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March 31, 2026

(Via electronic transmission)

Your DEQ Online
Oregon Department of Environmental Quality
Air Quality Division
4026 Fairview Industrial Drive
Salem, OR 97302

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

To Whom it May Concern:

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 2025 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 electronic copy uploaded to YDO.

Please feel free to contact Leigh Symank, John Hower, or me if you have any questions.

Sincerely,



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

cc: Denise Miller DEQ (cover letter via email)
Hugh Gao DEQ (cover letter via email)
Leigh Symank
John Hower

2025 Annual Environmental Monitoring Report Coffin Butte Landfill Benton County, Oregon

Submitted to:

Oregon Department of Environmental Quality
Eugene, Oregon

Submitted by:

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c/o Republic Services
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AU26.1015.00

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March 31, 2026
JN: AU25.1012

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**2025 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 of arsenic exceeded the primary MCL of 10 micrograms per liter ($\mu\text{g/L}$) in samples collected from East Side compliance wells MW-26 and MW-27. The arsenic concentrations 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. No other primary MCLs were exceeded in samples collected from wells that monitor the east side of the site.

As for West Side monitoring points, the primary MCL for nitrate + nitrite as nitrogen of 10 mg/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 $\mu\text{g/L}$] 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 $\mu\text{g/L}$) 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 in samples from compliance well MW-10S and detection well MW-19.

- TDS in samples from well pairs MW-10S/10D and MW-11S/11D, MW-20, MW-21, and detection well MW-19.
- Manganese in samples from well pair MW-10S/10D, MW-12S, and MW-21.
- Iron in samples from MW-12S and MW-21.
- Zinc in samples from 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 a trace concentration during the Fall monitoring event.

Site Specific Limits (SSLs)

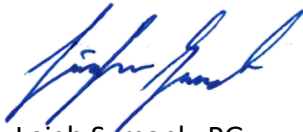
Of indicator parameter concentrations measured in the water quality samples collected from East Side Compliance wells in 2025, each was below the SSLs except for manganese, which exceeded its limit in the sample from MW-27 during the Spring event. VLI will continue to monitor manganese concentrations in this area. All other indicator parameter concentrations were below the respective SSLs during this monitoring period. Anions and cations were inadvertently excluded from analysis during the Fall event, and no results are available.

Landfill Gas Monitoring

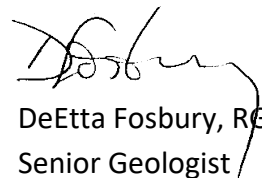
VLI routinely monitors six landfill gas monitoring probes around the perimeter of the landfill and the interior of six site structures. Measured values for the methane lower explosive limit were zero for all twelve monitoring events.

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.



Leigh Symanck, PG
Project Geologist



DeEtta Fosbury, RG
Senior Geologist

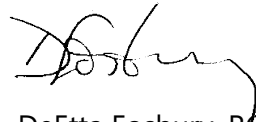
Certification

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.

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Date signed: March 26, 2026



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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
GLA	Geo-Logic Associates
LCRS	leachate collection and removal system
LDS	leak detection system
LEL	lower explosive limit
LFG	landfill gas
MCL	maximum contaminant level
msl	mean sea level
NELAP	National Environmental Laboratory Accreditation Program
NPDES	National Pollutant Discharge Elimination System
OAR	Oregon Administrative Rules
ORP	oxidation/reduction potential
ORS	Oregon Revised Statutes
PCE	tetrachloroeth[yl]ene
PSCL	permit-specific concentration limit
QA/QC	quality assurance/quality control
QCAB	trip/travel blanks
QCTB	field/ambient blanks
RACL	remedial action concentration limit
RPD	relative percent difference
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
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
VLI	Valley Landfills, Inc.
WWTP	wastewater treatment plant

Executive Summary

This annual environmental monitoring report provides a summary of the water quality monitoring activities conducted at Coffin Butte Landfill during 2025. 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 (SWDP) number 306, issued and administered by the Oregon Department of Environmental Quality (DEQ).

VOC Results Summary

No significant changes in water quality were observed during 2025. Quantifiable concentrations of volatile organic compounds (VOCs) were measured in samples collected from wells MW-12S and MW-12D near Cell 1 along the southern landfill boundary during the April 2025 monitoring event, and in west side well MW-19 during the October 2025 monitoring event. In addition, one VOC was detected at trace concentrations in samples from compliance wells MW-12D and MW-20 during the October event. No VOCs detected in any of the monitoring wells exceeded a primary drinking water standard, and the long-term trends for VOCs detected in site wells continue to decrease.

Metals and Inorganics Results Summary

Groundwater chemistry trends for metals and inorganics remain generally stable in wells on the west side downgradient of the former Closed Landfill (where source removal was completed in 2022), downgradient of Cell 1, Cell 1A, and newly constructed Cell 6. However, elevated concentrations of inorganic constituents and metals continue to be measured in samples from wells in this area of the site. As has been the case historically, remedial action concentration limits (RACL) for the west side wells were exceeded for chloride, total dissolved solids (TDS), iron, and manganese in samples from several wells during both monitoring events.

New SSLs for MW-20 and MW-21

Constituent results measured in west side monitoring wells MW-20 and MW-21 were compared to new statistically calculated site-specific limits (SSLs) included in the updated Environmental Monitoring Plan (EMP) (GLA, 2025). SSLs were not exceeded for any constituents during the April 2025 monitoring event, but three SSLs were exceeded during the October 2025 monitoring event:

- Bicarbonate at MW-21,
- TDS at MW-21, and
- Manganese at MW-21 and MW-20.

Verification sampling was performed December 17, 2025 in response to multiple exceedances of SSLs in MW-21 samples. Results of verification sampling confirmed the exceedance of TDS and bicarbonate, and these constituents will continue to be monitored.

Constituents above Primary Drinking Water Standards

Arsenic concentrations exceeded the primary maximum contaminant level (MCL) of 10 micrograms per liter (µg/L) in samples collected from several monitoring wells near the compliance boundary for Cells 4 and 5 on the east side. The detected concentrations are similar to historical values and reflect the reducing condition (low dissolved oxygen and oxidation/reduction potential) related to the marsh environment in this area of the site and are therefore naturally occurring. Sampling results at wells MW-26 and MW-27 were below the updated 2025 SSLs for all indicator parameters during the April and October 2025 monitoring events. No further action is required based on these results.

Leachate Collection

The volume of leachate collected by the leachate collection and removal system (LCRS) in Cells 1 through 5 for the 2024-2025 water year (October 1, 2024 to September 30, 2025) was estimated at approximately 43.8 million gallons. VLI continues to monitor the secondary leachate collection systems (SLCS) beneath Cells 2, 3, 4, and 5, which will soon include leachate and SLCS monitoring for Cell 6. Construction of Cell 6B was completed in 2025 and was approved for waste placement by DEQ in a letter dated January 28, 2026. Cell 6C construction is slated to begin in 2026.

1. Introduction

1.1 General

This annual environmental monitoring report (EMR) presents the monitoring methods and results of groundwater elevation measurements, field measurements, and laboratory analyses of groundwater, surface water, underdrain liquid, secondary leachate liquid, and landfill gas samples collected during the 2025 monitoring period at the Coffin Butte Landfill (CBL) in Benton County, Oregon (Figure 1-1). Monitoring was performed by Geo-Logic Associates (GLA) from April 7 to 11, 2025 during the spring monitoring event and from October 27 to 31, 2025 during the fall monitoring event. All monitoring was performed and is reported in accordance with the procedures included in the facility's newly developed and approved environmental monitoring plan (EMP) (GLA, 2025). This report has been prepared in accordance with the landfill's solid waste disposal permit number 306 (Permit), issued by Oregon Department of Environmental Quality (DEQ) on July 28, 2020. The monitoring program at the CBL includes semiannual measurement of groundwater elevations, collection and analysis of samples from groundwater monitoring wells, surface water and underdrain sampling points, and 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 requirements for the annual report include:

1. Assess achievement of groundwater quality remedial goals for the west side cells by evaluating:
 - ◇ The effect of remedial actions on groundwater quality (i.e. assess progress of cleanup).
 - ◇ The protection of potential human health receptors.
2. Evaluate compliance monitoring data for east side and Cell 6 wells.
3. Evaluate the performance of engineered liner systems for the active waste management units.

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

- Groundwater quality improvement based on concentration trends.

- Effectiveness of source control.
- Plume stabilization based on the extent and concentration of volatile organic compounds (VOCs).
- Monitoring domestic wells and early warning detection wells (i.e. Phillips well and piezometer P-8).

West side monitoring objectives include meeting the remedial action concentration limits (RACLs) set forth in the Permit for monitoring wells downgradient of the inactive Closed Landfill and Cells 1 and 1A. These concentration limits are intended to help maintain quality of groundwater migrating from the landfill. Tables and comparisons summarizing RACLs are included in Section 5.1.1.

The newly approved EMP (GLA, 2025) sets forth new intrawell statistical site-specific limits (SSLs) for wells MW-20 and MW-21 downgradient of Cell 6 based on the 2011 through 2024 dataset for each. SSLs for west side wells are summarized in Section 5.1.1.2.

For the east side, the report compares analytical results to newly calculated SSLs for MW-26 and MW-27, also based on the 2011 through 2024 dataset, and examines the data for any indications of significant change. SSLs for east side wells are summarized in Section 5.1.2.

In addition to RACLs and SSLs for the site, results are also compared to relevant water quality standards including United States Environmental Protection Agency (U.S. EPA) primary and secondary maximum contaminant levels (MCLs) for drinking water.

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

- A cover letter summarizing the analytical results in comparison to relevant monitoring standards including exceedances of the standards 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 directions, as well as inferred groundwater elevation contours.

- ◇ Data evaluation tools (e.g., time-series plots) for selected constituents of concern.
- ◇ Summary of monitoring results 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.
- Findings from the leachate management program.
- Results of landfill gas (LFG) probe monitoring (monitoring related to operations of the gas-to-energy plant are not reported as part of the environmental monitoring 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 DEQ has requested that facilities provide a historical database for the landfill each year to be archived at the DEQ. For the CBL, historical data are uploaded in the Trihydro® environmental data management software, EnFlection®. The data are available for download through their website at <https://enflection.trihydro.com>.

1.2 Background

The 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 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 site characterization reports (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 Toketie 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. Cells 5B through 5E were constructed against the south flank of Coffin Butte north of existing landfill Cells 2 and 3. Newly constructed Cell 6 is located on the southwestern flank of Coffin Butte, northeast of the Closed Landfill and west 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 were 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. The clean closure project and confirmation sampling of subgrade materials were documented by GLA (2022). As of the date of this report, Cell 6B has been fully constructed and approved for waste placement by DEQ in a letter dated January 28, 2026. Construction of Cell 6C is planned to begin in 2026.

2. Monitoring Activities

Semiannual 2025 monitoring at the CBL was completed by GLA. The second quarter (spring) 2025 monitoring event was conducted from April 7 to 11, 2025, and the fourth quarter (fall) 2025 monitoring event was conducted from October 27 to 31, 2025. Monitoring is performed in accordance with the site's EMP as follows:

- Monthly perimeter LFG probe monitoring by VLI personnel.
- Semiannual monitoring of all compliance monitoring wells, surface water monitoring point, underdrains, and the 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 reporting of monitoring results.
- Testing groundwater samples for an expanded suite of constituents of potential concern (COPCs) once every five years. Samples collected from all compliance and detection wells and from selected observation wells are tested for COPCs. The next COPC sampling event will occur in the fourth quarter of 2029.

2.1 Monitoring Network

As summarized below and depicted on Figure 2-1, the monitoring network at the CBL includes 6 perimeter gas probes, 32 groundwater monitoring wells (including perimeter 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)
Semiannual 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
Semiannual 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	<i>Split Samples are collected at all Compliance and Detection wells and select Observation Wells</i>	
	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, Merrill, Berkland	Private/Domestic Observation Well

* Water level elevation to be collected from all site monitoring wells semi-annually

^ Underdrain location SU-2 discharge location is inaccessible for sampling.

Note: Next 5-year split sampling to occur during spring 2029 monitoring event.

Table 2-1 includes monitoring network well survey data in addition to construction and lithology data. The CBL monitoring parameters and schedule are summarized by monitoring point type in Table 2-2. One monitoring adjustment was made with the approval of the new EMP in 2025: wells MW-20 and MW-21 have historically been sampled in the fourth quarter annually; however, since the completion of the newly constructed Cell 6, these wells are now sampled using the same schedule as other compliance wells.

Of note, during the fall 2024 (5-year COPC) monitoring event, groundwater samples were analyzed for routine monitoring parameters, as well as the critical landfill parameters listed in the comprehensive analytical groups on Table 2-2, but the laboratory inadvertently omitted the trace metals analyses required during 5-year events. Therefore, during the April 2025 (semiannual) monitoring event, groundwater samples were analyzed for routine monitoring (site-specific) indicator parameters, compliance wells were analyzed for VOCs, and all wells were analyzed for trace metals to account for the omission of these analytes during in October 2024 monitoring event. During the fall 2025 (annual) monitoring event, the same indicator parameters were analyzed with the addition of the annual metals scan as well as VOCs for all monitoring wells, as listed on Table 2-2.

2.2 Environmental Groundwater Sampling

Sampling protocols are described in the site sampling and analysis plan in the EMP (GLA, 2025). Upon arrival at the site, depths to water are measured at all monitoring wells and piezometers using an electronic sounding reel. When possible, all depth to water data are 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 2025, samples were not collected from the following locations:

- April (spring) event: S-U7, LDS-WLP were dry and not sampled. S-U6 was inaccessible due to heavy vegetation and sediment along the creek.
- October (fall) event: MW-10S, MW-12S, P-8, MW-17, 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 are 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. 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 sampling point 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]) currently 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 as a composite of all sump liquid that is drained to the West Leachate Pond sump (L-Pond) via a sampling port in accordance with the current 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-Change Room, Scale House, Pump House, and Lock-up #1) on a monthly basis. Landfill gas is monitored using a combustible gas detector (Landtec 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.

3. Laboratory Analyses and QA/QC

3.1 Analyses

This section presents a summary of laboratory analyses and QA/QC results for environmental samples collected at the CBL during the last year. Environmental samples were delivered to Eurofins Denver, a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory located in Arvada, Colorado.

As shown in Tables 3-1A through 3-1C, groundwater samples obtained from routine (semiannual) monitoring points were tested for indicator parameters including chloride, bicarbonate, total dissolved solids (TDS), calcium, iron, magnesium, manganese, sodium, arsenic, and VOCs. Groundwater samples obtained annually are also analyzed for eight trace metals. Surface water samples were analyzed for chloride, calcium, iron, magnesium, manganese, sodium, biological oxygen demand (BOD), total Kjeldahl nitrogen (TKN), total phosphorus, and orthophosphate. Underdrain samples were tested for the same semiannual 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. EPA guidance documents for evaluating solid waste (U.S. EPA, 1983 and 1986a, known as SW-846), for technical enforcement of groundwater monitoring (U.S. EPA, 1986b), and for preparing quality assurance plans (U.S. EPA, 1987 and 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. Analyses of BOD and orthophosphate 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 (QCTBs), field/ambient blanks (QCABs), duplicate samples, and laboratory analytical method blank analyses. Unfortunately, ambient blanks were not analyzed during the October 2025 event due to lack of laboratory-provided de-ionized (DI) water. Field QA/QC samples (QCTB, QCAB) were analyzed only for VOCs using 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-4, MW-1D, and MW-12S during the spring 2025 monitoring event and from MW-3D, MW-18, and MW-19 during the fall 2025 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. One sample/analyte pair exceeded the RPD control limit during the spring monitoring event (tetrachloroethene [PCE] for MW-12S) and one RPD control limit exceedance (dichlorodifluoromethane [Freon-12] in MW-19) was recorded during the fall monitoring event. These RPD exceedances were 43.6 percent and 89.5 percent, respectively. All other constituents evaluated as duplicates during the April and October 2025 events were below the control limit.

In summary, the QA/QC efforts completed during the 2025 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 collected during 2025 monitoring events.
- Several inorganic constituents were detected at trace concentrations in the laboratory method blanks prepared for the April and October 2025 sampling events. The concentrations were well 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, one primary/duplicate analyte pair exceeded the RPD control limit during the April 2025 sampling event, and one primary/duplicate analyte pair exceeded the RPD control limit during the October 2025 sampling event.

Based on the results of the QA/QC program, the 2025 analytical results presented herein are considered acceptable for their intended purposes.

3.3 DEQ Split Sampling

During the 5-year COPC monitoring event in October 2024, split sampling was conducted by the DEQ. As required, GLA submitted the analytical data from the sampling event to DEQ for their QA/QC analyses. The next 5-year sampling event requiring split sampling by the DEQ will be conducted in spring 2029.

4. Monitoring Results

4.1 Groundwater Potentiometric Surface

4.1.1 Groundwater Elevation

Historical groundwater elevation 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 levels during the April 2025 monitoring event were similar to historical values and elevations decreased at most wells between October 2024 and October 2025, particularly in the shallow wells. Wells MW-1S, MW-3S, MW-10S, MW-12S, P-8, and WP-3 were observed to be dry during the October 2025 sampling event.

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 2025 was 4.8 feet. Not including wells recorded as dry, well MW-15 experienced a historical low water level elevation during the April 2025 and wells MW-1D, MW-10D, MW-12D, MW-17, MW-18, MW-20, P-9R, WP-3, WP-5, and WP-6 experienced historical low water level

elevations during the October 2025 monitoring event. This can be expected as the total rainfall at the site for 2025 (34.46 inches) was more than 10 inches less than the total rainfall in 2024 (45.23 inches).

4.1.2 Groundwater Flow

Groundwater elevation data collected during the April 2025 monitoring event were used to construct the groundwater equipotential contours shown on Figure 4-4. These data indicate groundwater flow across the site is spatially variable, with a north-south trending groundwater divide present beneath the landfill. Groundwater flows from the surrounding bedrock highlands toward the alluvial valley, where it converges before diverging in two distinct directions: to the west, where it primarily moves through basalt, and to the east, where it flows within the alluvium and underlying basalt, indicating the presence of two separate groundwater-flow regimes.

Groundwater velocity is dependent upon three variables: hydraulic conductivity and effective porosity of the material and the hydraulic flow gradient. Using Darcy's law below, this section details the flow calculations made using groundwater level data collected during the 2025 monitoring events.

$$V = Ki/n_e$$

where:

V = horizontal groundwater velocity

K = hydraulic conductivity

i = horizontal hydraulic gradient

n_e = effective porosity

In the western flow regime, groundwater flows to the west and southwest through the basalt and alluvium beneath the western side of the landfill property at a hydraulic gradient of approximately 0.02 ft/ft. Using literature estimates of hydraulic conductivity of approximately 2.7 ft/d (EMCON, 1994) for the basalt and 0.22 ft/day for the alluvium, as well as an effective porosity ranging from 5 to 25 percent for the both aquifer materials underlying the site (Morris and Johnson, 1967), a groundwater velocity ranging from 6.4 to 493 ft/yr was calculated for the western flow regime using the gradient calculated from Cell 6 to MW-20. Additionally, using a hydraulic gradient of 0.005 ft/ft calculated using data collected from wells completed in basalt from MW-12 to WP-1, a groundwater velocity ranging from 20 to 99 ft/yr was calculated.

For the eastern flow regime, prior investigations estimated the hydraulic conductivity of the alluvium to be approximately 0.22 ft/day, with an effective porosity of 25 percent for wells

completed along Coffin Butte Road and near the Toketie Marsh. During the 2025 monitoring events, groundwater beneath the eastern half of the site was observed flowing southeast to east under a hydraulic gradient ranging from 0.02 to 0.05 ft/ft when calculated from Cell 5A to MW-9S. Using these parameters, the estimated groundwater velocity within the alluvium is approximately 6.4 to 16 feet per year (ft/yr) and the groundwater flowing in the underlying basalt in this area is estimated to range from 197 to 986 ft/year. Additionally, using hydraulic gradients of 0.013 ft/ft and 0.017 ft/ft calculated using data collected from wells completed in alluvium along Coffin Butte Road (from MW-24 to MW-15), a groundwater velocity ranging from 4.2 to 5.5 ft/yr was calculated.

4.2 Analytical Results

4.2.1 Groundwater Detections

This section summarizes 2025 water quality monitoring results at CBL. The CBL is monitored using groundwater monitoring wells and 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 Results

4.2.1.1.1 Closed Landfill/Cell 6

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). As previously mentioned, these wells have historically been sampled in the fourth quarter annually; however, since the completion of the newly constructed Cell 6 and in accordance with the EMP (GLA, 2025), these wells are now sampled using the same schedule as other compliance wells for the site. Historical groundwater chemistry data for MW-20 and MW-21 suggest that indicator parameter concentrations have been relatively stable or are decreasing, but October 2025 data showed slight increases of inorganics, as discussed in Section 5.1.2. VOCs are rarely detected and have never exceeded the MCLs in these wells.

4.2.1.1.2 *Cell 1A*

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). As seen in Appendix B, concentrations of VOCs in these wells have decreased significantly during the last 30 years and are rarely detected now. Well MW-10S could not be sampled due to insufficient liquid, but VOCs were not detected in samples from the other three wells downgradient of Cell 1A during either of the two 2025 monitoring events.

4.2.1.1.3 *Cell 1*

Monitoring wells MW-1D, MW-3D, 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. During the April 2025 monitoring event, PCE was detected in samples from MW-12S and MW-12D and byproducts of PCE breakdown were detected in the samples from MW-12S (Table 4-2). During the October 2025 sampling event, well MW-12S had insufficient water to sample, and a trace concentration of PCE was detected in the sample collected from MW-12D (Table 4-3). No MCLs were exceeded during 2025 monitoring events.

4.2.1.1.4 *Former Leachate Irrigation Field C*

Former leachate irrigation in Field C, located south of Cell 1A and Cell 1, appears to have historically affected the concentrations of some inorganic parameters in the downgradient monitoring well MW-19. Recent increases in concentrations of several inorganic constituents in samples from MW-19 (chloride, TDS, calcium, magnesium, sodium, and sulfate) are likely related to past leachate irrigation activities.

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; however, the measured concentrations were consistent with results from the last several years. No VOC results exceeded the MCLs during 2025 monitoring. Time-series charts for MW-19 are provided in Appendix B.

4.2.1.2 East Side Groundwater Results

4.2.1.2.1 Cell 2

Groundwater conditions southeast of Cell 2 are monitored by detection wells MW-8S and MW-23. Concentrations of indicator parameters bicarbonate, chloride, TDS, calcium, iron, magnesium, manganese, sodium, and arsenic reached historical high concentrations between 2000 and 2010, and concentrations of inorganic constituents are now within or just above the range of background concentrations in samples collected historically from MW-23 (TC, 2024). Historical arsenic concentrations in the samples collected from MW-23 vary in reverse proportion to the dissolved oxygen concentration and ORP, with concentrations ranging from 4.8 micrograms per liter (µg/L) up to 68 µg/L. Arsenic concentrations exceeded the MCL of 10 µg/L during the April and October 2025 monitoring events; arsenic concentrations were 15 µg/L and 16 µg/L, respectively (Tables 4-4 and 4-5) in samples from this well. Time-series charts of historical groundwater chemistry data are provided in Appendix B.

4.2.1.2.2 Cell 3

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 relatively stable and reflect natural water quality in the area (TC, 2024).

4.2.1.2.3 Cell 4

Compliance wells MW-26 and MW-27 are the primary groundwater quality monitoring points downgradient of Cell 4. Water quality results from these two monitoring wells indicate relatively lower and stable inorganic chemistry concentrations at MW-26 than at MW-27. Compared to other east side wells, these two Cell 4 monitoring wells have relatively elevated trace metal concentrations (Tables 4-4 and 4-5), with arsenic levels regularly above the primary MCL of 10 µg/L. 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, the mineral composition of the formation adjacent to the screened interval, low dissolved oxygen content and negative redox conditions that can liberate trace metals, or a combination of these factors (TC, 2024).

4.2.1.2.4 Former Leachate Irrigation Field B

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 indicator parameters measured during the last year were consistent with historical intrawell

concentrations. With the exception of barium, trace metals in Field B wells were detected at low to trace concentrations, or were not detected in 2025. Data from neither well suggest increasing trace metal concentrations that could indicate effects of past leachate irrigation. No VOCs were detected in samples from either well during 2025.

4.2.2 Surface Water Chemistry

Soap Creek southwest of the site 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 BOD, TKN, total phosphorus, and orthophosphate in samples from the three monitoring locations were either below the analyte detection limit or had trace detections that are similar to past monitoring results. Results from both 2025 monitoring events were within historical concentration ranges. Other dissolved inorganic constituent concentrations (chloride, calcium, magnesium, manganese, and sodium) varied seasonally, 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. A sample was collected from S-U3 during the April 2025 event, but this monitoring point was observed to be dry during the October 2025 event. During the April 2025 monitoring event, the concentration of manganese exceeded the federal secondary MCL of 50 µg/L, but was within the historical concentration range for this parameter at this location. Of note, operations in upgradient cells (e.g. construction) have the potential to affect 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 2025 and the results were similar to historical concentrations from this location. Concentrations of inorganic monitoring parameters from the underdrain have been consistently much 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 of indicator parameters have been consistent and do not suggest leakage from the overlying pond.

Underdrain monitoring point S-U5 collection liquid from below the West Leachate Pond to the southwest. The drain pipe also connects with another pipe that collects liquid from below the concrete pad of the non-operational Leachate Treatment Plant building. The monitoring results at SU-5 do not suggest 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 B.

Underdrain monitoring locations SU-2, SU-6, and SU-7 were deemed inaccessible for sampling during the 2025 monitoring events. GLA's field technician communicated with operations personnel to raise issues with sampling these locations because the drain pipes are either submerged, buried, or otherwise inaccessible for sampling at these locations. Site maintenance staff will need to provide access to discharge points for each of these three locations for sampling to resume.

4.2.4 Secondary Leachate Collection System (SLCS)

The SLCS is monitored at six locations, including the riser pipes at 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), the sump on the east end of Cell 5 (LDS-5), the west leachate pond (LDS-WLP) and east leachate pond (LDS-ELP). Samples were collected on a semiannual basis from each SLCS monitoring point except LDS-WLP, which was found to be dry during both monitoring events.

Leachate volumes reported in Section 4.3.2.1 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 are presented in Tables 4-10 and 4-11, 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 at LDS-2B vary seasonally as the amount of leachate, runoff, and groundwater levels fluctuate. Concentrations also vary from year to year as leachate sources are added or eliminated as a result of landfill operations. Increased concentrations of inorganic parameters measured in samples from LDS-2B are common during times of greater leachate production. During the 2025 monitoring period, VOCs (acetone and benzene) were detected at trace concentrations and the arsenic concentration exceeded the federal primary MCL for this metal in samples from LDS-2B.

The volume of liquid collected in 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. The quantity of liquid collected from LDS-2B has generally decreased since 2020. However, the volume of liquid collected since late December 2022 could not be accurately tracked due to a faulty automatic pumping system and flow meter. This SLCS is currently being pumped manually.

Historical liquid levels measurements in the Cell 2 primary and secondary leachate collection systems are summarized and illustrated in Appendix C. During the last year, measured liquid levels at LDS-2B remained below the target level of 54 inches.

4.2.4.2 *Cell 3*

Since 2017, indicator parameter concentrations measured in samples from LDS-3 have been just above or comparable to the parameter concentrations in underdrain S-U3. The water quality in samples from LDS-3 indicates seasonal variability, which is likely related to infiltration of rainwater to the system. Higher concentrations are measured in samples collected during drier period and lower concentrations are measured in samples collected during wetter period. No VOCs were detected in samples from LDS-3 during 2025.

