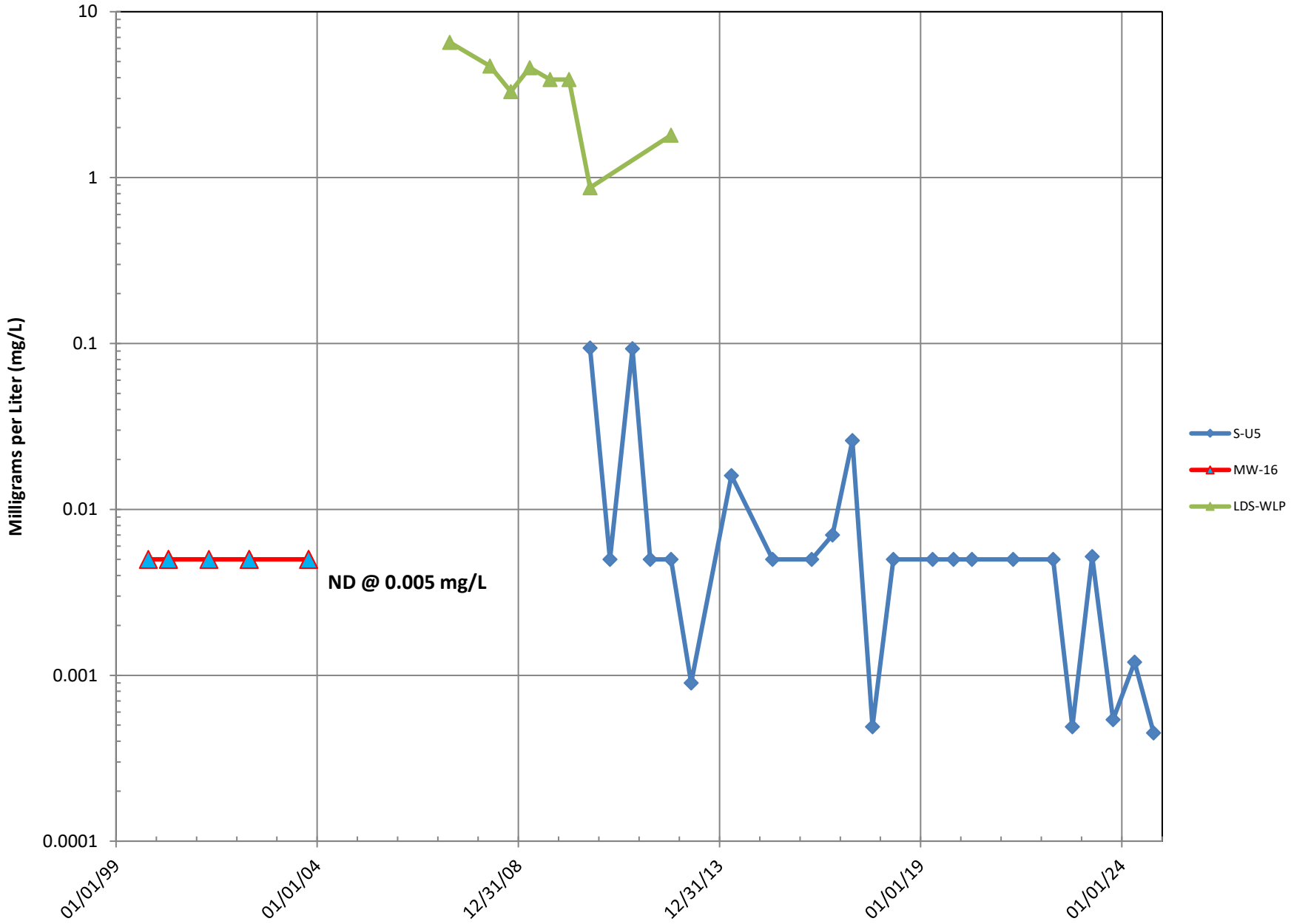
Underdrain - West Leachate Pond Area
Sodium
Coffin Butte Landfill



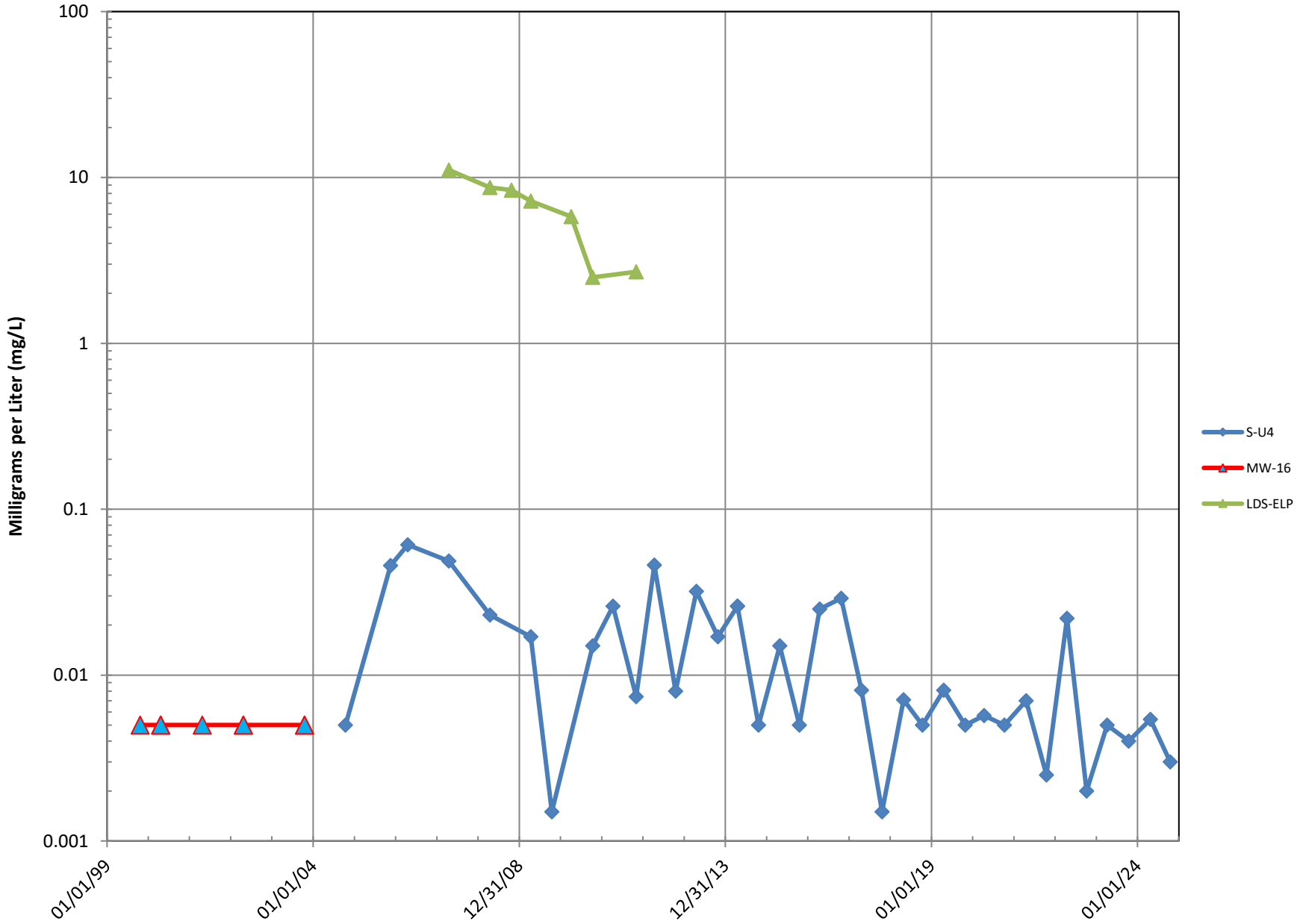
Underdrain - East Leachate Pond Area
Sodium
Coffin Butte Landfill



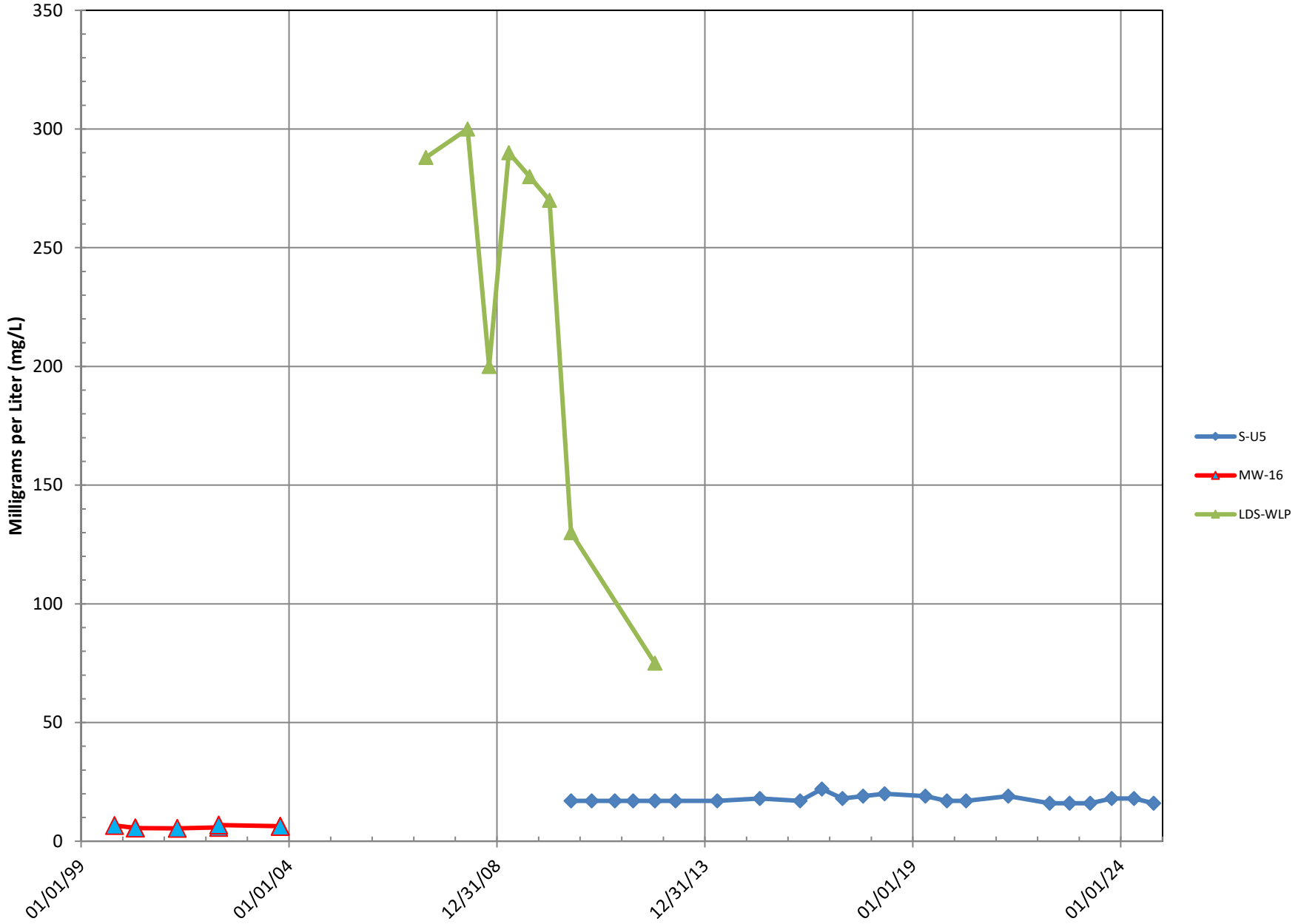
Underdrain - West Leachate Pond Area
Manganese
Coffin Butte Landfill



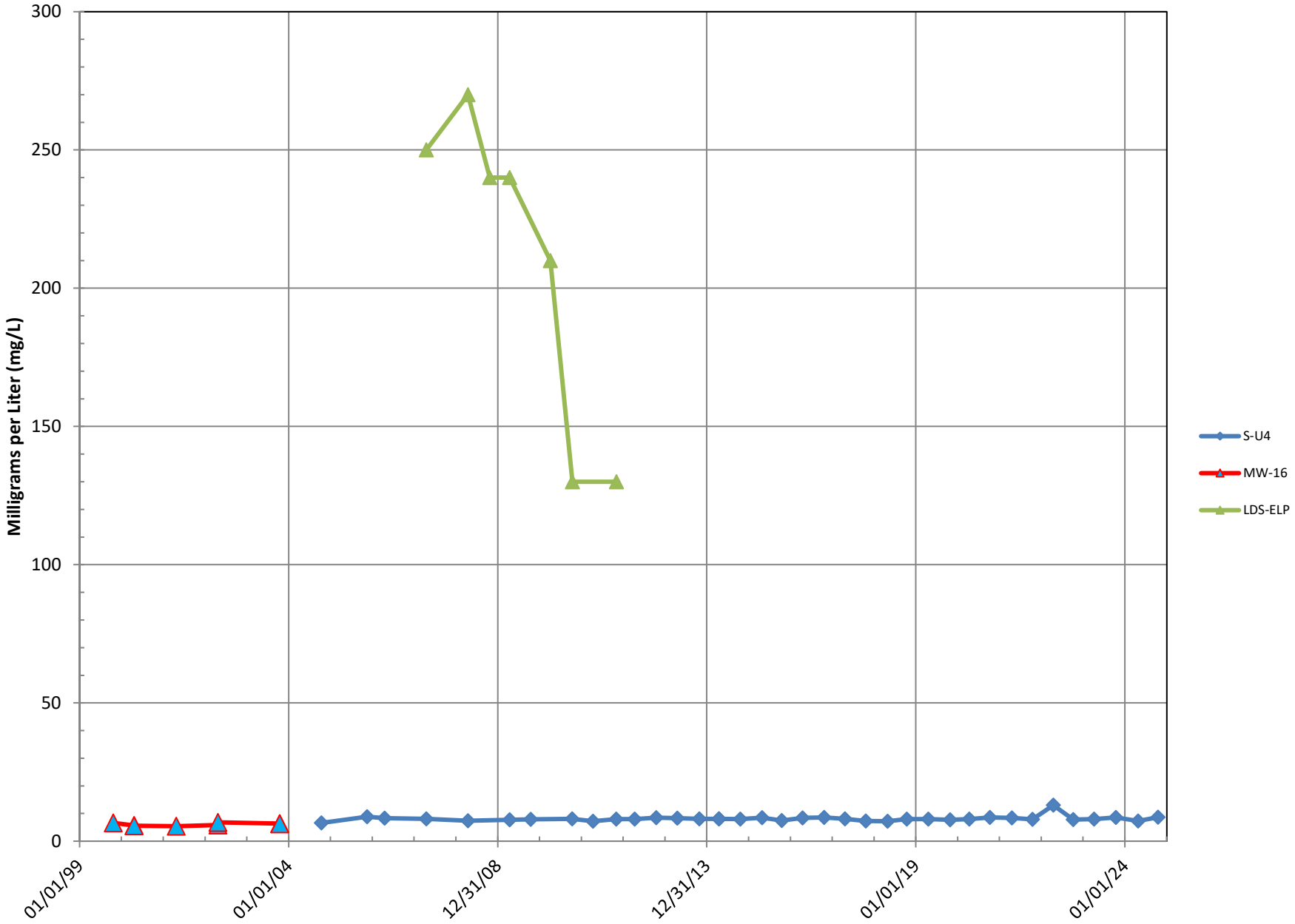
Underdrain - East Leachate Pond Area
Manganese
Coffin Butte Landfill



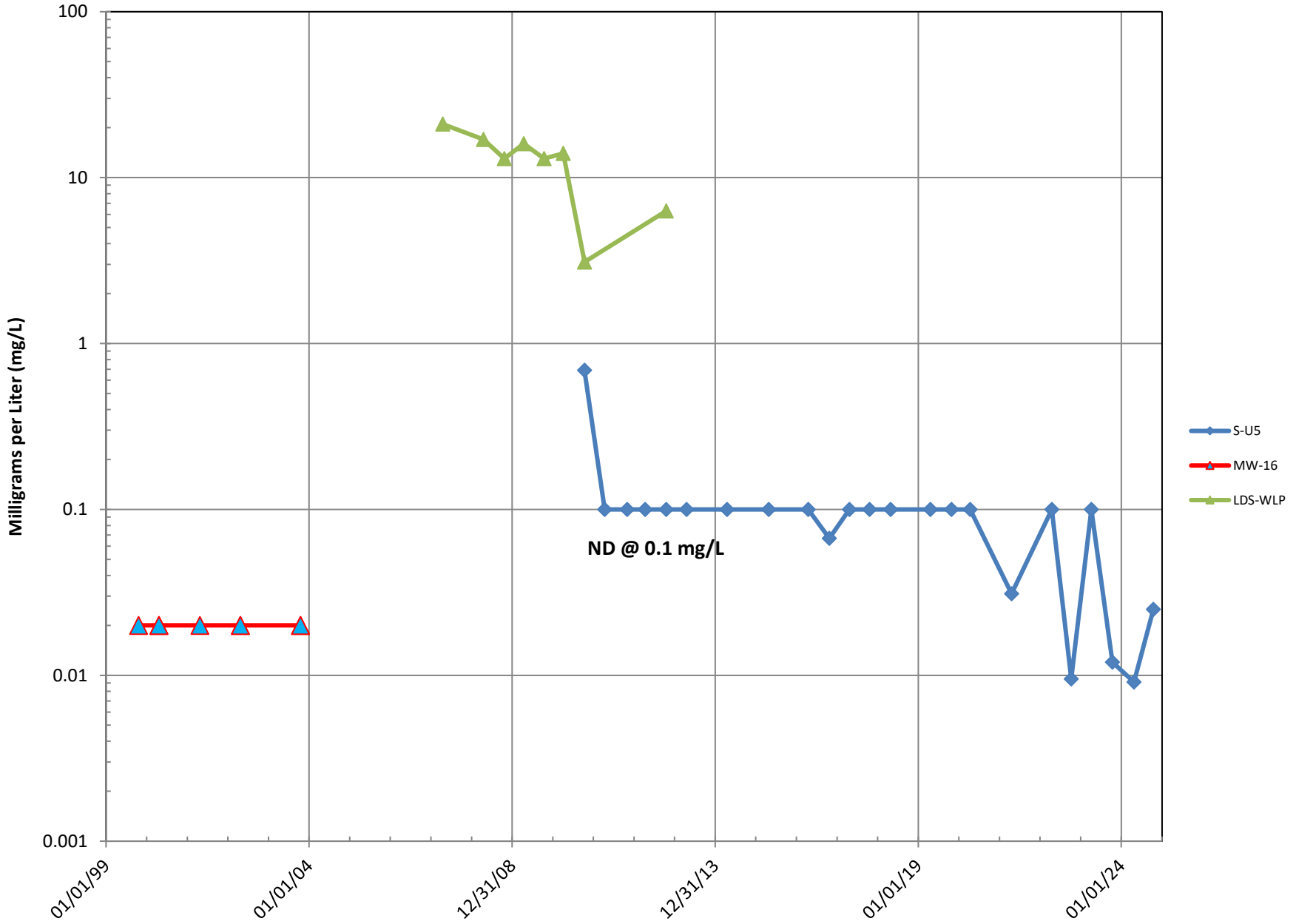
Underdrain - West Leachate Pond Area
Magnesium
Coffin Butte Landfill



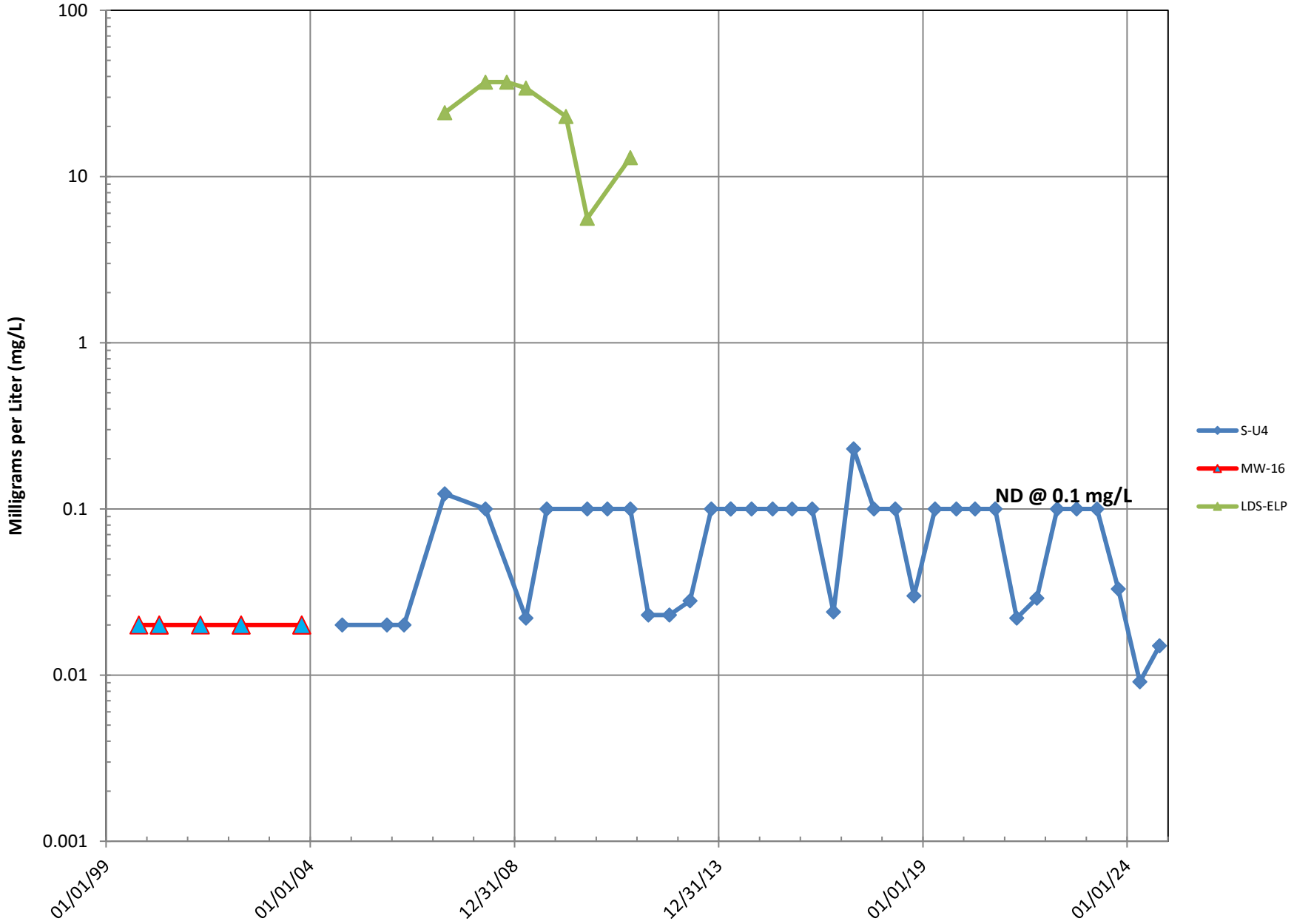
Underdrain - East Leachate Pond Area
Magnesium
Coffin Butte Landfill



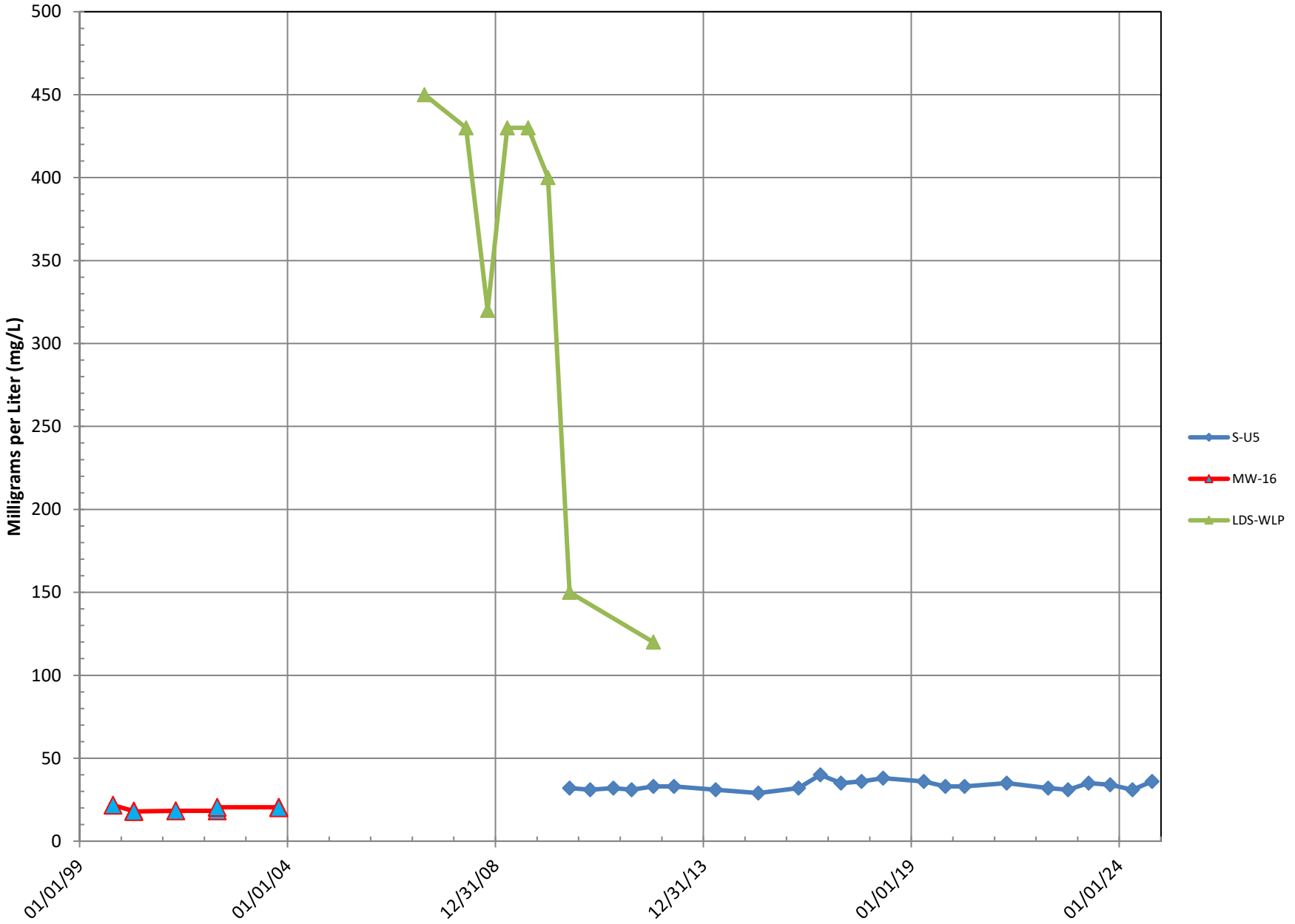
Underdrain - West Leachate Pond Area
Iron
Coffin Butte Landfill