Between October 2024 and September 2025, the total volume of liquid collected in the Cell 3 SLCS was approximately 109,814 gallons, approximately 2 percent less than the volume recorded for the 2024 water year. This corresponds to an infiltration rate of approximately 9.5 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 well MW-27. 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 147,244 gallons, 110 percent more than the volume measured during the 2024 water year. The average rate of infiltration for Cell 4 was calculated to be 30.33 gpad for 2025. 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 SLCS water quality has fluctuated historically due to construction and rainwater entering the system in the years after its installation. Concentrations of indicator parameters are similar to or slightly higher than those measured in samples from MW-27. A slight increase in chloride, dissolved metals, and TDS was recorded for the 2024 monitoring events, but these concentrations have since been decreasing. As such, there has 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 1,362 gallons which, in terms of infiltration rate, equates to approximately 0.5 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.

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 2025 monitoring results for leachate and SLCS liquid are provided in Tables 4-8 and 4-9. Because it was noted as dry, samples could not be collected from the West Pond SCLS system (LDS-WLP) during the both 2025 events, but LDS-ELP was sampled during both events, and L-Pond was sampled during the October 2025 event. Analyses of samples from both locations measured high concentrations of inorganic parameters, including heavy metals. While many VOCs were detected in samples from L-Pond at quantifiable concentrations, there were no VOCs detected in the samples from LDS-ELP during either 2025 monitoring event, suggesting that VOCs are attenuating in the SLCS.

According to detection system level readings, both the West and East Leachate Ponds were used to store leachate this past year. Records from automated pumping of liquid from the secondary systems show that liquid was not pumped from the West Pond's secondary system in 2025, and only 170 gallons were pumped from the East Pond's SLCS in May 2025. This indicates a relatively low amount of leakage through the primary liner into the secondary leachate collection layer.

4.3 Leachate Production

This EMR also includes information and data from the leachate management program as required by Sections 19.4 and 19.5 of the Solid Waste Permit. Leachate production data are summarized in this section for the water year that extends from October 2024 through September 2025 in a format consistent with elements described in Section 4.7 of the EMP (GLA, 2025). Facility-provided documents are included in Appendix C.

4.3.1 Overview of Leachate Management

During the 2024-25 water year, leachate was generated from Cells 1 through 6 and pumped into the leachate ponds south of Coffin Butte Road. A little over half of the total calculated leachate generated was trucked to the wastewater treatment plant (WWTP) in the City of Salem, with the remaining volume of leachate trucked to the WWTP in the City of Corvallis. Details of volumes sent off-site to these two facilities are provided in Table 4-11.

4.3.2 Primary Leachate Management

Leachate management reporting for this EMR includes the following elements:

4.3.2.1 *Annual Totals by Month*

Monthly totals are reported by the facility for (1) leachate volume generated from the landfill sumps and (2) leachate volume treated. The total volume of leachate generated is estimated two ways:

- The sum of flows measured by 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
- The difference in pond volume at the beginning and end of the water year plus the volume of leachate treated. Rain falling into the pond is not considered in the calculation because both ponds are covered.

Results of both calculations of leachate volume generated are presented in Table 4-11. The flow meters recorded an estimated 41 million gallons (MG) and the volumetric calculation approximately 43.8 MG, a relative percent difference of 1.10 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 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, 5, and 6 sumps are inclusive of the SLCS volume. The volume 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 2024-25 water year are noted below:

- Rainfall total for this water year was recorded at 36.53 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.
- Volumetrically calculated leachate volumes were greater than last year by approximately 4.20 MG. The calculated rate of leachate produced per inch of rainfall was also approximately 0.24 MG per inch of rain greater than the 2024 water year.

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 a National Pollutant Discharge Elimination System (NPDES) permit for monitoring effluent quality of the on-site treatment plant; however, the plant no longer exists and no monitoring is required or performed.
- 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 2025. Plots of the data are included in Appendix C. Head levels in the primary and secondary sumps exceeded permit requirements on several occasions during 2025 as detailed below:
 - ◇ Cell 2B primary (permit requirement = max 54 inches):
 - ▶ January 4 (75 inches)
 - ▶ June 7 (82 inches)
 - ▶ October 7-9 (max 83 inches)

- ◇ Cell 2B LDS/SLCS did not exceed the 54-inch leachate level maximum.
- ◇ Cell 3 primary (permit requirement = max 30 inches):
 - ▶ January 3 and 5 (34 inches and 37 inches)
 - ▶ February 24 (31 inches)
 - ▶ May 22-27 (max 66 inches)
- ◇ Cell 3 LDS/SLCS did not exceed the 30-inch leachate level maximum.
- ◇ Cell 4 primary (permit requirement = max 36 inches):
 - ▶ October 1 and 6 (47.8 inches and 48.9 inches)
 - ▶ December 23-29 (max 62.3 inches)
- ◇ Cell 4 LDS/SLCS did not exceed the 36-inch leachate level maximum.
- ◇ Cell 5 primary:
 - ▶ January 5 (89 inches)
 - ▶ October 31–November 3 (max 239.0 inches)
- Note that the Cell 4 LDS level monitor appeared to have issues with shorting out from April through September 2025. This condition appears to have been repaired in September 2025.
- 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

Monitoring or Analysis Item	Reference
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 no longer in existence. 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 2024-2025 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 LEL, methane, and oxygen percentages. LEL and methane percentage levels were zero at all monitoring points during all monitoring events. Results of 2025 gas monitoring are shown in Table 4-12.

5. Data Analysis and Discussion

Monitoring wells at Coffin Butte Landfill are sited to assess the water quality at 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 environmental controls and corrective actions, such as waste removal, that protect potential receptors and help to restore groundwater quality. The data from groundwater wells that monitor conditions around the east landfill cells are used to 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 the two areas. In the older west side areas, monitoring assesses the performance of the remedy in restoring groundwater quality to below RACLs and in protecting potential receptors. However, with the recent completion of Cell 6 and development of a new EMP, GLA used historical data to develop SSLs for those compliance wells downgradient of Cell 6 (MW-20 and MW-21). For the landfill on the east side, monitoring was previously classified as detection monitoring; however, as Cell 6 becomes active the objective of monitoring will be compliance, which compares monitoring results of indicator parameters with SSLs and permit-specific concentration limits (PSCLs) and evaluates the data for significant change.

5.1 Statistical Analysis of Groundwater Quality Data

The analytical results obtained for the 2025 sampling event were compared to statistically determined RACLs, SSLs, and PSCLs (SWDP 306; GLA, 2025). 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 and west side SSLs, which are based on calculated concentration limits (CLs) over a period of time, are usually calculated every five years. The 2025 EMP updated these concentration limits using data collected from 2011-2024. 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 2025 data in comparison with these concentration limits is presented in Tables 5-1 through 5-3.

5.1.1 West: RACL and SSL/PSCL 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 groundwater remediation 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 groundwater remediation. RACLs for the wells on the west side of the CBL are summarized below:

West Side Remedial Action Concentration Limits (RACLs)

Compound	RACL
<i>Inorganic Compounds (mg/L)</i>	
Chloride	250
Total Dissolved Solids (TDS)	500
<i>Metals (μ/L)</i>	
Iron	300
Manganese	50
Antimony	6
Arsenic	10
Barium	1,000
Beryllium	4
Cadmium	5
Chromium	50
Lead	50
Nickel	100
Selenium	10
Silver	50
Thallium	2
<i>VOCs (μg/L)</i>	
1,4-Dichlorobenzene (1,4-DCB)	75
Chloroethane	—
Tetrachloroethene (PCE)	5
Trichloroethene (TCE)	5
Vinyl chloride	2

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 2025 monitoring period, measured concentrations of chloride, TDS, iron, and manganese exceeded the RACLs in wells MW-10S, MW-10D, MW-11S, MW-11D, MW-12S, and MW-19 (Table 5-1). Concentrations continue to decrease as illustrated in time-series charts provided in Appendix B. Though most VOC concentrations are now below the detection limits, trace and quantifiable concentrations of VOCs continue to be detected in samples from MW-12S, MW-12D, and MW-19. Vinyl chloride

has not been detected at concentrations above the MCL since October 2004, and it was not detected at any monitoring well in 2025 above the 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 groundwater chemistry improves significantly as groundwater migrates downgradient of the landfill.

5.1.1.2 *Former Closed Landfill and Cell 6*

Groundwater monitoring wells MW-20 and MW-21 monitor groundwater quality downgradient of the newly constructed Cell 6, as well as the former "Closed Landfill" area, where contents were completely removed by 2022. 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 and TDS in samples collected from wells MW-20 and MW-21, concentrations of all constituents with an associated remedial cleanup level were below the RACs. Results are summarized in Table 5-1.

As mentioned previously, the newly approved EMP (GLA, 2025) sets forth new intrawell statistical SSLs developed for seven site-specific indicator parameters. These SSLs were calculated as prediction limits consistent with EPA's Unified Guidance (2009) and are based on intrawell statistics on data collected from these wells from 2011 through 2024. SSLs for west side wells are summarized below:

West Side Site Specific Concentration Limits (SSLs)

Indicator Parameter	IPL/SSL (mg/L)	
	MW-20	MW-21
Bicarbonate	298	420
Chloride	140	93.1
TDS	580	562
Calcium	100	120
Iron	0.038	0.60
Magnesium	42	56
Manganese	0.90	0.37
Sodium	28	29

April and October 2025 sampling results for MW-20 and MW-21 are compared to SSLs in Table 5-2. The October sampling event results exceeded one or more of the SSLs in samples from both MW-20 and MW-21. The SSL for manganese was exceeded in the sample collected from MW-20, and the SSLs for bicarbonate, TDS, and manganese were exceeded in samples collected from MW-21. Because there were two or more SSL exceedances measured in the samples from MW-21, verification sampling was performed as set forth in the EMP. Well MW-21 was retested on December 17, 2025 and the results confirmed the exceedances of the calculated SSLs for bicarbonate and TDS. As Cell 6 was actively being excavated and constructed in 2025, these exceedances are likely the result of ground disturbance during mining and cell construction (Table 5-2).

5.1.2 East: SSL/PSCL Comparison

As presented in the EMP (GLA, 2025), the east side multiunit cells are evaluated primarily using SSLs. As with west side SSLs, these also were calculated as prediction limits consistent with USEPA's Unified Guidance (2009) and are based on intrawell statistics using data collected from MW-26 and MW-27 between 2011 and 2024. In addition to the SSLs, analyte concentrations are compared to their primary drinking water maximum contaminant levels (MCLs). SSLs for east side wells are summarized below:

East Side Site Specific Concentration Limits (SSLs)

Indicator Parameter	IPL/SSL (mg/L)	
	MW-26	MW-27
Bicarbonate	255	480
Chloride	6.1	15
TDS	210	490
Calcium	28	94
Iron	0.86	13
Magnesium	11	41
Manganese	0.75	11
Sodium	29	41

Sampling results for MW-26 and MW-27 are compared with the recalculated SSLs in Table 5-3. Concentrations of all indicator parameters measured during the 2025 monitoring period were below SSLs and do not show increasing trends that could suggest landfill impacts.

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 summaries in 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*

None of the concentrations measured in samples from groundwater monitoring wells located on the west side of the site exceeded federal or state primary MCLs. Concentrations of 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. These results are consistent with historical intrawell data and are known to be associated with the natural reducing conditions in the soils in this area of the site.

5.1.3.2 *Secondary MCLs.*

During the last year, the following analyte concentrations exceeded a federal and/or state secondary MCL in samples collected from west side compliance boundary and detection wells:

- Chloride at compliance well MW-10S, where the short-term trend has been increasing since 2020, and detection well MW-19, where the trend as appeared to stabilize in 2016 after increasing since 2005.
- TDS at well pairs MW-10S/10D and MW-11S/11D, MW-20, MW-21, and detection well MW-19.
- Iron at MW-9S and MW-12S.
- Manganese at wells MW-9S, MW-10S/10D, MW-12S, MW-20, and MW-21.

With respect to the east side monitoring wells, 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 both 2025 sampling events. During the October 2025 monitoring event, the zinc concentrations in the samples collected from MW-26 and MW-27 also exceeded the secondary MCL. Based on site knowledge, the metals concentrations at MW-26 and MW-27 are associated with the natural reducing condition of the soils in this area of the site.

5.2 Non-Statistical Data Analysis

Trend analysis using time-series charts is the primary non-statistical method of data evaluation for the CBL. Time-series charts of inorganic general chemistry constituents, dissolved and total

(trace) metals, and VOCs depict changes in concentrations measured in samples collected during the 40-year history of monitoring this landfill. Evaluation of short and long-term groundwater chemistry trends in conjunction with unusual concentration spikes of indicator parameters may reflect operational changes or issues with environmental controls. Time-series charts have been included in Appendix D, and significant data trends are discussed in further detail in the following sections.

5.2.1 Source Control Effectiveness

Source controls in place for the CBL include the final cover over portions of 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 environmental control measures can be evaluated 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 5-4 summarizes VOC detections during 2025.

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 VOC detections have decreased in compliance wells. The initial decrease in detections and concentration of VOCs on the west side can likely be attributed to removal of landfill gas and the installation of cover to reduce infiltration of surface water. When detected in this area, most VOCs are measured at very low concentrations, and these concentrations generally continue to decrease or have stabilized in most monitoring wells. However, concentrations of daughter products of PCE and TCE have recently been trending upward in samples collected from monitoring well MW-19 (Appendix B), which will continue to be monitored. Monitoring wells on the east side do not regularly have quantifiable concentrations of VOCs.

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 because it is a covered cell; seepage would also be minimal. Monitoring wells sampled near Cells 1 and 1A have increasing trends for inorganics such as chloride, calcium, magnesium, and sodium, but leachate removal from other cells within the CBL appears to be effective in keeping VOCs and inorganics relatively stable.

5.2.1.2 LFG Probe Results.

Landfill gas 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. LFG results are discussed in Section 4.4 and summarized in Table 4-12.

5.2.2 Plume Stabilization

As described in the EMP (GLA, 2025), the stability of the VOC plume is evaluated qualitatively by examining whether concentrations at impacted wells are increasing and/or whether samples from monitoring wells downgradient of the VOC plume (e.g., 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, no VOCs were detected in samples from other areas of the site. Trace to low concentrations of PCE, TCE and 1,1-DCA have been detected since 2011 and appear to have stabilized. The detections of these VOCs are likely associated with residual leachate irrigation effects rather than a landfill release. Significant increases in VOC concentrations in MW-19 are not expected, as PCE and TCE have not been detected in samples from MW-11S/11D upgradient of MW 19 since 1999 and 1,1-DCA has not been detected or has been detected at trace concentrations since 2006.

Continued retraction of the extent of VOCs is also indicated by concentration decreases to non-detectable levels (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 charts 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. Time-series charts for indicator parameters for these wells are provided in Appendix B.

Early warning detection monitoring well P-8 is located near the groundwater divide that separates the eastern and western flow regimes; the groundwater divide likely inhibits any landfill related groundwater impacts from flowing towards the Phillips domestic well. None of the historical indicator parameter concentration trends for this well suggest significant changes in groundwater quality, and no VOCs were detected in 2025.

Similarly, analytical results for samples collected from the Phillips well during the October 2025 monitoring period do not suggest landfill impacts. Most parameters were either not detected or were measured at concentrations that are significantly below safe drinking water standards for the respective inorganic monitoring parameters and trace 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 2025 monitoring events are consistent with historical results. No new VOCs were detected in any site wells. Although the arsenic concentrations in samples from east side wells MW-23, MW-26, and MW-27 exceeded the primary MCL during both monitoring events, this condition is consistent with historical intrawell results and is known to be related to naturally occurring reducing conditions in the groundwater in this part of the site.

West side RACs 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 for iron, and MW-10S/10D, MW-12S, MW-20, and MW-21 for manganese. West side SSLs were not exceeded during the April 2025 monitoring event, but were exceeded for manganese concentration measured in the sample from MW-20 and for bicarbonate, TDS, and manganese in samples collected from MW-21 during the October 2025 monitoring event. Verification sampling was performed December 17, 2025 in response to multiple exceedances of SSLs in MW-21 samples. Results of verification sampling confirmed the exceedance of TDS and bicarbonate SSLs. The relatively elevated concentrations of inorganic constituent concentrations in samples from these wells appear to be related to past mining and ongoing development of Cell 6. Other items of concern were quantifiable concentrations of VOCs measured in the samples collected from wells MW-12S/12D and MW-19, though this condition is consistent with historical site monitoring results.

Conversely, east side SSLs were not exceeded during either monitoring event in 2025. Considering the similarity between recent and historical monitoring results for this site, it is concluded that no significant changes in groundwater chemistry have occurred since the previous monitoring event and landfill source controls are effective.

For leachate and LDS water quality screening, inorganic results were within historical ranges for LDS samples. The only VOCs detected were trace detections of acetone and benzene in the sample from LDS-2B and those expectedly detected in the L-POND sample. Additionally, field screening of soil-pore gas samples indicated that no methane was detected in any of the monitoring probes or on-site structures.

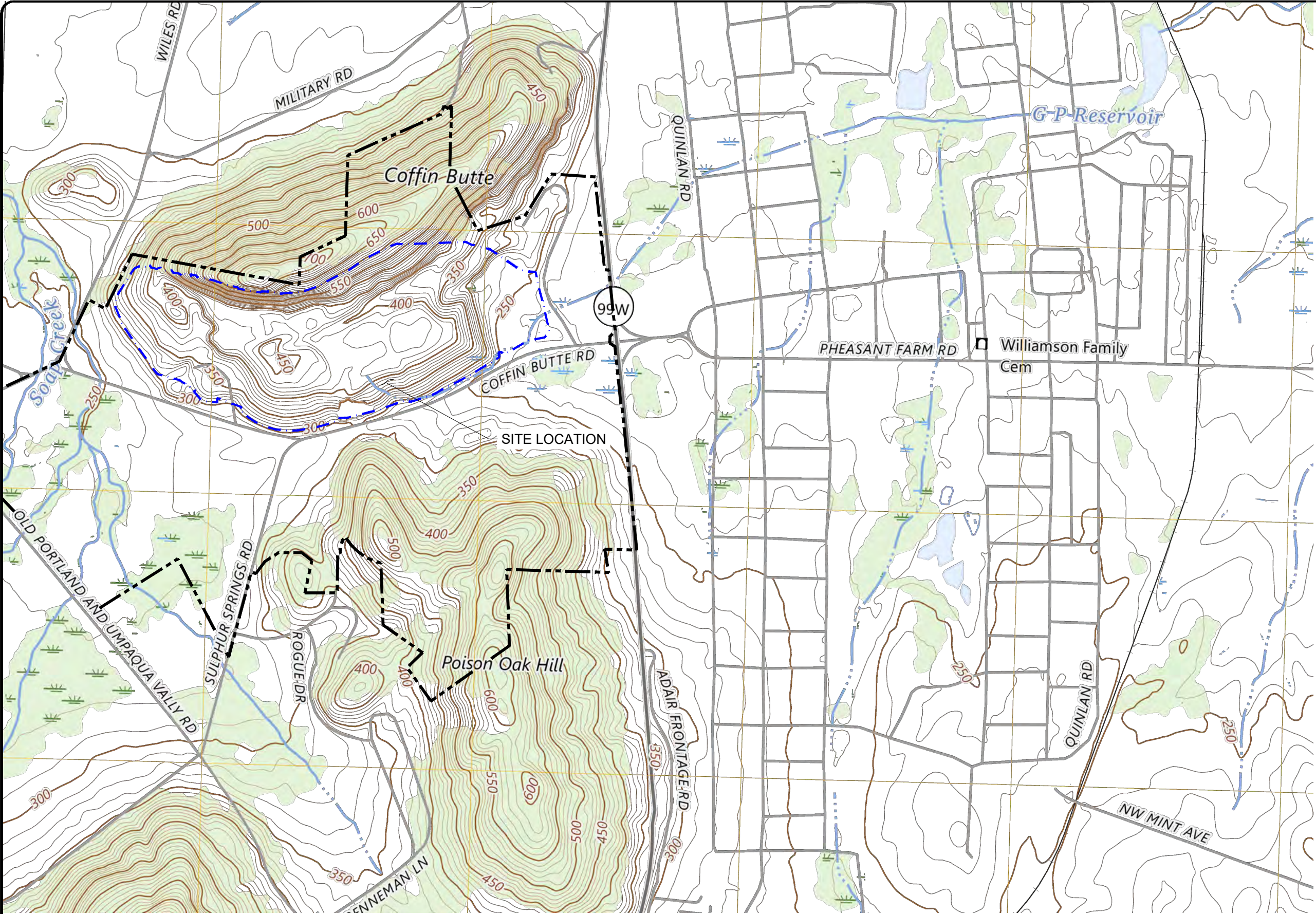
Finally, Cell 6 should be in operation in 2026. Changes planned for the monitoring network in 2026 include the introduction of sampling of the Cell 6 leachate, secondary detection system, and underdrain locations. Subsequently, GLA will be submitting an updated EMP to include Cell 6 sampling. The updated EMP will be put into effect after approval by the DEQ.

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Figures



LEGEND

--- PROPERTY BOUNDARY

- - - LANDFILL LIMIT

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

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APPROVED BY:	

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VALLEY LANDFILLS, INC.



COFFIN BUTTE LANDFILL
**2025 ENVIRONMENTAL MONITORING
REPORT**
BENTON COUNTY, OREGON
SITE LOCATION

FIGURE NO.
1-1
PROJECT NO.
AU26.1015

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

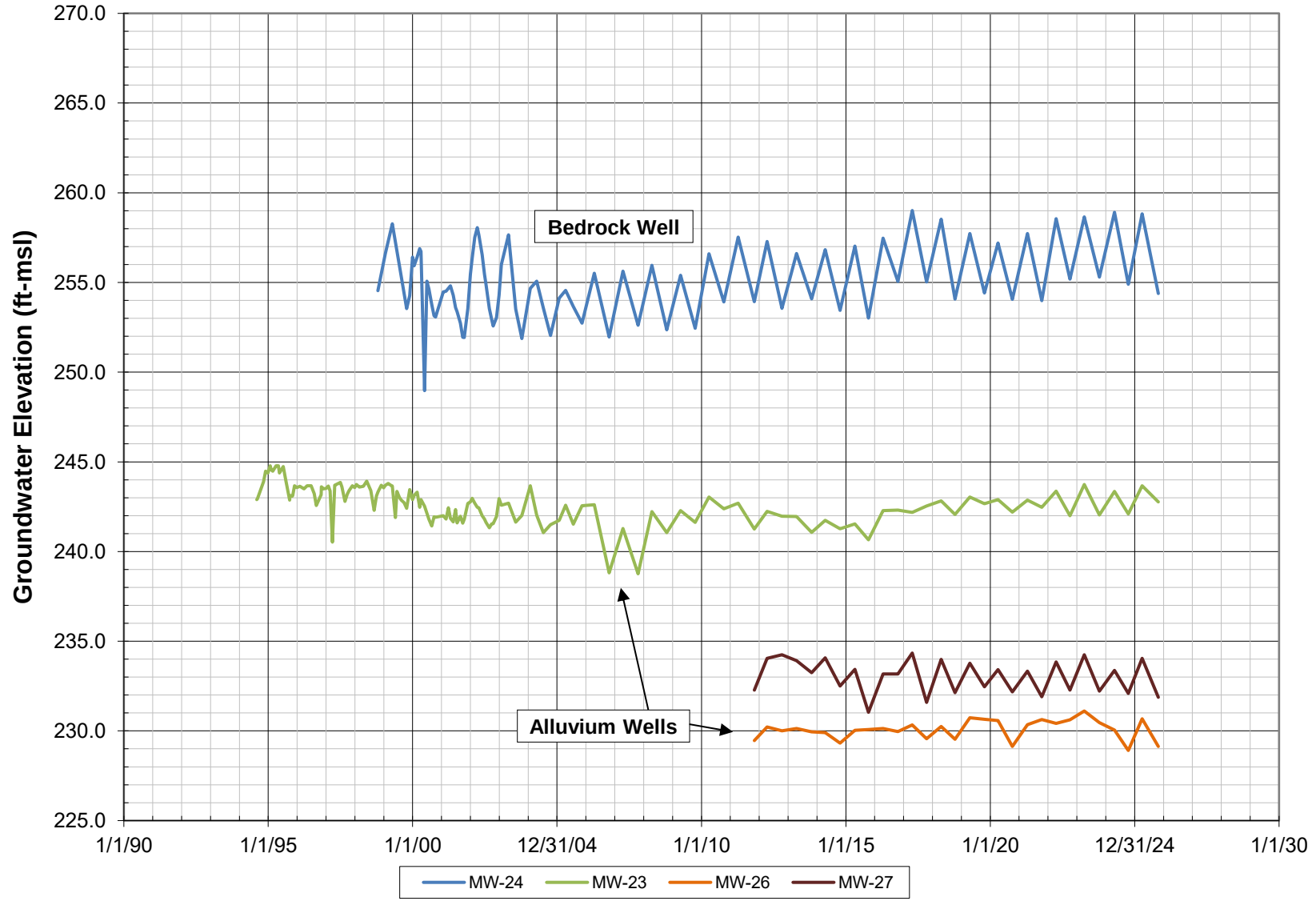


Figure 4-2
Hydrographs for Cell 1A Area Wells
Annual Environmental Monitoring Report
Coffin Butte Landfill