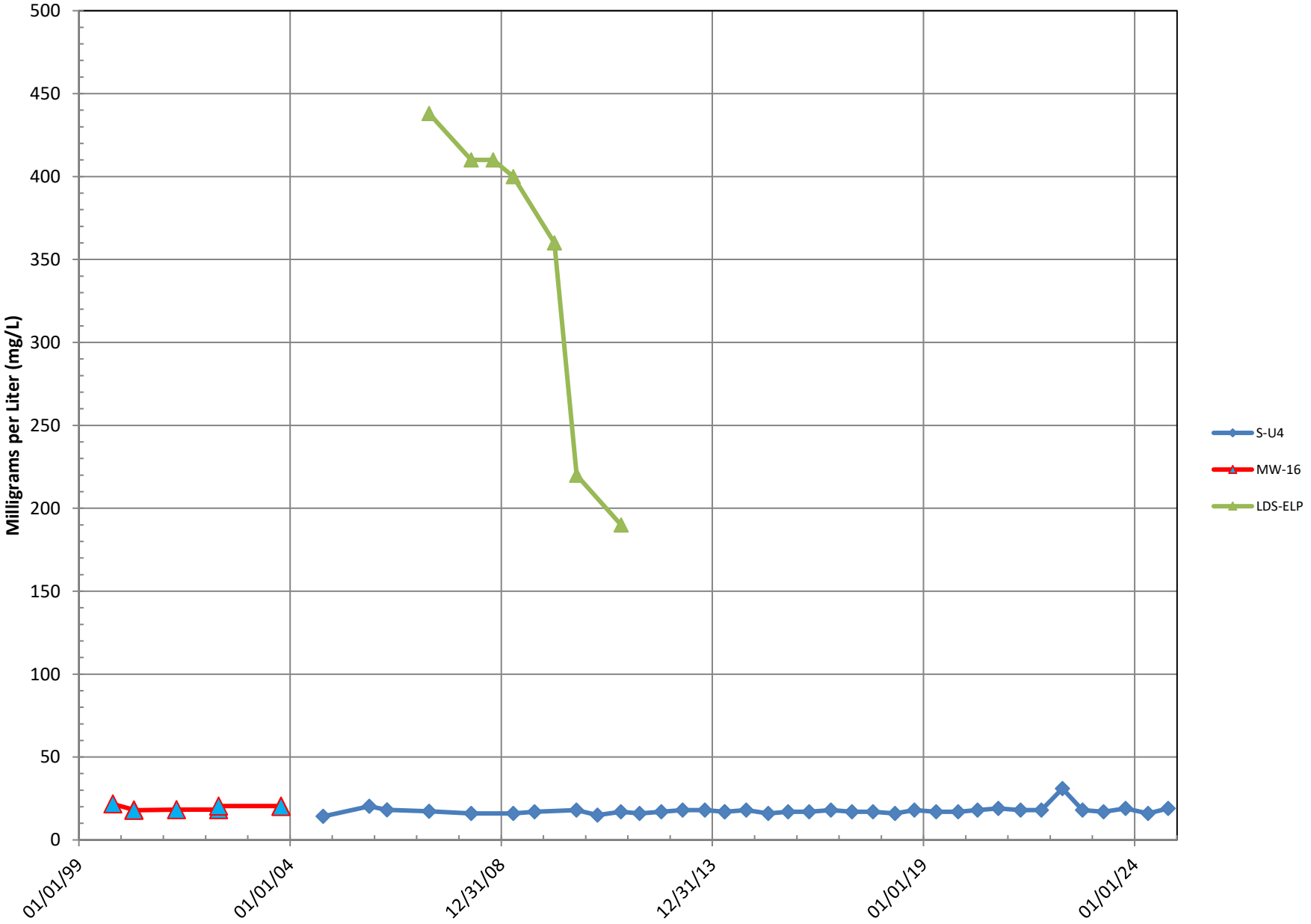
Underdrain - East Leachate Pond Area
Iron
Coffin Butte Landfill



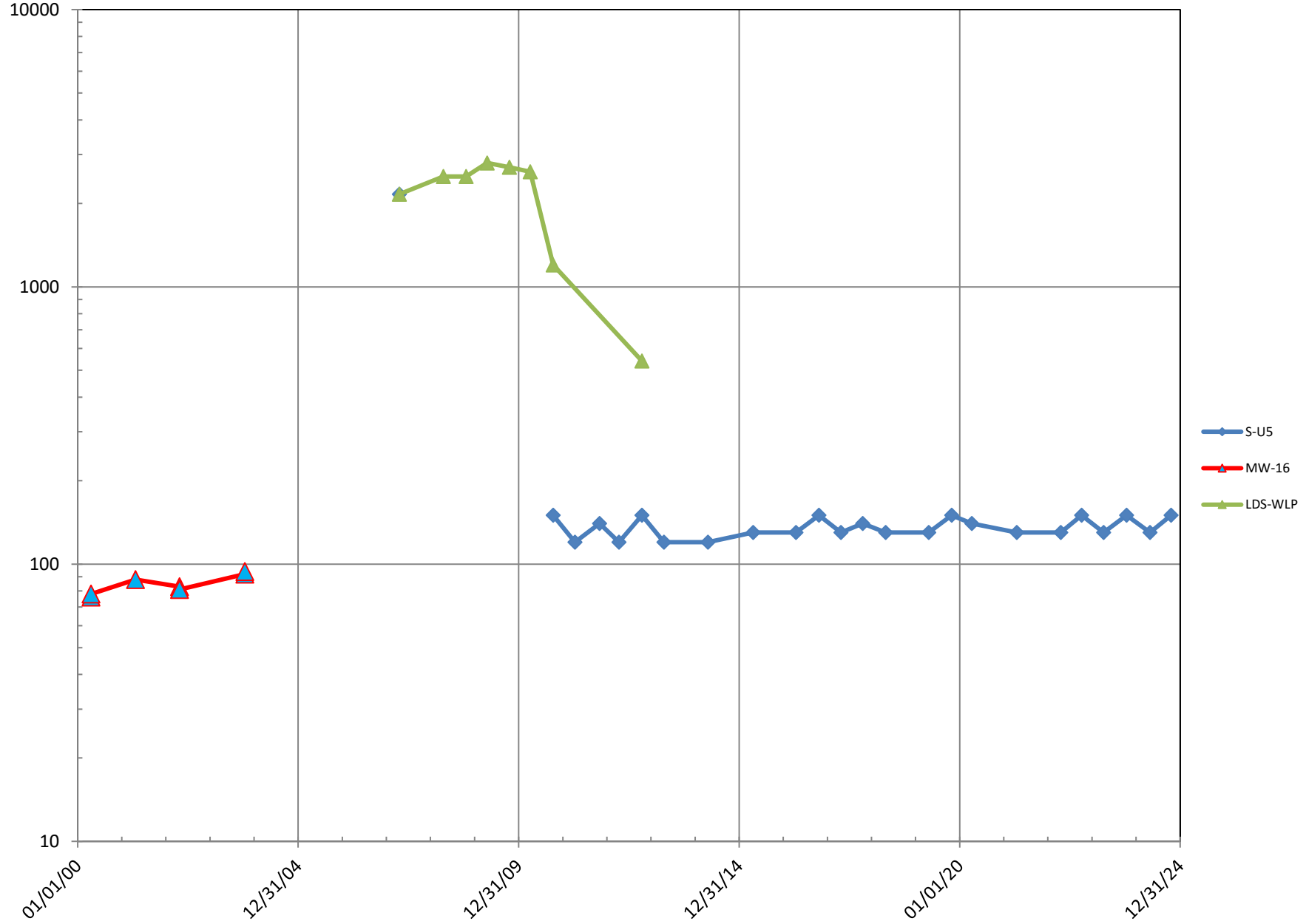
Underdrain - West Leachate Pond Area
Calcium
Coffin Butte Landfill



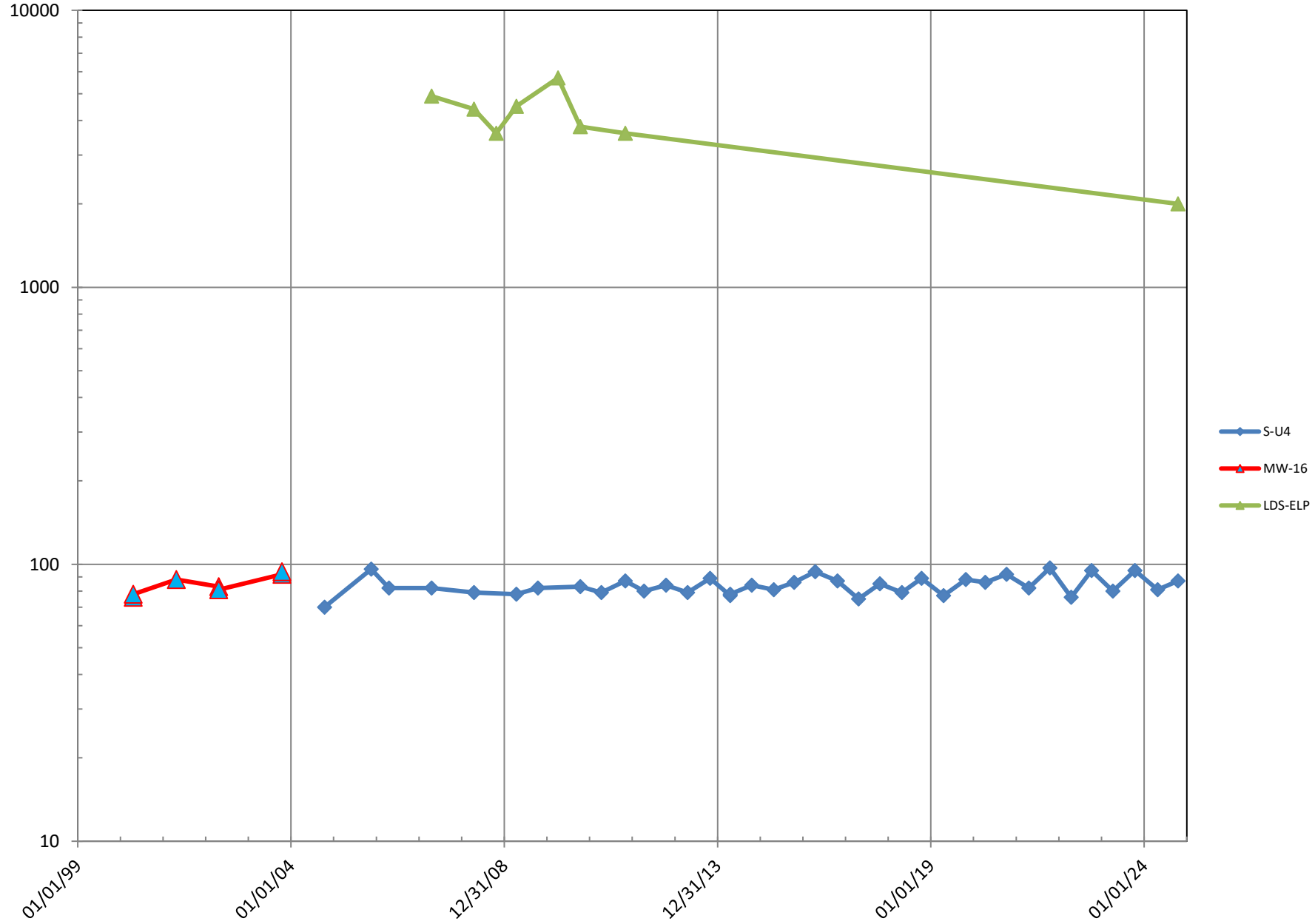
Underdrain - East Leachate Pond Area
Calcium
Coffin Butte Landfill



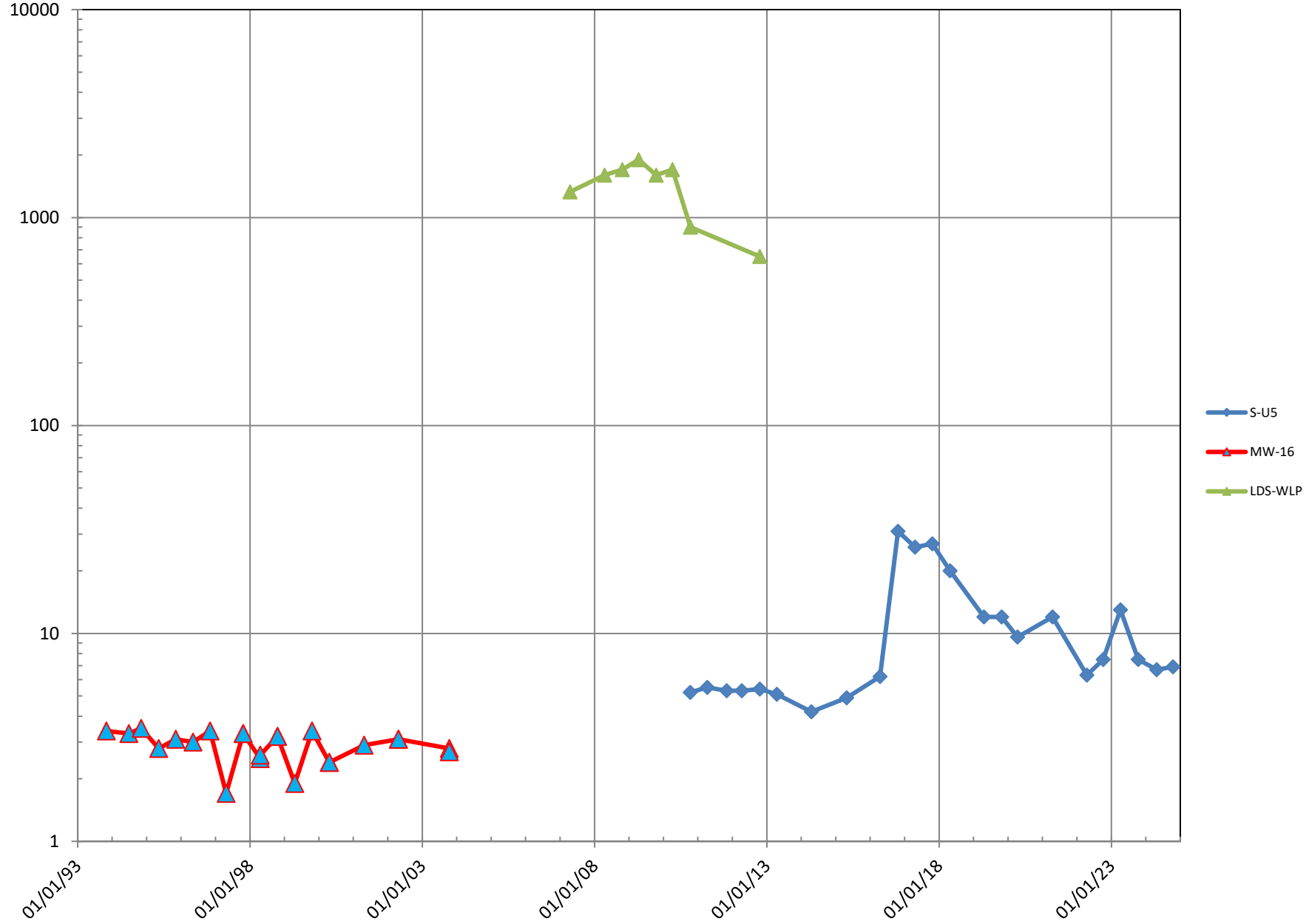
Underdrain - West Leachate Pond Area
Bicarbonate
Coffin Butte Landfill



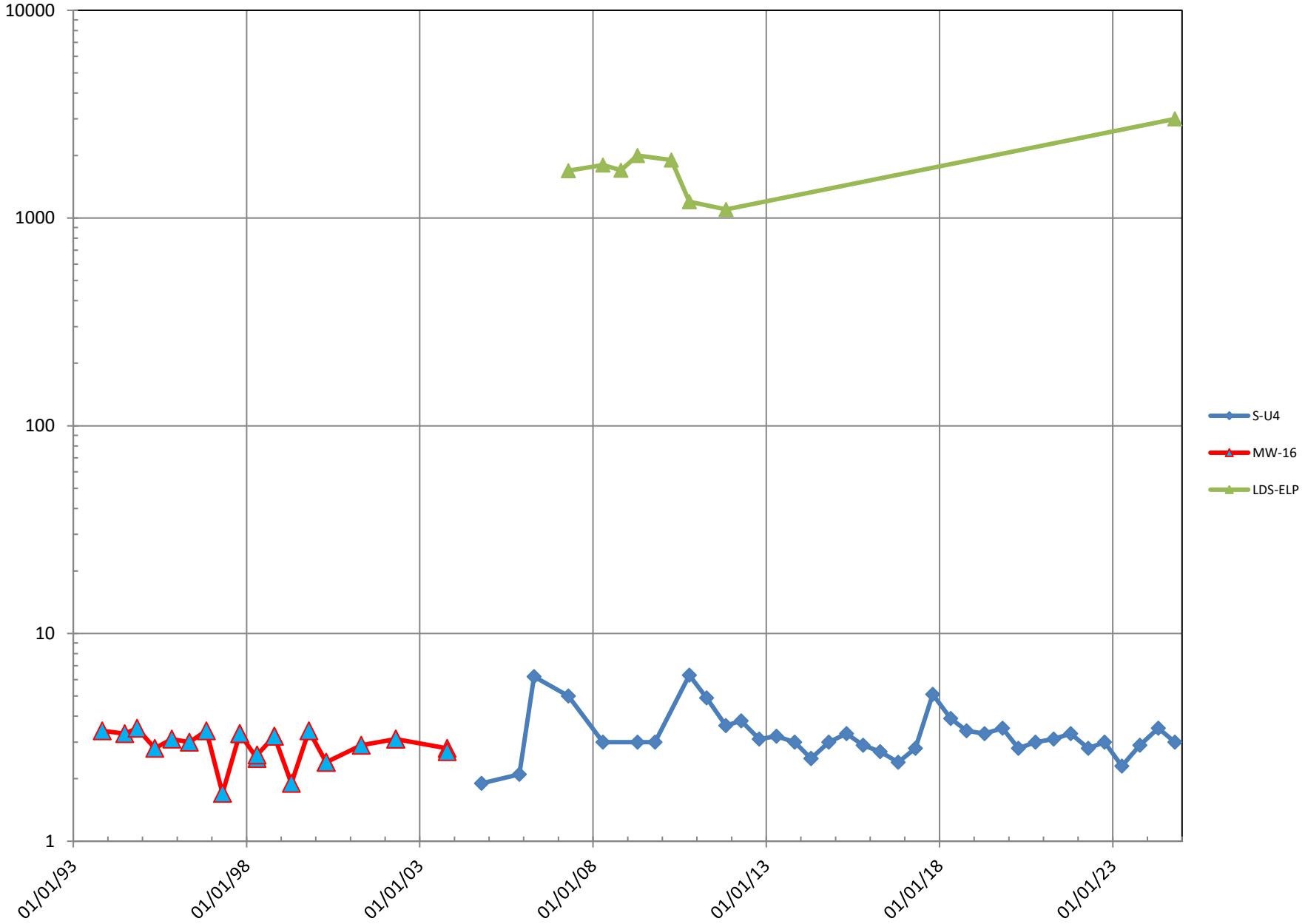
Underdrain - East Leachate Pond Area
Bicarbonate
Coffin Butte Landfill



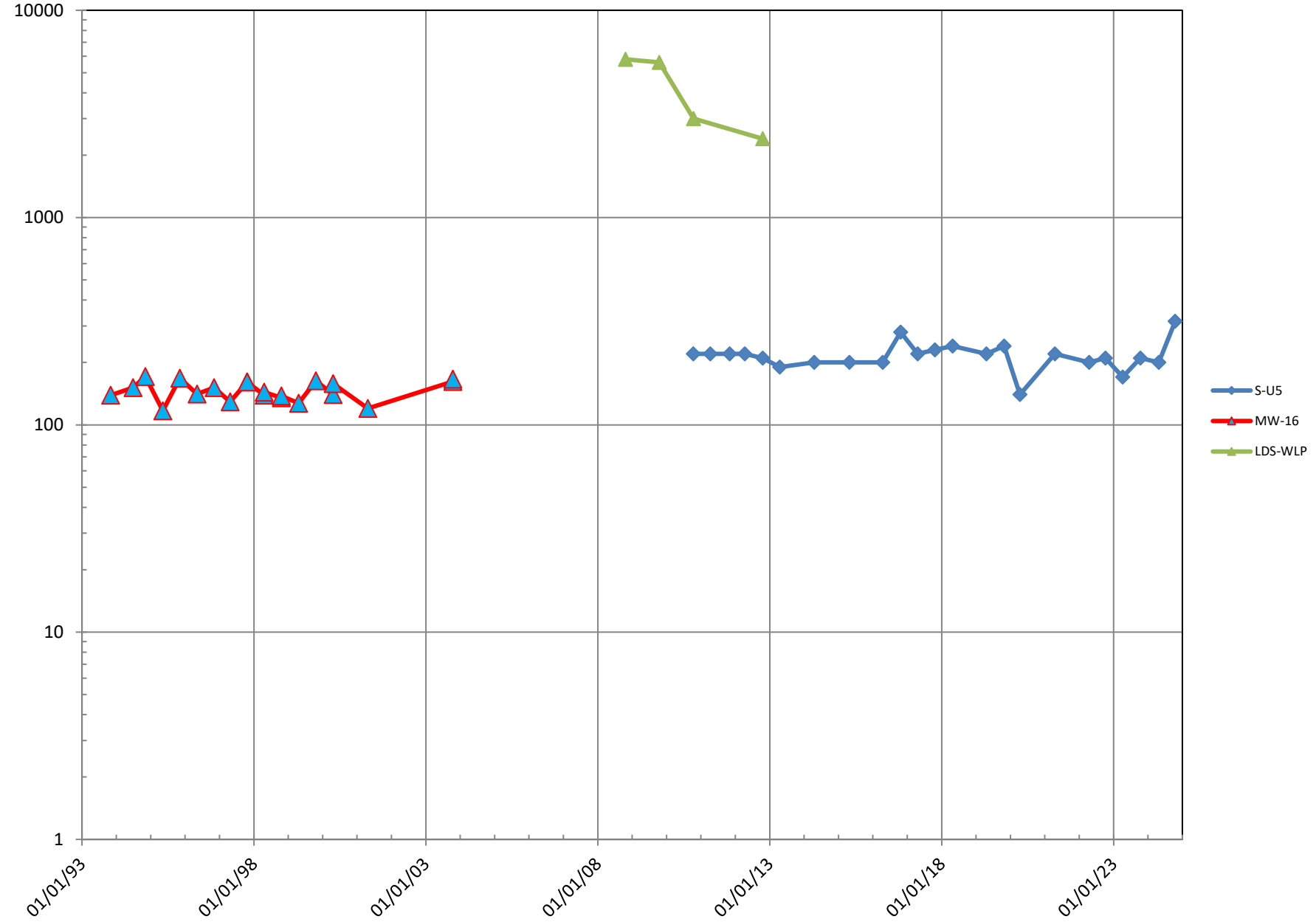
Underdrain - West Leachate Pond Area
Chloride
Coffin Butte Landfill



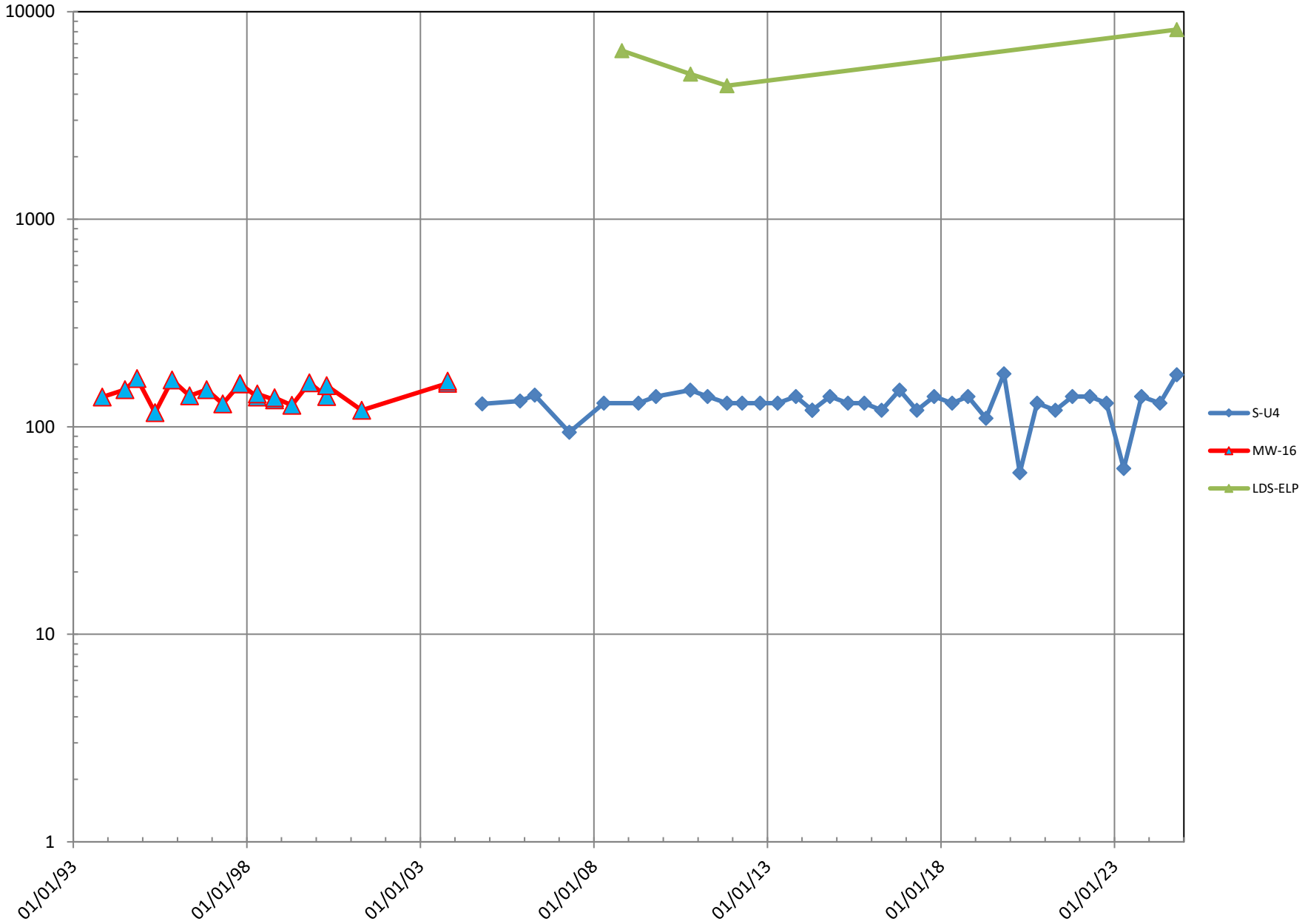
Underdrain - East Leachate Pond Area
Chloride
Coffin Butte Landfill



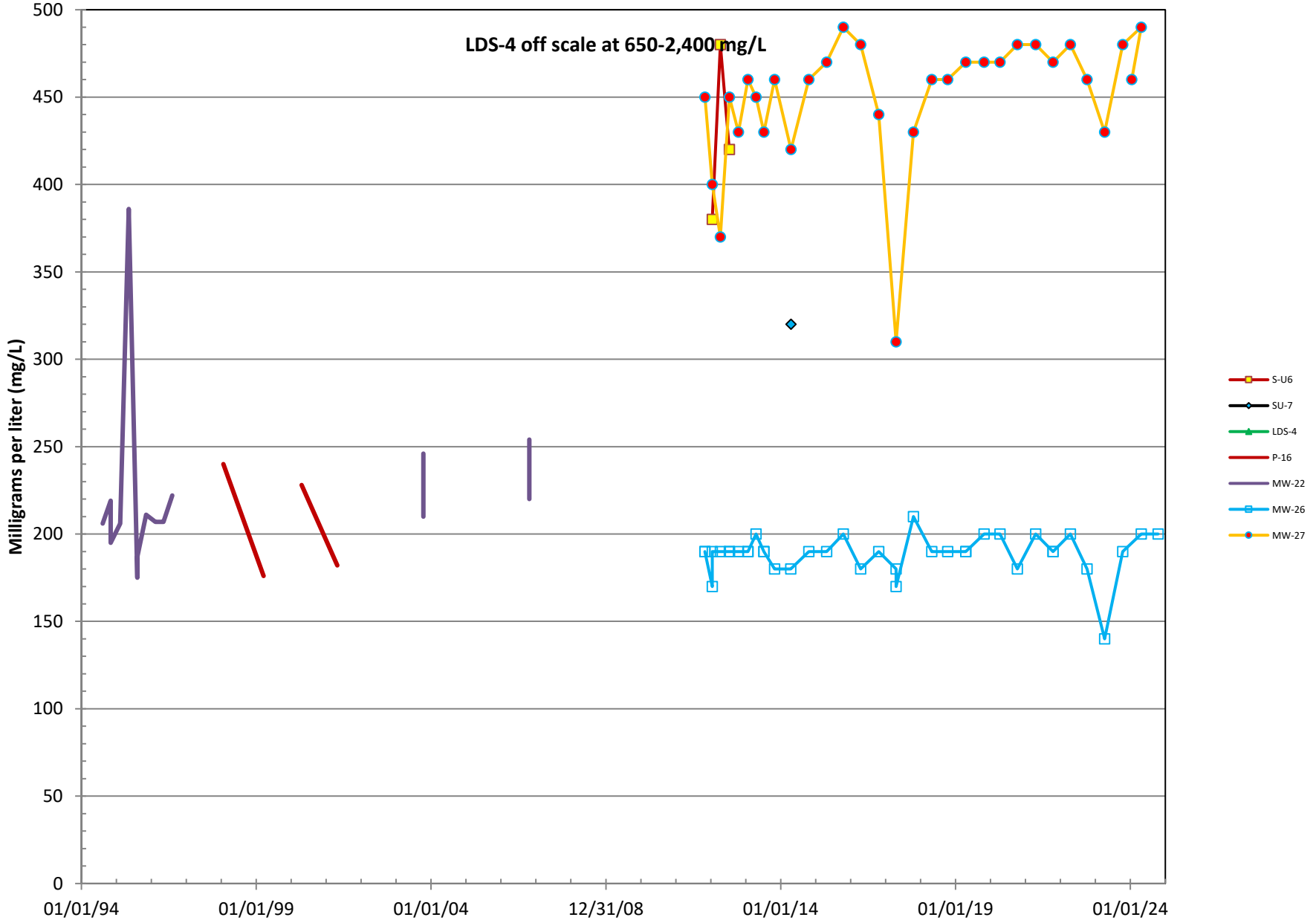
Underdrain - West Leachate Pond Area
Total Dissolved Solids
Coffin Butte Landfill



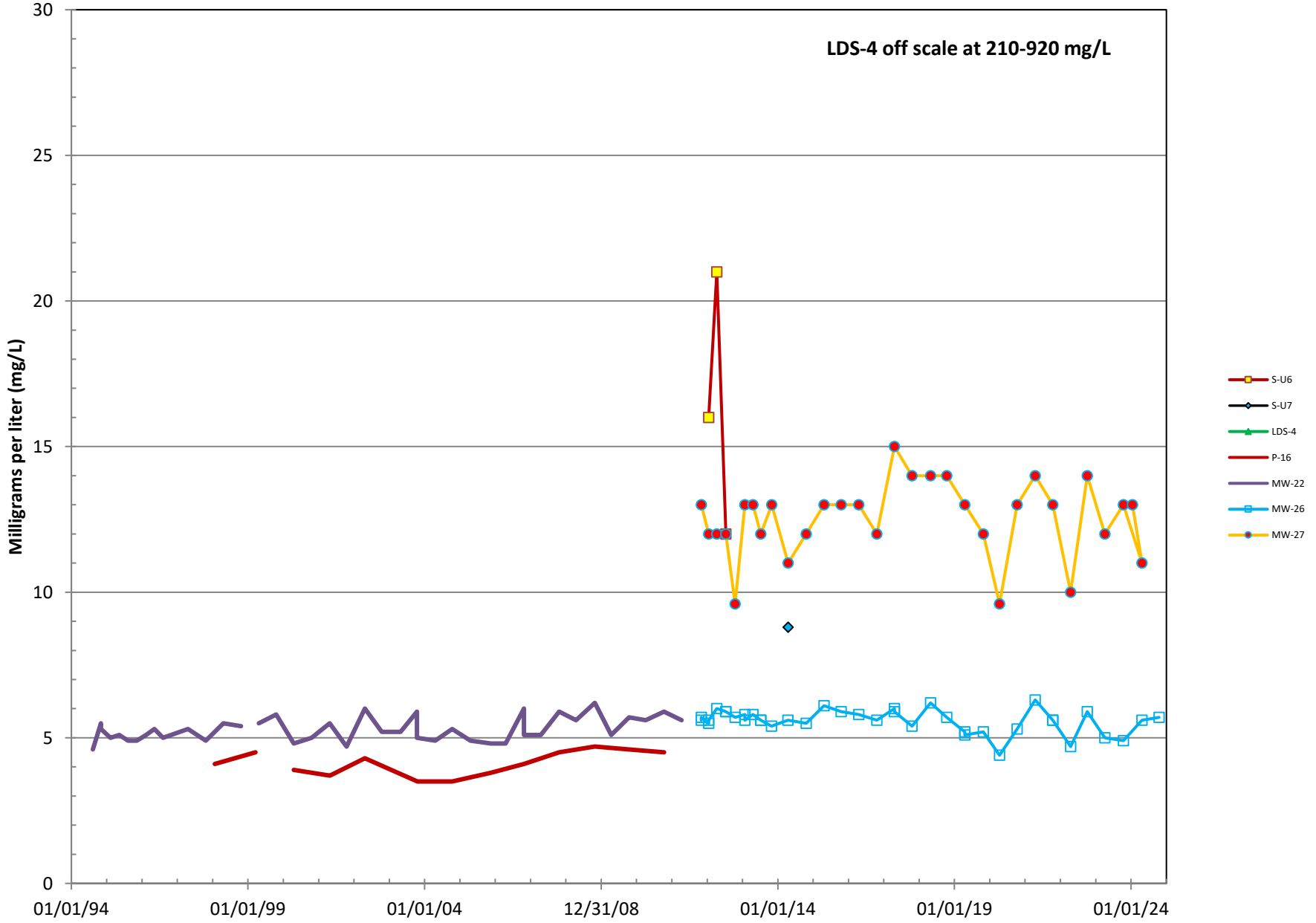
Underdrain - East Leachate Pond Area
Total Dissolved Solids
Coffin Butte Landfill



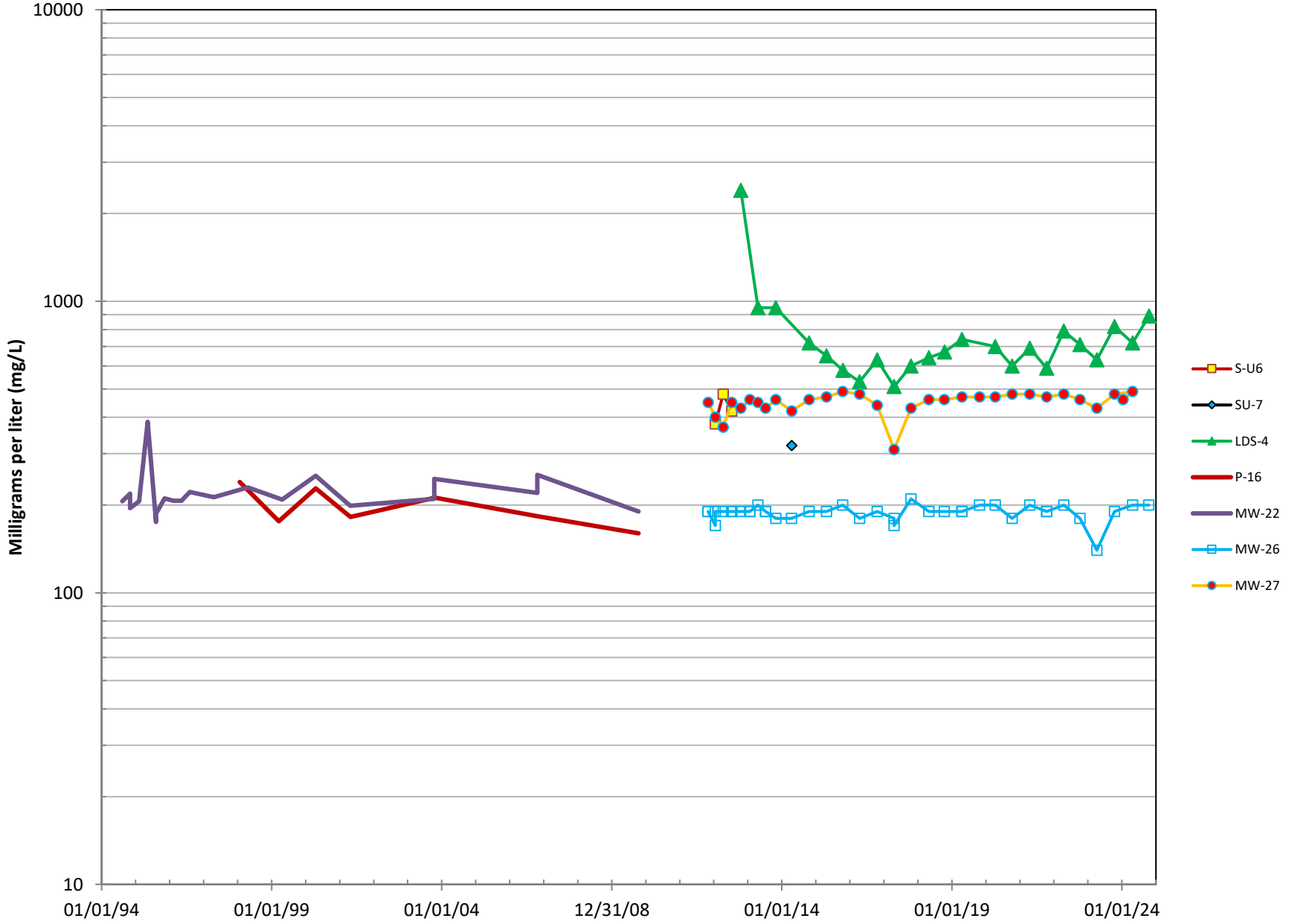
Cell 4 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



Cell 4 Underdrain Water Quality
Chloride
Coffin Butte Landfill



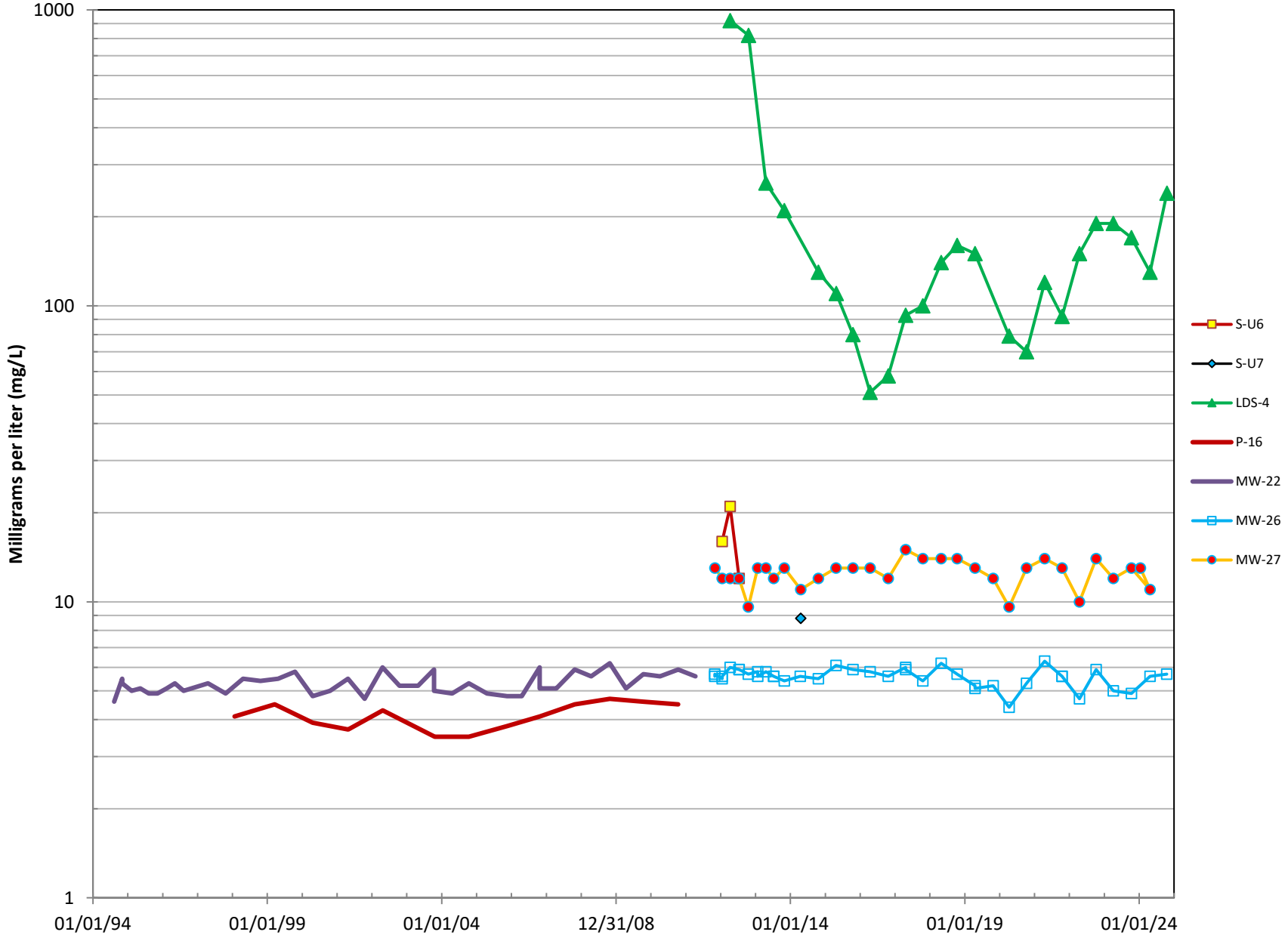
Cell 4 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



S-U6 Underdrain Cell 4TDS (log)

2/25/2025

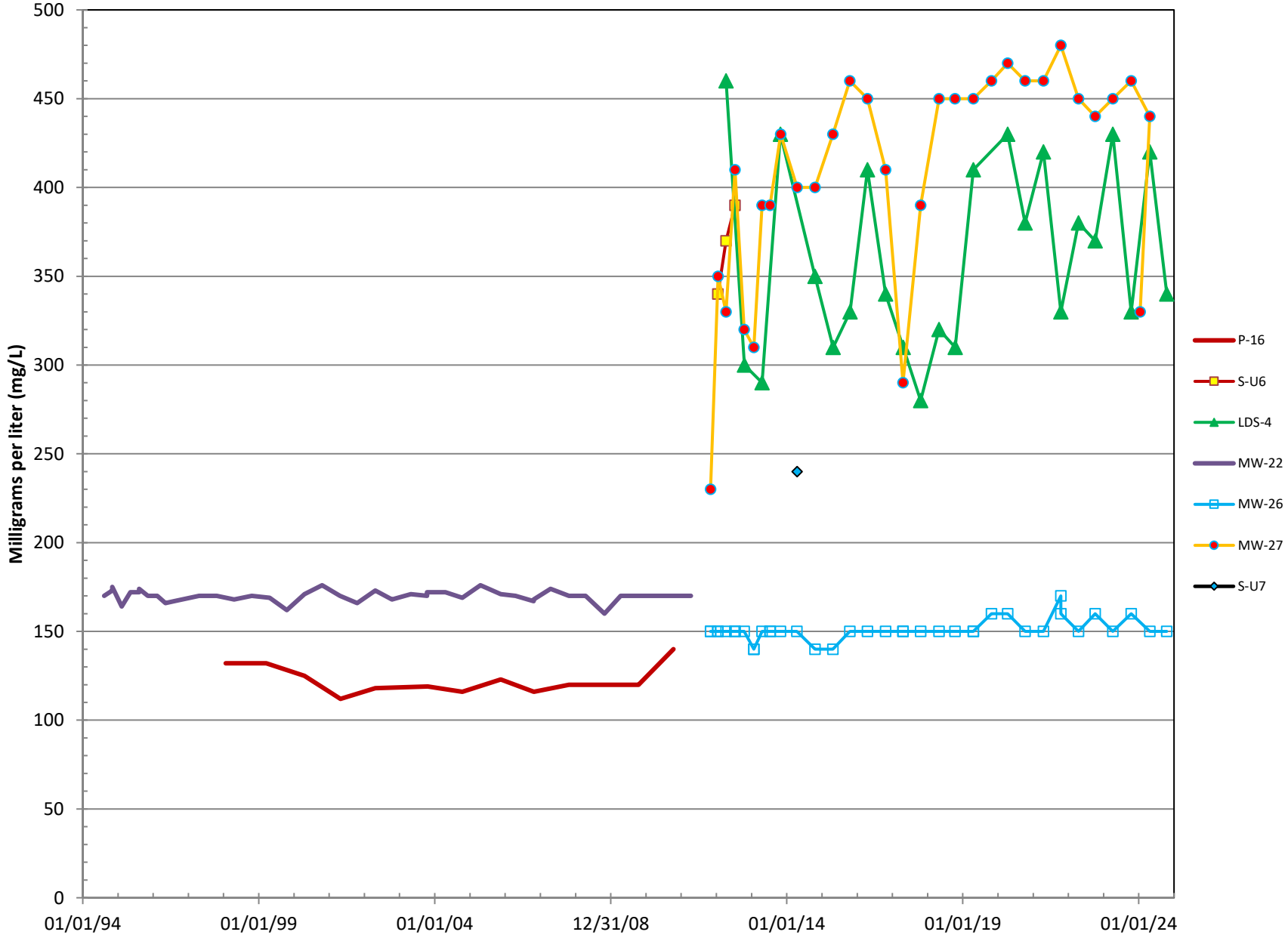
Cell 4 Underdrain Water Quality
Chloride
Coffin Butte Landfill



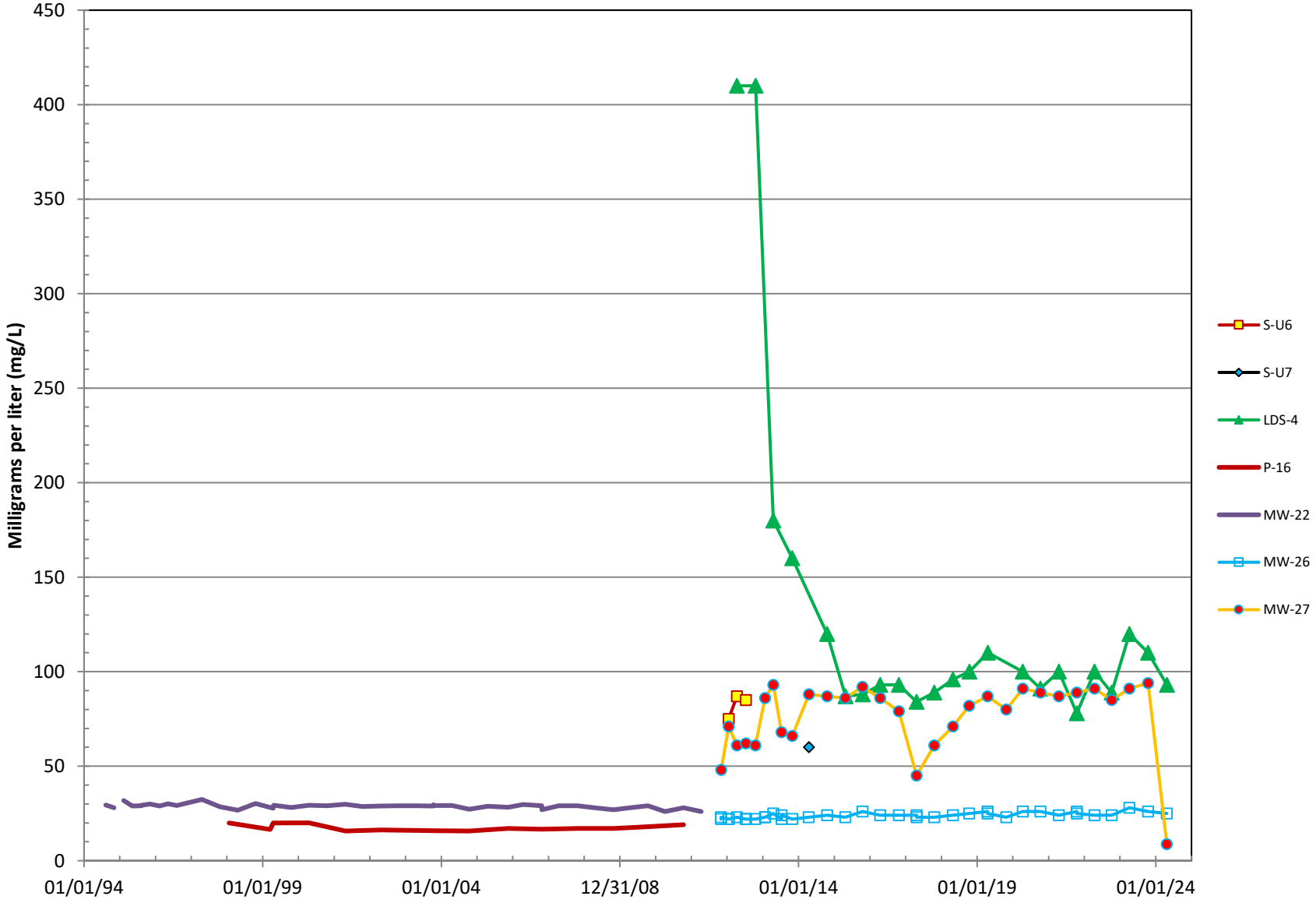
S-U6 Underdrain Cell 4Cl (log)

2/25/2025

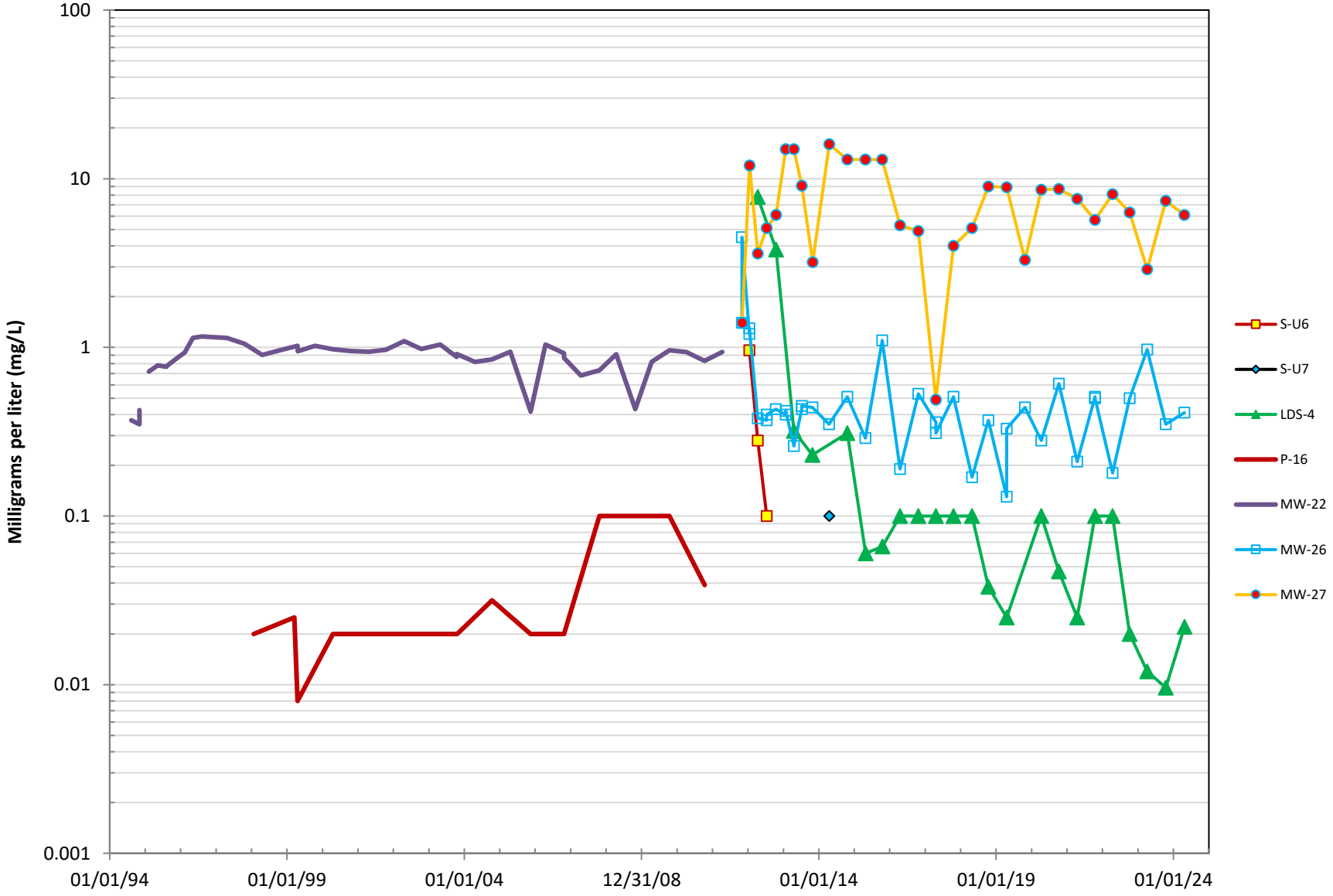
Cell 4 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



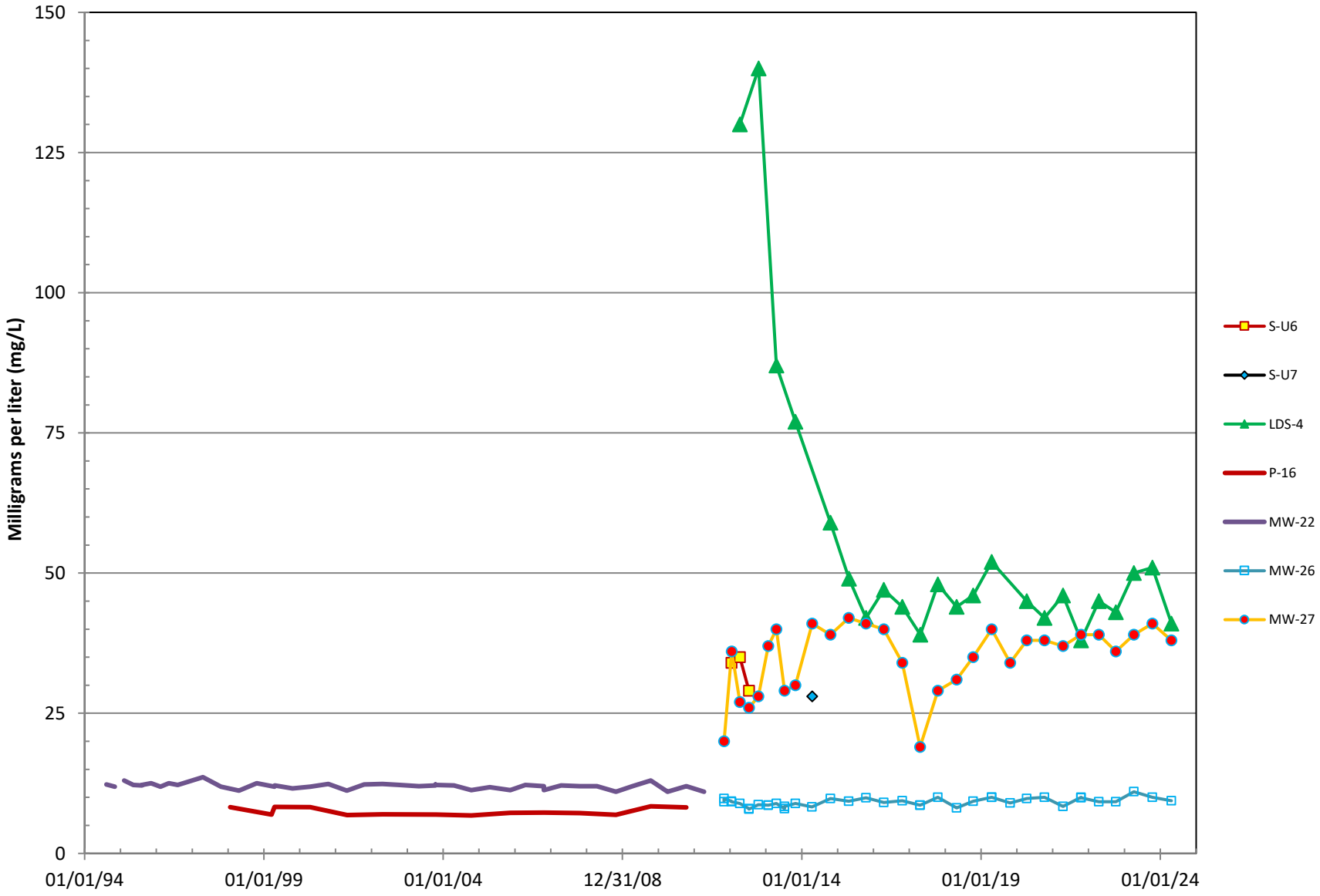
Cell 4 Underdrain Water Quality
Calcium
Coffin Butte Landfill