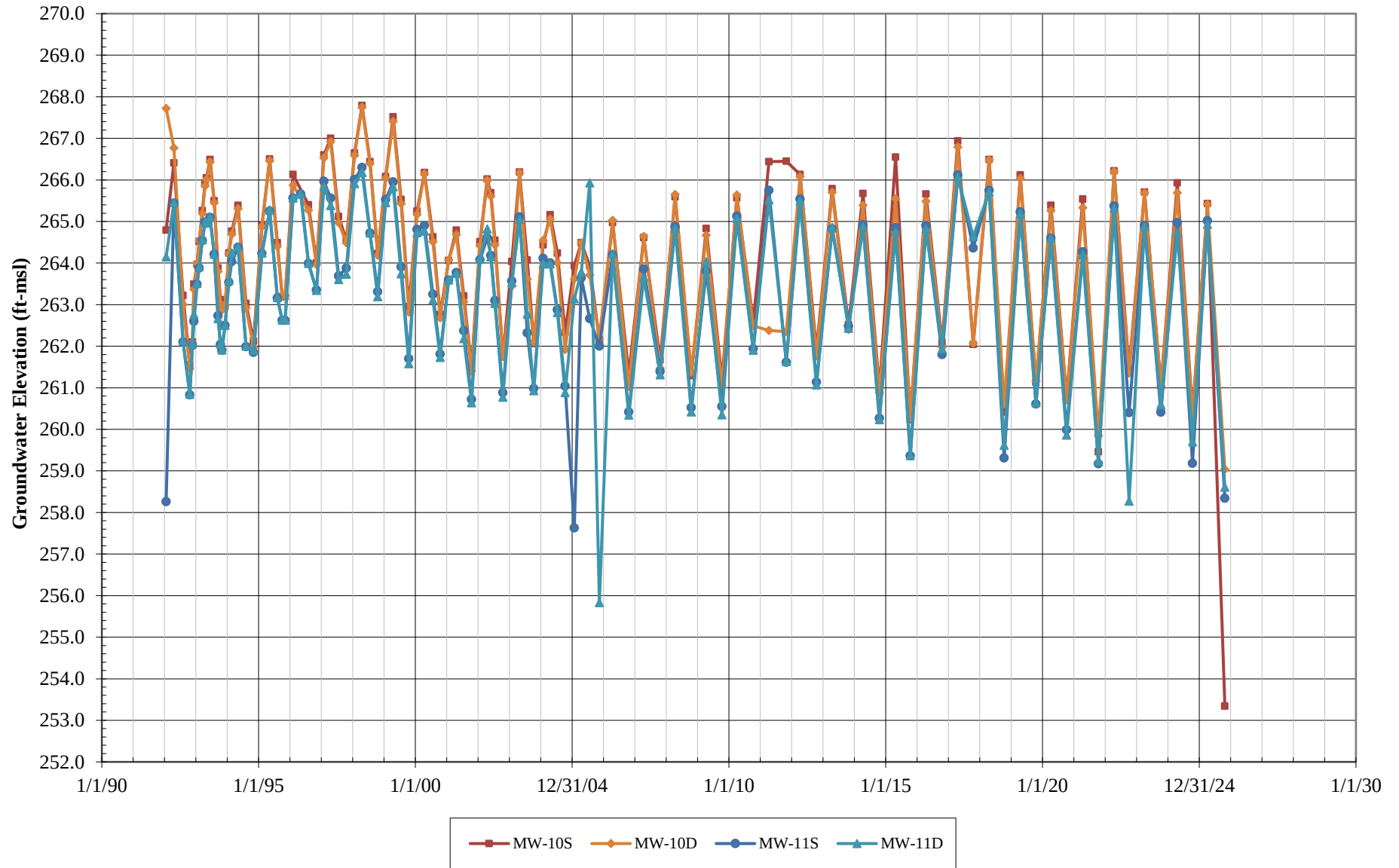
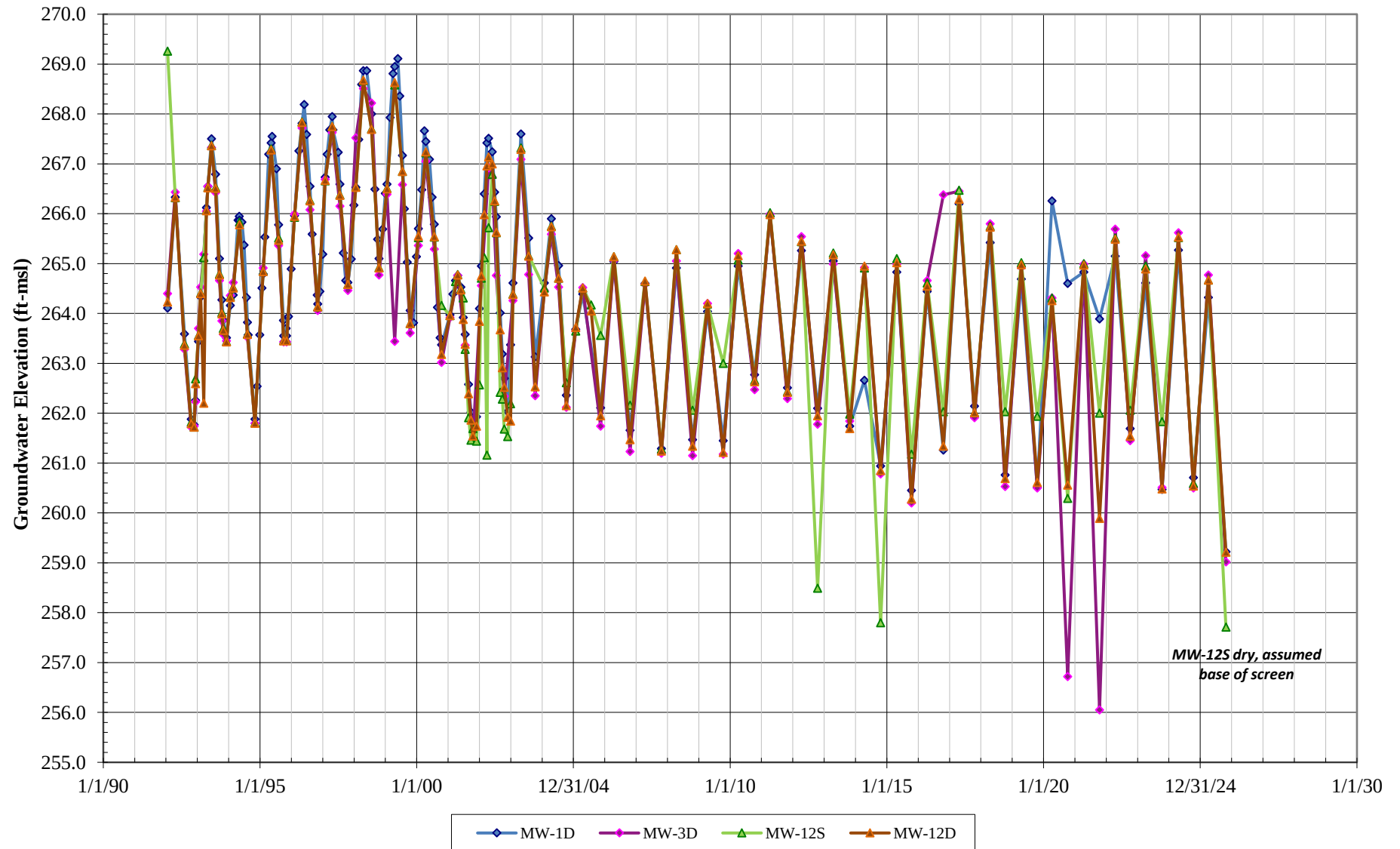
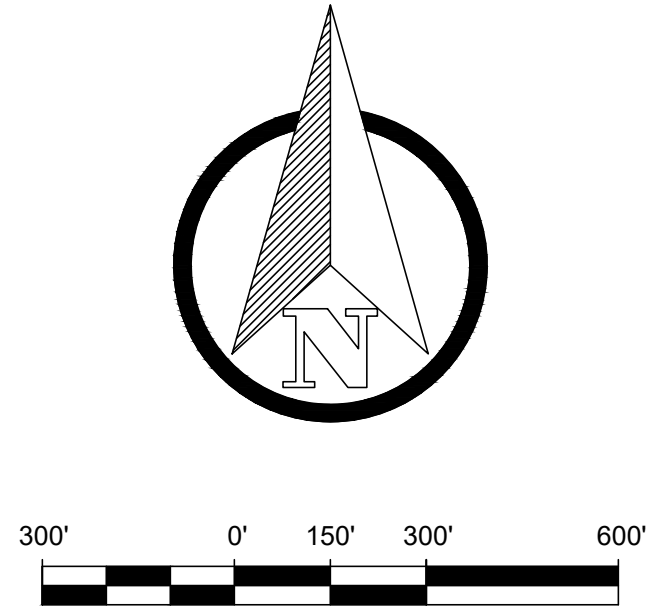
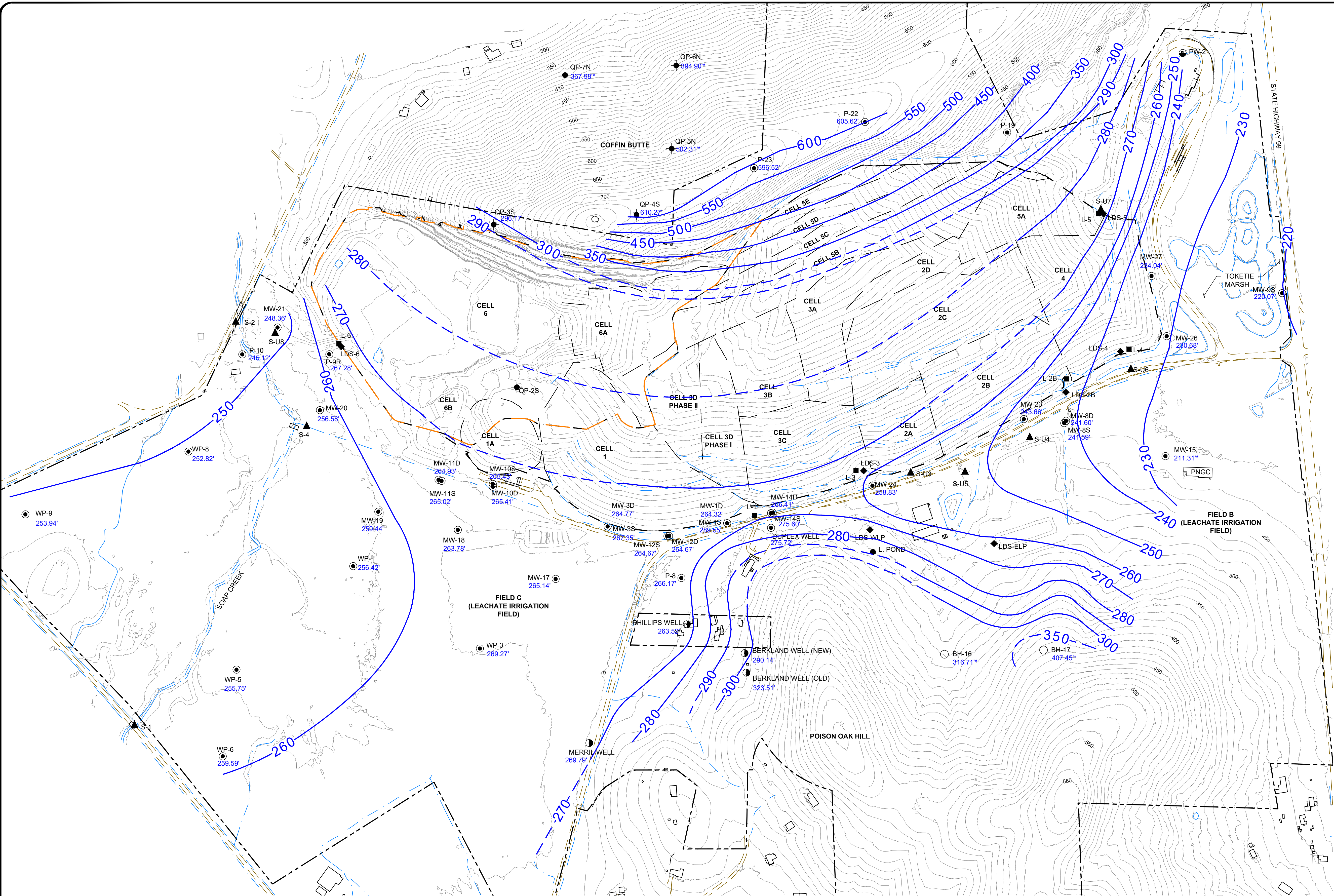


Figure 4-3
Hydrographs for Cell 1 Area Wells
Annual Environmental Monitoring Report
Coffin Butte Landfill



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LEGEND

- 300 EXISTING 10' CONTOUR⁽¹⁾
- EXISTING LINER LIMITS
- EXISTING PAVED ROAD
- EXISTING WATER
- GROUNDWATER CONTOUR, DASHED WHERE INFERRED
- EXISTING BUILDING
- EXISTING LANDFILL FOOTPRINT
- PROPERTY LINE
- APPROXIMATE LIMITS OF CELL 6
- MW-23 ● 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)
- 243.66' WATER ELEVATIONS USED FOR GROUNDWATER CONTOURS. * INDICATES ELEVATION NOT USED.

NOTES

- EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY FIRMATEK LLC. ON JULY 8, 2025 COMBINED WITH OCTOBER 21, 2024 TOPOGRAPHY.
- GROUNDWATER CONTOURS FROM APRIL 2025.

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APPROVED BY:	

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VALLEY LANDFILLS, INC.



COFFIN BUTTE LANDFILL
**2025 ENVIRONMENTAL MONITORING
REPORT**
BENTON COUNTY, OREGON

APRIL 2025 GROUNDWATER ELEVATIONS

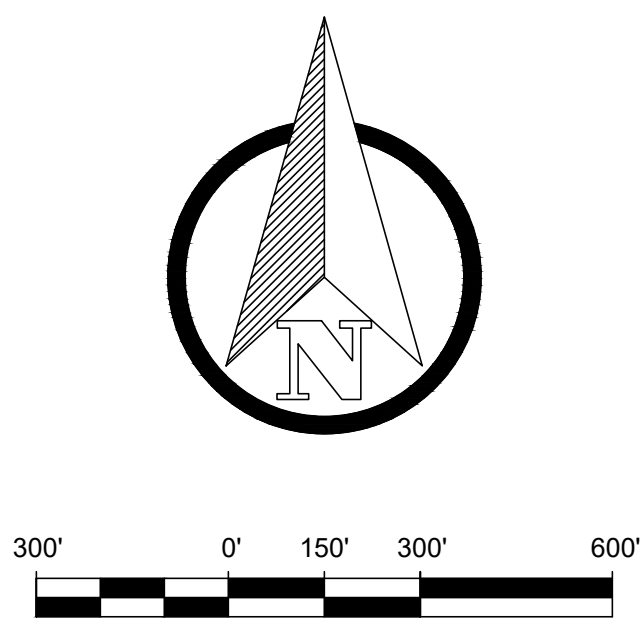
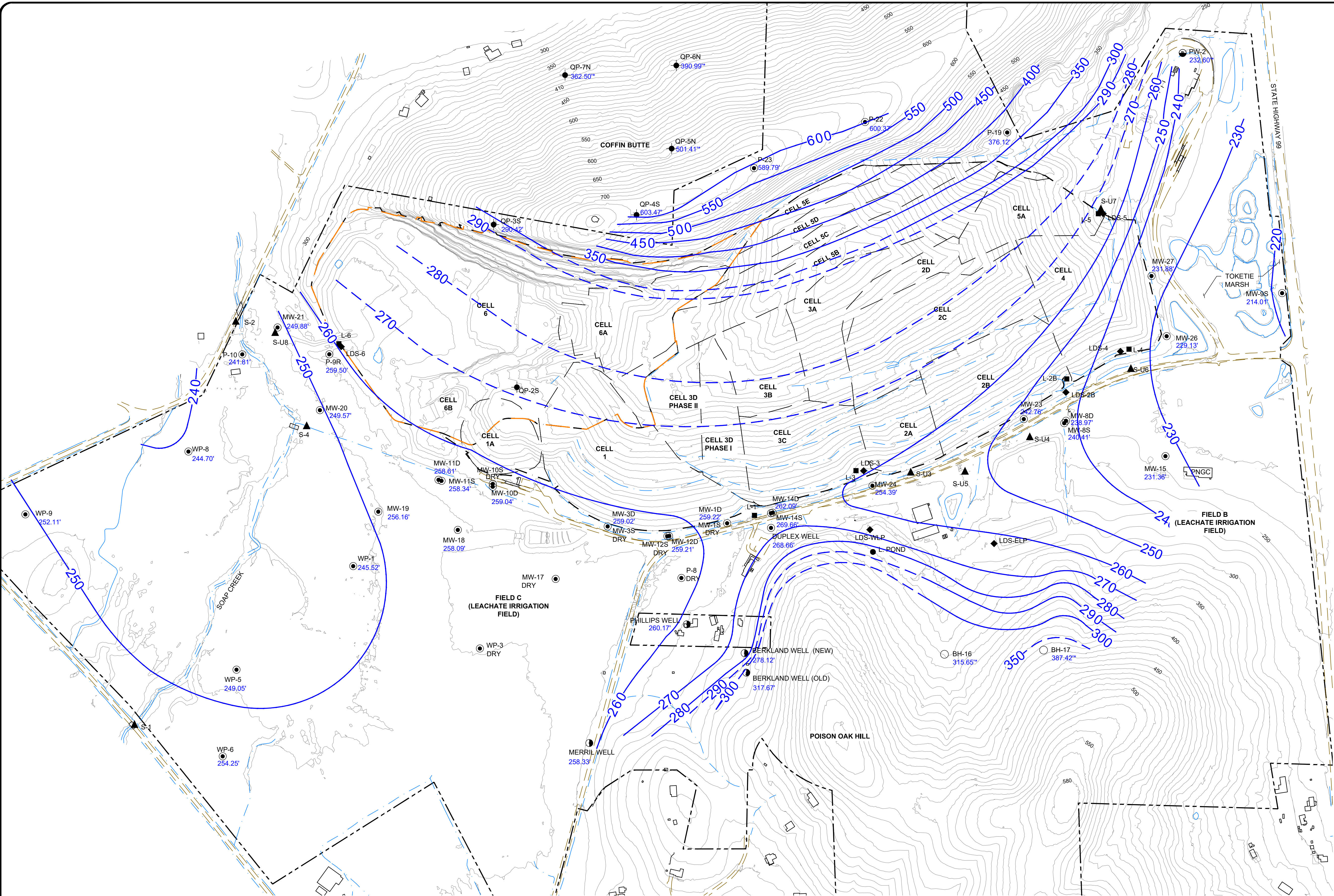
FIGURE NO.

4-4

PROJECT NO.

AU26.1015

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LEGEND

- 300 EXISTING 10' CONTOUR⁽¹⁾
- EXISTING LINER LIMITS
- EXISTING PAVED ROAD
- EXISTING WATER
- GROUNDWATER CONTOUR, DASHED WHERE INFERRED
- EXISTING BUILDING
- EXISTING LANDFILL FOOTPRINT
- PROPERTY LINE
- APPROXIMATE LIMITS OF CELL 6
- MW-23 ● PIEZOMETER/ OBSERVATION WELL
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- 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)
- 243.66' WATER ELEVATIONS USED FOR GROUNDWATER CONTOURS. * INDICATES ELEVATION NOT USED.

NOTES

- EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY FIRMATEK LLC. ON JULY 8, 2025 COMBINED WITH OCTOBER 21, 2024 TOPOGRAPHY.
- GROUNDWATER CONTOURS FROM OCTOBER 2025.

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VALLEY LANDFILLS, INC.



COFFIN BUTTE LANDFILL
**2025 ENVIRONMENTAL MONITORING
REPORT**
BENTON COUNTY, OREGON

OCTOBER 2025 GROUNDWATER ELEVATIONS

FIGURE NO.

4-5

PROJECT NO.

AU26.1015

Tables

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	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	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	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-20, MW-21, MW-26, MW-27, MW-23 ^a , P-8 ^a	MW-8S, MW-15, MW-17, MW-18, MW-19, 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-U7	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, HCO ₃ , TDS, Ca, Fe, Mg, Mn, Na	—	—	—	—	—	—	2Q, 4Q	—
NOTE: 1Q, 2Q, 3Q, 4Q = quarterly sampling events; 5Y = quinquennial (every 5 years; to be scheduled with the DEQ as split sampling event. Next event in fall 2029). ^a Detection monitoring well that is sampled at frequency listed for compliance 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 modified from 2023 Annual Groundwater Monitoring Report (Tuppan, 2024)								

TABLE 3-1A
LABORATORY ANALYTICAL METHODS
Coffin Butte Landfill
April 2025

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
<i>Field Parameters (Global)</i>					
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
<i>Groundwater Indicator Parameters</i>					
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
<i>Surface Water Specific Parameters</i>					
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 2025

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
<i>Field Parameters (Global)</i>					
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
<i>Groundwater Indicator Parameters</i>					
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
<i>Additional Annual Scan Parameters</i>					
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
<i>Additional Comprehensive/Leachate Analytical Parameters</i>					
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
<i>Surface Water Specific Parameters</i>					
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
VOC Detection Limits

PARAMETER	UNITS	PQL	MDL	TEST METHOD	TECHNIQUE
<i>Volatile Organic Compounds (VOCs)</i>					
1,1,1,2-Tetrachloroethane	µg/L	4	2.3	8260B	GC/MS
1,1,1-Trichloroethane	µg/L	4	1.6	8260B	GC/MS
1,1,2,2-Tetrachloroethane	µg/L	4	0.8	8260B	GC/MS
1,1,2-Trichloroethane	µg/L	4	1.1	8260B	GC/MS
1,1-Dichloroethane	µg/L	4	0.9	8260B	GC/MS
1,1-Dichloroethene	µg/L	4	0.9	8260B	GC/MS
1,1-Dichloropropene	µg/L	4	1.7	8260B	GC/MS
1,2,3-Trichlorobenzene	µg/L	8	2.8	8260B	GC/MS
1,2,3-Trichloropropane	µg/L	10	3.4	8260B	GC/MS
1,2,4-Trichlorobenzene	µg/L	4	2.3	8260B	GC/MS
1,2,4-Trimethylbenzene	µg/L	4	0.6	8260B	GC/MS
1,2-Dibromo-3-Chloropropane	µg/L	20	7.0	8260B	GC/MS
1,2-Dibromoethane	µg/L	4	1.6	8260B	GC/MS
1,2-Dichlorobenzene	µg/L	4	1.5	8260B	GC/MS
1,2-Dichloroethane	µg/L	4	2.2	8260B	GC/MS
1,2-Dichloropropane	µg/L	4	2.1	8260B	GC/MS
1,3,5-Trimethylbenzene	µg/L	4	1.5	8260B	GC/MS
1,3-Dichlorobenzene	µg/L	4	1.3	8260B	GC/MS
1,3-Dichloropropane	µg/L	4	1.5	8260B	GC/MS
1,4-Dichlorobenzene	µg/L	4	1.6	8260B	GC/MS
2,2-Dichloropropane	µg/L	4	1.5	8260B	GC/MS
2-Butanone (MEK)	µg/L	60	24.0	8260B	GC/MS
2-Chlorotoluene	µg/L	4	1.4	8260B	GC/MS
2-Hexanone	µg/L	20	6.8	8260B	GC/MS
4-Chlorotoluene	µg/L	4	0.8	8260B	GC/MS
4-Isopropyltoluene	µg/L	4	1.7	8260B	GC/MS
4-Methyl-2-pentanone (MIBK)	µg/L	20	3.9	8260B	GC/MS
Acetone	µg/L	60	26.0	8260B	GC/MS
Benzene	µg/L	4	1.2	8260B	GC/MS
Bromobenzene	µg/L	4	1.6	8260B	GC/MS
Bromochloromethane	µg/L	4	1.6	8260B	GC/MS
Bromoform	µg/L	8	4.8	8260B	GC/MS
Bromomethane	µg/L	20	9.4	8260B	GC/MS
Carbon disulfide	µg/L	8	2.5	8260B	GC/MS
Carbon tetrachloride	µg/L	4	2.3	8260B	GC/MS
Chlorobenzene	µg/L	4	1.7	8260B	GC/MS
Chloroethane	µg/L	16	5.5	8260B	GC/MS
Chloroform	µg/L	4	1.4	8260B	GC/MS
Chloromethane	µg/L	8	3.0	8260B	GC/MS
cis-1,2-Dichloroethene	µg/L	4	1.3	8260B	GC/MS
cis-1,3-Dichloropropene	µg/L	8	2.5	8260B	GC/MS
Dibromochloromethane	µg/L	8	2.5	8260B	GC/MS
Dibromomethane	µg/L	4	1.4	8260B	GC/MS
Dichlorodifluoromethane	µg/L	12	3.8	8260B	GC/MS
Ethylbenzene	µg/L	4	1.2	8260B	GC/MS
Hexachlorobutadiene	µg/L	8	4.7	8260B	GC/MS
Isopropylbenzene	µg/L	4	1.5	8260B	GC/MS
Methylene Chloride	µg/L	8	3.8	8260B	GC/MS
m-Xylene & p-Xylene	µg/L	8	1.4	8260B	GC/MS
Naphthalene	µg/L	8	1.4	8260B	GC/MS
n-Butylbenzene	µg/L	4	2.1	8260B	GC/MS
N-Propylbenzene	µg/L	4	2.1	8260B	GC/MS
o-Xylene	µg/L	4	1.3	8260B	GC/MS
sec-Butylbenzene	µg/L	4	1.8	8260B	GC/MS
Styrene	µg/L	4	1.4	8260B	GC/MS
tert-Butylbenzene	µg/L	4	1.7	8260B	GC/MS
Tetrachloroethene	µg/L	4	1.6	8260B	GC/MS
Toluene	µg/L	4	1.3	8260B	GC/MS
trans-1,2-Dichloroethene	µg/L	4	1.5	8260B	GC/MS
trans-1,3-Dichloropropene	µg/L	8	2.6	8260B	GC/MS
Trichloroethene	µg/L	4	1.2	8260B	GC/MS
Trichlorofluoromethane	µg/L	8	2.3	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
2025

LAB JOB ID	BLANK TYPE	BATCH	LAB SAMPLE ID	ANALYTE(S) DETECTED	SAMPLE/ ANALYSIS DATE		
April 2025							
280-205774-1	Method Blank(s)	NA	NA	None Detected	NA		
	Field Blank (QCAB)	NA	280-205774-8	None Detected	4/09/25		
280-205820-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-691740/9	acetone (10.9j µg/L)	4/15/25		
280-205844-1	Method Blank(s)	SM5210B - BOD, 5 Day	SCB 280-691268/1	BOD (0.969j mg/L)	4/11/25		
280-205852-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-691740/9	acetone (10.9j µg/L)	4/15/25		
		SM 2320B - Alkalinity	MB 280-692137/1	bicarbonate (20.0 µg/L)	4/17/25		
		SM5210B - BOD, 5 Day	SCB 280-691268/1	BOD (0.969j mg/L)	4/11/25		
		200.8 - Metals (ICP/MS)	MB 280-691372/1-A	barium (0.576j µg/L)	4/14/25		
280-205964-1	Method Blank(s)	NA	NA	None Detected	NA		
280-205965-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-691740/9	acetone (10.9j µg/L)	4/15/25		
	Trip Blank (QCTB)	NA	280-205774-8	None Detected	4/09/25		
280-205969-1	Method Blank(s)	NA	NA	None Detected	NA		
October 2025							
280-216302-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-722082/10	None Detected	11/10/25		
		6010D - Metals (ICP)	MB 280-721026/1-A	None Detected	11/07/25		
		300.0 - Anions	MB 280-721069/56	None Detected	11/05/25		
		SM 2540C - Solids (TDS)	MB 280-721048/1	None Detected	11/04/25		
280-216301-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-722331/10	None Detected	11/12/25		
		200.8 - Metals (ICP/MS)	MB 280-721148/1-A	Vanadium (1.5j µg/L)	11/04/25		
		6010D - Metals (ICP)	MB 280-721264/1-A	Magnesium (110j µg/L)	11/07/25		
		300.0 - Anions	MB 280-721069/56	None Detected	11/05/25		
		SM 2320B - Alkalinity	MB 280-721754/1	Bicarbonate (10.0 µg/L)	11/07/25		
		SM 2540C - Solids (TDS)	MB 280-721048/1	None Detected	11/04/25		
		SM 2540D - Solids (TSS)	MB 280-721312/1	None Detected	11/05/25		
		350.1 - Nitrogen, Ammonia	MB 280-721176/58	None Detected	11/04/25		
		SM 5310B - Organic Carbon, Total (TOC)	MB 280-721486/35	None Detected	11/06/25		
		410.4 - COD	MB 280-721014/4	None Detected	11/04/25		
		280-216285-1	Trip Blank (QCTB)	8260D - VOCs (GC/MS)	NA	None Detected	11/11/25
			Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-722300/10	None Detected	11/11/25
200.8 - Metals (ICP/MS)	MB 280-721157/1-A	None Detected		11/04/25			
6010D - Metals (ICP)	MB 280-721264/1-A	Magnesium (110j µg/L)		11/07/25			
300.0 - Anions	MB 280-721069/6	None Detected		11/04/25			
SM 2320B - Alkalinity	MB 280-721601/6	None Detected		11/06/25			
SM 2540C - Solids (TDS)	MB 280-721047/1	None Detected		11/04/25			
280-216276-1	Method Blank(s)	SM 2540D - Solids (TSS)	MB 280-721312/1	None Detected	11/04/25		
		524.2 - VOCs (GC/MS)	MB 570-653712/7	Methylene Chloride (0.428j µg/L)	11/10/25		
		200.8 - Metals (ICP/MS)	MB 280-721148/1-A	None Detected	11/04/25		
		6010D - Metals (ICP)	MB 280-720937/1-A	None Detected	11/03/25		
		300.0 - Anions	MB 280-721281/42	None Detected	11/06/25		
		SM 2540C - Solids (TDS)	MB 280-721047/1	None Detected	11/04/25		
280-216232-1	Method Blank(s)	SM 2540D - Solids (TSS)	MB 280-721311/1	None Detected	11/05/25		
		SM 2320B - Alkalinity	MB 280-721601/6	None Detected	11/06/25		
		6010D - Metals (ICP)	MB 280-720825/1-A	None Detected	11/03/25		
		300.0 - Anions	MB 280-720845/6	None Detected	11/03/25		
		SM 2320B - Alkalinity	MB 280-721296/90	None Detected	11/05/25		
		SM 2540C - Solids (TDS)	MB 280-721046/1	None Detected	11/04/25		
280-216229-1	Method Blank(s)	8260D - VOCs (GC/MS)	MB 280-721873/10	None Detected	11/09/25		
		200.8 - Metals (ICP/MS)	MB 280-720929/1-A	None Detected	11/03/25		
		6010D - Metals (ICP)	MB 280-720937/1-A	None Detected	11/03/25		
		SM 2540C - Solids (TDS)	MB 280-720831/1	None Detected	11/03/25		
		SM 2540D - Solids (TSS)	MB 280-720913/1	None Detected	11/03/25		
		SM 2320B - Alkalinity	MB 280-721296/62	None Detected	11/05/25		
280-216121-1	Method Blank(s)	300.0 - Anions	MB 280-720845/6	None Detected	11/03/25		
		8260D - VOCs (GC/MS)	MB 280-721901/10	None Detected	11/10/25		
		200.8 - Metals (ICP/MS)	MB 280-720687/1-A	None Detected	11/06/25		
		300.0 - Anions	MB 280-720746/6	None Detected	11/01/25		
		SM 2540C - Solids (TDS)	MB 280-720555/1	None Detected	10/31/25		
		SM 2540D - Solids (TSS)	MB 280-720598/1	None Detected	10/31/25		
280-216057-1	Method Blank(s)	SM 2320B - Alkalinity	MB 280-720866/62	None Detected	11/01/25		
		6010D - Metals	MB 280-720534/1-A	None Detected	10/31/25		
		300.0 - Anions	MB 280-720847/6	None Detected	11/03/25		
		351.2 - Nitrogen, Total Kjeldahl	MB 280-720695/28-A	None Detected	11/05/25		
		365.1 - Phosphorus, Total	MB 280-720584/4-A	None Detected	11/03/25		
		SM5210B - BOD, 5 Day	MB 280-720547/4	BOD (0.81j mg/L)	10/31/25		

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 2025

<i>Surface Water</i>			
ANALYTE	S-4 4/9/2025	DUPLICATE 4/9/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Calcium	15000	15000	0.0
Iron	40	40	Not Calculated
Magnesium	6100	6100	0.0
Manganese	9.5	9.2	Not Calculated
Sodium	6500	6400	1.6
GENERAL CHEMISTRY (mg/L):			
Chloride	5.2	5.2	0.0
ortho-Phosphate	0.035	0.035	Not Calculated
Biochemical Oxygen Demand	1.9	1.9	Not Calculated
<i>Groundwater</i>			
ANALYTE	MW-1D 4/8/2025	DUPLICATE 1 4/8/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Arsenic	0.77	0.64	Not Calculated
Calcium	22000	25000	12.8
Iron	44	40	Not Calculated
Magnesium	9100	10000	9.4
Manganese	10	10	Not Calculated
Sodium	22000	24000	8.7
GENERAL CHEMISTRY (mg/L):			
Chloride	7.1	7.2	1.4
Bicarbonate Alkalinity as CaCO3	140	140	0.0
Total Dissolved Solids	200	190	5.1
VOCs (µg/L): None Detected			
ANALYTE	MW-12S 4/9/2025	DUPLICATE 2 4/9/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Arsenic	1.0	1.1	Not Calculated
Calcium	47000	49000	4.2
Iron	650	540	18.5
Magnesium	22000	23000	4.4
Manganese	600	550	8.7
Sodium	32000	33000	3.1
GENERAL CHEMISTRY (mg/L):			
Chloride	38	39	2.6
Bicarbonate Alkalinity as CaCO3	240	240	0.0
Total Dissolved Solids	340	340	0.0
VOCs (µg/L):			
cis-1,2-Dichloroethee	1.2	1.2	0.0
Tetrachloroethene	4.3	6.7	43.6
Trichloroethene	1.8	2.1	15.4

TABLE 3-3B
QA/QC DUPLICATE SAMPLE ANALYSES
Coffin Butte Landfill
October 2025

<i>Groundwater</i>			
ANALYTE	MW-3D 10/28/2025	DUPLICATE 10/28/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Arsenic	0.68	0.69	<i>Not Calculated</i>
Barium	5.6	5.6	0.0
Calcium	43000	44000	2.3
Magnesium	19000	19000	0.0
Sodium	21000	21000	0.0
Zinc	5.0	5.7	<i>Not Calculated</i>
GENERAL CHEMISTRY (mg/L):			
Chloride	52	52	0.0
Bicarbonate Alkalinity as CaCO ₃	150	160	6.5
Total Dissolved Solids	290	290	0.0
ANALYTE	MW-18 10/30/2025	DUPLICATE 1 10/30/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Calcium	26000	25000	3.9
Magnesium	9400	9000	4.3
Sodium	11000	11000	0.0
GENERAL CHEMISTRY (mg/L):			
Chloride	4.3	4.4	2.3
Bicarbonate Alkalinity as CaCO ₃	86	87	1.2
Total Dissolved Solids	190	190	0.0
ANALYTE	MW-19 10/29/2025	DUPLICATE 2 10/29/2025	RELATIVE PERCENT DIFFERENCE (RPD)
DISSOLVED METALS (µg/L):			
Barium	0.69	0.55	<i>Not Calculated</i>
Calcium	90000	89000	1.1
Magnesium	37000	36000	2.7
Manganese	16	16	<i>Not Calculated</i>
Sodium	27000	26000	3.8
GENERAL CHEMISTRY (mg/L):			
Chloride	280	290	3.5
Bicarbonate Alkalinity as CaCO ₃	43	43	0.0
Total Dissolved Solids	550	560	1.8
VOCs (µg/L):			
1,1-Dichloroethane	1.2	1.2	0.0
cis-1,2-Dichloroethene	0.78	0.91	<i>Not Calculated</i>
Dichlorodifluoromethane	2.1	5.5	89.5
Tetrachloroethene	1.3	0.95	<i>Not Calculated</i>
Trichloroethene	1.3	1.1	16.7

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	
		4/7/2025	10/27/2025
Groundwater			
MW-1S	289.87	289.55	<265.37
MW-1D ^a	289.91	264.32	259.22
MW-3S	285.86	267.35	<258.66
MW-3D ^a	285.96	264.77	259.02
MW-8S ^a	244.03	241.59	240.41
MW-8D	244.04	241.60	238.97
MW-9S	223.27	220.07	214.01
MW-10S ^a	291.44	265.43	<253.34
MW-10D ^a	291.40	265.41	259.04
MW-11S ^a	274.73	265.02	258.34
MW-11D ^a	274.98	264.93	258.61
MW-12S ^a	285.61	264.67	<257.71
MW-12D ^a	285.45	264.67	259.21
MW-14S	289.58	275.60	269.66
MW-14D	291.27	266.41	262.09
MW-15 ^a	235.68	211.31	231.36
MW-17 ^a	279.69	265.14	<250.59
MW-18 ^a	269.92	263.78	258.09
MW-19 ^a	263.31	259.44	256.16
MW-20 ^a	259.24	256.58	249.57
MW-21 ^a	256.69	248.36	249.88
MW-23 ^a	244.80	243.66	242.76
MW-24 ^a	276.78	258.83	254.39
MW-26 ^a	237.93	230.68	229.13
MW-27 ^a	254.78	234.04	231.88
P-8	282.40	266.17	<254.02
P-9R	276.01	267.28	259.50
P-10	245.12	245.12	241.81
P-19	385.65	-	376.12
P-22	638.60	605.62	600.37
P-23	693.11	596.52	589.79
BH-16	318.00	316.71	315.65
BH-17	410.00	407.45	387.42
QP-3S	602.02	296.17	290.42
QP-4S	718.95	610.27	603.47
QP-5N	601.53	502.31	501.41
QP-6N	445.82	394.90	390.99
QP-7N	374.50	367.98	362.50
WP-1	259.83	256.42	245.52
WP-3	273.39	269.27	<261.19
WP-5	261.55	255.75	249.05
WP-6	264.85	259.59	254.25
WP-8	255.80	252.82	244.70
WP-9	257.90	253.94	252.11
PW-2	250.27	-	232.06
Duplex	289.01	275.72	268.66
Phillips	291.00	263.52	260.17
Berkland (New)	321.72	290.14	278.12
Berkland (old)	327.63	323.51	317.67
Merril	283.34	269.79	258.33
Surface Water			
S-1	unk	DTW=13.5	DTW=14.34
S-2	251.50	237.79	236.59
S-4	255.24	240.09	239.21

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 2025

ANALYTE	West Wells									MCL
	MW-1D	MW-3D	MW-10S	MW-10D	MW-11S	MW-11D	MW-12S	MW-12D	P-8	
	4/8/2025	4/8/2025	4/8/2025	4/8/2025	4/8/2025	4/8/2025	4/9/2025	4/9/2025	4/9/2025	
GENERAL CHEMISTRY (mg/l):										
Bicarbonate Alkalinity (as CaCO3)	140	150	620	350	180	830	240	140	170	NV
Chloride	7.1	54	550	82	21	100	38	10	9.4	250(2)
Dissolved Oxygen	6.01	6.41	2.45	2.99	8.33	1.67	2.29	4.46	5.43	NV
Redox Potential [Eh*] (mV)	249	340	353	380	365	203	169	358	350	NV
Electrical Conductivity (µS/cm)	185	283	2.54	591	196	1150	387	192	233	NV
pH (units)	7.39	7.27	7.24	7.32	7.19	7.07	6.87	7.36	7.46	6.5-8.5(2)
Total Dissolved Solids (TDS)	200	290	720	540	260	1100	340	210	230	500(2)
Total Suspended Solids	4	1.5	1.5	1.5	11	1.5	1.6	1.5	1.5	NV
METALS (µg/l):										
Arsenic	0.77	0.82	0.5	0.5	0.5	0.5	1.0	0.52	0.65	10(1), 50(2)
Calcium	22000	41000	310000	110000	49000	230000	47000	25000	30000	NV
Iron	44	40	40	40	40	40	650	40	40	300(2)
Magnesium	9100	18000	130000	34000	20000	94000	22000	11000	14000	NV
Manganese	2.5	2.5	78	59	2.5	25	600	2.5	2.5	50(2)
Sodium	22000	20000	36000	33000	23000	40000	32000	23000	28000	NV
VOLATILE ORGANIC COMPOUNDS (µg/L):										
cis-1,2-Dichloroethene	0.25	0.25	0.25	0.25	0.25	0.25	1.2	0.32	0.25	70(1)(3)
Tetrachloroethene	0.25	0.25	0.25	0.25	0.25	0.25	4.3	1.9	0.25	5(1)(3)
Trichloroethene	0.25	0.25	0.25	0.25	0.25	0.25	1.8	0.3	0.25	5(1)(3)

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

TABLE 4-2 (cont'd)
SUMMARY OF MONITORING RESULTS - OCT 2024 COC RESAMPLE
COFFIN BUTTE LANDFILL
APRIL 2025

ANALYTE	West Wells										MCL
	MW-8S	MW-9S	MW-15	MW-17	MW-18	MW-19	MW-20	MW-21	MW-24	Phillips	
	4/10/2025	4/11/2025	4/10/2025	4/11/2025	4/11/2025	4/11/2025	4/11/2025	4/11/2025	4/11/2025	4/11/2025	
GENERAL CHEMISTRY (mg/l):											
Dissolved Oxygen	2.41	3.76	4.50	7.80	9.37	2.38	3.51	3.08	5.59	10.41	NV
Redox Potential [Eh*] (mV)	335	110	364	411	415	380	374	322	343	327	NV
Electrical Conductivity (µS/cm)	235	716	346	228	169	677	584	645	238	205	NV
pH (units)	7.43	7.64	6.87	6.62	6.54	6.89	7.17	7.51	7.51	7.96	6.5-8.5(2)
Total Suspended Solids	2.5	4.4	1.6	4.0	1.5	1.5	1.6	6.4	1.5	1.5	NV
METALS (µg/l):											
Calcium	33000	95000	4500	28000	26000	91000	93000	110000	37000	26000	NV
Iron	40	1000	40	40	40	40	40	73	40	40	300(2)
Magnesium	14000	13000	22000	12000	9200	37000	33000	52000	14000	10000	NV
Manganese	2.5	1400	2.5	2.5	2.5	5.9	650	120	2.5	2.5	50(2)
Potassium	730	1400	500	500	500	500	500	500	500	500	NV
Silicon	24000	19000	27000	28000	16000	24000	18000	15000	23000	23000	NV
Sodium	20000	110000	29000	19000	11000	26000	26000	26000	22000	20000	NV

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

TABLE 4-3
SUMMARY OF MONITORING RESULTS - WEST WELLS
COFFIN BUTTE LANDFILL
OCTOBER 2025

ANALYTE	West Wells															MCL
	MW-1D 10/28/2025	MW-3D 10/28/2025	MW-10S 10/28/2025	MW-10D 10/28/2025	MW-11D 10/28/2025	MW-11S 10/28/2025	MW-12S 10/28/2025	MW-12D 10/28/2025	MW-17 10/29/2025	MW-18 10/30/2025	MW-19 10/29/2025	MW-20 10/30/2025	MW-21 10/30/2025	P-8 10/28/2025	Phillips 10/30/2025	
GENERAL CHEMISTRY (mg/l):																
Bicarbonate Alkalinity (as CaCO3)	170	150	IW	340	880	790	IW	140	IW	86	43	120*	430*	IW	130	NV
Chloride	7.2	52	IW	79	54	54	IW	7.3	IW	4.3	280	120	89	IW	7.9	250(2)
Dissolved Oxygen	3.28	3.91	IW	2.38	2.39	3.47	IW	4.03	IW	8.13	4.54	3.59	4.89	IW	7.12	NV
Redox Potential [Eh*] (mV)	234	239	IW	169	5	201	IW	262	IW	253	146	149	16	IW	162	NV
Electrical Conductivity (µS/cm)	269	349	IW	701	1740	1190	IW	234	IW	210	795	678	794	IW	216	NV
pH (units)	7.31	7.44	IW	7.43	7.17	7.23	IW	7.42	IW	6.87	7.46	7.55	7.70	IW	7.86	6.5-8.5(2)
Total Dissolved Solids (TDS)	220	290	IW	530	1100	920	IW	200	IW	190	550	540	580	IW	190	500(2)
Total Suspended Solids	1.5	1.5	IW	1.5	1.5	2.8	IW	1.5	IW	1.5	1.5	4	12.0	IW	1.5	NV
METALS (µg/l):																
Antimony	0.50	0.50	IW	0.50	0.50	0.50	IW	0.50	IW	0.50	0.50	0.50	0.50	IW	0.50	6(1)(3)
Arsenic	0.50	0.68	IW	0.66	0.50	0.50	IW	0.74	IW	0.50	0.50	0.50	0.50	IW	5.10	10(1), 50(2)
Barium	3.4	5.6	IW	7.7	5.2	7.9	IW	0.55	IW	0.55	0.69	5.9	2.7	IW	0.55	2000(1)(3)
Calcium	30000	43000	IW	110000	250000	30000	IW	25000	IW	26000	90000	89000	110000	IW	25000	NV
Chromium	1.00	1.00	IW	1.00	1.00	1.00	IW	1.00	IW	1.00	1.00	1.00	1.00	IW	1.00	100(1)(3)
Iron	40	40	IW	56	40	40	IW	40	IW	40	40	40	130	IW	40.0	300(2)
Lead	0.50	0.50	IW	0.50	0.50	0.50	IW	0.50	IW	0.50	0.50	0.50	0.50	IW	0.50	10(1), 15(3)
Magnesium	12000	19000	IW	34000	100000	83000	IW	12000	IW	9400*	37000	32000*	48000*	IW	9700	NV
Manganese	2.5	2.5	IW	60	28	8.1	IW	2.5	IW	2.5	16	1100	400	IW	2.5	50(2)
Nickel	1.0	1.0	IW	7.6	7.6	3.4	IW	1.0	IW	1.0	1.0	1.0	9.6	IW	1.0	NV
Selenium	0.6	0.50	IW	0.5	0.5	0.5	IW	0.71	IW	0.5	0.5	0.5	0.5	IW	0.5	50(1)(3)
Sodium	26000	21000	IW	34000	41000	32000	IW	24000	IW	11000	27000	26000	25000	IW	27000	NV
Zinc	5.00	5.00	IW	5.00	5.00	5.00	IW	5.00	IW	5.00	5.00	5.00	5.00	IW	5.00	5(2)
VOLATILE ORGANIC COMPOUNDS (µg/L):																
1,1-Dichloroethane	0.25	0.25	IW	0.25	0.25	0.25	IW	0.25	IW	0.25	1.2	0.25	0.25	IW	0.25	NV
cis-1,2-Dichloroethene	0.25	0.25	IW	0.25	0.25	0.25	IW	0.25	IW	0.25	0.78	0.25	0.25	IW	0.25	70(1)(3)
Dichlorodifluoromethane	0.50	0.50	IW	0.50	0.50	0.50	IW	0.50	IW	0.50	2.1	1.80	0.50	IW	0.50	NV
Tetrachloroethene	0.25	0.25	IW	0.25	0.25	0.25	IW	0.97	IW	0.25	1.3	0.25	0.25	IW	0.25	5(1)(3)
Trichlorethene	0.25	0.25	IW	0.25	0.25	0.25	IW	0.25	IW	0.25	1.3	0.25	0.25	IW	0.25	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 2025

ANALYTE	East Wells			MCL
	MW-23 4/9/2025	MW-26 4/9/2025	M-27 4/9/2025	
GENERAL CHEMISTRY (mg/l):				
Bicarbonate Alkalinity (as CaCO3)	150	170	420	NV
Chloride	5.8	20	14	250(2)
Dissolved Oxygen	3.55	3.25	3.53	NV
Redox Potential [Eh*] (mV)	104	80	152	NV
Electrical Conductivity (µS/cm)	231	191	523	NV
pH (units)	7.37	7.57	6.88	6.5-8.5(2)
Total Dissolved Solids (TDS)	200	220	470	500(2)
Total Suspended Solids	21	10	46	NV
METALS (µg/l):				
Arsenic	15	18	24	10(1), 50(2)
Calcium	24000	31000	79000	NV
Iron	360	710	5400	300(2)
Magnesium	8700	13000	33000	NV
Manganese	540	1100	8800	50(2)
Sodium	26000	23000	35000	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 2025**

ANALYTE	East Wells						MCL
	MW-8S 10/29/2025	MW-15 10/29/2025	MW-23 10/29/2025	MW-24 10/30/2025	MW-26 10/28/2025	MW-27 10/28/2025	
GENERAL CHEMISTRY (mg/l):							
Bicarbonate Alkalinity (as CaCO3)	150	180	190	180*	150	420	NV
Chloride	22	61	22	6	5.7	14	250(2)
Dissolved Oxygen	2.56	3.29	3.78	3.14	2.79	2.80	NV
Redox Potential [Eh*] (mV)	161	184	-100	134	-122	-88	NV
Electrical Conductivity (µS/cm)	280	394	308	272	236	658	NV
pH (units)	7.55	6.85	7.38	7.64	7.78	7.07	6.5-8.5(2)
Total Dissolved Solids (TDS)	230	320	250	230	210	460	500(2)
Total Suspended Solids	2	1.5	9.6	1.5	8.4	53	NV
METALS (µg/l):							
Antimony	0.50	0.50	0.50	0.50	0.50	0.50	6(1)(3)
Arsenic	0.59	0.50	19	0.50	14	35	10(1), 50(2)
Barium	0.55	11	33	0.55	27	110	2000(1)(3)
Calcium	33000	44000	37000	35000	25000	83000	NV
Chromium	1.00	1.00	1.00	1.00	1.00	1.00	100(1)(3)
Iron	40.0	40.0	2000	40.0	510	5500	300(2)
Lead	0.50	0.50	0.50	0.50	0.50	2.00	10(1), 15(3)
Magnesium	14000	21000	15000	13000	9700	35000	NV
Manganese	2.5	2.5	1500	2.5	690	9000	50(2)
Nickel	1.0	1.0	1.0	1.0	3.4	3.4	NV
Selenium	0.67	0.5	0.5	0.5	0.5	0.5	50(1)(3)
Sodium	20000	30000	27000	21000	28000	38000	NV
Zinc	5.00	5.00	5.00	5.00	49	15	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 2025

ANALYTE	Surface Water Samples			MCL
	S-1 4/10/2025	S-2 4/10/2025	S-4 4/10/2025	
GENERAL CHEMISTRY (mg/l):				
Chloride	4.8	5.3	5.2	250(2)
Dissolved Oxygen	9.90	10.45	9.45	NV
Redox Potential [Eh*] (mV)	472	370	408	NV
Electrical Conductivity (µS/cm)	111	97	97	NV
Total Kjeldahl Nitrogen	0.6	0.6	0.6	NV
pH (units)	5.84	6.91	6.41	6.5-8.5(2)
Total Phosphorus	0.035	0.035	0.035	NV
Ortho-Phosphate	0.046	0.035	0.035	NV
Biochemical Oxygen Demand	1.9	1.9	1.9	NV
METALS (µg/l):				
Calcium	15000	15000	15000	NV
Iron	40	46	40	300(2)
Magnesium	6200	6200	6100	NV
Manganese	9.0	9.2	9.5	50(2)
Sodium	6300	6500	6500	NV

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

TABLE 4-7
SUMMARY OF SURFACE WATER MONITORING RESULTS
COFFIN BUTTE LANDFILL
OCTOBER 2025

ANALYTE	Surface Water Samples			MCL
	S-1 10/29/2025	S-2 10/29/2025	S-4 10/29/2025	
GENERAL CHEMISTRY (mg/l):				
Chloride	17	18	17	250(2)
Dissolved Oxygen	9.48	8.27	10.02	NV
Redox Potential [Eh*] (mV)	170	273	192	NV
Electrical Conductivity (µS/cm)	190	198	190	NV
Total Kjeldahl Nitrogen	0.6	0.6	0.6	NV
pH (units)	7.61	6.12	7.16	6.5-8.5(2)
Total Phosphorus	0.039	0.053	0.057	NV
Ortho-Phosphate	0.035	0.035	0.035	NV
Biochemical Oxygen Demand	1.9	1.6	2	NV
METALS (µg/l):				
Calcium	25000	26000	24000	NV
Iron	40	40	40	300(2)
Magnesium	9600	9800	9400	NV
Manganese	12	14	12	50(2)
Sodium	11000	12000	11000	NV

* 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 2025

ANALYTE	Secondary Leachate Collection System (SCLS)						Subdrain Samples					MCL
	LDS-2B 4/9/2025	LDS-3 4/9/2025	LDS-4 4/9/2025	LDS-5 4/9/2025	LDS-ELP 4/9/2025	LDS-WLP 4/9/2025	S-U3 4/10/2025	S-U4 4/10/2025	S-U5 4/10/2025	S-U6 4/10/2025	S-U7 4/10/2025	
GENERAL CHEMISTRY (mg/l):												
Bicarbonate Alkalinity (as CaCO3)	1100	78	400	120	1800	IW	270	83	140	NS	IW	NV
Chloride	2100	140	230	640	2700	IW	130	2.7	17.0	NS	IW	250(2)
Dissolved Oxygen	1.59	1.88	4.60	2.49	2.92	IW	5.85	7.51	4.86	NS	IW	NV
Redox Potential [Eh*] (mV)	357	369	374	361	357	IW	284	291	336	NS	IW	NV
Electrical Conductivity (µS/cm)	8890	620	989	2670	16000	IW	672	106	239	NS	IW	NV
pH (units)	7.18	6.90	7.22	6.79	7.08	IW	7.61	8.16	6.94	NS	IW	6.5-8.5(2)
Total Dissolved Solids (TDS)	5200	460	1000	1500	9600	IW	530	130	240	NS	IW	500(2)
Total Suspended Solids	7.2	1.5	1.5	1.6	2.4	IW						NV
METALS (µg/l):												
Arsenic	17	0.80	0.88	0.94	7.3	IW						10(1), 50(2)
Calcium	200000	42000	13000	120000	690000	IW	50000	16000	36000	NS	IW	NV
Iron	2400	61	40	40	1000	IW	63	40	40	NS	IW	300(2)
Magnesium	130000	17000	51000	49000	250000	IW	22000	7100	18000	NS	IW	NV
Manganese	4500	130	2.5	2.5	11000	IW	200	7.4	2.5	NS	IW	50(2)
Sodium	1700000	85000	130000	330000	2200000	IW	85000	7900	12000	NS	IW	NV
VOLATILE ORGANIC COMPOUNDS (µg/l):												
Acetone	40	25	25	25	25	IW						
Isopropylbenzene	1.3	1.3	1.3	1.3	1.3	IW						NV

Blacked out cells indicate analyses that are not required for this monitoring point

* 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 2025

ANALYTE	Secondary Leachate Collection System (SCLS)						Leachate	Subdrain Samples					MCL
	LDS-2B 10/31/2025	LDS-3 10/30/2025	LDS-4 10/30/2025	LDS-5 10/30/2025	LDS-ELP 10/30/2025	LDS-WLP 10/30/2025	L-POND 10/30/2025	S-U3 10/30/2025	S-U4 10/30/2025	S-U5 10/30/2025	S-U6 10/30/2025	S-U7 10/30/2025	
GENERAL CHEMISTRY (mg/l):													
Bicarbonate Alkalinity (as CaCO3)	1600	310	370	140	2100	IW	6100	IW	89	150	NS	IW	NV
Ammonia as N	NA	NA	NA	NA	NA	IW	1200						NV
Chloride	2500	960	280	520	2800	IW	3700	IW	2.9	7.9	NS	IW	250(2)
Dissolved Oxygen	0.96	3.64	3.64	6.22	0.75	IW	0.78	IW	6.83	7.29	NS	IW	NV
Redox Potential [Eh*] (mV)	-4	182	156	167	51	IW	-230	IW	84	132	NS	IW	NV
Electrical Conductivity (µS/cm)	10400	2810	1610	2400	15500	IW	21900	IW	139	254	NS	IW	NV
Nitrate Nitrite (as N)	NA	NA	NA	NA	NA	IW	0.060						10(1)(3)
pH (units)	6.83	6.79	7.32	7.65	7.43	IW	7.87	IW	7.96	7.71	NS	IW	6.5-8.5(2)
Sulfate	NA	NA	NA	NA	NA	IW	1.5						250(2)
Total Dissolved Solids (TDS)	6200	2400	1000	1300	9800	IW	11000	IW	160	220	NS	IW	500(2)
Total Suspended Solids	NA	NA	NA	NA	NA	IW	27						NV
Non-Volatile Organic Carbon (TOC)	NA	NA	NA	NA	NA	IW	4600						NV
Chemical Oxygen Demand	NA	NA	NA	NA	NA	IW	2400						NV
METALS (µg/l):													
Antimony	NA	NA	NA	NA	NA	IW	23						6(1)(3)
Arsenic	28	5.0	NA	5.00	7.1	IW	150						10(1), 50(2)
Barium	NA	NA	NA	NA	NA	IW	680						2000(1)(3)
Beryllium	NA	NA	NA	NA	NA	IW	1.3						4(1)(3)
Cadmium	NA	NA	NA	NA	NA	IW	1.3						5(1)(3)
Calcium	190000	160000	130000	100000	430000	IW	140000	IW	18000	34000	NS	IW	NV
Chromium	NA	NA	NA	NA	NA	IW	230						100(1)(3)
Cobalt	NA	NA	NA	NA	NA	IW	56						NV
Copper	NA	NA	NA	NA	NA	IW	8.0						1300(1)(3), 1000(2)
Iron	10000	81	40	40	850	IW	500	IW	40	40	NS	IW	300(2)
Lead	NA	NA	NA	NA	NA	IW	2.5						10(1), 15(3)
Magnesium	130000	77000	52000	41000	200000	IW	160000	IW	7700	17000	NS	IW	NV
Manganese	3500	650	2.5	3.4	7500	IW	1400	IW	2.5	2.5	NS	IW	50(2)
Nickel	NA	NA	NA	NA	NA	IW	200						NV
Potassium	NA	NA	NA	NA	NA	IW	620000						NV
Selenium	NA	NA	NA	NA	NA	IW	2.5						50(1)(3)
Silicon	NA	NA	NA	NA	NA	IW	35000						NV
Silver	NA	NA	NA	NA	NA	IW	1.3						100(2)
Sodium	1500000	600000	120000	280000	1700000	IW	2300000	IW	8100	11000	NS	IW	NV
Thallium	NA	NA	NA	NA	NA	IW	1.3						2(1)(3)
Vanadium	NA	NA	NA	NA	NA	IW	220						NV
Zinc	NA	NA	NA	NA	NA	IW	57						5(2)