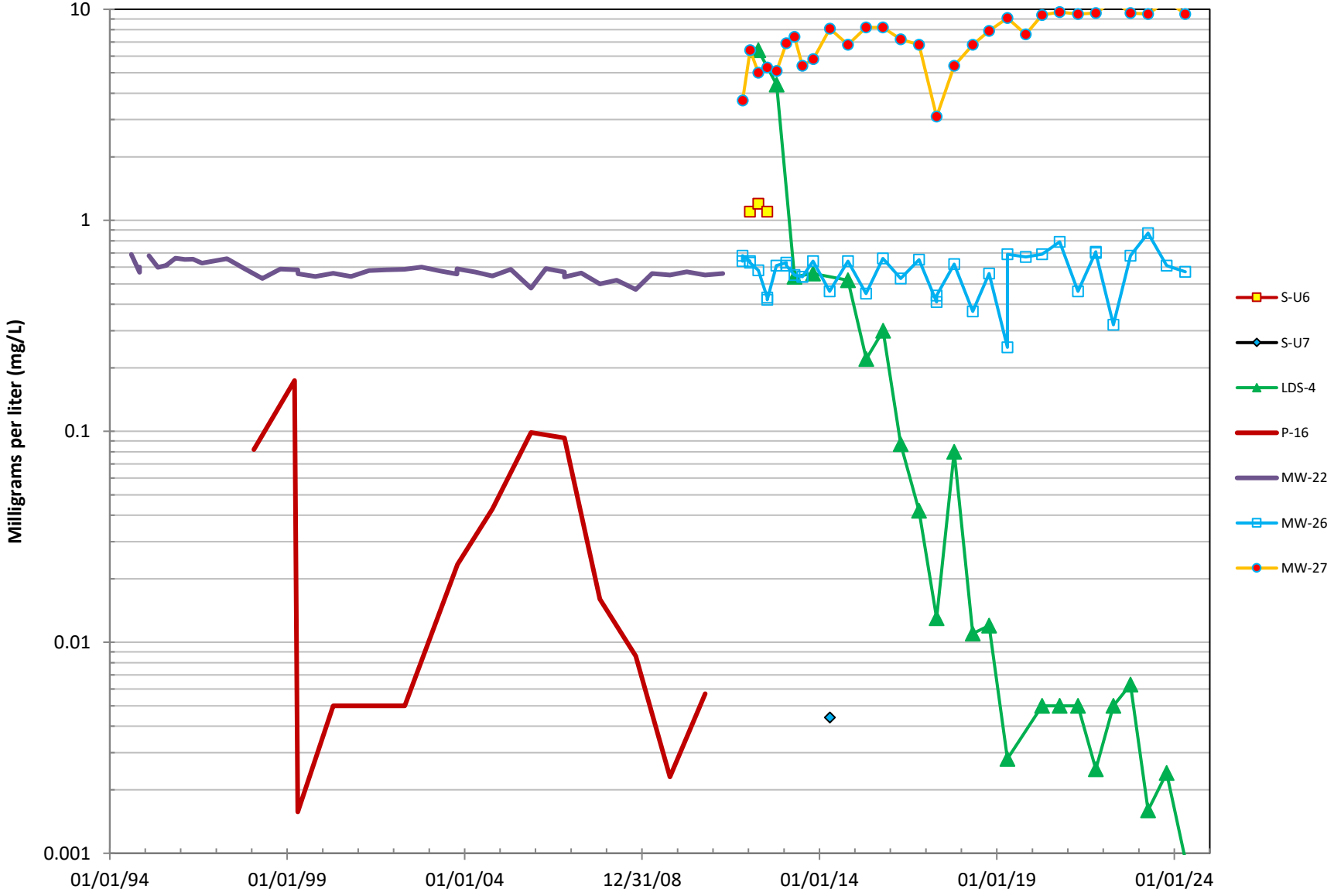
Cell 4 Underdrain Water Quality
Iron
Coffin Butte Landfill



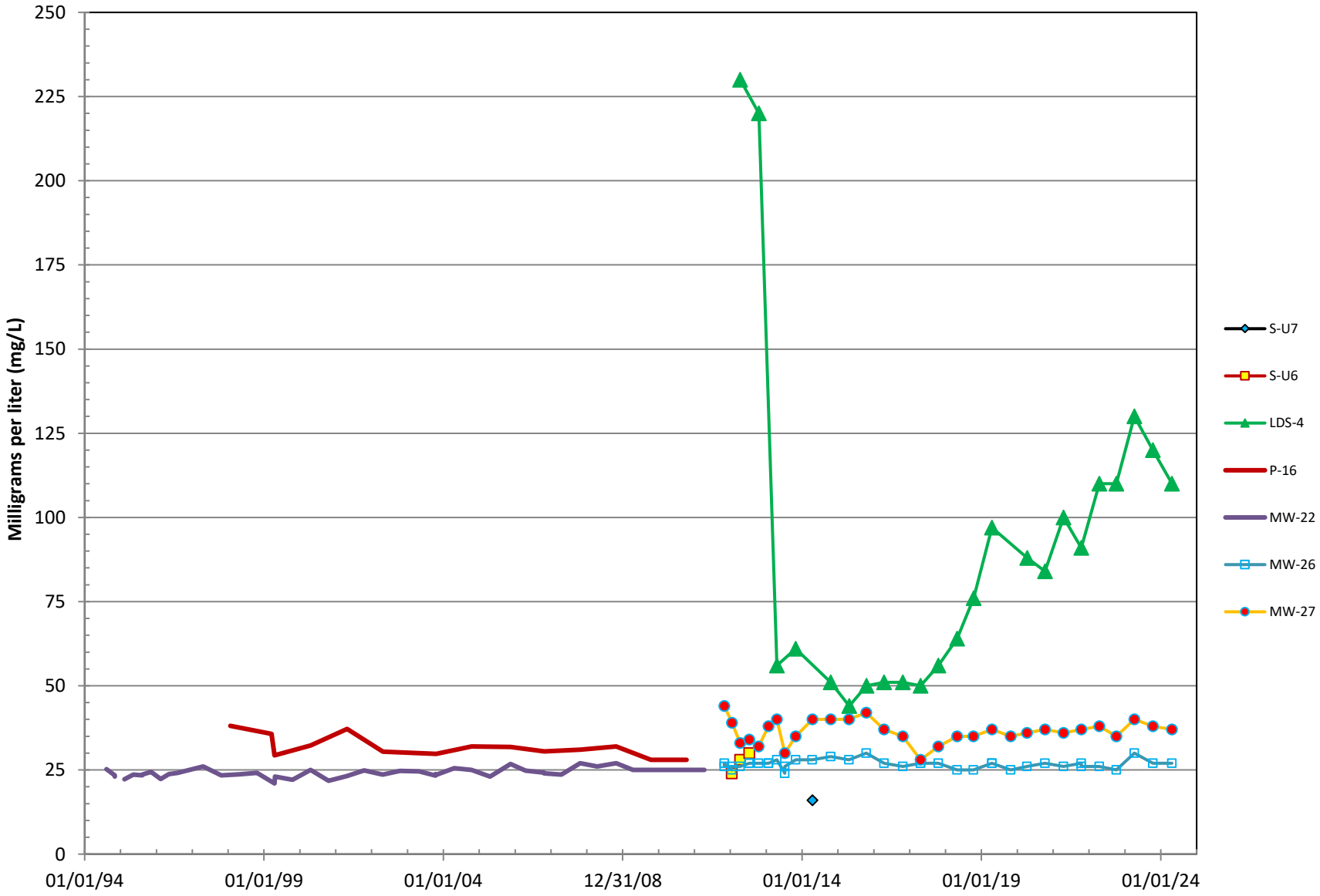
Cell 4 Underdrain Water Quality
Magnesium
Coffin Butte Landfill



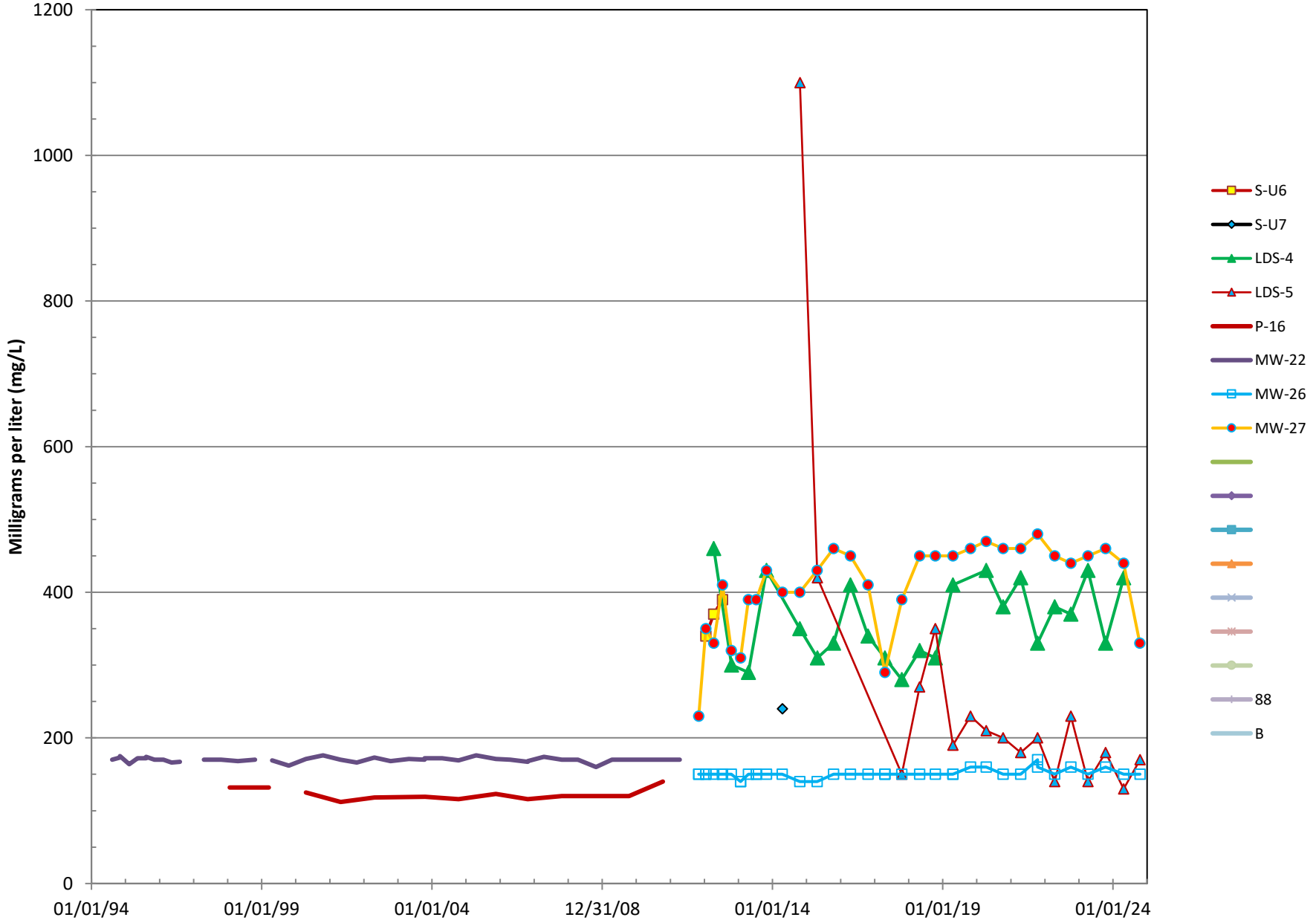
Cell 4 Underdrain Water Quality
Manganese
Coffin Butte Landfill



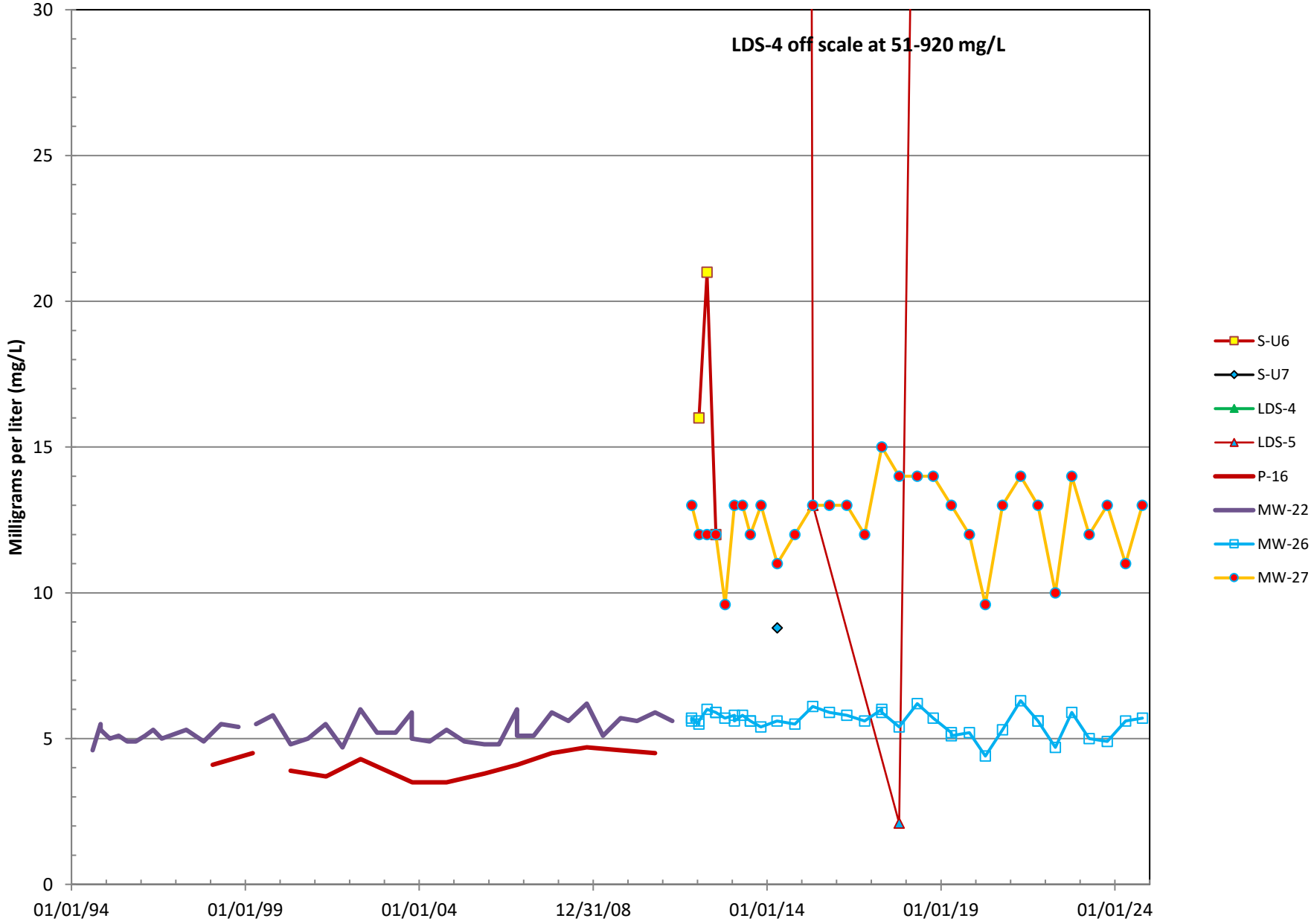
Cell 4 Underdrain Water Quality
Sodium
Coffin Butte Landfill



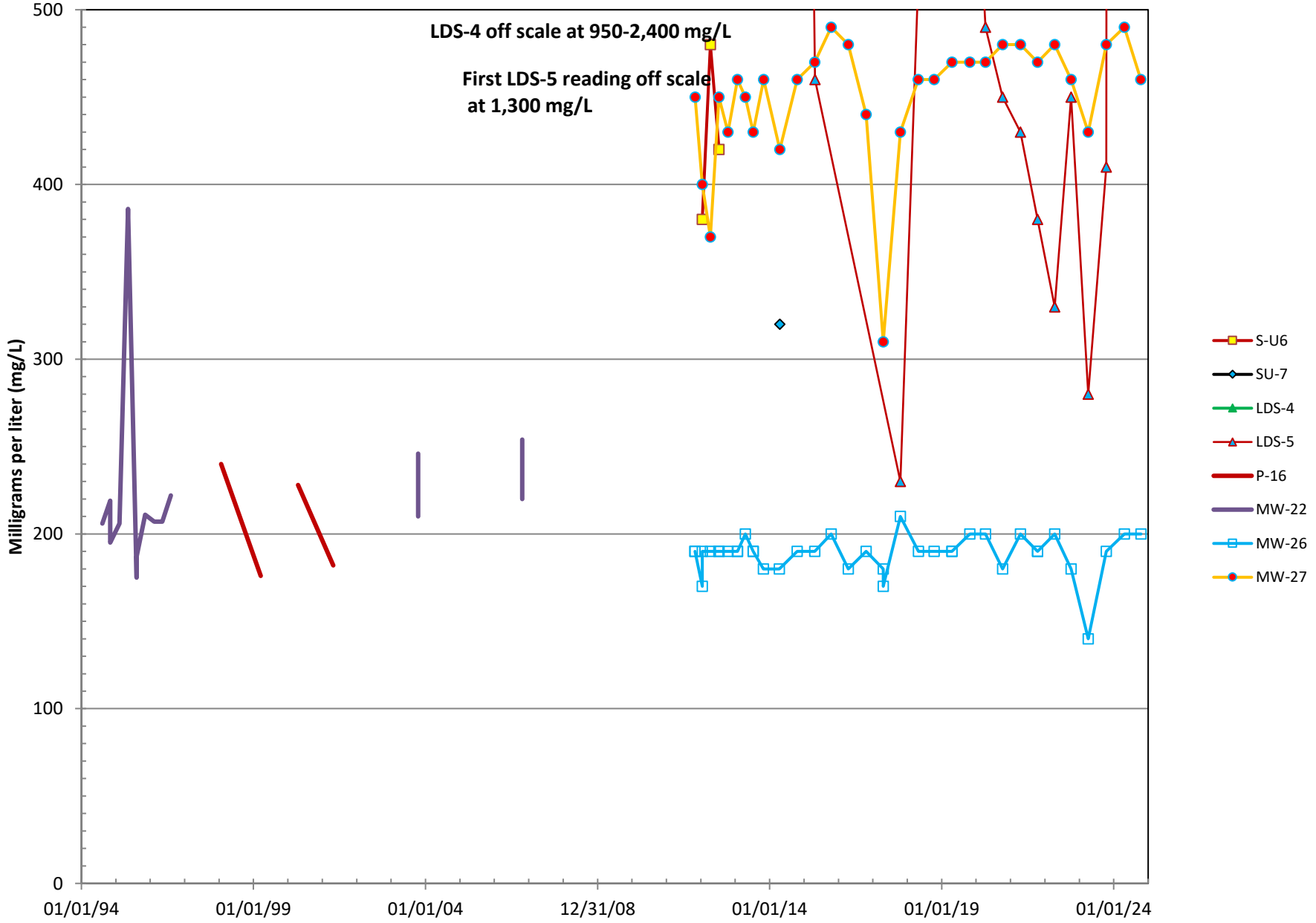
Cell 5 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



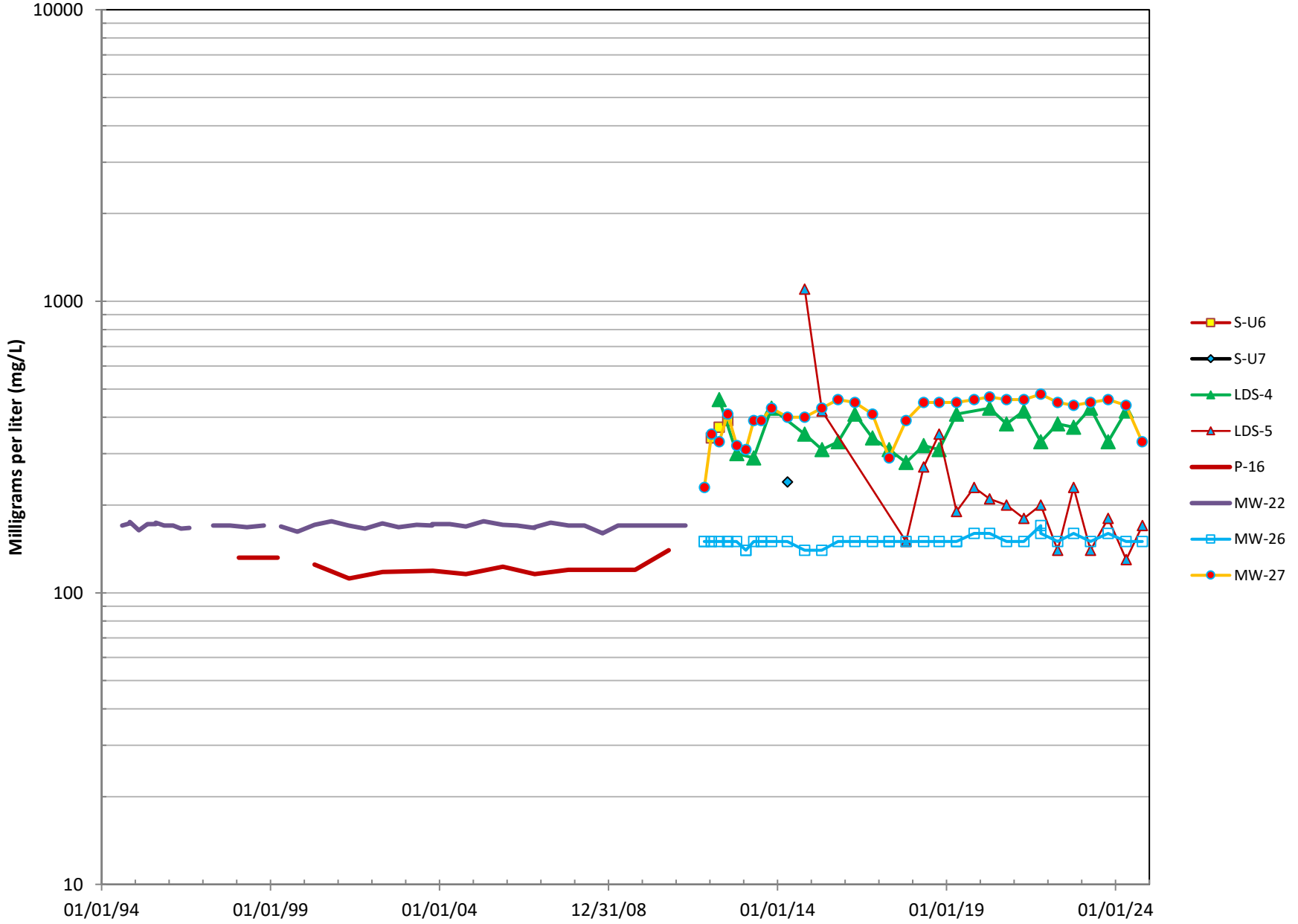
Cell 4 Underdrain Water Quality
Chloride
Coffin Butte Landfill



Cell 4 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



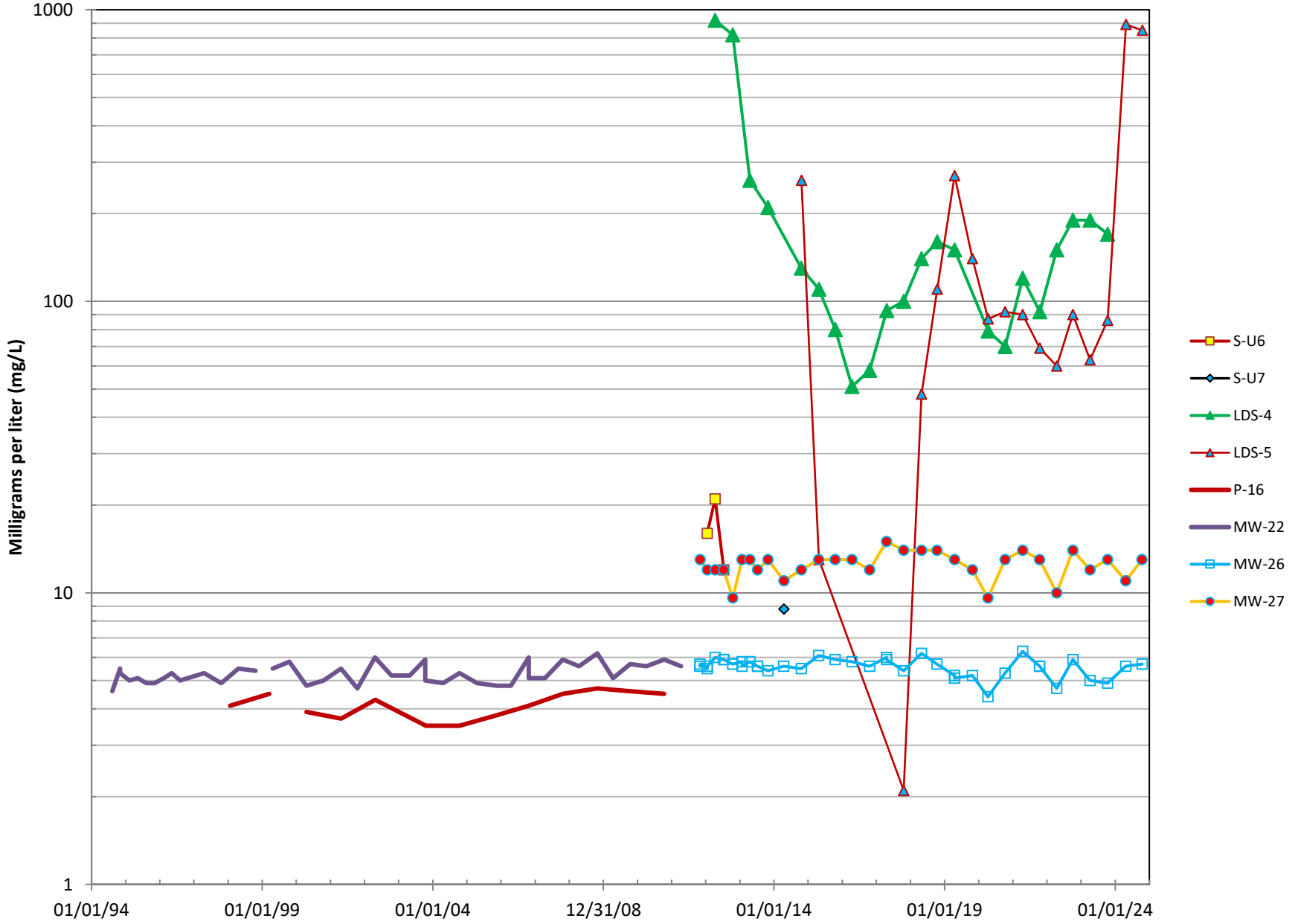
Cell 5 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



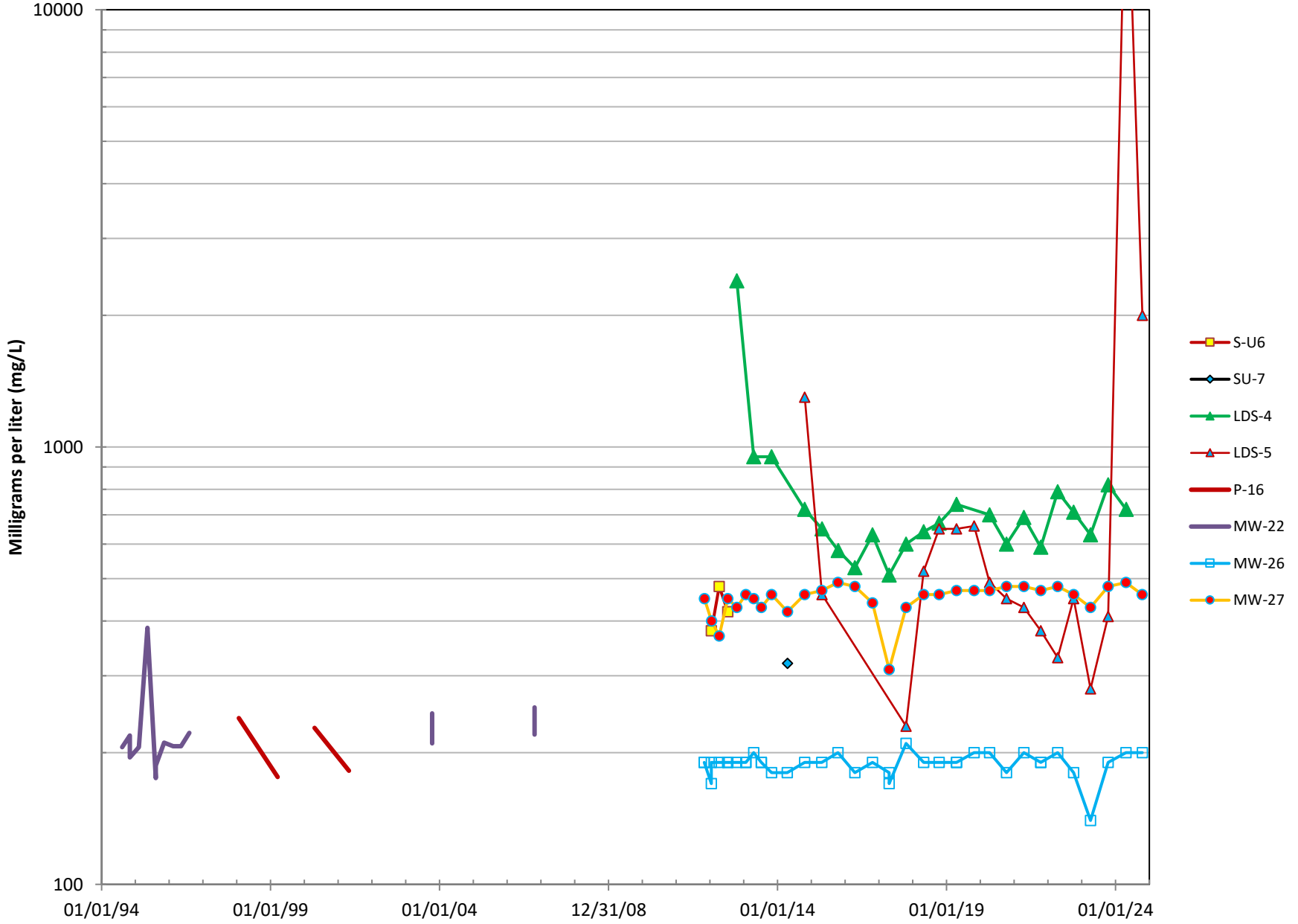
S-U7 Underdrain Cell 5HCO3 (log)

2/25/2025

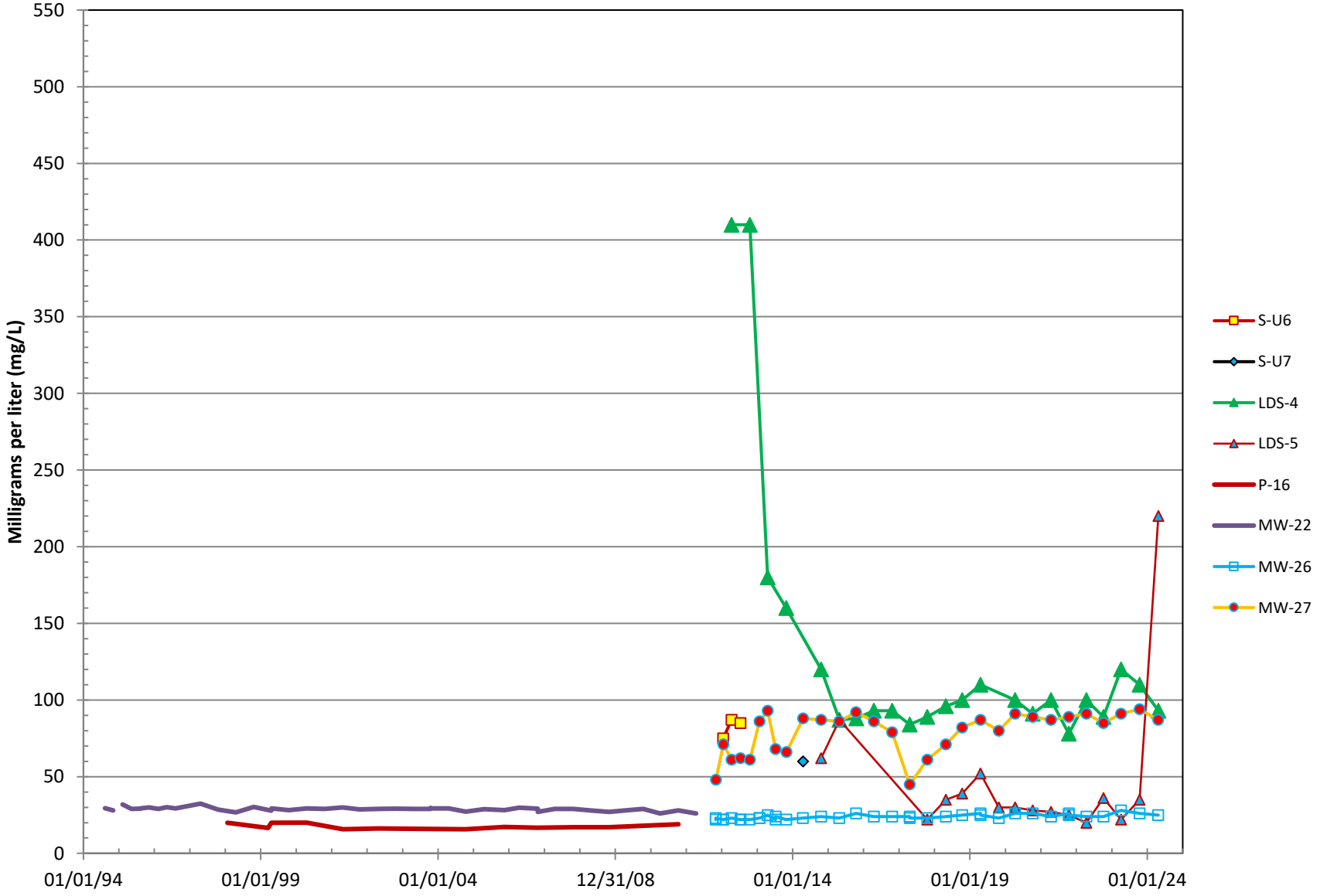
Cell 5 Underdrain Water Quality
Chloride
Coffin Butte Landfill



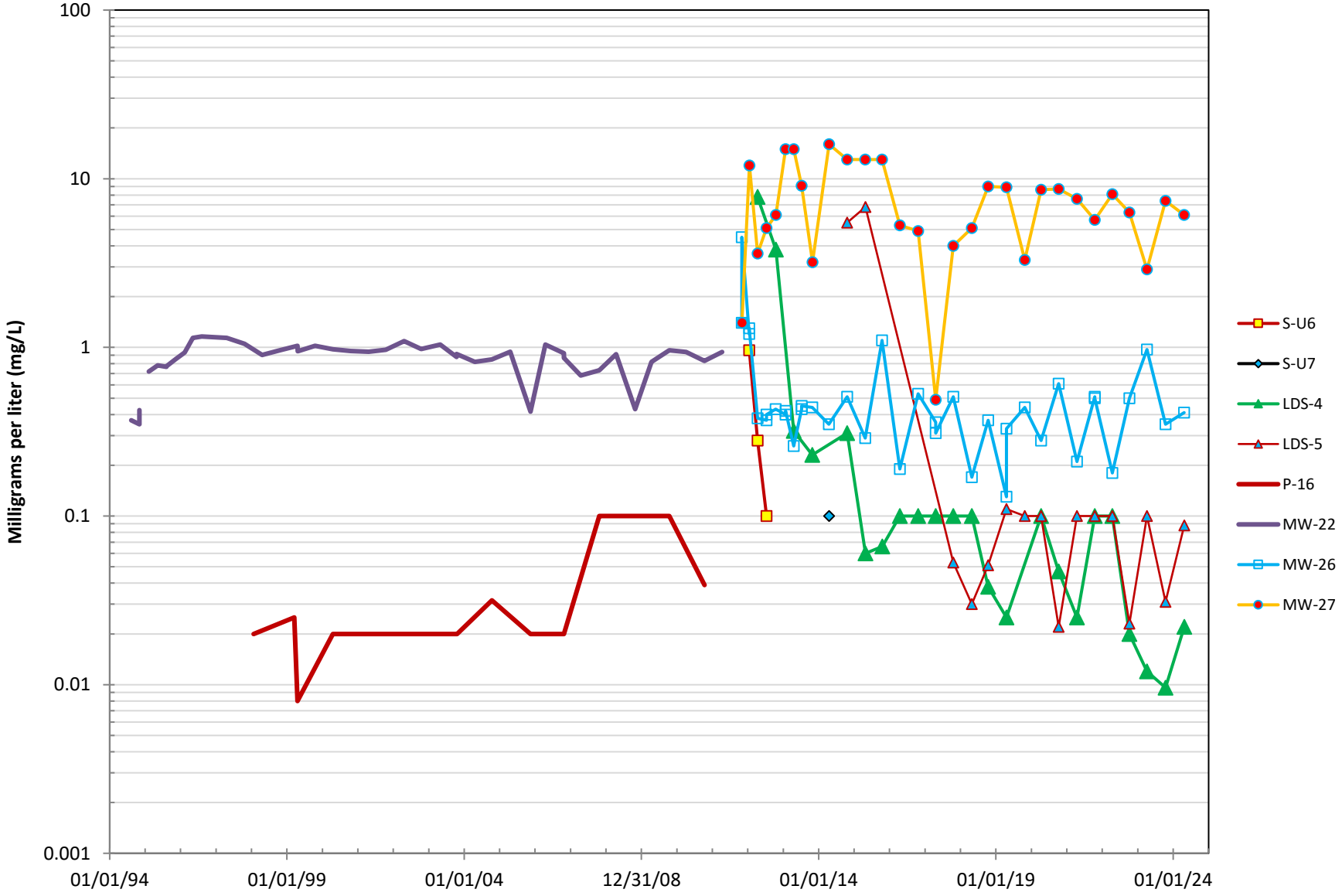
Cell 5 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



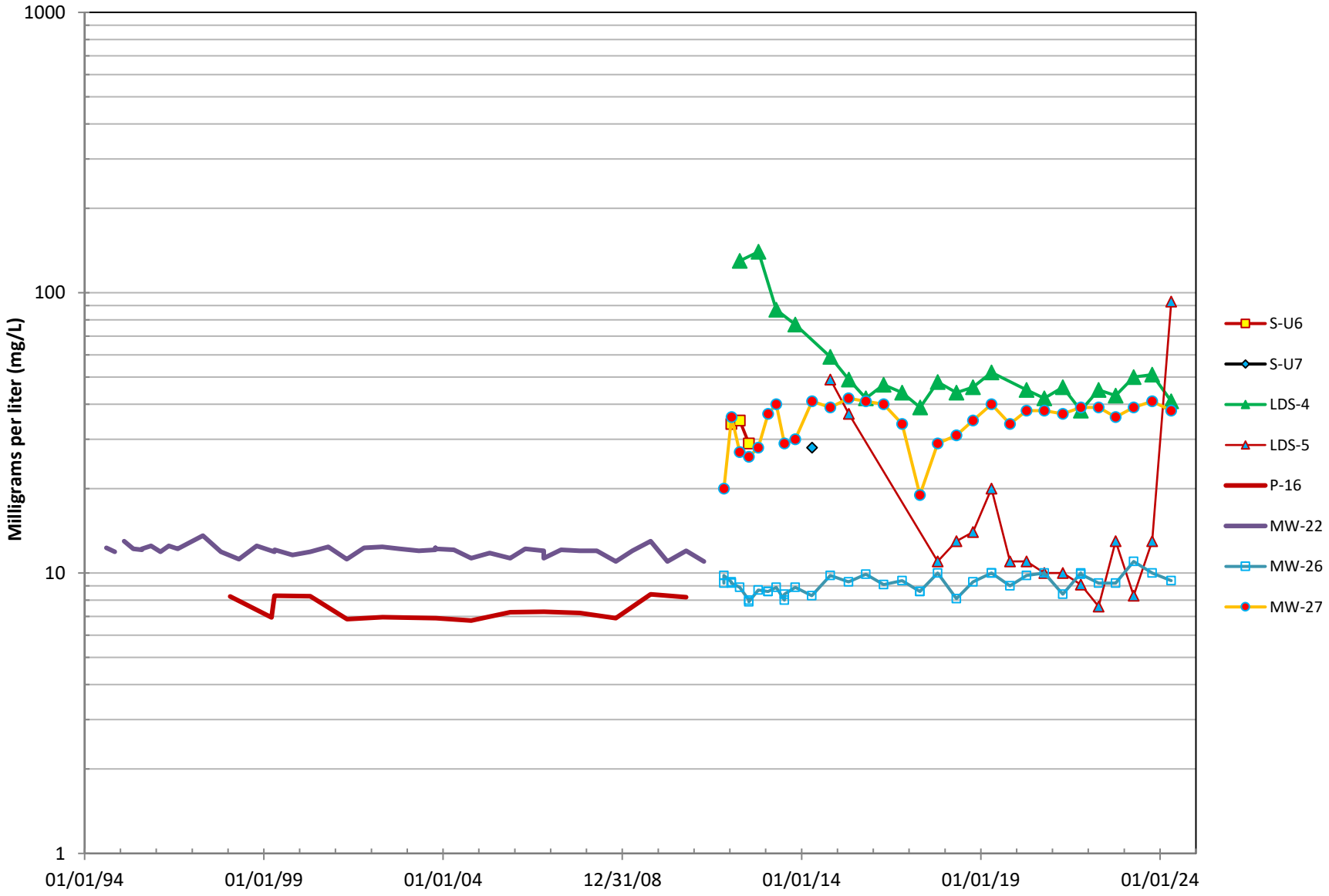
Cell 5 Underdrain Water Quality
Calcium
Coffin Butte Landfill



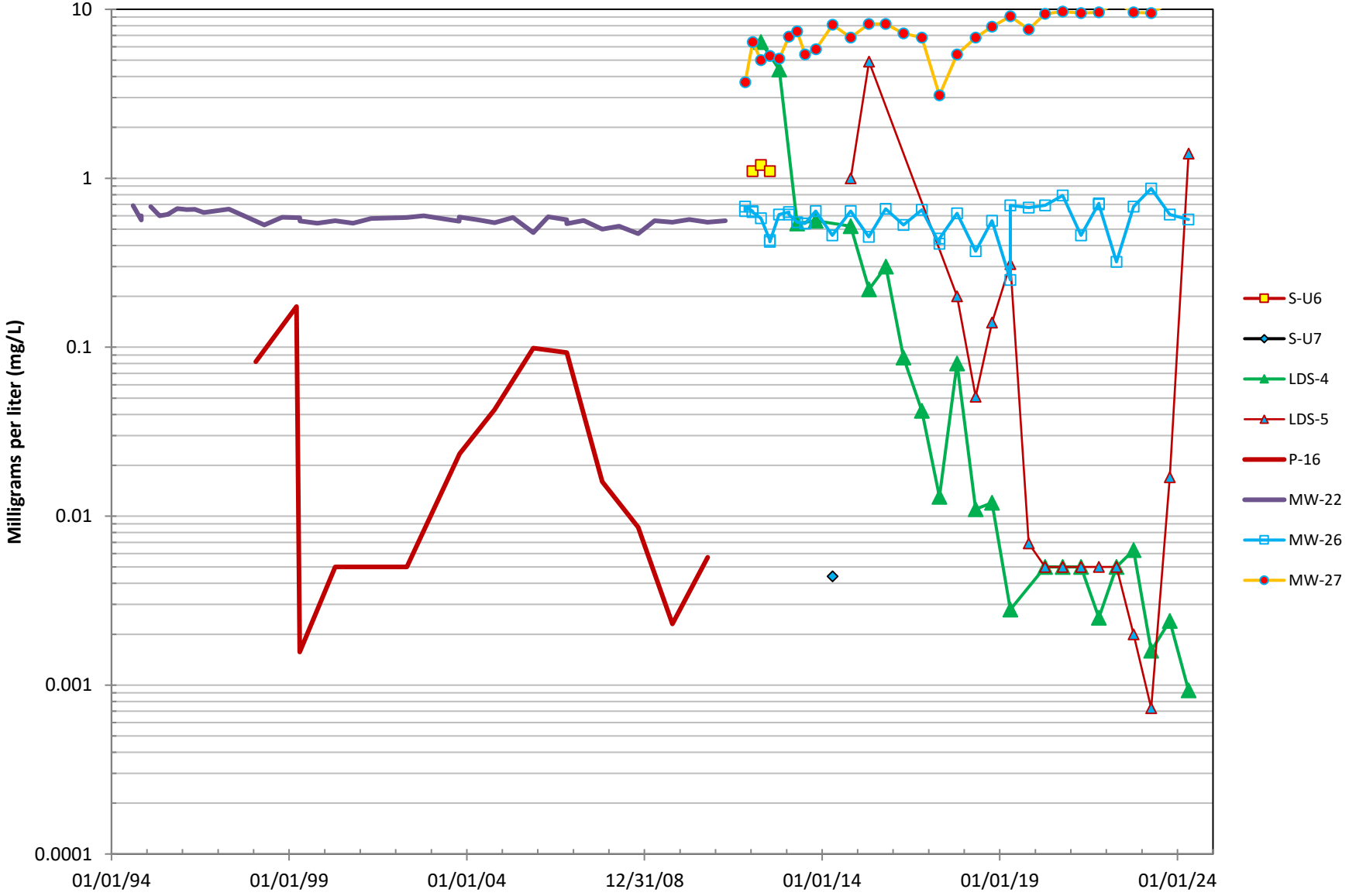
Cell 5 Underdrain Water Quality
Iron
Coffin Butte Landfill



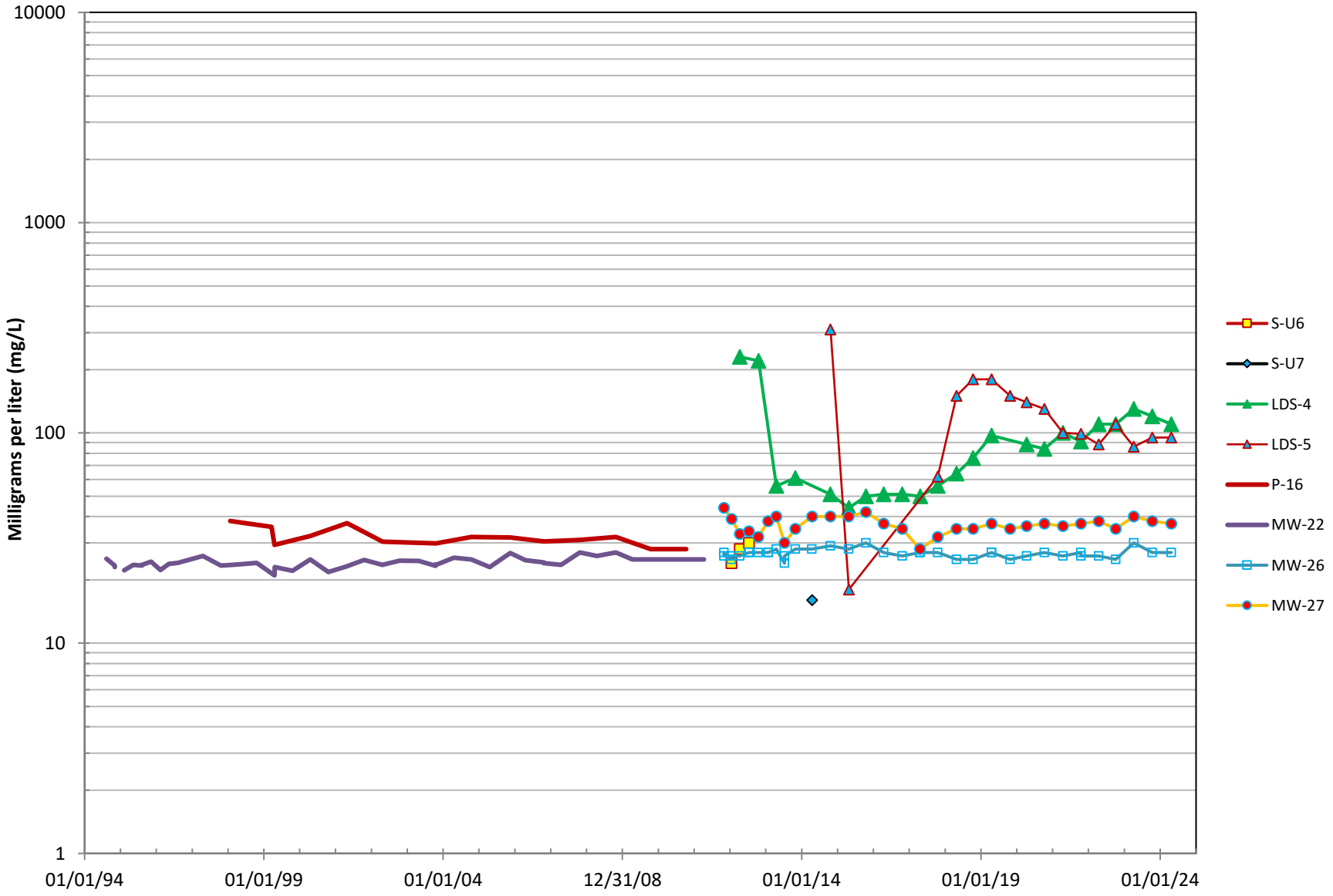
Cell 5 Underdrain Water Quality
Magnesium
Coffin Butte Landfill



Cell 5 Underdrain Water Quality
Manganese
Coffin Butte Landfill



Cell 5 Underdrain Water Quality
Sodium
Coffin Butte Landfill



Appendix D

Field Sampling Data Sheets and Laboratory Reports

Geo-Logic ASSOCIATES

Geo-Logic ASSOCIATES

GROUNDWATER MONITORING PROGRAM
WATER LEVEL SURVEY RECORD SHEET

SITE NAME: COFFIN BUTTE 4/F
DATE: 04-22-2024
PROJECT NUMBER AU24.1090
WATER LEVEL MAKE/MODEL: SOLINST 101 500'
FIELD PERSONNEL: N. REASON, N. RUDOLPH

WELL ID	CONSTRUCTION TOTAL DEPTH (TD)	~~ACTUAL TOTAL DEPTH (TD)~~ DTMB	DEPTH TO WATER (DTW)	COMMENTS
MW-1S		1811	24.49	WATER IS AT TD
MW-1D		1812	24.64	
MW-3S		1755	18.38	
MW-3D		1757	20.34	
MW-8S			3.21	ANTS INSIDE MONUMENT
MW-8D			2.83	
MW-9S			3.78	
MW-10S		1525	25.51	
MW-10D		1523	25.71	
MW-11S		1721	9.76	
MW-11D		1635	10.24	
MW-12S		1800	20.09	
MW-12D		1801	19.92	
MW-14S			14.38	YELLOW JACKETS INSIDE MONUMENT
MW-14D			22.39	YELLOW JACKETS INSIDE MONUMENT
MW-15			2.23	
MW-17		1502	14.35	
MW-18		1543	6.74	
MW-19		1535	4.47	
MW-20		1555	2.06	
MW-21		1610	4.19	
MW-23		1817	1.48	
MW-24		1349	17.87	
MW-26		1332	7.88	
MW-27		1337	21.41	
P-8		1040	5.86	NEEDS NEW LOCK
P-9		1034	5.14	

REMARKS: PAGE 1 of 2

SIGNATURE: NICHOLAS REASON

Geo-Logic ASSOCIATES

GROUNDWATER MONITORING PROGRAM
WATER LEVEL SURVEY RECORD SHEET

SITE NAME: COFFIN BUTTE L/F
DATE: 04-22-2024
PROJECT NUMBER AU24.1090
WATER LEVEL MAKE/MODEL: SOLINST 101 500'
FIELD PERSONNEL: N.REASON, N.RUDOLPH TIME

WELL ID	CONSTRUCTION TOTAL DEPTH (TD)	~~ACTUAL TOTAL DEPTH (TD)~~	DEPTH TO WATER (DTW)	COMMENTS
P-10		1105	0.00	WATER DAYLIGHTING WITH FLOW
P-19		1413	14.45	
P-22		1144	34.23	
P-23		1136	97.71	
DUPLEX			13.37	MOUSE NEST IN BOX
PHILLIPS			23.45	
BERKLAND NEW		0957	27.00	RATS NEST, YELLOW JACKETS INSIDE CONTAINMENT
BERKLAND OLD		0959	2.65	
MERRIL		1004	14.22	
S-2		1111	15.02	
S-4		1050	15.74	
PW-2		1424	11.45	
QP-3S		1208	309.64	
QP-4S		1127	108.73	
QP-5N		1224	95.48	
QP-6N		1231	51.47	
QP-7N		1238	9.09	
WP-1		1540	4.76	
WP-3		1508	9.26	
WP-5		1019	7.20	NO LOCK, NO PVC CAP
WP-6		1014	6.48	NO LOCK, NO PVC CAP
WP-8		1805	16.92	
WP-9		1606	7.55	
S-1		1027	14.21	
BH-16			1.92	
BH-17			16.34	

REMARKS: PAGE 2 OF 2

SIGNATURE: NICHOLAS REASON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL COFFIN BUTTE **Project No.:** AU24.1090

Station I.D.: S-1 **Sampling Date:** 04/23/2024
Collected By: NR, NR **Sampling Time:** 1300
Horiba Model S/N: U-52/ XMAR4034 **Duplicate Sample:** (YES) NO
Duplicate @ 1215

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	8.86	0.136	0.0	10.22	15.58	161

Surface water conditions (including stream flow rate, stream depth): STREAM APPROX 18 FT ACCROSS AND 4 FT DEEP WITH MODERATE FLOW

Additional Info/Comments: SUNNY, WARM

NICHOLAS REASON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL **Project No.:** AU24.1090

Station I.D.: S-1 **Sampling Date:** 4/24/2024
Collected By: NR, NR **Sampling Time:** 1210
Horiba Model S/N: U-52/XMAR4054 **Duplicate Sample:** (YES) NO

DUPLICATE COLLECTED AT 1220

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	9.27	0.141	0.0	9.48	13.68	~~88~~ (NR)

Surface water conditions (including stream flow rate, stream depth): ★ BOD ONLY RESAMPLE ★
STREAM APPROX 18 FEET ACROSS AND 3 FEET DEEP WITH MODERATE FLOW

Additional Info/Comments: CLOUDY, COOL TEMP

NICHOLAS ROBSON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Valley Landfill - Coffin Butte **Project No.:** AUZ4-1090

Station I.D.: S-2
Collected By: NR, NR
Horiba Model S/N: U-52 / XMAR4034

Sampling Date: 4/23/24
Sampling Time: 1340
Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	8.77	0.141	0.0	10.36	15.02	189

Surface water conditions (including stream flow rate, stream depth): STREAM APPROX 12 FT WIDE AND 1 FOOT DEEP WITH MODERATE FLOW

Additional Info/Comments: SUNNY, WARM

Nicholas Reason

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL Project No.: AU24.1090

Station I.D.: S-2 Sampling Date: 4/24/2024
Collected By: NR Sampling Time: 1310
Horiba Model S/N: U-52/XMAR4034 Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	9.00	0.144	0.0	9.92	13.35	131

Surface water conditions (including stream flow rate, stream depth): ★ BOD ONLY RESAMPLE ★
Stream 10-12 FT WIDE AND 6-8 inches deep WITH MODERATE FLOW

Additional Info/Comments: CLOUDY, COOL

NICHOLAS REASON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Valley Landfill - Coffin Butte Project No.: AU24.1090