TABLE 4-9
SUMMARY OF SLCS, LEACHATE, AND UNDERDRAIN MONITORING RESULTS
COFFIN BUTTE LANDFILL
OCTOBER 2025

ANALYTE	Secondary Leachate Collection System (SCLS)						Leachate	Subdrain Samples					MCL
	LDS-2B 10/31/2025	LDS-3 10/30/2025	LDS-4 10/30/2025	LDS-5 10/30/2025	LDS-ELP 10/30/2025	LDS-WLP 10/30/2025	L-POND 10/30/2025	S-U3 10/30/2025	S-U4 10/30/2025	S-U5 10/30/2025	S-U6 10/30/2025	S-U7 10/30/2025	
VOLATILE ORGANIC COMPOUNDS (µg/l):													
Acetone	25.0	5.0	5.0	5.0	5.0	IW	1200						NV
Benzene	2.0	0.25	0.25	0.25	0.25	IW	4.8						5
Carbon disulfide	2.0	2.0	2.0	2.0	2.0	IW	3.6						NV
2-Butanone (MEK)	16.0	16.0	16.0	16.0	16.0	IW	1400						NV
Ethylbenzene	1.0	1.0	1.0	1.0	2.0	IW	5.8						700
m-Xylene & p-Xylene	2.0	2.0	2.0	2.0	2.0	IW	9.5						10000
o-Xylene	1.0	1.0	1.0	1.0	1.0	IW	5.5						10000
4-Methyl-2-pentanone (MIBK)	6.0	6.0	6.0	6.0	7.0	IW	69						NV
4-Isopropyltoluene	1.0	1.0	1.0	1.0	2.0	IW	4.0						NV
4-Chlorotoluene	1.0	1.0	1.0	1.0	1.0	IW	5.3						
Napthalene	4.0	4.0	4.0	4.0	4.0	IW	7.4						
Trichloroethene	0.3	0.3	0.3	0.3	0.3	IW	1.0						5
Toluene	1.0	1.0	1.0	1.0	1.0	IW	22						1000
cis-1,2-Dichloroethene	1.0	1.0	1.0	1.0	1.0	IW	1.2						
1,2-Dichloroethene	1.0	1.0	1.0	1.0	1.0	IW	1.4						
1,2,4-Trimethylbenzene	1.0	1.0	1.0	1.0	1.0	IW	2.3						

Blacked out cells indicate analyses that are not required for this monitoring point

* 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
10/1/24 - 10/1/25*	365	34.50	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
2025 Annual Environmental Monitoring Report
Coffin Butte Landfill

Month	Reported Monthly Pond Volume	Rainfall (inches)	Corvallis WWTP	Salem WWTP	Treated: Corvallis	Cell 1 Flowmeter	Cell 2 Flowmeter	Cell 3 Flowmeter	Cell 4 Flowmeter	Cell 5 Flowmeter	Cell 6 Flowmeter	Cell 2 Horizontal/Co ndenate Sump	Downwell Pumps	Condensate Sump (Main)	Condensate Sump (Cell 4)	Horizontal Well Gravity	Public Area	PRC Leachate Handled	Total Gallons (Flowmeter)
Oct-24	2,020,371	3.63	1,287,190	3,574,500	1,117,000	68,670	543,065	319,041	209,706	1,066,233	-	-	355,690	171,945	186,643	55,435	-	3,500	2,976,428
Nov-24	2,740,729	7.24	2,357,833	2,475,000	2,181,000	95,625	686,244	940,924	879,509	2,183,885	-	-	259,794	325,198	81,256	69,423	-	-	5,521,858
Dec-24	4,170,276	7.47	2,198,484	2,186,500	1,988,000	117,845	581,957	743,089	1,717,779	1,783,945	-	-	158,327	374,574	-	72,531	-	54,000	5,550,047
Jan-25	2,912,172	3.50	2,172,453	3,965,000	1,983,000	111,123	640,642	643,156	874,294	1,805,722	-	-	115,392	378,110	-	86,457	-	35,000	4,654,896
Feb-25	2,227,382	4.70	2,293,624	3,564,500	2,111,500	137,482	508,241	650,077	598,475	1,541,084	-	-	829	316,435	-	19,105	-	34,000	3,771,728
Mar-25	1,484,989	6.76	2,557,607	2,970,000	2,299,000	143,025	592,185	701,694	741,498	1,555,172	63,643	-	5,043	380,801	-	28	-	49,000	4,183,089
Apr-25	843,867	1.21	1,778,172	2,684,500	1,594,500	110,940	652,849	826,850	293,237	1,156,484	76,335	-	45,333	344,845	-	5	-	21,000	3,506,878
May-25	923,800	0.57	1,085,052	1,472,000	965,500	95,680	439,387	456,974	99,423	887,511	59,477	-	72,997	385,936	-	48	-	20,000	2,497,433
Jun-25	658,861	0.49	1,061,800	1,381,000	961,500	87,160	351,577	367,198	75,388	757,671	-	-	95,066	336,444	-	57	-	7,000	2,070,561
Jul-25	1,358,682	0.00	892,215	585,000	812,000	93,830	244,640	375,933	76,006	769,073	15,767	-	186,823	334,695	-	54	-	-	2,096,821
Aug-25	2,557,159	0.08	119,574	763,000	91,000	98,121	247,965	371,422	72,115	691,947	9,424	-	249,869	318,573	-	40	-	-	2,059,477
Sep-25	2,621,685	0.88	759,168	1,295,000	728,000	123,359	97,296	452,706	57,116	623,435	2,747	400,564	704	166,735	183,834	31	-	-	2,108,526
Totals	24,519,973	36.53	18,563,172	26,916,000	16,832,000	1,282,860	5,586,048	6,849,064	5,694,546	14,822,162	227,393	400,564	1,545,867	3,834,291	451,733	303,214	0	223,500	40,997,742

2024-25 Leachate Volume (Treated + Volume in Ponds): **43,788,000**

Leachate Recorded by Flowmeters: **40,997,742**

Percent Difference: Meters vs. Volumetrics: **1.10%**

Notes: All values in gallons unless noted

Table 4-12
Landfill Gas Monitoring
2024 Annual Environmental Monitoring Report
Coffin Butte Landfill

Date	Time	Monitoring Location												
		Landfill Perimeter							Buildings					
		Levels	GP2	GP3	GP4	GP5	GP5A	GP6	Quarry Scalehouse	Office	LTF	Scale House	Pump House	Lock-up #1
01/30/25	9:50	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 1.5	0.0 0.0 7.5	0.0 0.0 7.1	0.0 0.0 20.9	0.0 0.0 13.8	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
02/26/25	10:54	LEL % CH4 % O2 %	0.0 0.0 20.3	0.0 0.0 20.1	0.0 0.0 7.8	0.0 0.0 6.0	0.0 0.0 20.9	0.0 0.0 11.1	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
03/27/25	13:20	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 3.4	0.0 0.0 6.5	0.0 0.0 20.9	0.0 0.0 9.6	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
04/30/25	11:06	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 5.1	0.0 0.0 8.2	0.0 0.0 20.9	0.0 0.0 11.8	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
05/23/25	9:09	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 10.6	0.0 0.0 20.9	0.0 0.0 9.6	0.0 0.0 20.9	0.0 0.0 12.3	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
06/18/25	13:20	LEL % CH4 % O2 %	No access, Cell constrct	0.0 0.0 15.2	0.0 0.0 3.2	0.0 0.0 10.8	0.0 0.0 20.9	0.0 0.0 8.7	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
07/29/25	10:54	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 15.9	0.0 0.0 9.0	0.0 0.0 19.6	0.0 0.0 20.9	0.0 0.0 9.7	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
08/28/25	10:27	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 16.7	0.0 0.0 13.4	0.0 0.0 19.6	0.0 0.0 20.9	0.0 0.0 13.8	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
09/17/25	13:03	LEL % CH4 % O2 %	No access, Cell constrct	No access, Cell constrct	0.0 0.0 15.0	0.0 0.0 19.5	0.0 0.0 20.9	0.0 0.0 16.1	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
10/16/25	10:30	LEL % CH4 % O2 %	0.0 0.0 16.5	0.0 0.0 17.6	0.0 0.0 17.1	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 17.8	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
11/25/25	13:43	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 14.6	0.0 0.0 19.2	0.0 0.0 20.9	0.0 0.0 14.8	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9
12/23/25	13:09	LEL % CH4 % O2 %	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 10.6	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	No access, quarry closed	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9	0.0 0.0 20.9

**TABLE 5-1
COMPARISON OF SAMPLING RESULTS WITH RACLs
WEST SIDE COMPLIANCE WELLS
ANNUAL 2025 MONITORING PERIOD
COFFIN BUTTE LANDFILL**

ANALYTE	UNITS	MW-1D		MW-3D		MW-10S		MW-10D		MW-11S		MW-11D		MW-12S		MW-12D		RACL
		04/08/25	10/28/25	04/08/25	10/28/25	04/08/25	10/28/25	04/08/25	10/28/25	04/08/25	10/28/25	04/08/25	10/28/25	04/09/25	10/28/25	04/09/25	10/28/25	
GENERAL CHEMISTRY																		
Chloride	mg/L	7.1	7.2	54	52	550	NS	82	79	21	54	100	110	38	NS	10	7.3	250
Total Dissolved Solids (TDS)	mg/L	200	220	290	290	720	NS	540	530	260	920	1100	1100	340	NS	210	200	500
METALS																		
Antimony	µg/L		<0.50		<0.50		NS		<0.50		<0.50		<0.50		NS		<0.50	6
Arsenic	µg/L	0.77j	<0.50	0.82j	0.68j	<0.50	NS	<0.50	0.66j	<0.50	<0.50	<0.50	<0.50	1.0j	NS	<0.50	0.74j	10
Barium	µg/L		7.9		5.6		NS		7.7			7.9			NS		<0.55	1000
Chromium	µg/L		<1.0		<1.0		NS		<1.0		<1.0		<1.0		NS		<1.0	50
Iron	µg/L	44j	<40	<40	<40	<40	NS	<40	56j	<40	<40	<40	<40	650	NS	<40	<40	300
Lead	µg/L		<0.50		<0.50		NS		<0.50		<0.50		<0.50		NS		<0.50	50
Manganese	µg/L	<2.5	<2.5	<2.5	<2.5	78	NS	59	60	<2.5	8.1j	25	28	600	NS	<2.5	<2.5	50
Nickel	µg/L		<1.0		<1.0		NS		9.1			3.4	7.6		NS		<1.0	100
Selenium	µg/L		0.60j		<0.50		NS		<0.50		<0.50		<0.50		NS		0.71j	10
Zinc	µg/L		<5.0		<5.0		NS		<5.0		<5.0		<5.0		NS		<5.0	NV
VOLATILE ORGANIC COMPOUNDS																		
cis-1,2-Dichloroethene	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.2	NS	<0.25	<0.25	70
1,4-Dichlorobenzene	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	75
Tetrachloroethene	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	4.3	NS	1.9	0.97j	5
Trichloroethene	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.8	NS	<0.25	<0.25	5
Vinyl Chloride	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	<0.25	2

ANALYTE	UNITS	MW-17		MW-18		MW-19		MW-20		MW-21		P-8		Phillips		RACL
		4/11/2025*	10/28/25	4/11/2025*	10/29/25	4/11/2025*	10/29/25	4/11/2025*	10/30/25	4/11/2025*	10/30/25	4/9/2025*	10/28/25	4/11/2025*	10/30/25	
GENERAL CHEMISTRY																
Chloride	mg/L		NS		4.3		280		120		89		NS		7.9	250
Total Dissolved Solids (TDS)	mg/L		NS		190		550		540		580		NS		190	500
METALS																
Antimony	µg/L		NS		<0.50		<0.50		<0.50		<0.50		NS		<0.50	6
Arsenic	µg/L		NS		<0.50		<0.50		<0.50		<0.50		NS		0.57j	10
Barium	mg/L		NS		<0.55		0.69j		5.9		2.7		NS		<0.55	1000
Chromium	mg/L		NS		<1.0		<1.0		<1.0		<1.0		NS		<1.0	50
Iron	µg/L	<40	NS	<40	<40	<40	<40	<40	<40	73j	130	<40	NS	<40	<40	300
Lead	µg/L		NS		<0.50		<0.50		<0.50		<0.50		NS		<0.50	50
Manganese	µg/L	<2.5	NS	<2.5	<2.5	5.9j	16	650	1100	120	400	<2.5	NS	<2.5	<2.5	50
Nickel	µg/L		NS		<1.0		<1.0		<1.0		9.6		NS		<1.0	100
Selenium	µg/L		NS		<0.50		<0.50		<0.50		<0.50		NS		<0.50	10
Zinc	µg/L		NS		<5.0		<5.0		<5.0		<5.0		NS		<5.0	NV
VOLATILE ORGANIC COMPOUNDS																
cis-1,2-Dichloroethene	µg/L		NS		<0.25		0.78j		<0.25		<0.25		NS		<0.023	70
1,4-Dichlorobenzene	µg/L		NS		<0.25		<0.25		<0.25		<0.25		NS		<0.023	75
Tetrachloroethene	µg/L		NS		<0.25		1.3		<0.25		<0.25		NS		<0.014	5
Trichloroethene	µg/L		NS		<0.25		1.3		<0.25		<0.25		NS		<0.028	5
Vinyl Chloride	µg/L		NS		<0.25		<0.25		<0.25		<0.25		NS		<0.035	2

* Detection wells resampled for dissolved Fe and Mn after inadvertently excluding during October 2024 COC event

Note: Shaded cells indicate constituent was not analyzed for during monitoring event.

NS = Well unable to be sampled during the indicated monitoring period

j = Concentration not detected above the Practical Quantitation Limit (PQL)

TABLE 5-2
COMPARISON OF SAMPLING RESULTS WITH SSLs
WEST SIDE COMPLIANCE WELLS
ANNUAL 2025 MONITORING PERIOD
COFFIN BUTTE LANDFILL

		Indicator Parameters							
		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-20	SSL	298	140	580	100	0.038	42	0.90	28
	4/11/2025	NR	NR	NR	93	<.04	33	0.65	26
	10/30/2025	120	120	540	89	<.04	32	1.1	26
MW-21	SSL	420	93.1	562	120	0.60	56	0.37	29
	4/11/2025	NR	NR	NR	110	0.073j	52	0.12	26
	10/30/2025	430	89	580	110	0.13	48	0.40	25
	12/17/2025	440	NA	570	NA	NA	NA	0.27	NA

TABLE 5-3
COMPARISON OF SAMPLING RESULTS WITH SSLs
EAST SIDE COMPLIANCE WELLS
ANNUAL 2025 MONITORING PERIOD
COFFIN BUTTE LANDFILL

	Units	Indicator Parameters							
		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
	Updated SSL	255	6.1	210	28	0.86	11	0.75	29
	4/9/2025	150	5.8	200	24	0.36	8.7	0.54	26
	10/28/2025	150	5.7	210	25	0.51	9.7	0.69	28
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
	Updated SSL	480	15	490	94	13	41	11	41
	4/9/2025	420	14	470	79	5.4	33	8.8	35
	10/28/2025	420	14	460	83	5.5	35	9.0	38

**TABLE 5-4
SUMMARY OF VOC DETECTIONS
ANNUAL ENVIRONMENTAL MONITORING REPORT
2025 MONITORING PERIOD**

April 2025

		WEST WELLS		SCLS SAMPLES
ANALYTE	UNITS	MW-12S 04/09/25	MW-12D 04/09/25	LDS-2B 04/09/25
Acetone	µg/L			40j
cis-1,2-Dichloroethene	µg/L	1.2		
Tetrachloroethene	µg/L	4.3	1.9	
Trichloroethene	µg/L	1.8		

October 2025

		EAST WELLS	WEST WELLS		SCLS SAMPLES	
ANALYTE	UNITS	MW-20 10/30/25	MW-12D 10/28/25	MW-19 10/29/25	LDS-2B 10/31/25	L-POND 10/31/25
1,1-Dichloroethane	µg/L			1.2		
1,2,4-Trimethylbenzene	µg/L					2.3j
1,2-Dichloroethane	µg/L					1.4j
1,4-Dichlorobenzene	µg/L					1.3j
2-Butanone (MEK)	µg/L					1400
4-Chlorotoluene	µg/L					5.3
4-Isopropyltoluene	µg/L					4.0
4-Methyl-2-pentanone (MIBK)	µg/L					69
Acetone	µg/L				25j	1200
Benzene	µg/L				2.0j	4.8
Carbon disulfide	µg/L					3.6j
cis-1,2-Dichloroethene	µg/L			0.78j		1.2j
Dichlorodifluoromethane	µg/L	1.8j		2.1		
Ethylbenzene	µg/L					5.8
Napthalene	µg/L					7.4j
Tetrachloroethene	µg/L		0.97j	1.3		
Toluene	µg/L				1.4j	22
Trichloroethene	µg/L			1.3		
m-Xylene & p-Xylene	µg/L					9.5
o-Xylene	µg/L					5.5

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.
Well MW-12S had insufficient water to sample during Oct. 2025 monitoring event

Appendix A

Tabular Historical Water Level and Quality Data

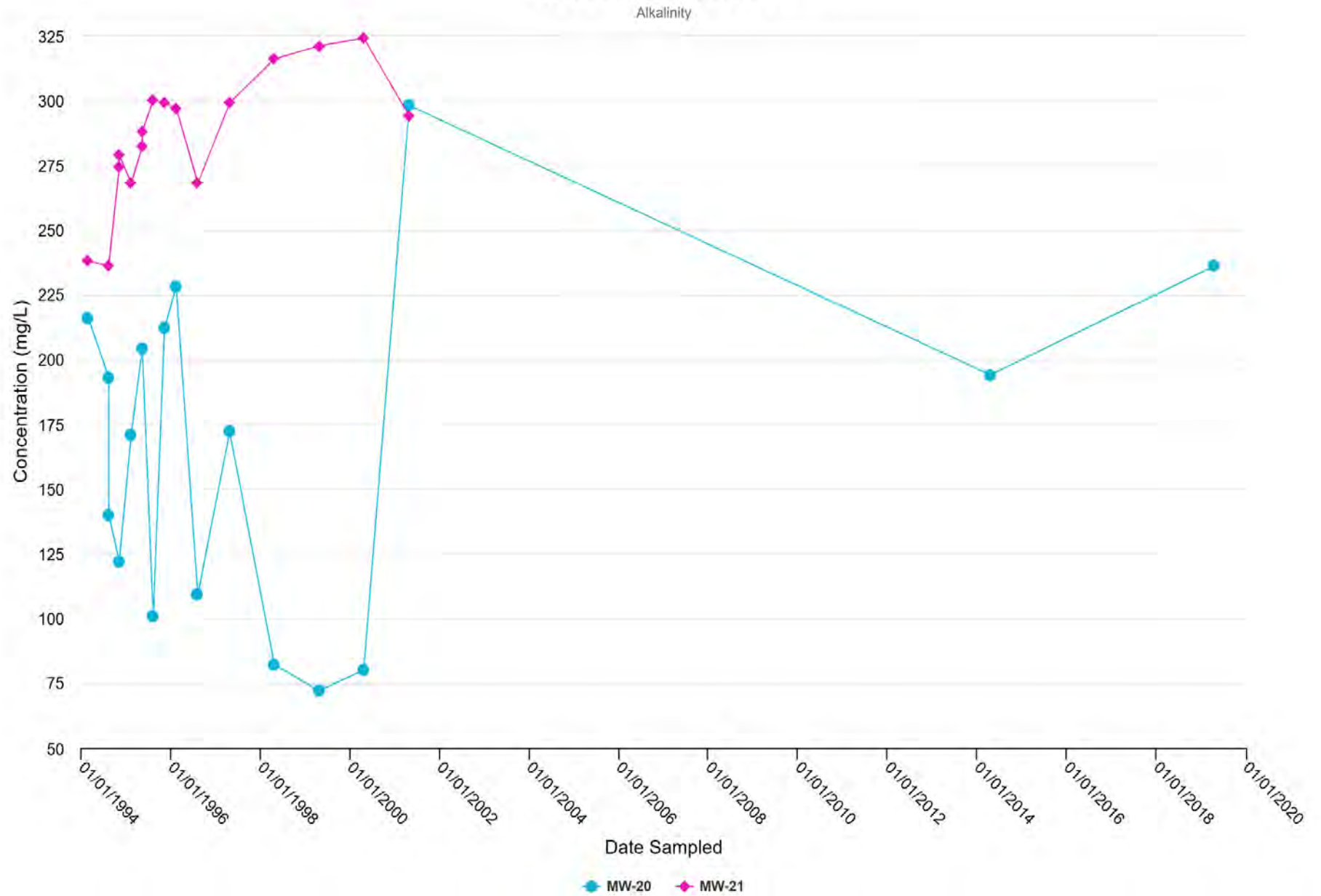
Historical Data Files

(on flash drive included in report hard copy)