Station I.D.: S-4 Sampling Date: 4/23/24
Collected By: NR NR Sampling Time: 1410
Horiba Model S/N: U-52 | XMAR4034 Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	8.77	0.138	0.0	11.76	16.00	139

Surface water conditions (including stream flow rate, stream depth): Stream is 8 FT WIDE AND APPROX 1 FOOT DEEP WITH MODERATE FLOW

Additional Info/Comments: SUNNY, WARM

NICHOLAS REBSON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL **Project No.:** AU24.1090

Station I.D.: S-4 **Sampling Date:** 4/24/2024
Collected By: NR, NR **Sampling Time:** 1250
Horiba Model S/N: U-52 / XMAR3044 **Duplicate Sample:** YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	9.10	0.142	0.0	8.68	13.38	108

Surface water conditions (including stream flow rate, stream depth): * BOD ONLY RESAMPLE *
STREAM APPX 8 FT WIDE AND 1 FOOT DEEP WITH MODERATE FLOW

Additional Info/Comments: Cloudy, cool temp

NICHOLAS PEARSON

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-1D	**Sampling Date:**	04/24/2024
Collected By:	NR NR	**Purge start Time:**	0910
Casing Diameter (inches):	2	**Purge Stop time:**	0927
Starting Water Level:	24.92	**Sampling (Well Recovery) Time:**	0937
Total Depth (feet):	41.40	**Ending Water Level (feet):**	25.15
Water column (feet):	16.48	**Total Purged (gallons):**	4
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52/XMAR403Y		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0913	.5	25.4	6.78	0.307	0	3.21	13.64	298
0914	1	25.1	7.34	0.249	0	3.21	13.93	259
0916	1.5	25.3	7.62	0.243	0	3.20	14.05	244
0918	2	25.15	7.80	0.242	0	3.20	14.18	214
0919	2.5	25.35	7.91	0.241	0	3.27	14.23	178
0921	3	25.14	7.97	0.240	0	3.28	14.19	157
0923	3.5	25.25	8.08	0.239	0.2	3.20	14.20	140
0925	3.75	25.15	8.07	0.239	~~2.8~~ NR 0.1	3.27	14.23	140
0926	4	25.15	8.15	0.239	0.1	3.23	14.24	136

Purge Sampling Rates: 22 psi Setting Controller CMP #4

Well condition: Good

Additional Info/Comments: Cloudy, cool temp

Name: NICHOLAS PERSON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL - COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-3D	**Sampling Date:**	4/23/24
Collected By:	NR, NR	**Purge start Time:**	0950
Casing Diameter (inches):	2	**Purge Stop time:**	1005
Starting Water Level:	20.34	**Sampling (Well Recovery) Time:**	1015
Total Depth (feet):	56.20	**Ending Water Level (feet):**	21.39
Water column (feet):	35.86	**Total Purged (gallons):**	2.5
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR 4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0954	0.5	21.4	8.43	0.403	0.0	3.44	16.02	128
0959	1.0	21.42	8.20	0.359	0.0	2.65	15.34	137
1001	1.5	21.39	8.17	0.357	0.0	10.34	15.23	146
1003	2	21.39	8.13	0.358	0.0	2.55	15.09	151
1005	2.5	21.39	8.10	0.360	0.0	2.59	14.96	156

Purge Sampling Rates: PSI 19 CPM setting #4

Well condition: OK

Additional Info/Comments: SUNNY, WARM, MODERATE - HEAVY vehicle traffic next to well

Name: NICHOLAS REASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL - COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-10S	**Sampling Date:**	4/23/24
Collected By:	NR NR	**Purge start Time:**	0914
Casing Diameter (inches):	2	**Purge Stop time:**	0924
Starting Water Level:	25.52	**Sampling (Well Recovery) Time:**	0934
Total Depth (feet):	40.50	**Ending Water Level (feet):**	27.00
Water column (feet):	14.98	**Total Purged (gallons):**	2
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0918	1/2	26.59	7.92	2.60	0.0	2.37	16.52	184
0920	1	26.75	7.94	2.64	0.0	2.31	16.13	168
0922	1 1/2	26.91	7.86	2.65	0.0	2.35	16.08	159
0924	2	27.00	7.85	2.65	0.0	2.33	15.99	162

Purge Sampling Rates: ~~N~~ 20 PSI Controller Setting CPM #4

Well condition: OK

Additional Info/Comments: SUNNY, WARM, Heavy vehicle traffic NEXT TO WELL

Name: NICHOLAS PEARSON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL - COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-10D	**Sampling Date:**	4/23/2024
Collected By:	NR, NR	**Purge start Time:**	0823
Casing Diameter (inches):	2	**Purge Stop time:**	0847
Starting Water Level:	25.55	**Sampling (Well Recovery) Time:**	0857
Total Depth (feet):	83.50	**Ending Water Level (feet):**	35.12
Water column (feet):	57.95	**Total Purged (gallons):**	2.50
Screen Length (feet):	-	**Duplicate Sample:**	(YES) NO
Sample Method:	(Micro Purge) Low Flow	DUPLICATE 1 COLLECTED @ 0700	
Horiba Model S/N:	U-52 | XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0829	.5	29.68	9	0.864	0	2.12	16.42	211
0835	1	31.3	7.59	0.815	0	2.35	15.57	148
0839	1.5	32.87	7.83	0.817	0	2.29	15.28	116
0843	2	34.19	7.89	0.866	0	2.59	15.29	104
0845	2.25	34.85	7.87	0.805	0	2.43	15.41	96
0847	2.50	35.12	7.88	0.803	0	2.49	15.38	103

Purge Sampling Rates: PURGE Settings CPM Setting # 4 Psi @ 21

Well condition: OK - WATER CLEAR WITH NO ODOR

Additional Info/Comments: SUNNY, WARM, HEAVY VEHICLE TRAFFIC NEXT TO WELL

Name: NICHOLAS REASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-11s (VLF240422-2)	**Sampling Date:**	4/22/2024
Collected By:	NR, NR	**Purge start Time:**	1722
Casing Diameter (inches):	2	**Purge Stop time:**	1734
Starting Water Level:	9.76	**Sampling (Well Recovery) Time:**	1744
Total Depth (feet):	31.90	**Ending Water Level (feet):**	10.91
Water column (feet):		**Total Purged (gallons):**	2
Screen Length (feet):	-	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR4054		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1724 ~~0724~~ NR	1/2	10.87	7.87	0.697	118	7.19	17.26	123
1727	1	11.10	7.38	0.857	26.2	2.05	16.37	134
1731	1 1/2	11.19	7.42	0.889	11.1	1.91	16.40	143
1734	2	10.91	7.33	0.900	7.0	1.98	15.97	145

Purge Sampling Rates: 15 PSI CPM SETTING #4

Well condition: OK

Additional Info/Comments: SUNNY, MILD TEMP, LIGHT BREEZE

Name: NICHOLAS REASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-11D (VLF240422-1)	**Sampling Date:**	4/22/2024
Collected By:	NR, NR	**Purge start Time:**	1646
Casing Diameter (inches):	2	**Purge Stop time:**	1659
Starting Water Level:	10.24	**Sampling (Well Recovery) Time:**	1710
Total Depth (feet):	75.20	**Ending Water Level (feet):**	10.30
Water column (feet):	64.96	**Total Purged (gallons):**	2
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro-Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1650	1/2		7.03	1.64	0.0	0.72	17.83	-13
1653	1	10.43	7.50	1.60	0.0	2.13	16.67	-33
1655	1 1/2	10.31	7.54	1.61	0.0	2.12	16.21	-35
1659	2	10.30	7.50	1.61	0.0	2.10	15.91	-33

Purge Sampling Rates: 40 PSI CPM SETTING #4

Well condition: OK

Additional Info/Comments: SUNNY, LIGHT BREEZE

Name: NICHOLAS PEASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-12S	**Sampling Date:**	4/23/2024
Collected By:	NR, NR	**Purge start Time:**	1109
Casing Diameter (inches):	2	**Purge Stop time:**	1121
Starting Water Level:	20.27	**Sampling (Well Recovery) Time:**	1131
Total Depth (feet):	27.90	**Ending Water Level (feet):**	23.30
Water column (feet):	7.63	**Total Purged (gallons):**	1.5
Screen Length (feet):	-	**Duplicate Sample:**	(YES) NO
Sample Method:	(Micro Purge) Low Flow	DUPLICATE 2 COLLECTED @ 0900	
Horiba Model S/N:	U-52 | XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1112	.5	23	8.03	0.482	0.0	3.01	15.86	37
1114	.75	Top of pump 23.3	7.89	0.499	0.0	1.98	15.30	-30
1117	1	23.3	7.83	0.490	0.0	1.97	15.03	-47
1118	1.25	23.3	7.81	0.482	0.0	2.01	14.90	-52
1120	1.5	23.3	7.77	0.475	0.0	2.01	14.94	-50

Purge Sampling Rates: PSI @ 20 CPM setting #4

Well condition: OK - WATER CLEAR WITH NO ODOR

Additional Info/Comments: SUNNY, WARM

Name: NICHOLAS REASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-12D	**Sampling Date:**	4/23/2024
Collected By:	NR, NR	**Purge start Time:**	1044
Casing Diameter (inches):	2	**Purge Stop time:**	1053
Starting Water Level:	19.97	**Sampling (Well Recovery) Time:**	1103
Total Depth (feet):	61.90	**Ending Water Level (feet):**	20.10
Water column (feet):	41.93	**Total Purged (gallons):**	2
Screen Length (feet):	-	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1047	.5	20.25	8.31	0.225	0.0	3.06	16.61	169
1049	1	20.1	8.27	0.224	0.0	3.01	15.88	145
1051	1.5	20.1	8.24	0.232	0.0	3.00	15.56	169
1052	2	20.1	8.19	0.241	0.0	2.90	15.38	167

Purge Sampling Rates: PSI @ 25 CPM setting #4

Well condition: OK

Additional Info/Comments: SUNNY, WARM TEMP, LIGHT BREEZE

Name: Nicholas Reason **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL COFFIN BUTTE	**Project No.:**	AU24.1090
Well I.D.:	MW-23	**Sampling Date:**	4/24/24
Collected By:	NR, NR	**Purge start Time:**	0959
Casing Diameter (inches):	2	**Purge Stop time:**	1010
Starting Water Level:	1.53	**Sampling (Well Recovery) Time:**	1020
Total Depth (feet):	24.70	**Ending Water Level (feet):**	11.10
Water column (feet):	23.17	**Total Purged (gallons):**	2.75
Screen Length (feet):	–	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 / XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1000	.5	4.39	8.19	0.291	33.4	3.17	15.10	78
1001	1	6.90	8.10	0.294	7.5	3.19	15.26	-53
1003	1.5	8.10	8.10	0.295	13.8	3.18	15.28	-76
1006	2	9.40	8.08	0.296	15.4	3.19	15.32	-83
1007	2.25	9.80	8.05	0.298	10.7	3.21	15.41	-86
1008	2.50	11.10	8.00	0.301	10.1	3.24	15.52	-91
1010	2.75	11.10	7.97	0.303	10.5	3.21	15.62	-92

Purge Sampling Rates: 2psi Controler setting CMP #4

Well condition: Odor present, water brown/yellow color

Additional Info/Comments: Cloudy, cool temp

Name: Nicholas Reason **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL	**Project No.:**	AU24.1090
Well I.D.:	MW-26	**Sampling Date:**	4/24/2024
Collected By:	NR, NR	**Purge start Time:**	1140
Casing Diameter (inches):	2	**Purge Stop time:**	1150
Starting Water Level:	7.80	**Sampling (Well Recovery) Time:**	1200
Total Depth (feet):	30.00	**Ending Water Level (feet):**	12.82
Water column (feet):	"	**Total Purged (gallons):**	2.5
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52/XMAR4034		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1142	.5	9.93	8.23	0.253	30.4	4.43	17.04	-62
1144	1	10.83	8.35	0.244	7.8	4.38	16.37	-98
1146	1.5	11.87	8.39	0.245	4.0	4.35	16.08	-106
1147	2	12.21	8.42	0.245	1.9	4.30	16.10	-116
1148	2.25	12.35	8.42	0.2216	1.2	4.21	15.99	-121
1150	2.5	12.82	8.44	0.245	0.9	4.33	15.87	-121

Purge Sampling Rates: 7 psi Controller setting CMP #4

Well condition: ok, Greyish water color, slight odor

Additional Info/Comments:

Name: Nicholas Rudolph **Signature:** Nh Rdlf

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL COFFIN BUTTE	**Project No.:**	A024.1090
Well I.D.:	MW-27	**Sampling Date:**	4/24/2024
Collected By:	NR, NR	**Purge start Time:**	1048
Casing Diameter (inches):	2	**Purge Stop time:**	1104
Starting Water Level:	21.10	**Sampling (Well Recovery) Time:**	1114
Total Depth (feet):	37.70	**Ending Water Level (feet):**	32.70
Water column (feet):	16.60	**Total Purged (gallons):**	3
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	~~Micro Purge~~ Low Flow	FIELD BLANK COLLECTED AT THIS LOCATION.	
Horiba Model S/N:	U-52 / XMAR4037		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1050	.5	25.41	7.77	0.690	2.2	4.33	16.19	-85
1052	1	25.41	7.68	0.669	1.8	4.45	16.19	-85
1055	1.5	29.65	7.64	0.658	2.0	4.34	16.31	-61
1057	2	30.62	7.58	0.695	25.4	4.28	16.31	-75
1059	2.25	31.21	7.51	0.716	12.1	4.26	16.27	-98
1100	2.5	31.87	7.49	0.718	5.8	4.13	16.46	-92
1102	2.75	32.7	7.55	0.695	3.5	4.11	16.49	-89
1104	3	32.7	7.51	0.687	3.8	4.10	16.51	-83

Purge Sampling Rates: 10 psi controller setting CMP#4

Well condition: OK – Sand in purge water

Additional Info/Comments: CLOUDY, COOL TEMP

Name: NICHOLAS REASON **Signature:**

Geo-Logic ASSOCIATES

Geologists • Hydrogeologists • Engineers

GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET

Site Name:	VALLEY LANDFILL	**Project No.:**	AU24.1090
Well I.D.:	P-8	**Sampling Date:**	4/23/2024
Collected By:	NR, NR	**Purge start Time:**	1159
Casing Diameter (inches):	2	**Purge Stop time:**	1209
Starting Water Level:	16.93	**Sampling (Well Recovery) Time:**	1219
Total Depth (feet):	30.00	**Ending Water Level (feet):**	18.49
Water column (feet):	13.07	**Total Purged (gallons):**	2 gal
Screen Length (feet):	—	**Duplicate Sample:**	YES (NO)
Sample Method:	(Micro Purge) Low Flow		
Horiba Model S/N:	U-52 | XMAR 403Y		

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1201	.5	18.25	8.30	0.291	0.0	4.17	15 91	111
1204	1	18.42	8.27	0.289	0.0	4.20	15.04	124
1206	1.5	18.49	8.25	0.289	0 0	4.18	14.64	127
1209	2.0	18.49	8.28	0.290	0.0	4.20	14.51	133

Purge Sampling Rates: 15 PSI CPM controller Setting #4

Well condition: OK - WATER CLEAR WITH NO ODOR

Additional Info/Comments: SUNNY, CLEAR, WARM TEMP

Name: NICHOLAS PEARSON **Signature:**

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL COFFIN BUTTE **Project No.:** AU24.1090

Station I.D.: S-U3 **Sampling Date:** 4/25/2024
Collected By: NR, NR **Sampling Time:** 0930
Horiba Model S/N: U-52| XMAR4054 **Duplicate Sample:** YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
LIGHT YELLOW	NONE	7.05	0.504	2.0	6.72	15.66	257

Surface water conditions (including stream flow rate, stream depth): SAMPLE COLLECTED FROM 6" HDPE PIPE WITH MODERATE FLOW

Additional Info/Comments: Light Rain, cool temp

Nicholas Reagan

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: S-U4

Collected By: NR, NR

Horiba Model S/N: U-52J XMAR4034

Sampling Date: 04/25/2025

Sampling Time: 0845

Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	6.60	0.174	0.0	5.11	13.80	273

Surface water conditions (including stream flow rate, stream depth): MODERATE FLOW OUT OF 4" HDPE PIPE WHERE SAMPLE WAS COLLECTED

Additional Info/Comments: LIGHT RAIN, COOL TEMP

NICHOLAS REASON

Geo-Logic ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: VALLEY LANDFILL COFFIN BOTTE **Project No.:** AU24.1090

Station I.D.: S-U5 **Sampling Date:** 4/25/2024
Collected By: NR, NR **Sampling Time:** 0905
Horiba Model S/N: U-52/XMAR4034 **Duplicate Sample:** YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	7.09	0.257	0.0	9.63	14.11	271

Surface water conditions (including stream flow rate, stream depth): SAMPLE COLLECTED FROM FLOW OUT OF 6" HDPE PIPE

Additional Info/Comments: LIGHT RAIN, COOL TEMP

NICHOLAS PEARSON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL CUFFIN BUTTE

Project No.: AU24.0090

Station I.D.: LDS-2B

Collected By: NR, NR

Horiba Model S/N: U-52 | XMAR4034

Sampling Date: 4/25/2024

Sampling Time: 1105

Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Reddish brown	strong	6.28	9.28	6.2	6.88	12.33	127

Leachate sampling station conditions: SAMPLE Collected From SAMPLE PORT

Additional Info/Comments: Light Rain COOL TEMP

NICHOLAS REASON

Geo-Logic ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: LDS-3

Collected By: NR, NR

Horiba Model S/N: U-52 / XMAR4034

Sampling Date: 4/25/2024

Sampling Time: 1040

Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Light Yellow	Strong	7.42	0.874	3.3	2.90	17.72	201

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT

Additional Info/Comments: LIGHT RAIN, COOL TEMP

NICHOLAS REASON

Geo-Logic ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL COFFIN BUTTE **Project No.:** AU24.1090

Station I.D.: LDS-4 **Sampling Date:** 4/25/2024
Collected By: NR, NR **Sampling Time:** 1125
Horiba Model S/N: U-52 | XMAR4034 **Duplicate Sample:** YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	STRONG	8.69	1.36	1.9	2.74	24.91	95

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT

Additional Info/Comments: Light rain, cool temp

Nicholas Reyna

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL COFFIN BUTTE **Project No.:** AU24.1090

Station I.D.: LDS-5 **Sampling Date:** 4/25/24
Collected By: NR, NR **Sampling Time:** 1010
Horiba Model S/N: U-52/XMAR403Y **Duplicate Sample:** YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
DARK Yellow	Strong	6.48	4.48	5.4	2.05	23.03	217

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT

Additional Info/Comments: Light stain, cool temp

NICHOLAS REASON

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: LDS-ELP

Collected By: NR, NP

Horiba Model S/N: —

Sampling Date: 4/25/24

Sampling Time: —

Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
—		NOT	SAMPLED		—		

Leachate sampling station conditions: PUMP MALFUNCTIONING OR POND IS DRY. UNABLE TO COLLECT SAMPLE

Additional Info/Comments: Light rain, cool temp

Nicholas Reagan

Geo-Logic
ASSOCIATES
Geologists, Hydrogeologists, and Engineers

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: VALLEY LANDFILL COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: LDS-WLP

Collected By: NR, NR

Horiba Model S/N: —

Sampling Date: 04/25/2024

Sampling Time: —

Duplicate Sample: YES (NO)

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
—	—	NOT	SAMPLED	—	—	—	

Leachate sampling station conditions: UNABLE TO COLLECT SAMPLE DUE TO EITHER POND BEING DRY OR PUMP MALFUNCTION.

Additional Info/Comments: LIGHT RAIN, COOL TEMP

NICHOLAS REASON

Geo-Logic ASSOCIATES

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site/Facility Name) Coffin Butte **PROJECT NAME / NUMBER** AU24.1090

Instrument Make/Model #	Horiba U-52 (XMAR4034)					
Date/Time 4/22/24 1632	pH	Electrical Conductivity (µMhos/cm) (4.49 mg/Kg)	Turbidity (NTU) (0)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	3.98	4.71	0.0	10.12		
Calibration	4.00	4.51	0.1	10.91		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satifies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	
Physical Condition of Unit	GWD					

Geo-Logic ASSOCIATES

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site/Facility Name) Coffin Butte Valley Landfill PROJECT NAME / NUMBER AU24.1090

Instrument Make/Model #	Horiba U-52 XMAR4034					
Date/Time 4/23/2024 0815	pH	Electrical Conductivity (µMhos/cm) (4.49 mg/Kg)	Turbidity (NTU) (0)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	3.86	4.43	1.4	11.98		
Calibration	4.00	4.49	0.1	10.46		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satifies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	
Physical Condition of Unit		Good				

Geo-Logic ASSOCIATES

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site/Facility Name) VALLEY LANDFILL COFFIN BUTTE **PROJECT NAME / NUMBER** AU24.1090

Instrument Make/Model #	HORIBA U-52 (XMAR4034)					
Date/Time 04/24/24 0745	pH	Electrical Conductivity (µMhos/cm) (4.49 mg/Kg)	Turbidity (NTU) (0)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	3.98	4.45	0.0	11.18		
Calibration	4.00	4.49	0.0	10.39		
Calibration Successful? (Y/N)	NR				enter YES or NO	
Satifies Protocol?	NR				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	
Physical Condition of Unit	GOOD					

Geo-Logic ASSOCIATES

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site/Facility Name) VALLEY LANDFILL COFFIN BUTTE **PROJECT NAME / NUMBER** AU24.1090

Instrument Make/Model #	Horiba U-52 XMAR4034					
Date/Time 4/25/24 0740	pH	Electrical Conductivity (µMhos/cm) (4.49 mg/Kg)	Turbidity (NTU) (0)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	4.35	4.43	0.0	13.93		
Calibration	4.00	4.49	0.0	10.07		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satifies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	
Physical Condition of Unit	GOOD					

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

Generated 5/17/2024 1:15:41 PM

JOB DESCRIPTION

Valley LF-Republic Serv Coffin Butte- Surfacewater

JOB NUMBER

280-190593-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

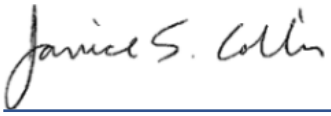
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



Generated
5/17/2024 1:15:41 PM

Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Cover Page 1
Table of Contents 3
Definitions 4
Case Narrative 5
Detection Summary 6
Method Summary 8
Sample Summary 9
Client Sample Results 10
QC Sample Results 13
QC Association 20
Chronicle 23
Chain of Custody 25
Receipt Checklists 28

Definitions/Glossary

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-190593-1 Eurofins Denver

Job Narrative
280-190593-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/25/2024 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C.

Receipt Exceptions
The containers labels for the two 250 mL Plastic unpreserved sample containers received for the following samples did not indicate if either was field filtered: 280-190593-1, 280-190593-2, 280-190593-3 and 280-190593-4.

The TSS analysis was canceled and TKN and Total Phosphorus analyses were added to the following samples in accordance with the Analysis Request provided by the client: 280-190593-1, 280-190593-2, 280-190593-3 and 280-190593-4.

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

General Chemistry
Method 365.1: The matrix spike (MS) recovery for preparation batch 280-652501 and analytical batch 280-652672 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM5210B_BODCalc: The correction factor for the Seeded Control Blank (SCB) for batch 280-651066 was outside the method range of 0.6 to 1.0 mg/L. Thus, there is added uncertainty for the associated sample results.

Method SM5210B_BODCalc: The USB dilution water D.O. depletion was greater than 0.2 mg/L. The associated sample results in batch 280-651066 are qualified and reported.

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

Detection Summary

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Client Sample ID: S-1 — Lab Sample ID: 280-190593-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		200	24	ug/L	1		6010B	Dissolved
Iron	380		100	9.1	ug/L	1		6010B	Dissolved
Magnesium	7900		200	4.2	ug/L	1		6010B	Dissolved
Manganese	21		10	0.45	ug/L	1		6010B	Dissolved
Sodium	7400	B	1000	97	ug/L	1		6010B	Dissolved
Chloride	7.1		3.0	1.0	mg/L	1		300.0	Total/NA
ortho-Phosphate	0.019	J	0.050	0.018	mg/L	1		365.1	Total/NA

Client Sample ID: S-2 — Lab Sample ID: 280-190593-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	24	ug/L	1		6010B	Dissolved
Iron	13	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	7300		200	4.2	ug/L	1		6010B	Dissolved
Manganese	9.2	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	8000	B	1000	97	ug/L	1		6010B	Dissolved
Chloride	8.0		3.0	1.0	mg/L	1		300.0	Total/NA
Phosphorus, Total	0.028	J	0.050	0.025	mg/L	1		365.1	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: S-4 — Lab Sample ID: 280-190593-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	24	ug/L	1		6010B	Dissolved
Iron	16	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	7400		200	4.2	ug/L	1		6010B	Dissolved
Manganese	9.3	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	7800	B	1000	97	ug/L	1		6010B	Dissolved
Chloride	7.6		3.0	1.0	mg/L	1		300.0	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: Duplicate — Lab Sample ID: 280-190593-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	24	ug/L	1		6010B	Dissolved
Iron	35	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	7400		200	4.2	ug/L	1		6010B	Dissolved
Manganese	11		10	0.45	ug/L	1		6010B	Dissolved
Sodium	7800	B	1000	97	ug/L	1		6010B	Dissolved
Chloride	7.0		3.0	1.0	mg/L	1		300.0	Total/NA

Client Sample ID: S-1 — Lab Sample ID: 280-190593-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	3.6	J b	5.0	0.59	mg/L	1		SM5210B	Total/NA

Client Sample ID: S-2 — Lab Sample ID: 280-190593-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	0.93	J b	5.0	0.59	mg/L	1		SM5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Client Sample ID: S-4
Lab Sample ID: 280-190593-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	1.2	J b	5.0	0.59	mg/L	1		SM5210B	Total/NA

Client Sample ID: Duplicate
Lab Sample ID: 280-190593-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	1.1	J b	5.0	0.59	mg/L	1		SM5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Method	Method Description	Protocol	Laboratory
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
365.1	Phosphorus, Ortho	EPA	EET DEN
365.1	Phosphorus, Total	EPA	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM5210B	BOD, 5 Day	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
365.2/365.3/365	Phosphorus, Total	EPA	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-190593-1	S-1	Water	04/23/24 13:00	04/25/24 09:25
280-190593-2	S-2	Water	04/23/24 13:40	04/25/24 09:25
280-190593-3	S-4	Water	04/23/24 14:10	04/25/24 09:25
280-190593-4	Duplicate	Water	04/23/24 12:15	04/25/24 09:25
280-190593-5	S-1	Water	04/24/24 12:40	04/25/24 09:25
280-190593-6	S-2	Water	04/24/24 13:10	04/25/24 09:25
280-190593-7	S-4	Water	04/24/24 12:50	04/25/24 09:25
280-190593-8	Duplicate	Water	04/24/24 12:20	04/25/24 09:25

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: S-1
Date Collected: 04/23/24 13:00
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19000		200	24	ug/L		05/15/24 08:41	05/16/24 21:45	1
Iron	380		100	9.1	ug/L		05/15/24 08:41	05/16/24 21:45	1
Magnesium	7900		200	4.2	ug/L		05/15/24 08:41	05/16/24 21:45	1
Manganese	21		10	0.45	ug/L		05/15/24 08:41	05/16/24 21:45	1
Sodium	7400	B	1000	97	ug/L		05/15/24 08:41	05/16/24 21:45	1

Client Sample ID: S-2
Date Collected: 04/23/24 13:40
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	24	ug/L		04/30/24 15:25	05/03/24 06:45	1
Iron	13	J	100	9.1	ug/L		04/30/24 15:25	05/03/24 06:45	1
Magnesium	7300		200	4.2	ug/L		04/30/24 15:25	05/03/24 06:45	1
Manganese	9.2	J	10	0.45	ug/L		04/30/24 15:25	05/03/24 06:45	1
Sodium	8000	B	1000	97	ug/L		04/30/24 15:25	05/03/24 06:45	1