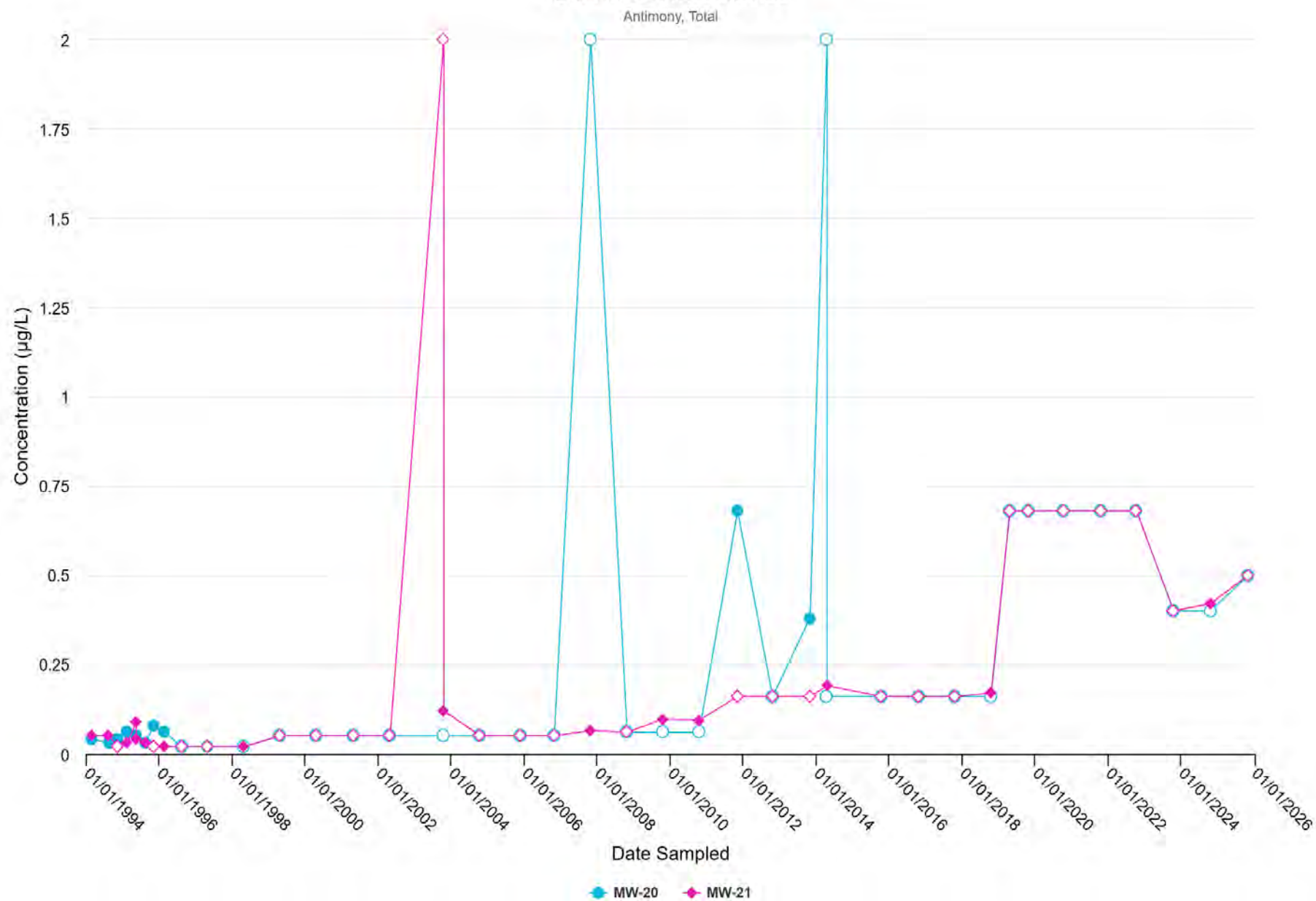
Appendix B

Water Quality Summary Time-Series Plots

Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

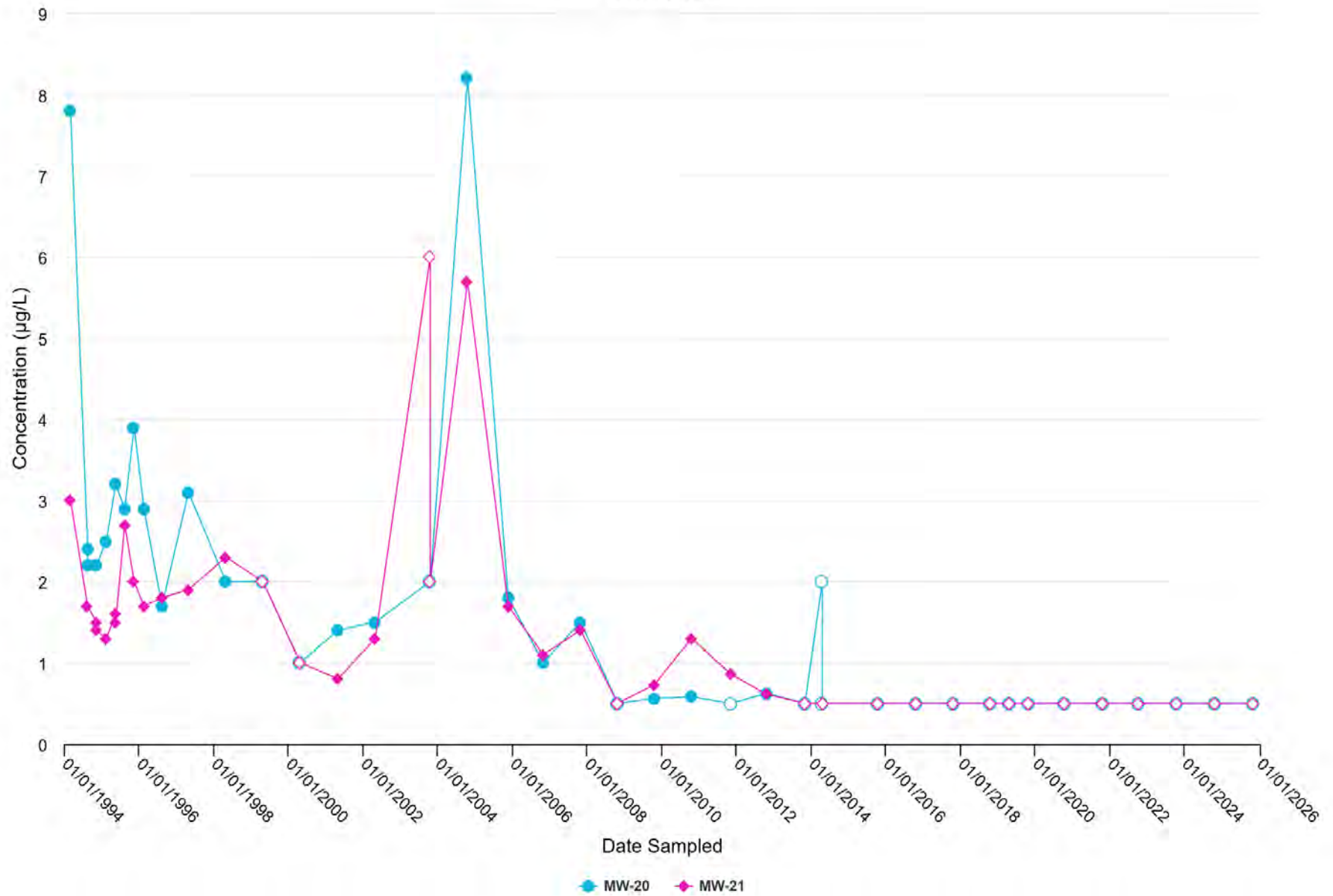


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL



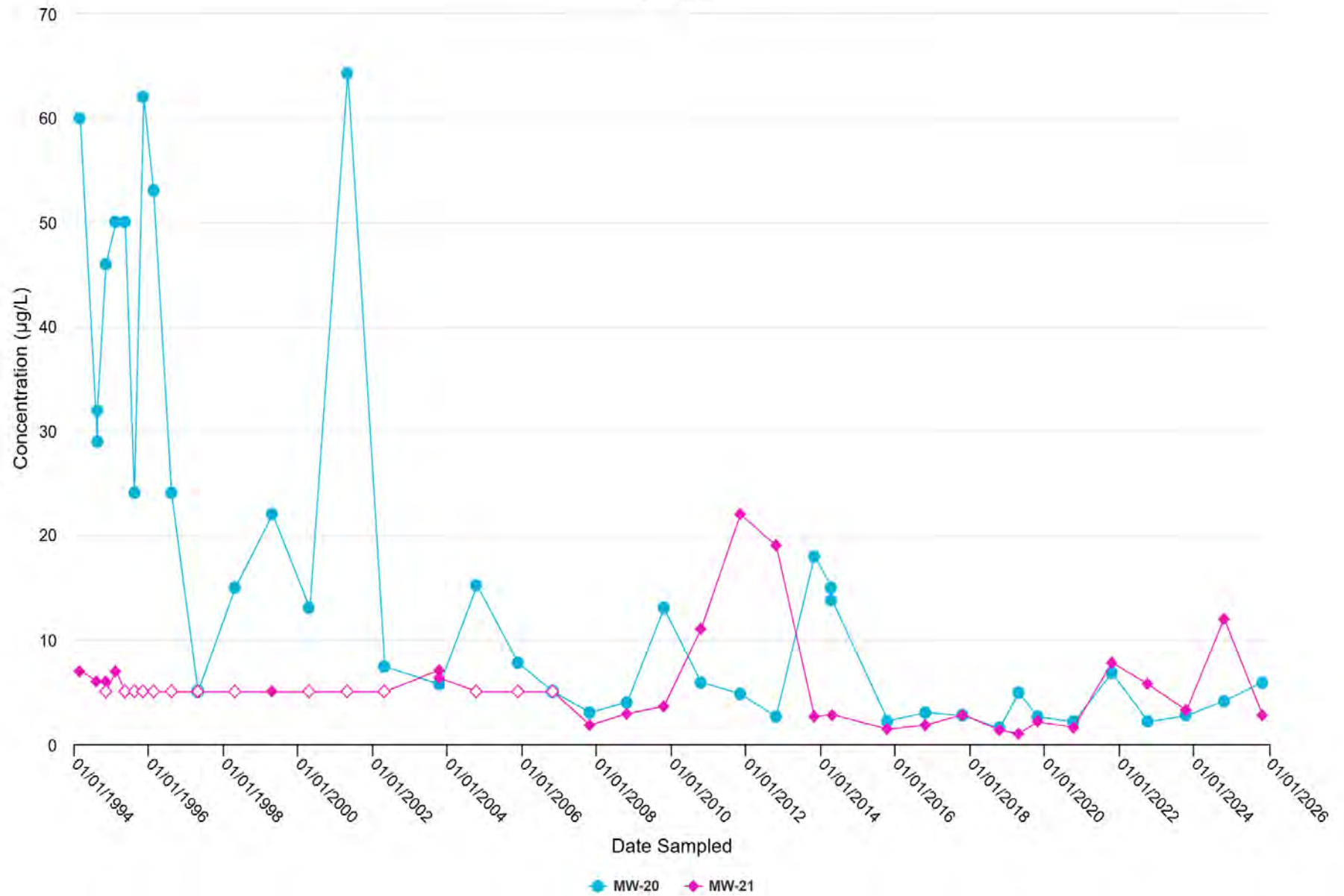
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Arsenic, Total



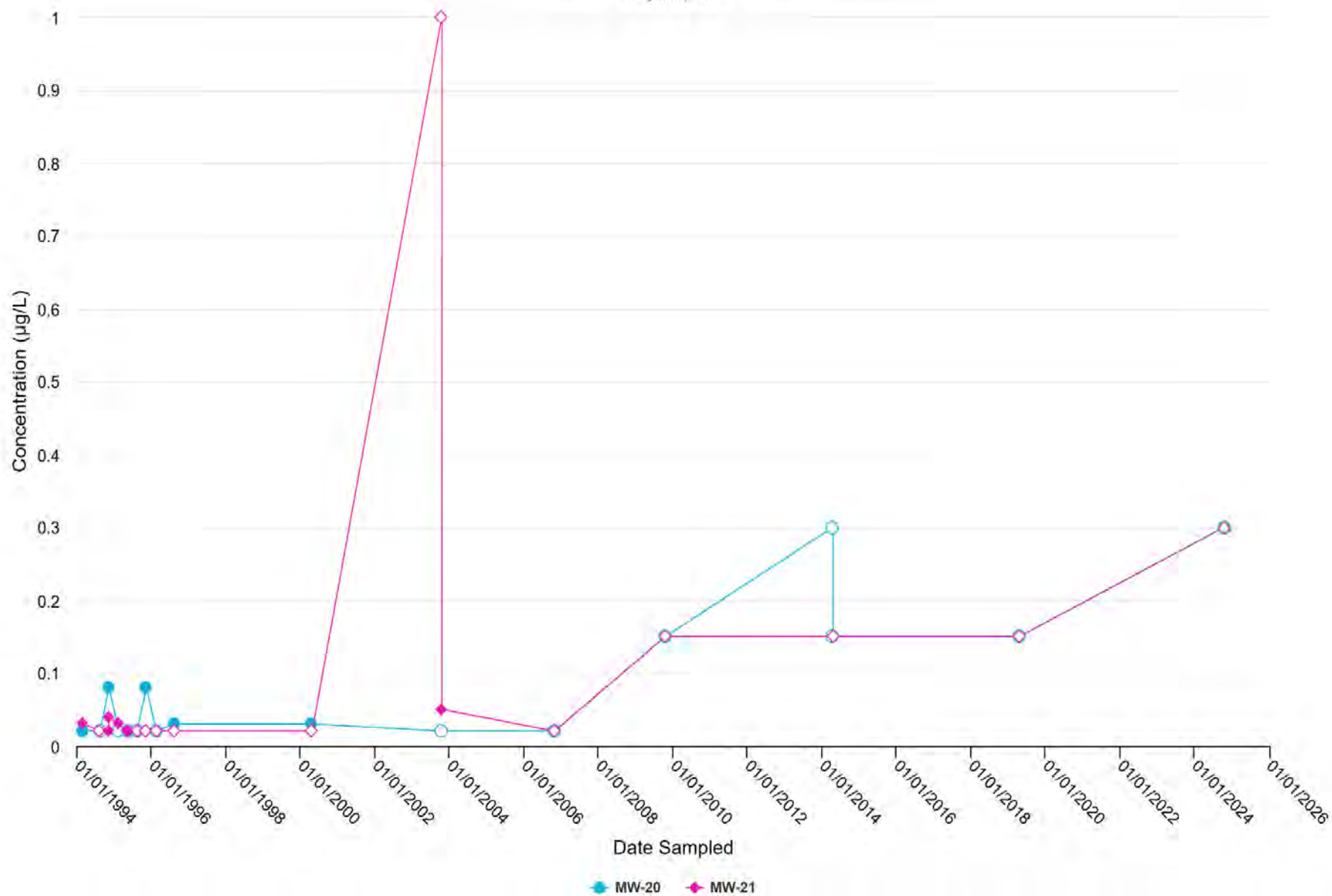
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Barium, Total



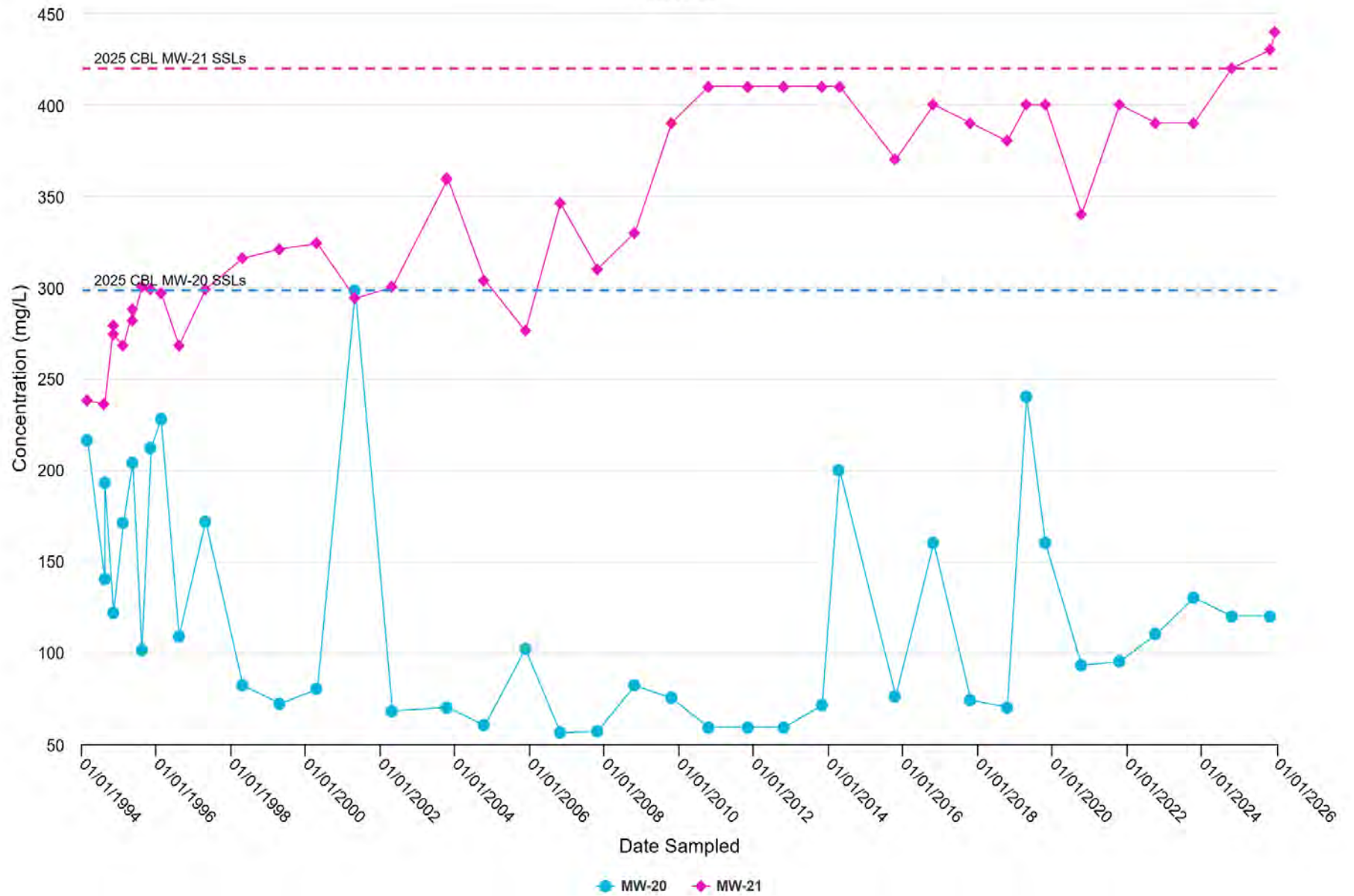
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Beryllium, Total



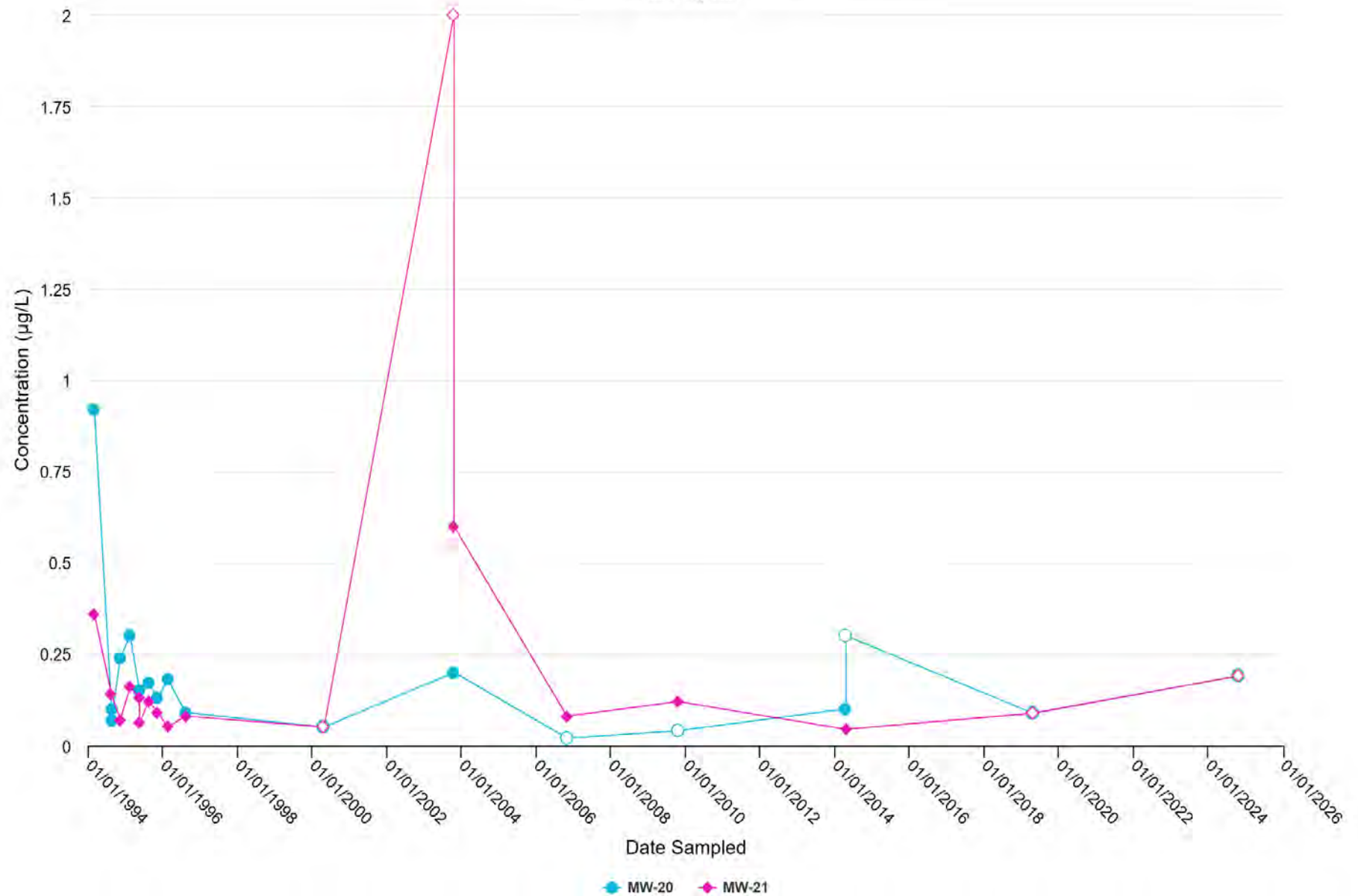
Cell 6 Time Series (MW-20, MW-21) COFFIN BUTTE LANDFILL

Bicarbonate



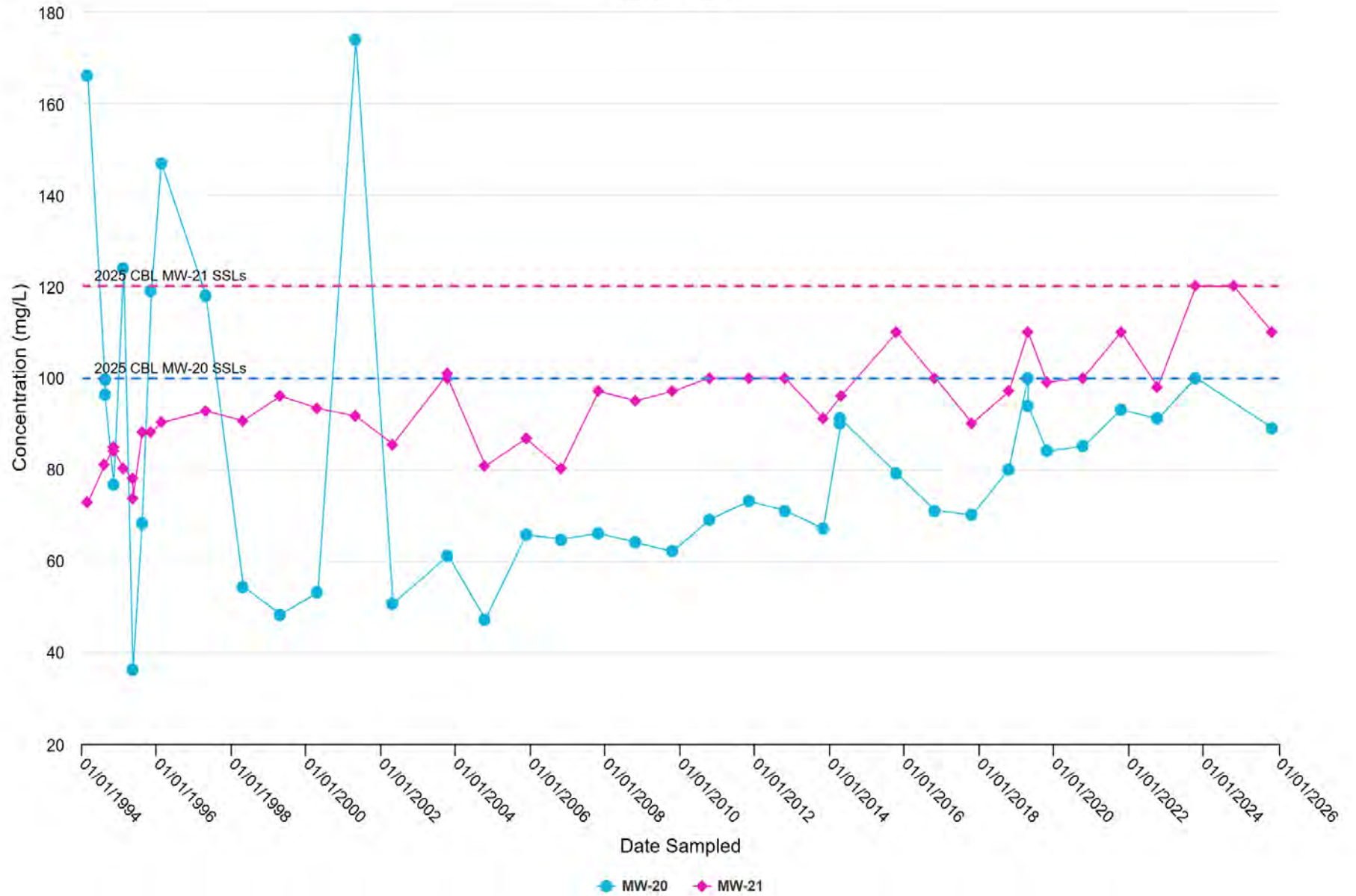
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Cadmium, Total

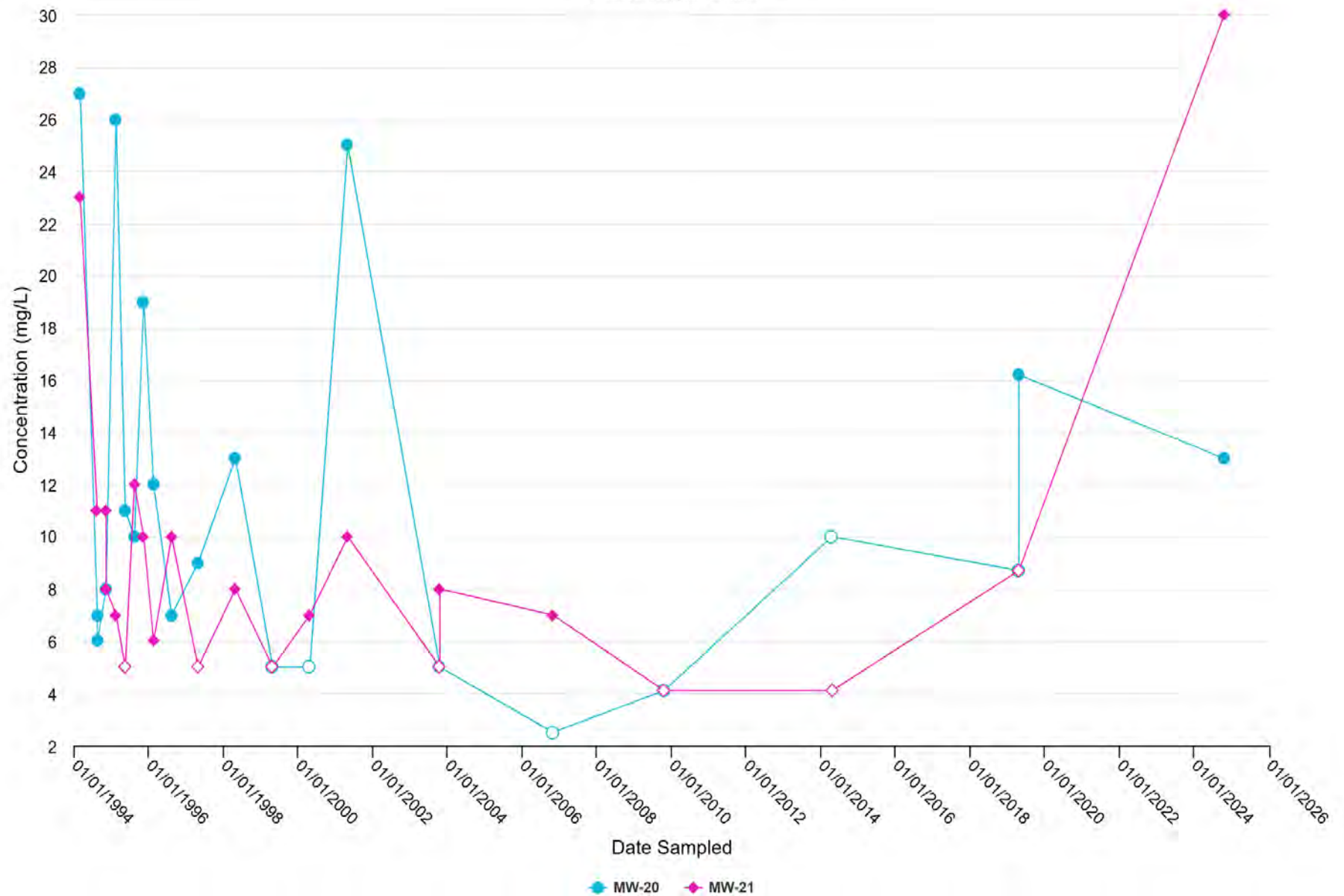


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Calcium, Dissolved

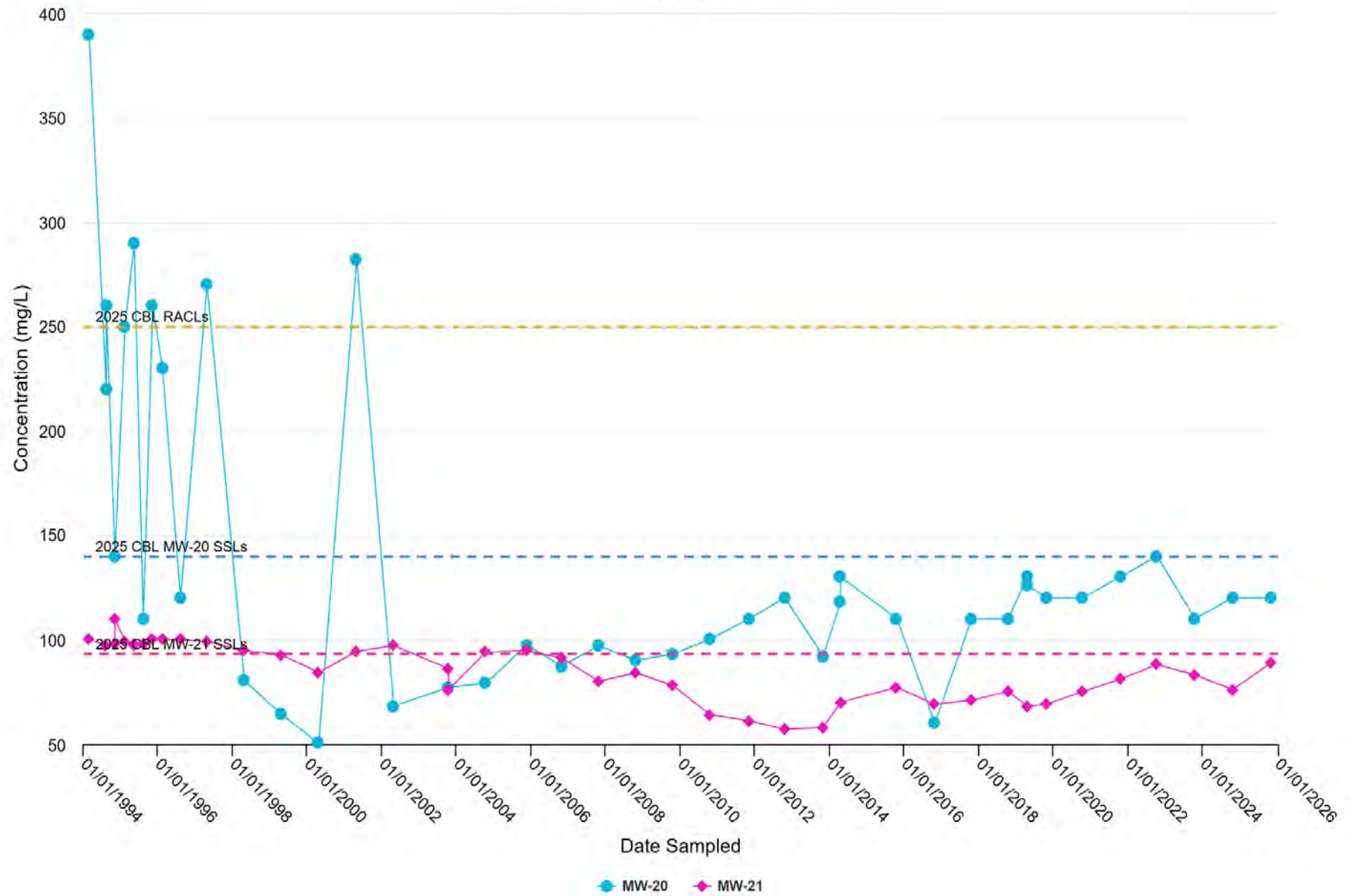


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL
Chemical Oxygen Demand



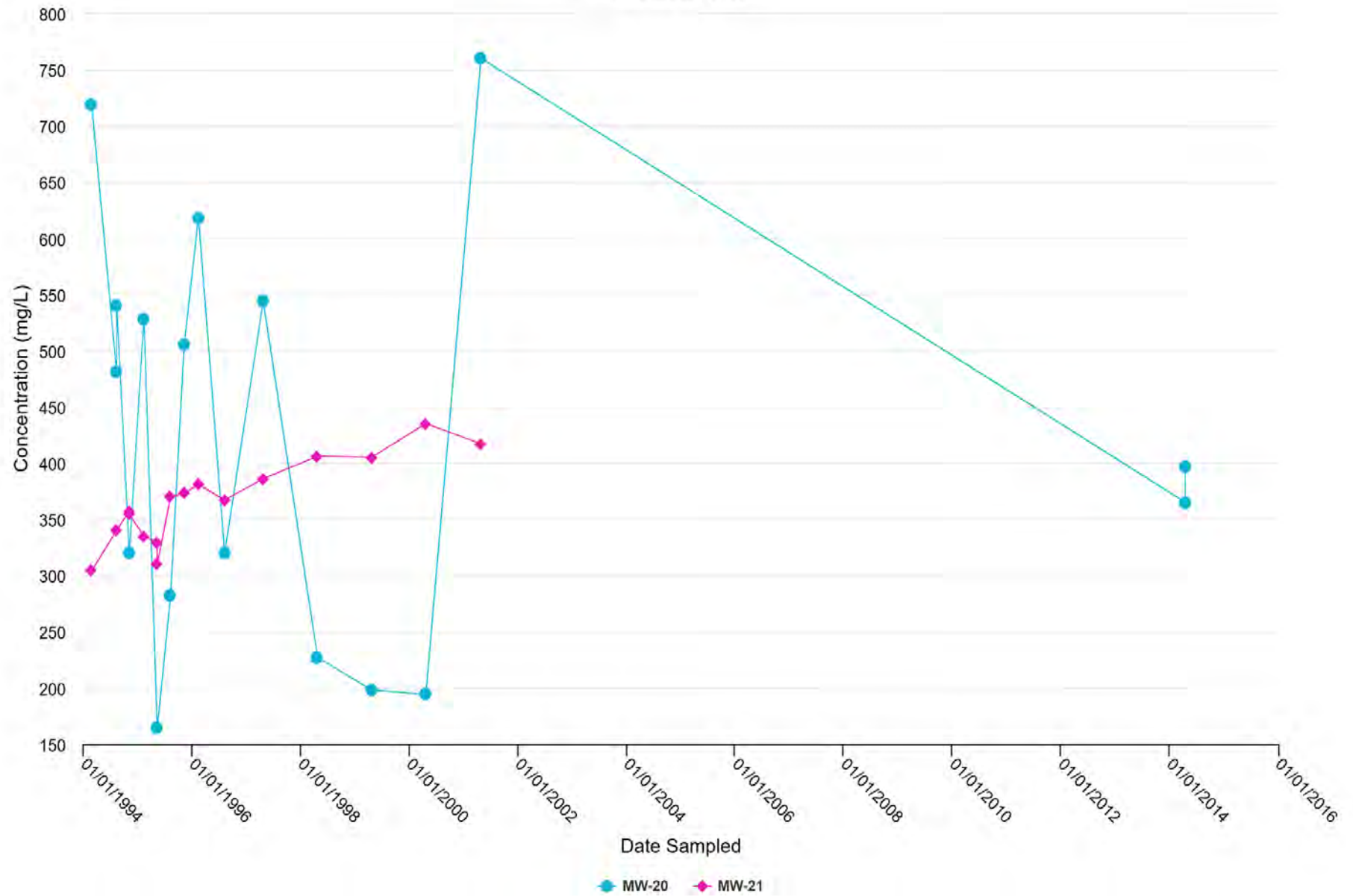
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Chloride

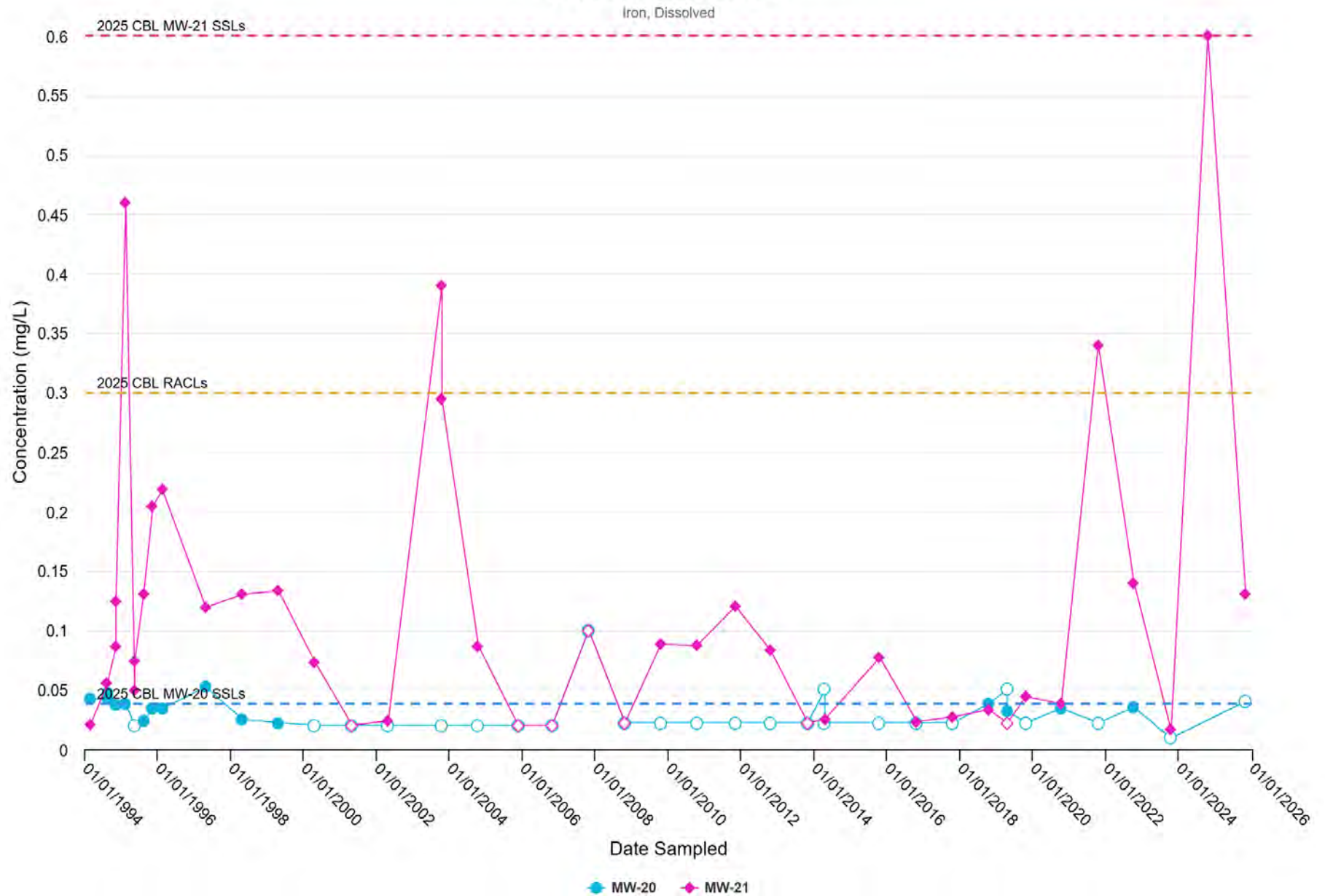


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Hardness as CaCO₃

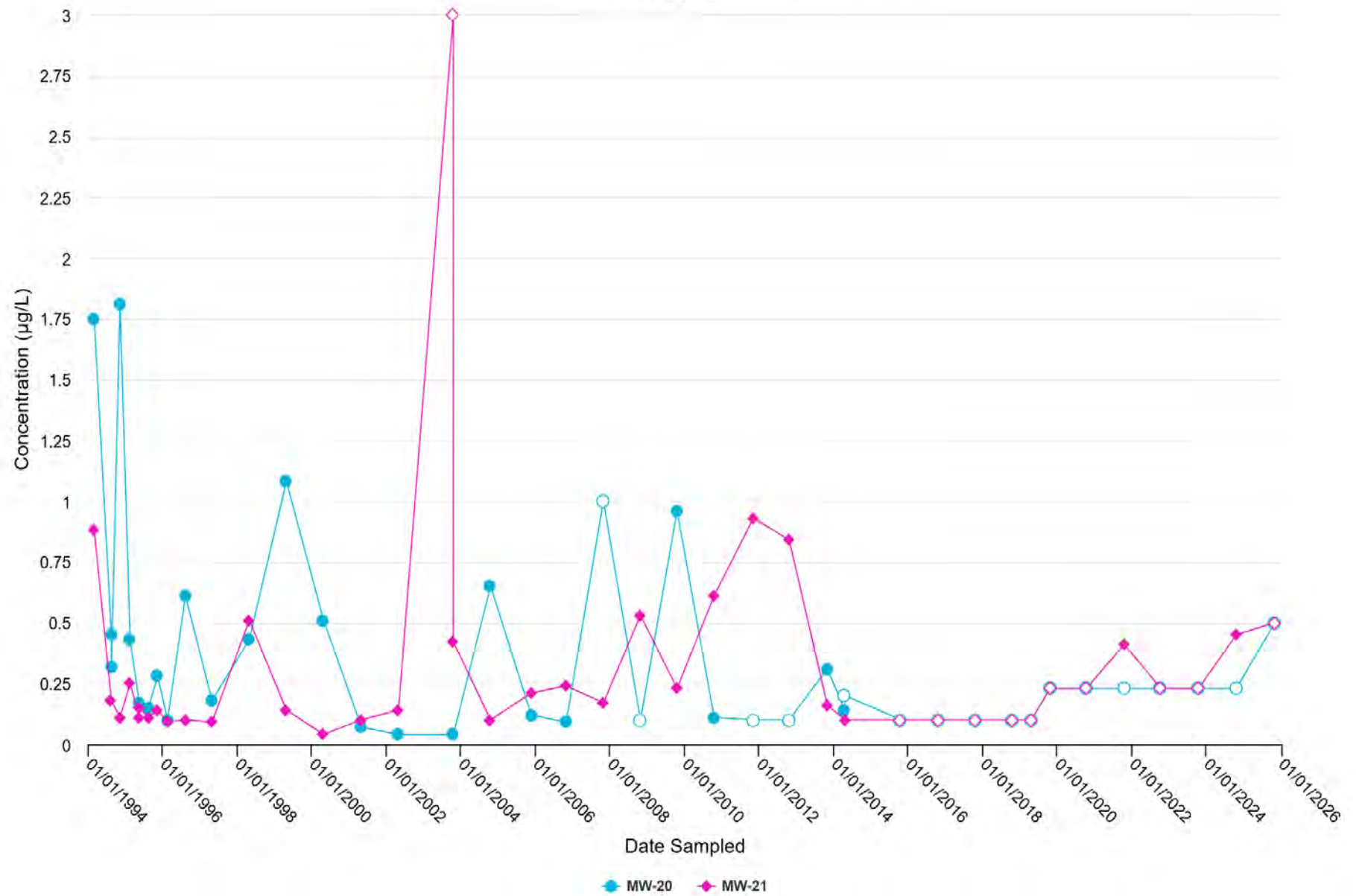


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL



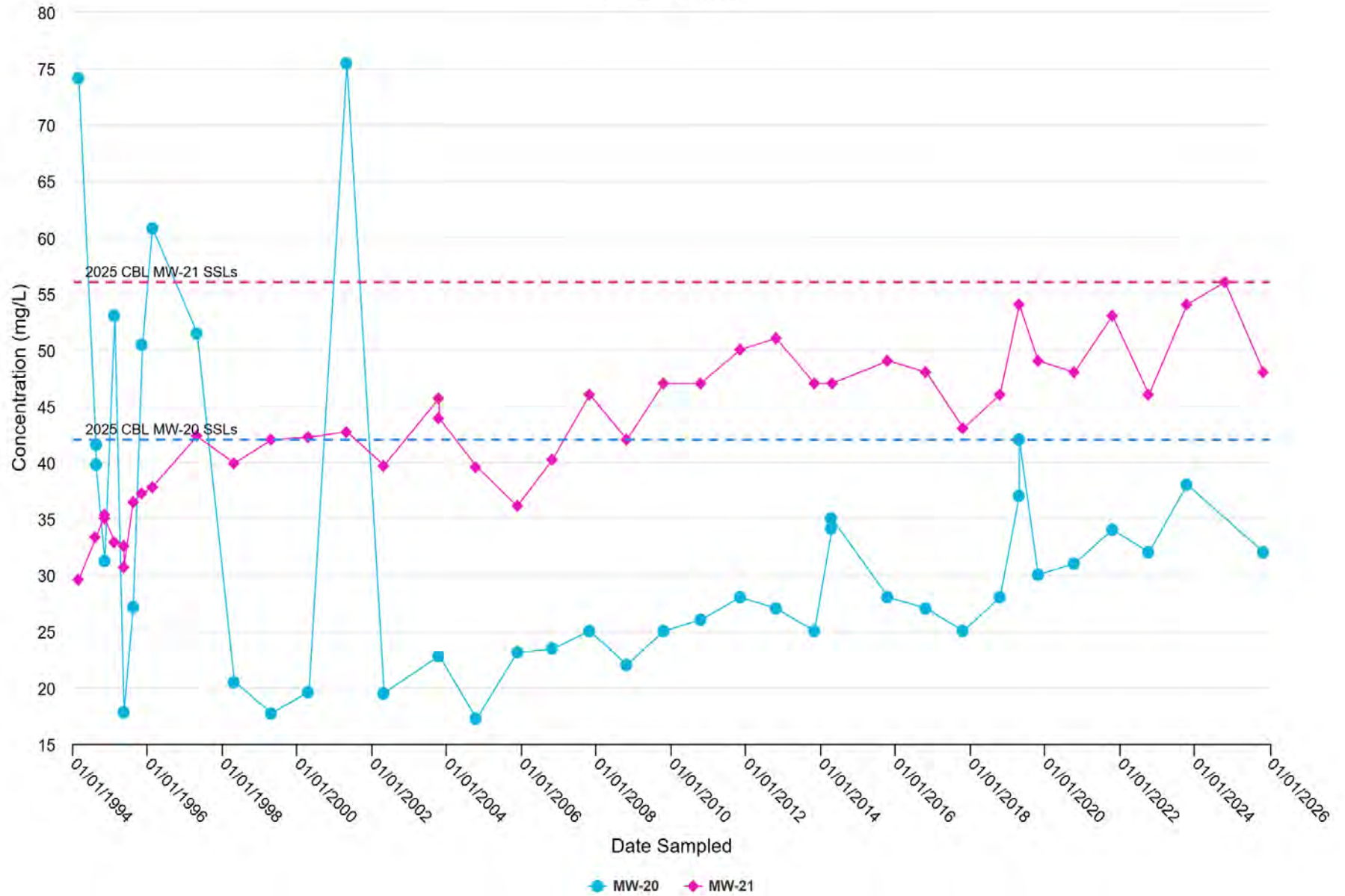
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Lead, Total



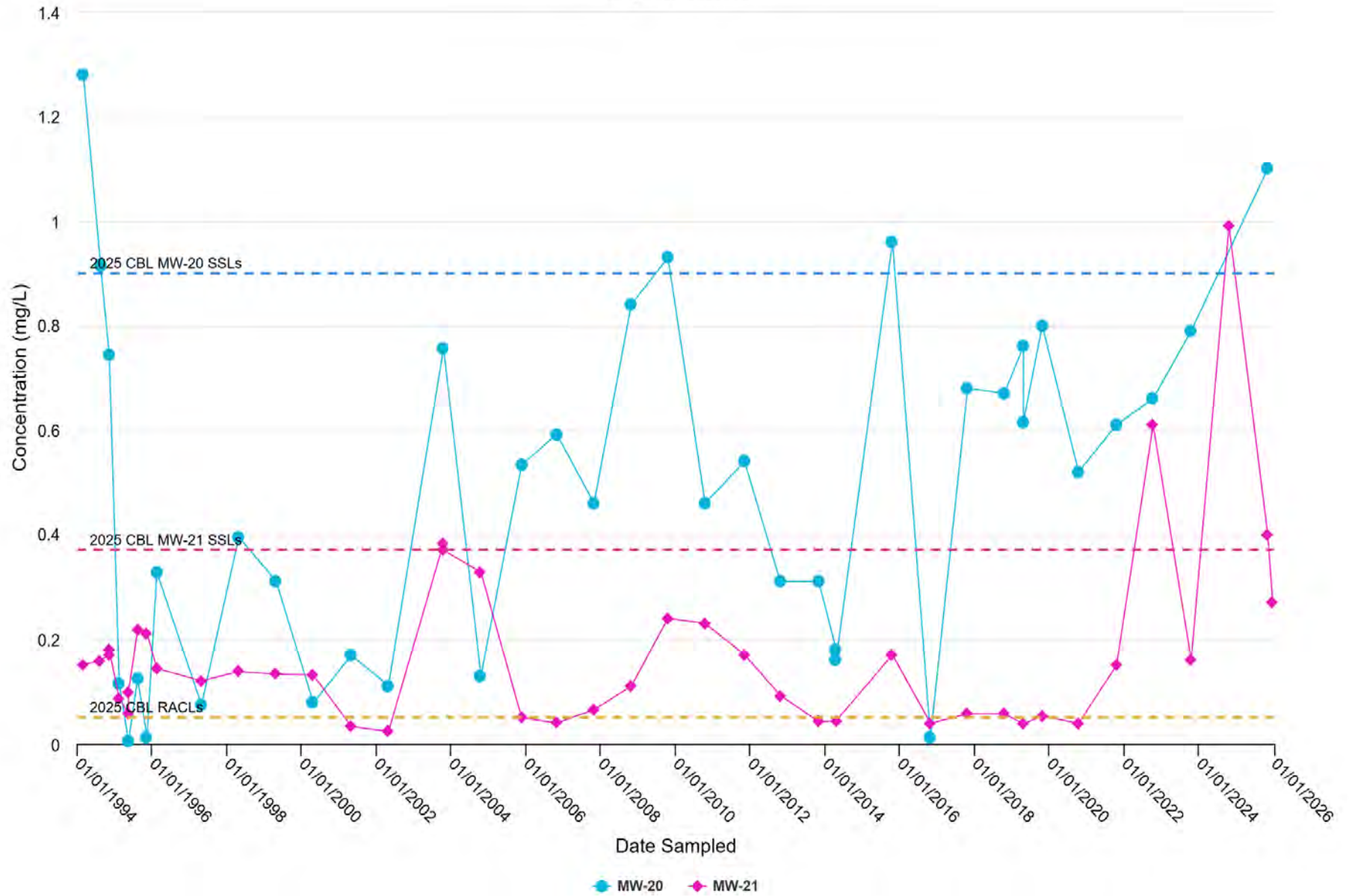
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Magnesium, Dissolved