Client Sample ID: S-4
Date Collected: 04/23/24 14:10
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	24	ug/L		04/30/24 15:25	05/03/24 06:49	1
Iron	16	J	100	9.1	ug/L		04/30/24 15:25	05/03/24 06:49	1
Magnesium	7400		200	4.2	ug/L		04/30/24 15:25	05/03/24 06:49	1
Manganese	9.3	J	10	0.45	ug/L		04/30/24 15:25	05/03/24 06:49	1
Sodium	7800	B	1000	97	ug/L		04/30/24 15:25	05/03/24 06:49	1

Client Sample ID: Duplicate
Date Collected: 04/23/24 12:15
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	24	ug/L		04/30/24 15:25	05/03/24 06:53	1
Iron	35	J	100	9.1	ug/L		04/30/24 15:25	05/03/24 06:53	1
Magnesium	7400		200	4.2	ug/L		04/30/24 15:25	05/03/24 06:53	1
Manganese	11		10	0.45	ug/L		04/30/24 15:25	05/03/24 06:53	1
Sodium	7800	B	1000	97	ug/L		04/30/24 15:25	05/03/24 06:53	1

General Chemistry

Client Sample ID: S-1
Date Collected: 04/23/24 13:00
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	7.1		3.0	1.0	mg/L			04/26/24 18:22	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		05/02/24 16:03	05/07/24 09:41	1
ortho-Phosphate (EPA 365.1)	0.019	J	0.050	0.018	mg/L			04/25/24 12:58	1
Phosphorus, Total (EPA 365.1)	ND		0.050	0.025	mg/L		05/07/24 22:17	05/08/24 17:48	1

General Chemistry

Client Sample ID: S-2
Date Collected: 04/23/24 13:40
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**8.0**		3.0	1.0	mg/L			04/26/24 18:33	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		05/02/24 16:03	05/07/24 09:42	1
ortho-Phosphate (EPA 365.1)	ND		0.050	0.018	mg/L			04/25/24 12:57	1
Phosphorus, Total (EPA 365.1)	**0.028**	**J**	0.050	0.025	mg/L		05/07/24 22:17	05/08/24 17:47	1
Total Suspended Solids (SM 2540D)	**1.2**	**J**	4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: S-4
Date Collected: 04/23/24 14:10
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**7.6**		3.0	1.0	mg/L			04/26/24 19:17	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		05/02/24 16:03	05/07/24 09:43	1
ortho-Phosphate (EPA 365.1)	ND		0.050	0.018	mg/L			04/25/24 12:58	1
Phosphorus, Total (EPA 365.1)	ND		0.050	0.025	mg/L		05/07/24 22:17	05/08/24 17:50	1
Total Suspended Solids (SM 2540D)	**1.2**	**J**	4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: Duplicate
Date Collected: 04/23/24 12:15
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**7.0**		3.0	1.0	mg/L			04/26/24 19:28	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		05/02/24 16:03	05/07/24 09:43	1
ortho-Phosphate (EPA 365.1)	ND		0.050	0.018	mg/L			04/25/24 12:58	1
Phosphorus, Total (EPA 365.1)	ND	F1	0.050	0.025	mg/L		05/07/24 22:17	05/08/24 17:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: S-1
Date Collected: 04/24/24 12:40
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	**3.6**	**J b**	5.0	0.59	mg/L			04/26/24 08:08	1

Client Sample ID: S-2
Date Collected: 04/24/24 13:10
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	**0.93**	**J b**	5.0	0.59	mg/L			04/26/24 08:08	1

Client Sample ID: S-4
Date Collected: 04/24/24 12:50
Date Received: 04/25/24 09:25
Lab Sample ID: 280-190593-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	**1.2**	**J b**	5.0	0.59	mg/L			04/26/24 08:09	1

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

General Chemistry

Client Sample ID: Duplicate
Date Collected: 04/24/24 12:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190593-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	1.1	J b	5.0	0.59	mg/L			04/26/24 10:53	1

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-651469/1-A
Matrix: Water
Analysis Batch: 652018

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651469

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	24	ug/L		04/30/24 15:25	05/03/24 05:34	1
Iron	ND		100	9.1	ug/L		04/30/24 15:25	05/03/24 05:34	1
Magnesium	ND		200	4.2	ug/L		04/30/24 15:25	05/03/24 05:34	1
Manganese	ND		10	0.45	ug/L		04/30/24 15:25	05/03/24 05:34	1
Sodium	186	J	1000	97	ug/L		04/30/24 15:25	05/03/24 05:34	1

Lab Sample ID: LCS 280-651469/2-A
Matrix: Water
Analysis Batch: 652018

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	48000		ug/L		96	90 - 111
Iron	10000	9640		ug/L		96	89 - 115
Magnesium	50000	47500		ug/L		95	90 - 113
Manganese	1000	951		ug/L		95	90 - 110
Sodium	50000	49000		ug/L		98	90 - 115

Lab Sample ID: MB 280-653385/1-A
Matrix: Water
Analysis Batch: 653793

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 653385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	24	ug/L		05/15/24 08:41	05/16/24 21:36	1
Iron	ND		100	9.1	ug/L		05/15/24 08:41	05/16/24 21:36	1
Magnesium	ND		200	4.2	ug/L		05/15/24 08:41	05/16/24 21:36	1
Manganese	ND		10	0.45	ug/L		05/15/24 08:41	05/16/24 21:36	1
Sodium	137	J	1000	97	ug/L		05/15/24 08:41	05/16/24 21:36	1

Lab Sample ID: LCS 280-653385/2-A
Matrix: Water
Analysis Batch: 653793

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 653385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	50700		ug/L		101	90 - 111
Iron	10000	10400		ug/L		104	89 - 115
Magnesium	50000	50500		ug/L		101	90 - 113
Manganese	1000	992		ug/L		99	90 - 110
Sodium	50000	48400		ug/L		97	90 - 115

Lab Sample ID: 280-190515-C-1-B MS
Matrix: Water
Analysis Batch: 652018

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 651469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	210000		50000	264000	4	ug/L		104	48 - 153
Iron	ND		10000	9800		ug/L		98	52 - 155
Magnesium	220000		50000	277000	4	ug/L		106	62 - 146
Manganese	11		1000	980		ug/L		97	79 - 121
Sodium	280000	B	50000	340000	4	ug/L		122	70 - 203

Method: 6010B - Dissolved Metals (Continued)

Lab Sample ID: 280-190515-C-1-C MSD
Matrix: Water
Analysis Batch: 652018

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 651469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	210000		50000	258000	4	ug/L		91	48 - 153	2	20
Iron	ND		10000	9640		ug/L		96	52 - 155	2	20
Magnesium	220000		50000	271000	4	ug/L		94	62 - 146	2	20
Manganese	11		1000	964		ug/L		95	79 - 121	2	20
Sodium	280000	B	50000	331000	4	ug/L		105	70 - 203	3	20

Lab Sample ID: 280-191449-D-8-B MS
Matrix: Water
Analysis Batch: 653793

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 653385

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	470000		50000	537000	4	ug/L		137	48 - 153
Iron	6500		10000	16800		ug/L		103	52 - 155
Magnesium	200000		50000	265000	4	ug/L		121	62 - 146
Manganese	160		1000	1140		ug/L		98	79 - 121
Sodium	250000	B	50000	311000	4	ug/L		127	70 - 203

Lab Sample ID: 280-191449-D-8-C MSD
Matrix: Water
Analysis Batch: 653793

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 653385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	470000		50000	522000	4	ug/L		106	48 - 153	3	20
Iron	6500		10000	16500		ug/L		100	52 - 155	2	20
Magnesium	200000		50000	257000	4	ug/L		106	62 - 146	3	20
Manganese	160		1000	1130		ug/L		96	79 - 121	1	20
Sodium	250000	B	50000	301000	4	ug/L		108	70 - 203	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-651089/6
Matrix: Water
Analysis Batch: 651089

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			04/26/24 11:43	1

Lab Sample ID: LCS 280-651089/4
Matrix: Water
Analysis Batch: 651089

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	95.9		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-651089/5
Matrix: Water
Analysis Batch: 651089

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.2		mg/L		96	90 - 110	0	10

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MRL 280-651089/3
Matrix: Water
Analysis Batch: 651089

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			5.00	4.85		mg/L		97	50 - 150		

Lab Sample ID: 280-190593-2 MS
Matrix: Water
Analysis Batch: 651089

Client Sample ID: S-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8.0		50.0	59.4		mg/L		103	80 - 120		

Lab Sample ID: 280-190593-2 MSD
Matrix: Water
Analysis Batch: 651089

Client Sample ID: S-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.0		50.0	60.7		mg/L		105	80 - 120	2	20

Lab Sample ID: 280-190593-2 DU
Matrix: Water
Analysis Batch: 651089

Client Sample ID: S-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	8.0		8.01		mg/L		0	15

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-651928/3-A
Matrix: Water
Analysis Batch: 652395

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 651928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	ND		1.0	0.69	mg/L		05/02/24 16:03	05/07/24 09:39	1

Lab Sample ID: LCS 280-651928/1-A
Matrix: Water
Analysis Batch: 652395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 651928

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrogen, Kjeldahl			6.00	6.27		mg/L		104	90 - 110		

Lab Sample ID: LCSD 280-651928/2-A
Matrix: Water
Analysis Batch: 652395

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 651928

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Kjeldahl			6.00	6.23		mg/L		104	90 - 110	1	25

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 280-190307-F-2-B MS
Matrix: Water
Analysis Batch: 652395

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 651928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	ND		3.00	3.27		mg/L		109	90 - 110

Lab Sample ID: 280-190307-F-2-C MSD
Matrix: Water
Analysis Batch: 652395

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 651928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	ND		3.00	3.20		mg/L		107	90 - 110	2	25

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 280-650963/12
Matrix: Water
Analysis Batch: 650963

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.050	0.018	mg/L			04/25/24 12:57	1

Lab Sample ID: LCS 280-650963/10
Matrix: Water
Analysis Batch: 650963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
ortho-Phosphate	0.500	0.518		mg/L		104	90 - 110

Lab Sample ID: LCSD 280-650963/11
Matrix: Water
Analysis Batch: 650963

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ortho-Phosphate	0.500	0.524		mg/L		105	90 - 110	1	10

Lab Sample ID: 280-190593-2 MS
Matrix: Water
Analysis Batch: 650963

Client Sample ID: S-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
ortho-Phosphate	ND		0.500	0.528		mg/L		106	90 - 110

Lab Sample ID: 280-190593-2 MSD
Matrix: Water
Analysis Batch: 650963

Client Sample ID: S-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ortho-Phosphate	ND		0.500	0.542		mg/L		108	90 - 110	3	10

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 280-652501/5-A
Matrix: Water
Analysis Batch: 652672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.050	0.025	mg/L		05/07/24 22:17	05/08/24 17:47	1

Lab Sample ID: LCS 280-652501/3-A
Matrix: Water
Analysis Batch: 652672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652501

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Phosphorus, Total			0.500	0.503		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-652501/4-A
Matrix: Water
Analysis Batch: 652672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652501

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus, Total			0.500	0.494		mg/L		99	90 - 110	2	10

Lab Sample ID: 280-190593-2 MS
Matrix: Water
Analysis Batch: 652672

Client Sample ID: S-2
Prep Type: Total/NA
Prep Batch: 652501

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Phosphorus, Total	0.028	J	0.500	0.518		mg/L		98	90 - 110		

Lab Sample ID: 280-190593-2 MSD
Matrix: Water
Analysis Batch: 652672

Client Sample ID: S-2
Prep Type: Total/NA
Prep Batch: 652501

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus, Total	0.028	J	0.500	0.525		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-190593-4 MS
Matrix: Water
Analysis Batch: 652672

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 652501

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Phosphorus, Total	ND	F1	0.500	0.567	F1	mg/L		113	90 - 110		

Lab Sample ID: 280-190593-4 MSD
Matrix: Water
Analysis Batch: 652672

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 652501

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus, Total	ND	F1	0.500	0.528		mg/L		106	90 - 110	7	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-651559/1
Matrix: Water
Analysis Batch: 651559

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Lab Sample ID: LCS 280-651559/2
Matrix: Water
Analysis Batch: 651559

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	500	466		mg/L		93	79 - 114

Lab Sample ID: 280-190622-A-14 DU
Matrix: Water
Analysis Batch: 651559

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		1.20	J	mg/L		NC	10

Lab Sample ID: 280-190632-B-1 DU
Matrix: Water
Analysis Batch: 651559

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.0	J	2.00	J	mg/L		0	10

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 280-651066/5
Matrix: Water
Analysis Batch: 651066

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.24	mg/L			04/26/24 08:08	1

Lab Sample ID: SCB 280-651066/1
Matrix: Water
Analysis Batch: 651066

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.07	J s	2.0	0.24	mg/L			04/26/24 08:08	1

Lab Sample ID: USB 280-651066/2
Matrix: Water
Analysis Batch: 651066

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.330	J	2.0	0.24	mg/L			04/26/24 08:08	1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: LCS 280-651066/3
Matrix: Water
Analysis Batch: 651066

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	199		mg/L		101	85 - 115		

Lab Sample ID: LCSD 280-651066/4
Matrix: Water
Analysis Batch: 651066

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Biochemical Oxygen Demand			198	195		mg/L		98	85 - 115	2	20

Lab Sample ID: 280-190615-N-1 DU
Matrix: Water
Analysis Batch: 651066

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	2.8	J b		ND		mg/L				NC	20

Metals

Prep Batch: 651469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-2	S-2	Dissolved	Water	3005A	
280-190593-3	S-4	Dissolved	Water	3005A	
280-190593-4	Duplicate	Dissolved	Water	3005A	
MB 280-651469/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-651469/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-190515-C-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-190515-C-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 652018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-2	S-2	Dissolved	Water	6010B	651469
280-190593-3	S-4	Dissolved	Water	6010B	651469
280-190593-4	Duplicate	Dissolved	Water	6010B	651469
MB 280-651469/1-A	Method Blank	Total Recoverable	Water	6010B	651469
LCS 280-651469/2-A	Lab Control Sample	Total Recoverable	Water	6010B	651469
280-190515-C-1-B MS	Matrix Spike	Dissolved	Water	6010B	651469
280-190515-C-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	651469

Prep Batch: 653385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Dissolved	Water	3005A	
MB 280-653385/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-653385/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-191449-D-8-B MS	Matrix Spike	Dissolved	Water	3005A	
280-191449-D-8-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 653793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Dissolved	Water	6010B	653385
MB 280-653385/1-A	Method Blank	Total Recoverable	Water	6010B	653385
LCS 280-653385/2-A	Lab Control Sample	Total Recoverable	Water	6010B	653385
280-191449-D-8-B MS	Matrix Spike	Dissolved	Water	6010B	653385
280-191449-D-8-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	653385

General Chemistry

Analysis Batch: 650963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	365.1	
280-190593-2	S-2	Total/NA	Water	365.1	
280-190593-3	S-4	Total/NA	Water	365.1	
280-190593-4	Duplicate	Total/NA	Water	365.1	
MB 280-650963/12	Method Blank	Total/NA	Water	365.1	
LCS 280-650963/10	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-650963/11	Lab Control Sample Dup	Total/NA	Water	365.1	
280-190593-2 MS	S-2	Total/NA	Water	365.1	
280-190593-2 MSD	S-2	Total/NA	Water	365.1	

Analysis Batch: 651066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-5	S-1	Total/NA	Water	SM5210B	

General Chemistry (Continued)

Analysis Batch: 651066 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-6	S-2	Total/NA	Water	SM5210B	
280-190593-7	S-4	Total/NA	Water	SM5210B	
280-190593-8	Duplicate	Total/NA	Water	SM5210B	
MB 280-651066/5	Method Blank	Total/NA	Water	SM5210B	
SCB 280-651066/1	Method Blank	Total/NA	Water	SM5210B	
USB 280-651066/2	Method Blank	Total/NA	Water	SM5210B	
LCS 280-651066/3	Lab Control Sample	Total/NA	Water	SM5210B	
LCSD 280-651066/4	Lab Control Sample Dup	Total/NA	Water	SM5210B	
280-190615-N-1 DU	Duplicate	Total/NA	Water	SM5210B	

Analysis Batch: 651089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	300.0	
280-190593-2	S-2	Total/NA	Water	300.0	
280-190593-3	S-4	Total/NA	Water	300.0	
280-190593-4	Duplicate	Total/NA	Water	300.0	
MB 280-651089/6	Method Blank	Total/NA	Water	300.0	
LCS 280-651089/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-651089/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-651089/3	Lab Control Sample	Total/NA	Water	300.0	
280-190593-2 MS	S-2	Total/NA	Water	300.0	
280-190593-2 MSD	S-2	Total/NA	Water	300.0	
280-190593-2 DU	S-2	Total/NA	Water	300.0	

Analysis Batch: 651559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-2	S-2	Total/NA	Water	SM 2540D	
280-190593-3	S-4	Total/NA	Water	SM 2540D	
280-190593-4	Duplicate	Total/NA	Water	SM 2540D	
MB 280-651559/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651559/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-190622-A-14 DU	Duplicate	Total/NA	Water	SM 2540D	
280-190632-B-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Prep Batch: 651928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	351.2	
280-190593-2	S-2	Total/NA	Water	351.2	
280-190593-3	S-4	Total/NA	Water	351.2	
280-190593-4	Duplicate	Total/NA	Water	351.2	
MB 280-651928/3-A	Method Blank	Total/NA	Water	351.2	
LCS 280-651928/1-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 280-651928/2-A	Lab Control Sample Dup	Total/NA	Water	351.2	
280-190307-F-2-B MS	Matrix Spike	Total/NA	Water	351.2	
280-190307-F-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 652395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	351.2	651928
280-190593-2	S-2	Total/NA	Water	351.2	651928
280-190593-3	S-4	Total/NA	Water	351.2	651928

General Chemistry (Continued)

Analysis Batch: 652395 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-4	Duplicate	Total/NA	Water	351.2	651928
MB 280-651928/3-A	Method Blank	Total/NA	Water	351.2	651928
LCS 280-651928/1-A	Lab Control Sample	Total/NA	Water	351.2	651928
LCSD 280-651928/2-A	Lab Control Sample Dup	Total/NA	Water	351.2	651928
280-190307-F-2-B MS	Matrix Spike	Total/NA	Water	351.2	651928
280-190307-F-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	651928

Prep Batch: 652501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	365.2/365.3/365	
280-190593-2	S-2	Total/NA	Water	365.2/365.3/365	
280-190593-3	S-4	Total/NA	Water	365.2/365.3/365	
280-190593-4	Duplicate	Total/NA	Water	365.2/365.3/365	
MB 280-652501/5-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 280-652501/3-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
LCSD 280-652501/4-A	Lab Control Sample Dup	Total/NA	Water	365.2/365.3/365	
280-190593-2 MS	S-2	Total/NA	Water	365.2/365.3/365	
280-190593-2 MSD	S-2	Total/NA	Water	365.2/365.3/365	
280-190593-4 MS	Duplicate	Total/NA	Water	365.2/365.3/365	
280-190593-4 MSD	Duplicate	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 652672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190593-1	S-1	Total/NA	Water	365.1	652501
280-190593-2	S-2	Total/NA	Water	365.1	652501
280-190593-3	S-4	Total/NA	Water	365.1	652501
280-190593-4	Duplicate	Total/NA	Water	365.1	652501
MB 280-652501/5-A	Method Blank	Total/NA	Water	365.1	652501
LCS 280-652501/3-A	Lab Control Sample	Total/NA	Water	365.1	652501
LCSD 280-652501/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	652501
280-190593-2 MS	S-2	Total/NA	Water	365.1	652501
280-190593-2 MSD	S-2	Total/NA	Water	365.1	652501
280-190593-4 MS	Duplicate	Total/NA	Water	365.1	652501
280-190593-4 MSD	Duplicate	Total/NA	Water	365.1	652501

Lab Chronicle

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Client Sample ID: S-1
Lab Sample ID: 280-190593-1
Date Collected: 04/23/24 13:00
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	653385	05/15/24 08:41	AMH	EET DEN
Dissolved	Analysis	6010B		1			653793	05/16/24 21:45	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651089	04/26/24 18:22	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	651928	05/02/24 16:03	CLP	EET DEN
Total/NA	Analysis	351.2		1			652395	05/07/24 09:41	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	650963	04/25/24 12:58	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	652501	05/07/24 22:17	LL	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	652672	05/08/24 17:48	LL	EET DEN

Client Sample ID: S-2
Lab Sample ID: 280-190593-2
Date Collected: 04/23/24 13:40
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651469	04/30/24 15:25	KLG	EET DEN
Dissolved	Analysis	6010B		1			652018	05/03/24 06:45	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651089	04/26/24 18:33	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	651928	05/02/24 16:03	CLP	EET DEN
Total/NA	Analysis	351.2		1			652395	05/07/24 09:42	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	650963	04/25/24 12:57	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	652501	05/07/24 22:17	LL	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	652672	05/08/24 17:47	LL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: S-4
Lab Sample ID: 280-190593-3
Date Collected: 04/23/24 14:10
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651469	04/30/24 15:25	KLG	EET DEN
Dissolved	Analysis	6010B		1			652018	05/03/24 06:49	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651089	04/26/24 19:17	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	651928	05/02/24 16:03	CLP	EET DEN
Total/NA	Analysis	351.2		1			652395	05/07/24 09:43	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	650963	04/25/24 12:58	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	652501	05/07/24 22:17	LL	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	652672	05/08/24 17:50	LL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Lab Chronicle

Client: Geo-Logic Associates
Job ID: 280-190593-1
Project/Site: Valley LF-Republic Serv Coffin Butte- Surfacewate

Client Sample ID: Duplicate
Lab Sample ID: 280-190593-4
Date Collected: 04/23/24 12:15
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651469	04/30/24 15:25	KLG	EET DEN
Dissolved	Analysis	6010B		1			652018	05/03/24 06:53	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651089	04/26/24 19:28	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	651928	05/02/24 16:03	CLP	EET DEN
Total/NA	Analysis	351.2		1			652395	05/07/24 09:43	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	650963	04/25/24 12:58	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	652501	05/07/24 22:17	LL	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	652672	05/08/24 17:49	LL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: S-1
Lab Sample ID: 280-190593-5
Date Collected: 04/24/24 12:40
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	651066	04/26/24 08:08	MAW	EET DEN

Client Sample ID: S-2
Lab Sample ID: 280-190593-6
Date Collected: 04/24/24 13:10
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	651066	04/26/24 08:08	MAW	EET DEN

Client Sample ID: S-4
Lab Sample ID: 280-190593-7
Date Collected: 04/24/24 12:50
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	651066	04/26/24 08:09	MAW	EET DEN

Client Sample ID: Duplicate
Lab Sample ID: 280-190593-8
Date Collected: 04/24/24 12:20
Matrix: Water
Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	651066	04/26/24 10:53	MAW	EET DEN

Laboratory References:
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: NR, NR	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-97584-22898.1
Client Contact: M. REASON	Phone: (909) 332-0312	E-Mail: Janice.Collins@et.eurofinsus.com		Page: 1 of 2
Company: Valley Landfills, Inc. Republic Services				Job #:
Address: 28972 Coffin Butte Road	Due Date Requested:			
City: Corvallis	TAT Requested (days):			
State, Zip: OR, 97330	Compliance Project: Δ Yes Δ No			
Phone: 503-675-1335(Tel)	PO #: PO# 1584668			
Email:	WO #:			
Project Name: Coffin Butte/Valley Landfills	Project #: 28003197"Semiannual Surfacewater (S-1 thru S-4)"			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0 - Chloride	6010B - Dissolved Metals (FF)	SM5210B - BOD	2540D - TSS	365.1 - Orthophosphate (FF)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	N		
S-1	4/23/24	1300	G	W			X	X		X	X		
S-2	4/23/24	1340	G	W			X	X		X	X		
S-4	4/23/24	1410	G	W			X	X		X	X		
DUPLICATE	4/23/24	1215	G	W			X	X		X	X		

280-190593 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-24-24 1500	GLA			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4-25-24 0925	Company EEDEN
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.3°C IR CF0.1

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: NR, NR	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-97584-22898.1
Client Contact: N REASER	Phone: (907) 372-0312	E-Mail: Janice.Collins@et.eurofinsus.com		Page: 2 of 2
Company: Valley Landfills, Inc. Republic Services				Job #:

Address: 28972 Coffin Butte Road	Due Date Requested:
City: Corvallis	TAT Requested (days):
State, Zip: OR, 97330	Compliance Project: Δ Yes Δ No
Phone: 503-675-1335(Tel)	PO #: PO# 1584668
Email:	WO #:
Project Name: Coffin Butte/Valley Landfills	Project #: 28003197"Semiannual Surfacewater (S-1 thru S-4)"
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0 - Chloride	6010B - Dissolved Metals (FF)	SM5210B - BOD	2540D - TSS	365.1 - Orthophosphate (FF)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	N		
S-1	4/24/24	1240	G	W					X				
S-2	4/24/24	1310	G	W					X				
S-4	4/24/24	1250	G	W					X				
Duplicate	4/24/24	1220	G	W					X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4-24-24 1500	Company GLA	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4-25-24 0925	Company EET DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 01/16/2019

280-190593 Waybill

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-190593-1

Login Number: 190593
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

Generated 5/9/2024 2:38:45 PM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-190622-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

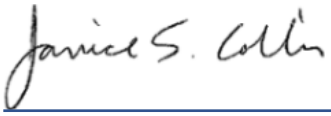
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



Generated
5/9/2024 2:38:45 PM

Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Cover Page 1
Table of Contents 3
Definitions 4
Case Narrative 5
Detection Summary 6
Method Summary 10
Sample Summary 11
Client Sample Results 12
Surrogate Summary 44
QC Sample Results 45
QC Association 58
Chronicle 63
Chain of Custody 68
Receipt Checklists 70

Definitions/Glossary

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
280-190622-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/25/2024 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.9°C, 1.1°C and 1.5°C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Relinquished By signature and date were missing on the COC.

GC/MS VOA
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 280-651953.

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

Metals
Method 6010B - Dissolved: The instrument blank for analytical batch 280-652161 contained 138 ug/L Ca greater than one-half the reporting limit (RL) of 200 ug/L, and were not re-analyzed because sample > 10x the blank. The data have been qualified and reported.

Method 6010B - Dissolved: The instrument blank for preparation batch 280-651496 and analytical batch 280-652161 contained Fe (60.8 ug/L) greater than one-half the reporting limit (RL), and the samples were not re-analyzed because Fe is a common laboratory contaminant and is thus controlled to the full value of the RL in instrument blank. Therefore; the data have been qualified and reported.

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

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 280-651734 was outside control limits. Sample non-homogeneity is suspected.

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

Detection Summary

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Client Sample ID: MW-1D — Lab Sample ID: 280-190622-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.58	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	26000	B	200	24	ug/L	1		6010B	Dissolved
Iron	20	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	11000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	0.66	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	25000		1000	97	ug/L	1		6010B	Dissolved
Chloride	6.4		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3D — Lab Sample ID: 280-190622-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	43000	B	200	24	ug/L	1		6010B	Dissolved
Iron	11	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	19000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	1.9	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	20000		1000	97	ug/L	1		6010B	Dissolved
Chloride	44		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	280		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-10S — Lab Sample ID: 280-190622-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	330000	B	200	24	ug/L	1		6010B	Dissolved
Iron	11	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	150000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	91		10	0.45	ug/L	1		6010B	Dissolved
Sodium	36000		1000	97	ug/L	1		6010B	Dissolved
Chloride	500		30	10	mg/L	10		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	610		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1500		20	9.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-10D — Lab Sample ID: 280-190622-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000	B	200	24	ug/L	1		6010B	Dissolved
Iron	14	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	42000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	64		10	0.45	ug/L	1		6010B	Dissolved
Sodium	35000		1000	97	ug/L	1		6010B	Dissolved
Chloride	68		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	400		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	590		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: VLF240422-2 — Lab Sample ID: 280-190622-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	150000	B	200	24	ug/L	1		6010B	Dissolved
Magnesium	64000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	4.6	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	24000		1000	97	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Client Sample ID: VLF240422-2 (Continued) — Lab Sample ID: 280-190622-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	33		6.0	2.0	mg/L	2		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	590		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	690		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	18		4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: VLF240422-1 — Lab Sample ID: 280-190622-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	240000	B	200	24	ug/L	1		6010B	Dissolved
Iron	23	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	100000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	29		10	0.45	ug/L	1		6010B	Dissolved
Sodium	39000		1000	97	ug/L	1		6010B	Dissolved
Chloride	83		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	820		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1100		20	9.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12S — Lab Sample ID: 280-190622-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.67	J	1.0	0.32	ug/L	1		8260B	Total/NA
Tetrachloroethene	8.0		1.0	0.40	ug/L	1		8260B	Total/NA
Trichloroethene	3.1		1.0	0.30	ug/L	1		8260B	Total/NA
Arsenic	0.68	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	53000	B	200	24	ug/L	1		6010B	Dissolved
Iron	520	B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	26000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	690		10	0.45	ug/L	1		6010B	Dissolved
Sodium	36000		1000	97	ug/L	1		6010B	Dissolved
Chloride	31		6.0	2.0	mg/L	2		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	240		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12D — Lab Sample ID: 280-190622-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.1		1.0	0.40	ug/L	1		8260B	Total/NA
Calcium	26000	B	200	24	ug/L	1		6010B	Dissolved
Magnesium	12000		200	4.2	ug/L	1		6010B	Dissolved
Sodium	24000		1000	97	ug/L	1		6010B	Dissolved
Chloride	9.6		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 280-190622-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	20		5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	33000	B	200	24	ug/L	1		6010B	Dissolved
Iron	1300	B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	14000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	1200		10	0.45	ug/L	1		6010B	Dissolved
Sodium	25000		1000	97	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-23 (Continued) — Lab Sample ID: 280-190622-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	170		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	230		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	31		4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-26 — Lab Sample ID: 280-190622-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	14		5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	25000	B	200	24	ug/L	1		6010B	Dissolved
Iron	410	B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	9400		200	4.2	ug/L	1		6010B	Dissolved
Manganese	570		10	0.45	ug/L	1		6010B	Dissolved
Sodium	27000		1000	97	ug/L	1		6010B	Dissolved
Chloride	5.6		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	12		4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-27 — Lab Sample ID: 280-190622-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	35		5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	87000	B	200	24	ug/L	1		6010B	Dissolved
Iron	6100	B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	38000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	9500		10	0.45	ug/L	1		6010B	Dissolved
Sodium	37000		1000	97	ug/L	1		6010B	Dissolved
Chloride	11		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	440		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	490		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	32		4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: P-8 — Lab Sample ID: 280-190622-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000	B	200	24	ug/L	1		6010B	Dissolved
Magnesium	14000		200	4.2	ug/L	1		6010B	Dissolved
Sodium	29000		1000	97	ug/L	1		6010B	Dissolved
Chloride	8.8		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	170		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	230		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Duplicate 1 — Lab Sample ID: 280-190622-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	120000	B	200	24	ug/L	1		6010B	Dissolved
Iron	13	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	40000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	55		10	0.45	ug/L	1		6010B	Dissolved
Sodium	34000		1000	97	ug/L	1		6010B	Dissolved
Chloride	68		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	400		10	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Duplicate 1 (Continued)
Lab Sample ID: 280-190622-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	570		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Duplicate 2
Lab Sample ID: 280-190622-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.70	J	1.0	0.32	ug/L	1		8260B	Total/NA
Tetrachloroethene	7.7		1.0	0.40	ug/L	1		8260B	Total/NA
Trichloroethene	3.2		1.0	0.30	ug/L	1		8260B	Total/NA
Arsenic	0.74	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	31000	B	200	24	ug/L	1		6010B	Dissolved
Iron	9.2	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	14000		200	4.2	ug/L	1		6010B	Dissolved
Sodium	29000		1000	97	ug/L	1		6010B	Dissolved
Chloride	33		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	240		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Field Blank
Lab Sample ID: 280-190622-15

No Detections.

Client Sample ID: Trip Blank
Lab Sample ID: 280-190622-16

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

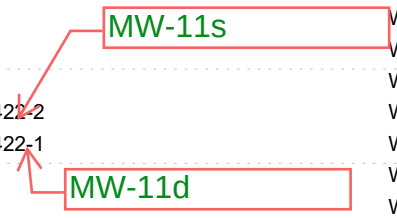
Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-190622-1	MW-1D	Water	04/24/24 09:37	04/25/24 09:25
280-190622-2	MW-3D	Water	04/23/24 10:15	04/25/24 09:25
280-190622-3	MW-10S	Water	04/23/24 09:34	04/25/24 09:25
280-190622-4	MW-10D	Water	04/23/24 08:57	04/25/24 09:25
280-190622-5	VLF240422-2	Water	04/22/24 17:44	04/25/24 09:25
280-190622-6	VLF240422-1	Water	04/22/24 17:10	04/25/24 09:25
280-190622-7	MW-12S	Water	04/23/24 11:31	04/25/24 09:25
280-190622-8	MW-12D	Water	04/23/24 11:03	04/25/24 09:25
280-190622-9	MW-23	Water	04/24/24 10:20	04/25/24 09:25
280-190622-10	MW-26	Water	04/24/24 12:00	04/25/24 09:25
280-190622-11	MW-27	Water	04/24/24 11:14	04/25/24 09:25
280-190622-12	P-8	Water	04/23/24 12:19	04/25/24 09:25
280-190622-13	Duplicate 1	Water	04/23/24 07:00	04/25/24 09:25
280-190622-14	Duplicate 2	Water	04/23/24 08:00	04/25/24 09:25
280-190622-15	Field Blank	Water	04/23/24 00:00	04/25/24 09:25
280-190622-16	Trip Blank	Water	04/23/24 08:57	04/25/24 09:25



Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-1D
Date Collected: 04/24/24 09:37
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/02/24 23:56	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/02/24 23:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/24 23:56	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/02/24 23:56	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/02/24 23:56	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/02/24 23:56	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/02/24 23:56	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/02/24 23:56	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/02/24 23:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/02/24 23:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/02/24 23:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/02/24 23:56	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/02/24 23:56	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/02/24 23:56	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/02/24 23:56	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/02/24 23:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/02/24 23:56	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/02/24 23:56	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 23:56	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/02/24 23:56	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 23:56	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/02/24 23:56	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/02/24 23:56	1
2-Hexanone	ND		5.0	1.7	ug/L			05/02/24 23:56	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/02/24 23:56	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/02/24 23:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/02/24 23:56	1
Acetone	ND		15	6.6	ug/L			05/02/24 23:56	1
Benzene	ND		1.0	0.31	ug/L			05/02/24 23:56	1
Bromobenzene	ND		1.0	0.40	ug/L			05/02/24 23:56	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/02/24 23:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/24 23:56	1
Bromoform	ND		2.0	1.2	ug/L			05/02/24 23:56	1
Bromomethane	ND		5.0	2.4	ug/L			05/02/24 23:56	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/02/24 23:56	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/02/24 23:56	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/02/24 23:56	1
Chloroethane	ND		4.0	1.4	ug/L			05/02/24 23:56	1
Chloroform	ND		1.0	0.36	ug/L			05/02/24 23:56	1
Chloromethane	ND		2.0	0.75	ug/L			05/02/24 23:56	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/02/24 23:56	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/02/24 23:56	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/02/24 23:56	1
Dibromomethane	ND		1.0	0.34	ug/L			05/02/24 23:56	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/02/24 23:56	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/02/24 23:56	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/02/24 23:56	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/02/24 23:56	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/02/24 23:56	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-1D
Date Collected: 04/24/24 09:37
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/02/24 23:56	1
Naphthalene	ND		2.0	0.63	ug/L			05/02/24 23:56	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/02/24 23:56	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/02/24 23:56	1
o-Xylene	ND		1.0	0.33	ug/L			05/02/24 23:56	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/02/24 23:56	1
Styrene	ND		1.0	0.36	ug/L			05/02/24 23:56	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/02/24 23:56	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/02/24 23:56	1
Toluene	ND		1.0	0.32	ug/L			05/02/24 23:56	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/02/24 23:56	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/02/24 23:56	1
Trichloroethene	ND		1.0	0.30	ug/L			05/02/24 23:56	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/02/24 23:56	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/02/24 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*05/02/24 23:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/02/24 23:56*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*05/02/24 23:56*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/02/24 23:56*	*1*

Client Sample ID: MW-3D
Date Collected: 04/23/24 10:15
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 00:18	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 00:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 00:18	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 00:18	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 00:18	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 00:18	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 00:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 00:18	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 00:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 00:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 00:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 00:18	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 00:18	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 00:18	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 00:18	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 00:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 00:18	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 00:18	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 00:18	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 00:18	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 00:18	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 00:18	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 00:18	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 00:18	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-3D
Date Collected: 04/23/24 10:15
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 00:18	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 00:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 00:18	1
Acetone	ND		15	6.6	ug/L			05/03/24 00:18	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 00:18	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 00:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 00:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 00:18	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 00:18	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 00:18	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 00:18	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 00:18	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 00:18	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 00:18	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 00:18	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 00:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 00:18	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 00:18	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 00:18	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 00:18	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 00:18	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 00:18	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 00:18	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 00:18	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 00:18	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 00:18	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 00:18	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 00:18	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 00:18	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 00:18	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 00:18	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 00:18	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 00:18	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 00:18	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 00:18	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 00:18	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 00:18	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 00:18	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 00:18	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*05/03/24 00:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*05/03/24 00:18*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 00:18*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*05/03/24 00:18*	*1*

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-10S
Date Collected: 04/23/24 09:34
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 00:41	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 00:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 00:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 00:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 00:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 00:41	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 00:41	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 00:41	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 00:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 00:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 00:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 00:41	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 00:41	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 00:41	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 00:41	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 00:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 00:41	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 00:41	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 00:41	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 00:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 00:41	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 00:41	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 00:41	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 00:41	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 00:41	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 00:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 00:41	1
Acetone	ND		15	6.6	ug/L			05/03/24 00:41	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 00:41	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 00:41	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 00:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 00:41	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 00:41	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 00:41	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 00:41	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 00:41	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 00:41	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 00:41	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 00:41	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 00:41	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 00:41	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 00:41	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 00:41	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 00:41	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 00:41	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 00:41	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 00:41	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 00:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 00:41	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-10S
Date Collected: 04/23/24 09:34
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 00:41	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 00:41	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 00:41	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 00:41	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 00:41	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 00:41	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 00:41	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 00:41	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 00:41	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 00:41	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 00:41	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 00:41	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 00:41	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 00:41	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*05/03/24 00:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/24 00:41*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 00:41*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/03/24 00:41*	*1*

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 01:03	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 01:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 01:03	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 01:03	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 01:03	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 01:03	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 01:03	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 01:03	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 01:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 01:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 01:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 01:03	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 01:03	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 01:03	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 01:03	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 01:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 01:03	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 01:03	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:03	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 01:03	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:03	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 01:03	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 01:03	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 01:03	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 01:03	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 01:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 01:03	1
Acetone	ND		15	6.6	ug/L			05/03/24 01:03	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 01:03	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 01:03	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 01:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 01:03	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 01:03	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 01:03	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 01:03	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 01:03	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 01:03	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 01:03	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 01:03	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 01:03	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 01:03	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 01:03	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 01:03	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 01:03	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 01:03	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 01:03	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 01:03	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 01:03	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 01:03	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 01:03	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 01:03	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 01:03	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 01:03	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 01:03	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 01:03	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 01:03	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 01:03	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 01:03	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 01:03	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 01:03	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 01:03	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 01:03	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 01:03	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*05/03/24 01:03*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/03/24 01:03*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 01:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/03/24 01:03*	*1*

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: VLF240422-2
Date Collected: 04/22/24 17:44
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 01:26	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 01:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 01:26	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 01:26	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 01:26	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 01:26	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 01:26	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 01:26	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 01:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 01:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 01:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 01:26	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 01:26	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 01:26	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 01:26	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 01:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 01:26	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 01:26	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:26	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 01:26	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:26	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 01:26	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 01:26	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 01:26	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 01:26	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 01:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 01:26	1
Acetone	ND		15	6.6	ug/L			05/03/24 01:26	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 01:26	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 01:26	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 01:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 01:26	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 01:26	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 01:26	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 01:26	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 01:26	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 01:26	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 01:26	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 01:26	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 01:26	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 01:26	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 01:26	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 01:26	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 01:26	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 01:26	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 01:26	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 01:26	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 01:26	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 01:26	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: VLF240422-2
Date Collected: 04/22/24 17:44
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 01:26	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 01:26	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 01:26	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 01:26	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 01:26	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 01:26	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 01:26	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 01:26	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 01:26	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 01:26	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 01:26	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 01:26	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 01:26	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 01:26	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*05/03/24 01:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/03/24 01:26*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*05/03/24 01:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/03/24 01:26*	*1*

Client Sample ID: VLF240422-1
Date Collected: 04/22/24 17:10
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 01:49	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 01:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 01:49	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 01:49	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 01:49	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 01:49	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 01:49	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 01:49	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 01:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 01:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 01:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 01:49	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 01:49	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 01:49	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 01:49	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 01:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 01:49	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 01:49	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:49	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 01:49	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 01:49	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 01:49	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 01:49	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 01:49	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: VLF240422-1
Date Collected: 04/22/24 17:10
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 01:49	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 01:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 01:49	1
Acetone	ND		15	6.6	ug/L			05/03/24 01:49	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 01:49	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 01:49	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 01:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 01:49	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 01:49	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 01:49	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 01:49	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 01:49	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 01:49	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 01:49	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 01:49	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 01:49	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 01:49	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 01:49	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 01:49	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 01:49	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 01:49	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 01:49	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 01:49	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 01:49	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 01:49	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 01:49	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 01:49	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 01:49	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 01:49	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 01:49	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 01:49	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 01:49	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 01:49	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 01:49	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 01:49	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 01:49	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 01:49	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 01:49	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 01:49	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*05/03/24 01:49*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/24 01:49*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 01:49*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*05/03/24 01:49*	*1*

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-12S
Date Collected: 04/23/24 11:31
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 02:11	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 02:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 02:11	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 02:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 02:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 02:11	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 02:11	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 02:11	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 02:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 02:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 02:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 02:11	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 02:11	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 02:11	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 02:11	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 02:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 02:11	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 02:11	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:11	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 02:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:11	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 02:11	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 02:11	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 02:11	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 02:11	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 02:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 02:11	1
Acetone	ND		15	6.6	ug/L			05/03/24 02:11	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 02:11	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 02:11	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 02:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 02:11	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 02:11	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 02:11	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 02:11	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 02:11	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 02:11	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 02:11	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 02:11	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 02:11	1
cis-1,2-Dichloroethene	**0.67**	**J**	1.0	0.32	ug/L			05/03/24 02:11	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 02:11	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 02:11	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 02:11	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 02:11	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 02:11	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 02:11	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 02:11	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 02:11	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-12S
Date Collected: 04/23/24 11:31
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 02:11	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 02:11	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 02:11	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 02:11	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 02:11	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 02:11	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 02:11	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 02:11	1
Tetrachloroethene	**8.0**		1.0	0.40	ug/L			05/03/24 02:11	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 02:11	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 02:11	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 02:11	1
Trichloroethene	**3.1**		1.0	0.30	ug/L			05/03/24 02:11	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 02:11	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/03/24 02:11*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*05/03/24 02:11*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/03/24 02:11*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/03/24 02:11*	*1*

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 02:33	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 02:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 02:33	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 02:33	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 02:33	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 02:33	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 02:33	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 02:33	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 02:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 02:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 02:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 02:33	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 02:33	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 02:33	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 02:33	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 02:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 02:33	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 02:33	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:33	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 02:33	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:33	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 02:33	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 02:33	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 02:33	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 02:33	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 02:33	1
Acetone	ND		15	6.6	ug/L			05/03/24 02:33	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 02:33	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 02:33	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 02:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 02:33	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 02:33	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 02:33	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 02:33	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 02:33	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 02:33	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 02:33	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 02:33	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 02:33	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 02:33	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 02:33	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 02:33	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 02:33	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 02:33	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 02:33	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 02:33	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 02:33	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 02:33	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 02:33	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 02:33	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 02:33	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 02:33	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 02:33	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 02:33	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 02:33	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 02:33	1
Tetrachloroethene	**2.1**		1.0	0.40	ug/L			05/03/24 02:33	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 02:33	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 02:33	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 02:33	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 02:33	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 02:33	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/03/24 02:33*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/24 02:33*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*05/03/24 02:33*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/03/24 02:33*	*1*

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 02:56	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 02:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 02:56	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 02:56	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 02:56	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 02:56	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 02:56	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 02:56	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 02:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 02:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 02:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 02:56	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 02:56	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 02:56	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 02:56	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 02:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 02:56	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 02:56	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:56	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 02:56	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 02:56	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 02:56	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 02:56	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 02:56	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 02:56	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 02:56	1
Acetone	ND		15	6.6	ug/L			05/03/24 02:56	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 02:56	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 02:56	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 02:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 02:56	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 02:56	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 02:56	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 02:56	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 02:56	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 02:56	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 02:56	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 02:56	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 02:56	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 02:56	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 02:56	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 02:56	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 02:56	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 02:56	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 02:56	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 02:56	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 02:56	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 02:56	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 02:56	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 02:56	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 02:56	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 02:56	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 02:56	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 02:56	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 02:56	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 02:56	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 02:56	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 02:56	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 02:56	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 02:56	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 02:56	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 02:56	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*05/03/24 02:56*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/24 02:56*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 02:56*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/03/24 02:56*	*1*

Client Sample ID: MW-26
Date Collected: 04/24/24 12:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 03:18	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 03:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 03:18	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 03:18	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 03:18	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 03:18	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 03:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 03:18	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 03:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 03:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 03:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 03:18	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 03:18	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 03:18	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 03:18	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 03:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 03:18	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 03:18	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 03:18	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 03:18	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 03:18	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 03:18	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 03:18	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 03:18	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-26
Date Collected: 04/24/24 12:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 03:18	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 03:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 03:18	1
Acetone	ND		15	6.6	ug/L			05/03/24 03:18	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 03:18	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 03:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 03:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 03:18	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 03:18	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 03:18	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 03:18	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 03:18	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 03:18	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 03:18	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 03:18	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 03:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 03:18	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 03:18	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 03:18	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 03:18	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 03:18	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 03:18	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 03:18	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 03:18	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 03:18	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 03:18	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 03:18	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 03:18	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 03:18	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 03:18	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 03:18	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 03:18	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 03:18	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 03:18	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 03:18	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 03:18	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 03:18	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 03:18	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 03:18	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*05/03/24 03:18*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*05/03/24 03:18*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 03:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/03/24 03:18*	*1*

Client: Geo-Logic Associates
Job ID: 280-190622-1
Project/Site: Valley LF - Republic Serv Coffin Butte

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-27
Date Collected: 04/24/24 11:14
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 03:40	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 03:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 03:40	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 03:40	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 03:40	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 03:40	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 03:40	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 03:40	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 03:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 03:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 03:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 03:40	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 03:40	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 03:40	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 03:40	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 03:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 03:40	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 03:40	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 03:40	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 03:40	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 03:40	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 03:40	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 03:40	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 03:40	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 03:40	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 03:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 03:40	1
Acetone	ND		15	6.6	ug/L			05/03/24 03:40	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 03:40	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 03:40	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 03:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 03:40	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 03:40	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 03:40	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 03:40	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 03:40	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 03:40	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 03:40	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 03:40	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 03:40	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 03:40	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 03:40	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 03:40	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 03:40	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 03:40	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 03:40	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 03:40	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 03:40	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 03:40	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-27
Date Collected: 04/24/24 11:14
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 03:40	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 03:40	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 03:40	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 03:40	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 03:40	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 03:40	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 03:40	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 03:40	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 03:40	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 03:40	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 03:40	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 03:40	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 03:40	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 03:40	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*05/03/24 03:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/24 03:40*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/03/24 03:40*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/03/24 03:40*	*1*

Client Sample ID: P-8
Date Collected: 04/23/24 12:19
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 04:02	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 04:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 04:02	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 04:02	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 04:02	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 04:02	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 04:02	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 04:02	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 04:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 04:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 04:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 04:02	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 04:02	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 04:02	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 04:02	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 04:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 04:02	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 04:02	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:02	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 04:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:02	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 04:02	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 04:02	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 04:02	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: P-8
Date Collected: 04/23/24 12:19
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 04:02	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 04:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 04:02	1
Acetone	ND		15	6.6	ug/L			05/03/24 04:02	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 04:02	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 04:02	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 04:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 04:02	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 04:02	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 04:02	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 04:02	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 04:02	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 04:02	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 04:02	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 04:02	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 04:02	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 04:02	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 04:02	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 04:02	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 04:02	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 04:02	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 04:02	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 04:02	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 04:02	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 04:02	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 04:02	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 04:02	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 04:02	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 04:02	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 04:02	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 04:02	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 04:02	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 04:02	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 04:02	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 04:02	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 04:02	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 04:02	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 04:02	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 04:02	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 04:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*05/03/24 04:02*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*05/03/24 04:02*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/03/24 04:02*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/03/24 04:02*	*1*

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 04:25	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 04:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 04:25	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 04:25	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 04:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 04:25	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 04:25	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 04:25	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 04:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 04:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 04:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 04:25	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 04:25	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 04:25	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 04:25	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 04:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 04:25	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 04:25	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:25	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 04:25	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:25	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 04:25	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 04:25	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 04:25	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 04:25	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 04:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 04:25	1
Acetone	ND		15	6.6	ug/L			05/03/24 04:25	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 04:25	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 04:25	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 04:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 04:25	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 04:25	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 04:25	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 04:25	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 04:25	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 04:25	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 04:25	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 04:25	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 04:25	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/03/24 04:25	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 04:25	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 04:25	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 04:25	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 04:25	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 04:25	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 04:25	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 04:25	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 04:25	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 04:25	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 04:25	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 04:25	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 04:25	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 04:25	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 04:25	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 04:25	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 04:25	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/03/24 04:25	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 04:25	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 04:25	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 04:25	1
Trichloroethene	ND		1.0	0.30	ug/L			05/03/24 04:25	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 04:25	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*05/03/24 04:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/24 04:25*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*05/03/24 04:25*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/03/24 04:25*	*1*

Client Sample ID: Duplicate 2
Date Collected: 04/23/24 08:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/03/24 04:47	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/03/24 04:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/03/24 04:47	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/03/24 04:47	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/03/24 04:47	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/03/24 04:47	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/03/24 04:47	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/03/24 04:47	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/03/24 04:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/03/24 04:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/03/24 04:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/03/24 04:47	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/03/24 04:47	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/03/24 04:47	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/03/24 04:47	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/03/24 04:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/03/24 04:47	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/03/24 04:47	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:47	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/03/24 04:47	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/03/24 04:47	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/03/24 04:47	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/03/24 04:47	1
2-Hexanone	ND		5.0	1.7	ug/L			05/03/24 04:47	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Duplicate 2
Date Collected: 04/23/24 08:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/03/24 04:47	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/03/24 04:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/03/24 04:47	1
Acetone	ND		15	6.6	ug/L			05/03/24 04:47	1
Benzene	ND		1.0	0.31	ug/L			05/03/24 04:47	1
Bromobenzene	ND		1.0	0.40	ug/L			05/03/24 04:47	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/03/24 04:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/03/24 04:47	1
Bromoform	ND		2.0	1.2	ug/L			05/03/24 04:47	1
Bromomethane	ND		5.0	2.4	ug/L			05/03/24 04:47	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/03/24 04:47	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/03/24 04:47	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/03/24 04:47	1
Chloroethane	ND		4.0	1.4	ug/L			05/03/24 04:47	1
Chloroform	ND		1.0	0.36	ug/L			05/03/24 04:47	1
Chloromethane	ND		2.0	0.75	ug/L			05/03/24 04:47	1
cis-1,2-Dichloroethene	**0.70**	**J**	1.0	0.32	ug/L			05/03/24 04:47	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/03/24 04:47	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/03/24 04:47	1
Dibromomethane	ND		1.0	0.34	ug/L			05/03/24 04:47	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/03/24 04:47	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/03/24 04:47	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/03/24 04:47	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/03/24 04:47	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/03/24 04:47	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/03/24 04:47	1
Naphthalene	ND		2.0	0.63	ug/L			05/03/24 04:47	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/03/24 04:47	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/03/24 04:47	1
o-Xylene	ND		1.0	0.33	ug/L			05/03/24 04:47	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/03/24 04:47	1
Styrene	ND		1.0	0.36	ug/L			05/03/24 04:47	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/03/24 04:47	1
Tetrachloroethene	**7.7**		1.0	0.40	ug/L			05/03/24 04:47	1
Toluene	ND		1.0	0.32	ug/L			05/03/24 04:47	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/03/24 04:47	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/03/24 04:47	1
Trichloroethene	**3.2**		1.0	0.30	ug/L			05/03/24 04:47	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/03/24 04:47	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/03/24 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 127*		*05/03/24 04:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/24 04:47*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/03/24 04:47*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*05/03/24 04:47*	*1*

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Field Blank
Date Collected: 04/23/24 00:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/02/24 23:11	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/02/24 23:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/24 23:11	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/02/24 23:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/02/24 23:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/02/24 23:11	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/02/24 23:11	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/02/24 23:11	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/02/24 23:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/02/24 23:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/02/24 23:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/02/24 23:11	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/02/24 23:11	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/02/24 23:11	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/02/24 23:11	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/02/24 23:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/02/24 23:11	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/02/24 23:11	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 23:11	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/02/24 23:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 23:11	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/02/24 23:11	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/02/24 23:11	1
2-Hexanone	ND		5.0	1.7	ug/L			05/02/24 23:11	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/02/24 23:11	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/02/24 23:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/02/24 23:11	1
Acetone	ND		15	6.6	ug/L			05/02/24 23:11	1
Benzene	ND		1.0	0.31	ug/L			05/02/24 23:11	1
Bromobenzene	ND		1.0	0.40	ug/L			05/02/24 23:11	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/02/24 23:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/24 23:11	1
Bromoform	ND		2.0	1.2	ug/L			05/02/24 23:11	1
Bromomethane	ND		5.0	2.4	ug/L			05/02/24 23:11	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/02/24 23:11	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/02/24 23:11	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/02/24 23:11	1
Chloroethane	ND		4.0	1.4	ug/L			05/02/24 23:11	1
Chloroform	ND		1.0	0.36	ug/L			05/02/24 23:11	1
Chloromethane	ND		2.0	0.75	ug/L			05/02/24 23:11	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/02/24 23:11	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/02/24 23:11	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/02/24 23:11	1
Dibromomethane	ND		1.0	0.34	ug/L			05/02/24 23:11	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/02/24 23:11	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/02/24 23:11	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/02/24 23:11	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/02/24 23:11	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/02/24 23:11	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Field Blank
Date Collected: 04/23/24 00:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/02/24 23:11	1
Naphthalene	ND		2.0	0.63	ug/L			05/02/24 23:11	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/02/24 23:11	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/02/24 23:11	1
o-Xylene	ND		1.0	0.33	ug/L			05/02/24 23:11	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/02/24 23:11	1
Styrene	ND		1.0	0.36	ug/L			05/02/24 23:11	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/02/24 23:11	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/02/24 23:11	1
Toluene	ND		1.0	0.32	ug/L			05/02/24 23:11	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/02/24 23:11	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/02/24 23:11	1
Trichloroethene	ND		1.0	0.30	ug/L			05/02/24 23:11	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/02/24 23:11	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/02/24 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*05/02/24 23:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/02/24 23:11*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/02/24 23:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/02/24 23:11*	*1*

Client Sample ID: Trip Blank
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/02/24 22:48	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/02/24 22:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/24 22:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/02/24 22:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/02/24 22:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/02/24 22:48	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/02/24 22:48	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/02/24 22:48	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/02/24 22:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/02/24 22:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/02/24 22:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/02/24 22:48	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/02/24 22:48	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/02/24 22:48	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/02/24 22:48	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/02/24 22:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/02/24 22:48	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/02/24 22:48	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 22:48	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/02/24 22:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 22:48	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/02/24 22:48	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/02/24 22:48	1
2-Hexanone	ND		5.0	1.7	ug/L			05/02/24 22:48	1