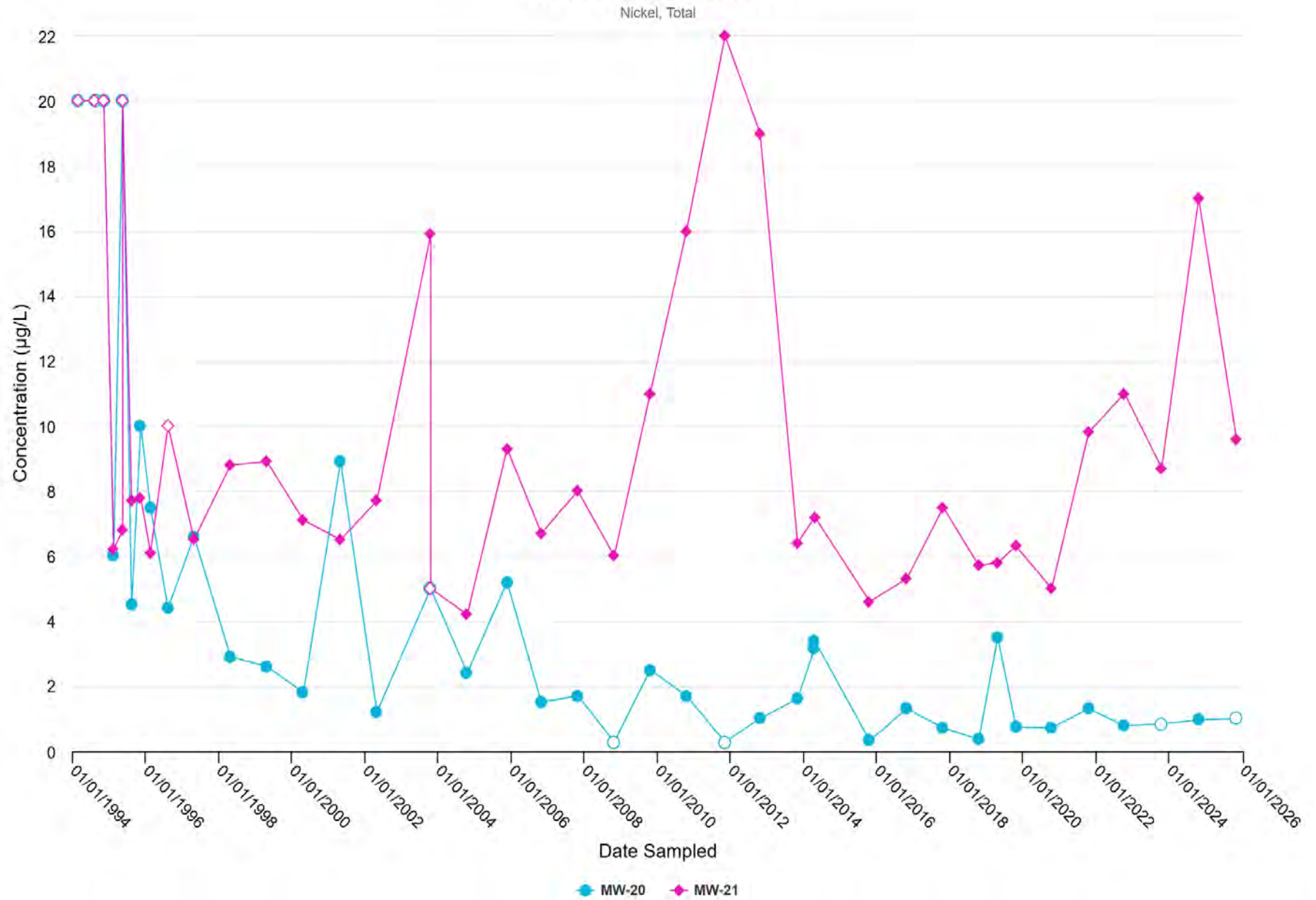


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Manganese, Dissolved

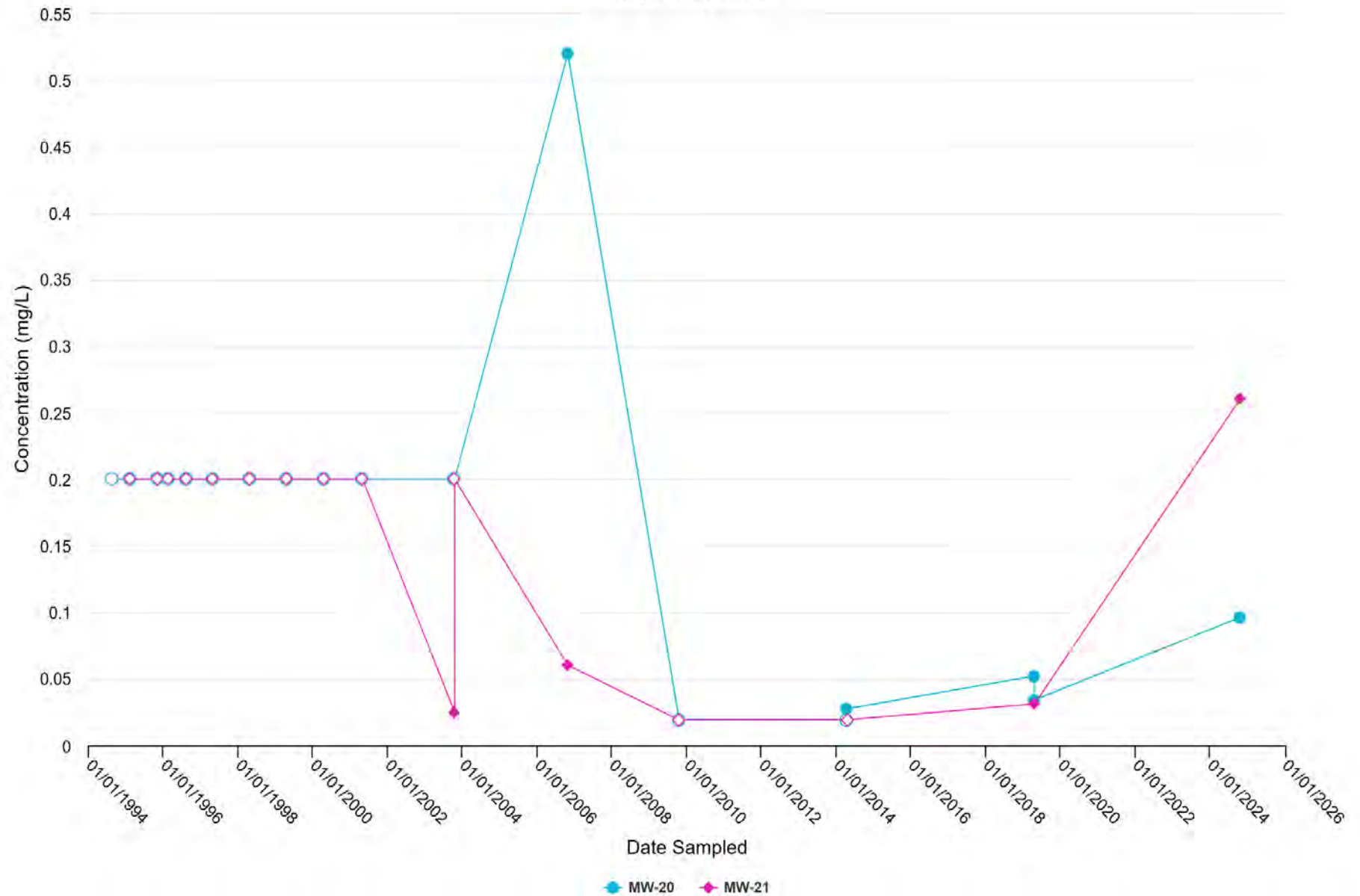


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL



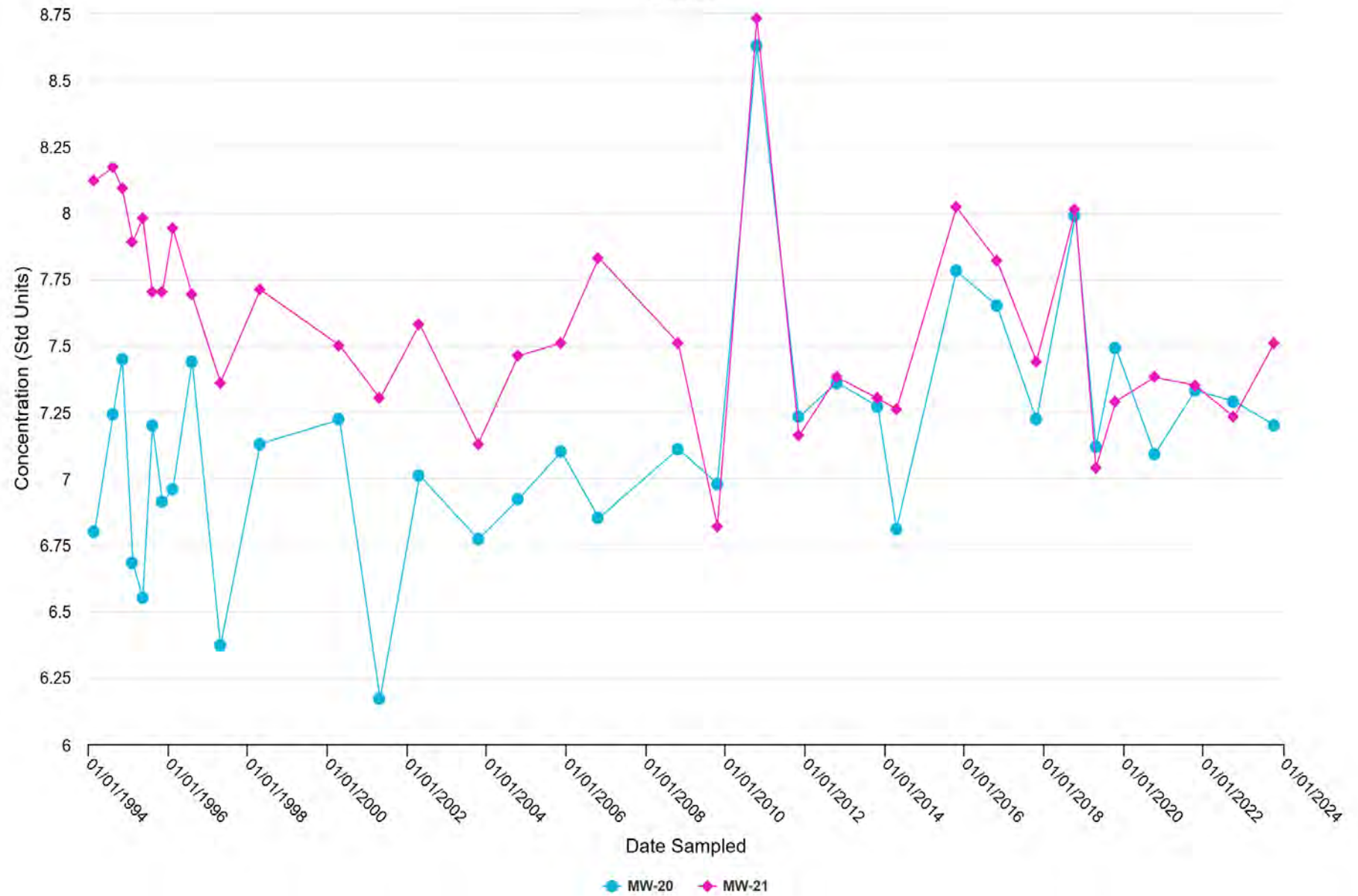
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Nitrogen, Nitrate & Nitrite



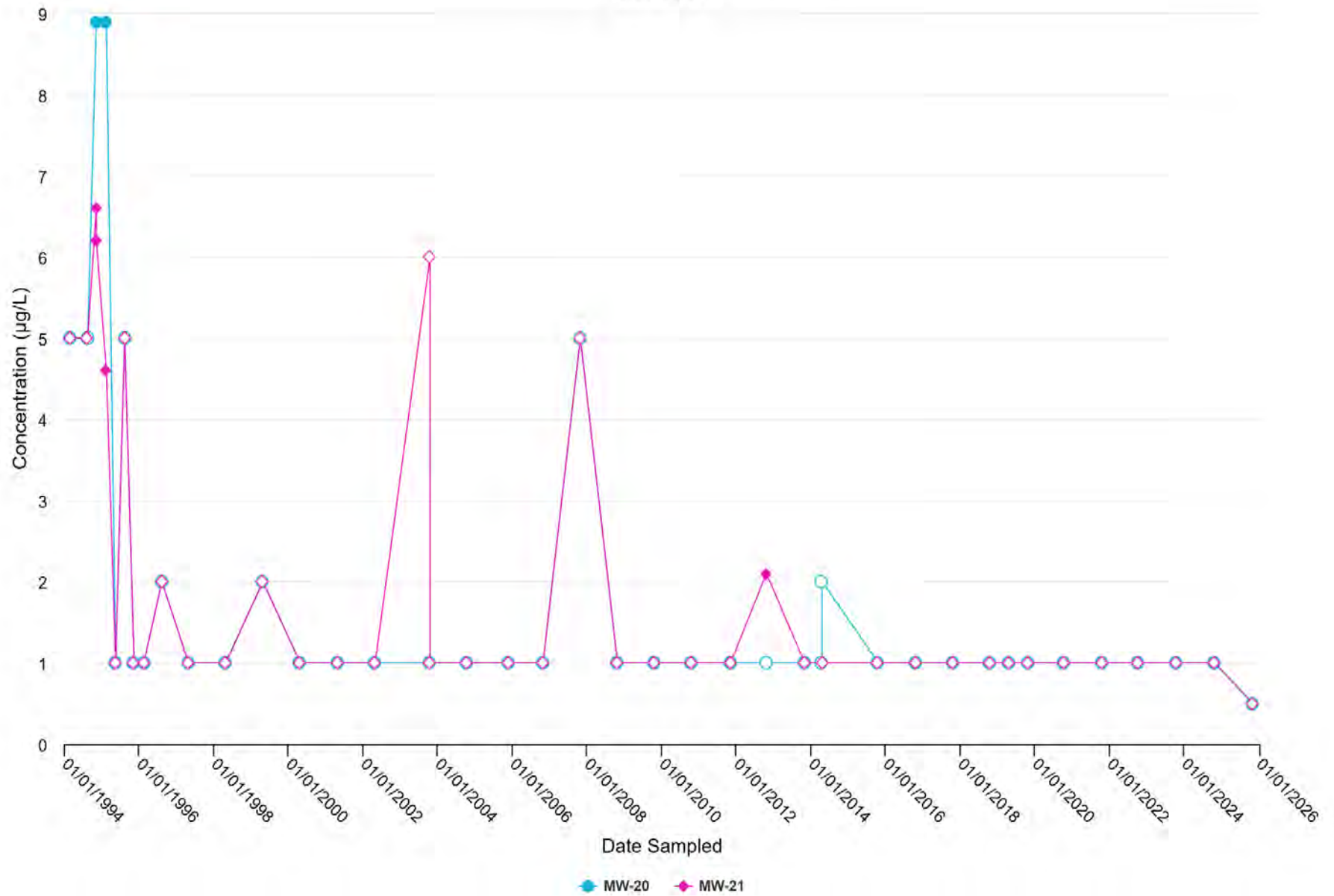
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

pH, Field



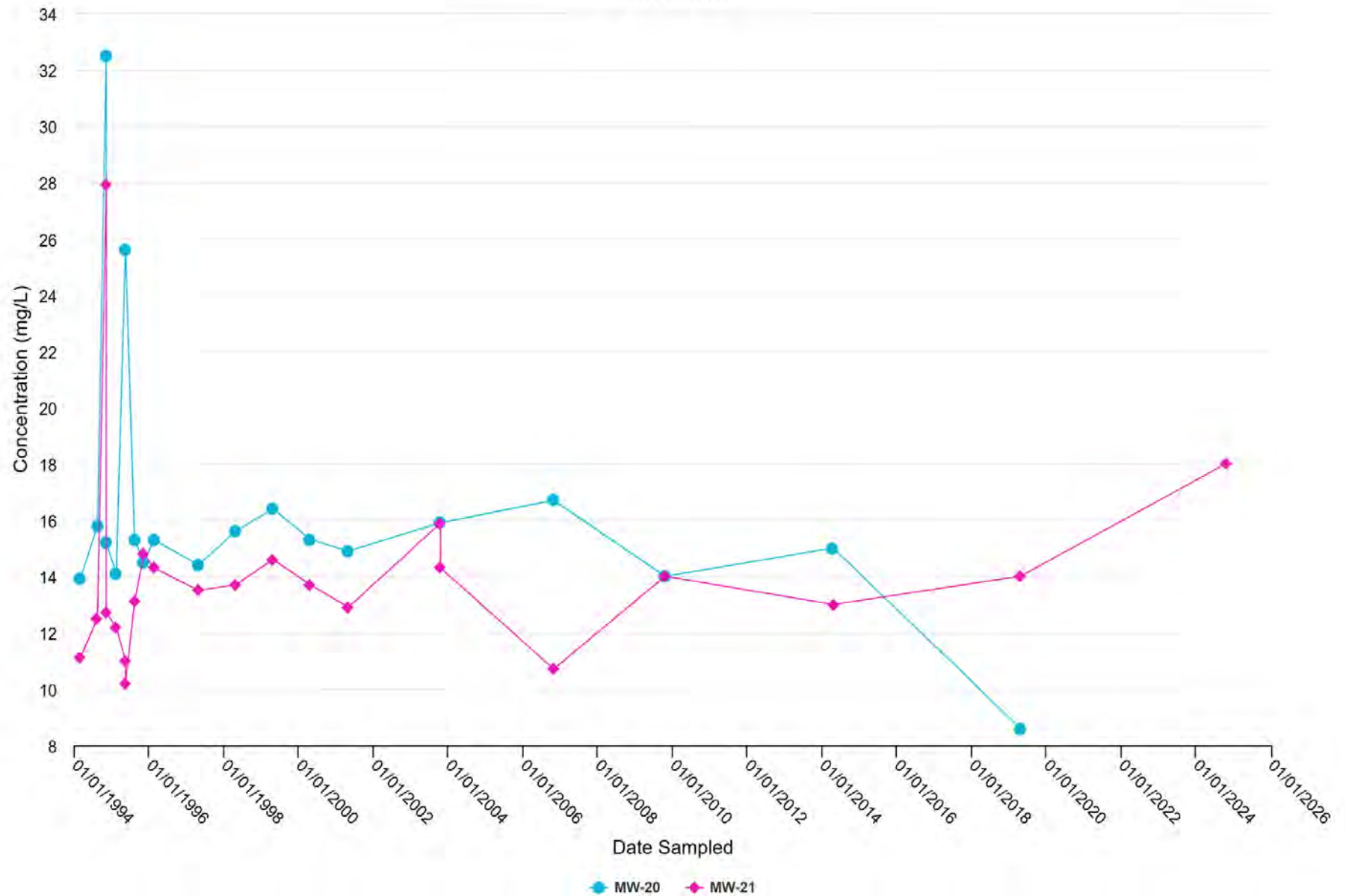
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Selenium, Total



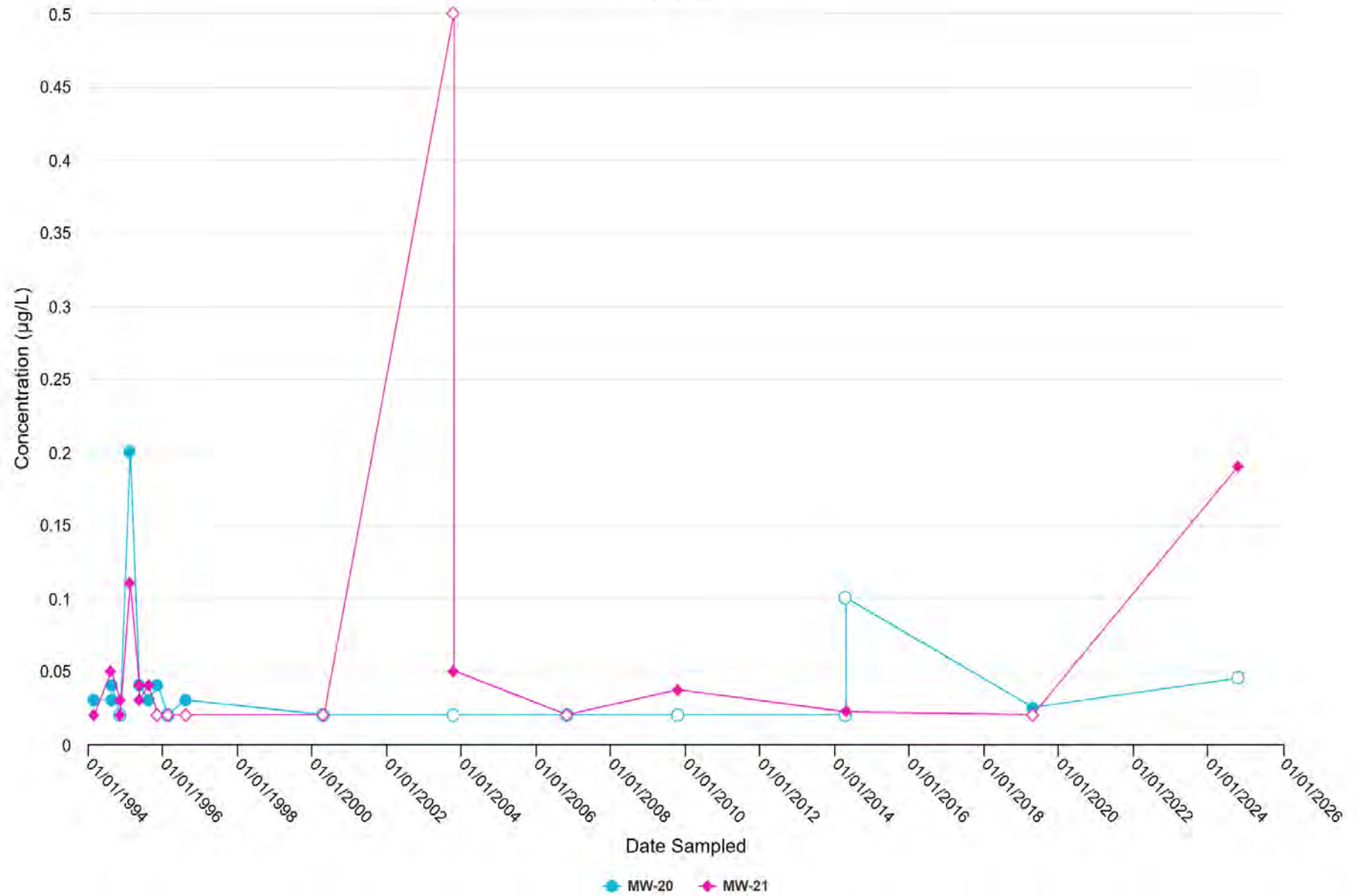
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Silicon, Dissolved



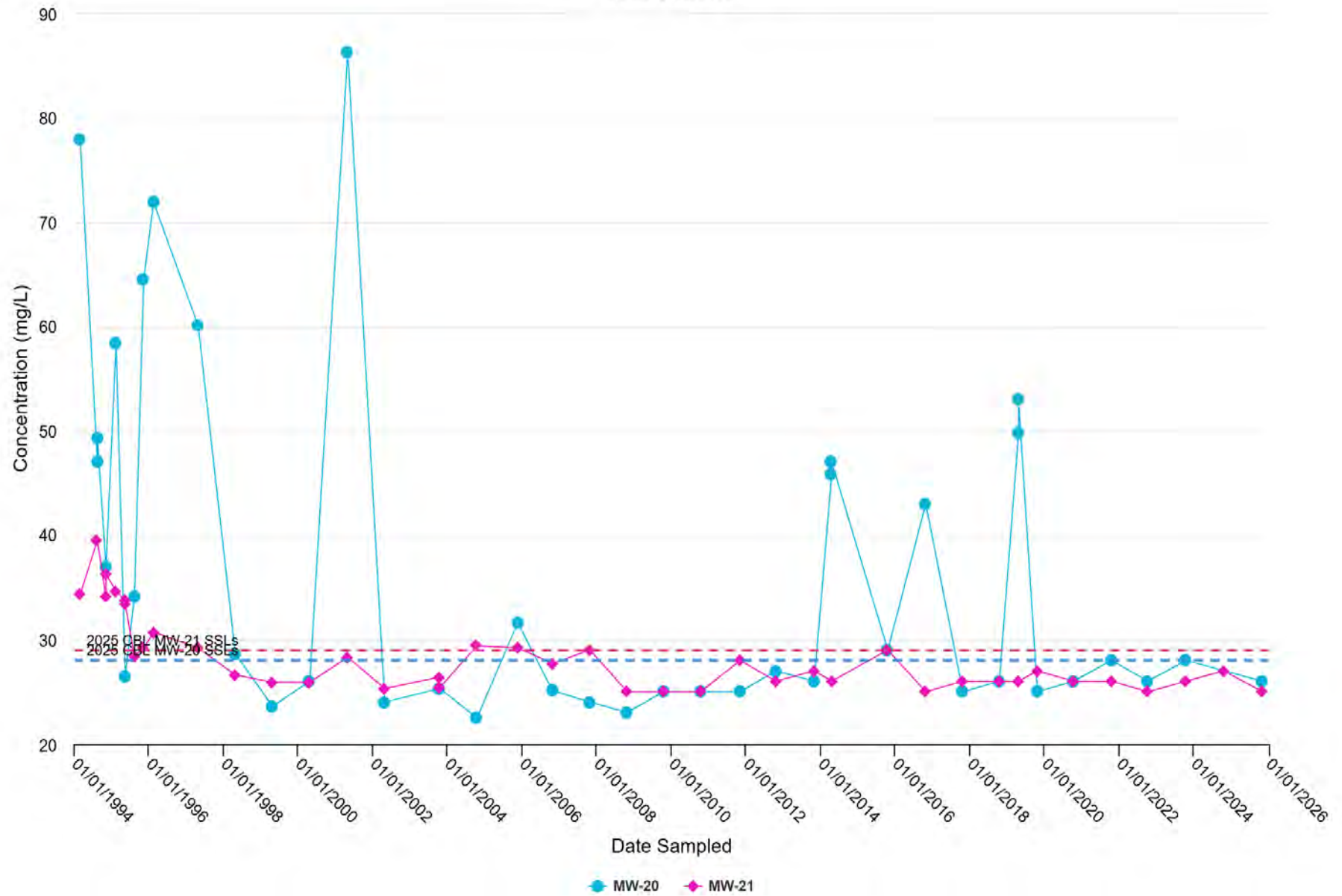
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Silver, Total



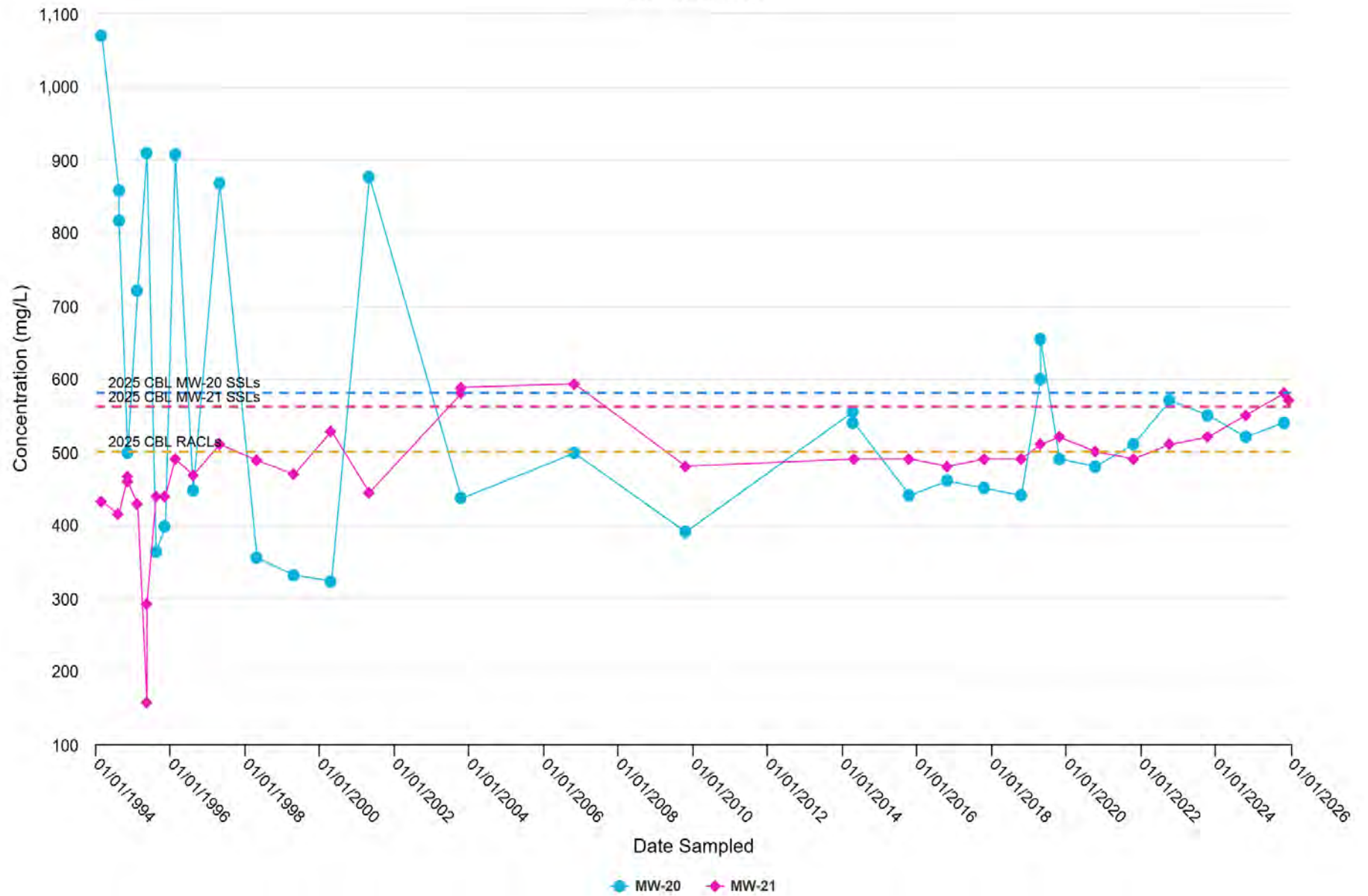
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Sodium, Dissolved



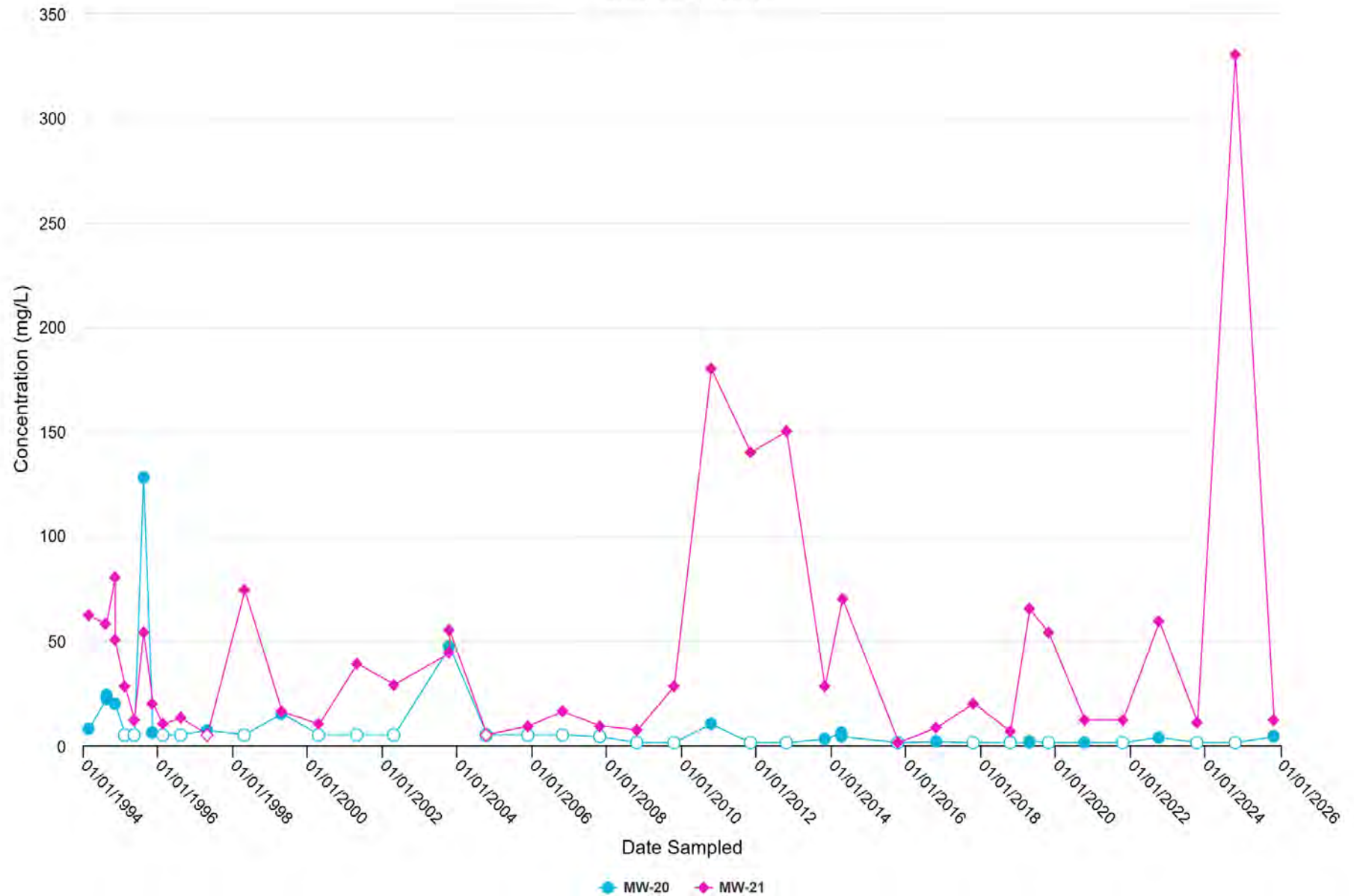
Cell 6 Time Series (MW-20, MW-21) COFFIN BUTTE LANDFILL

Solids, Total Dissolved

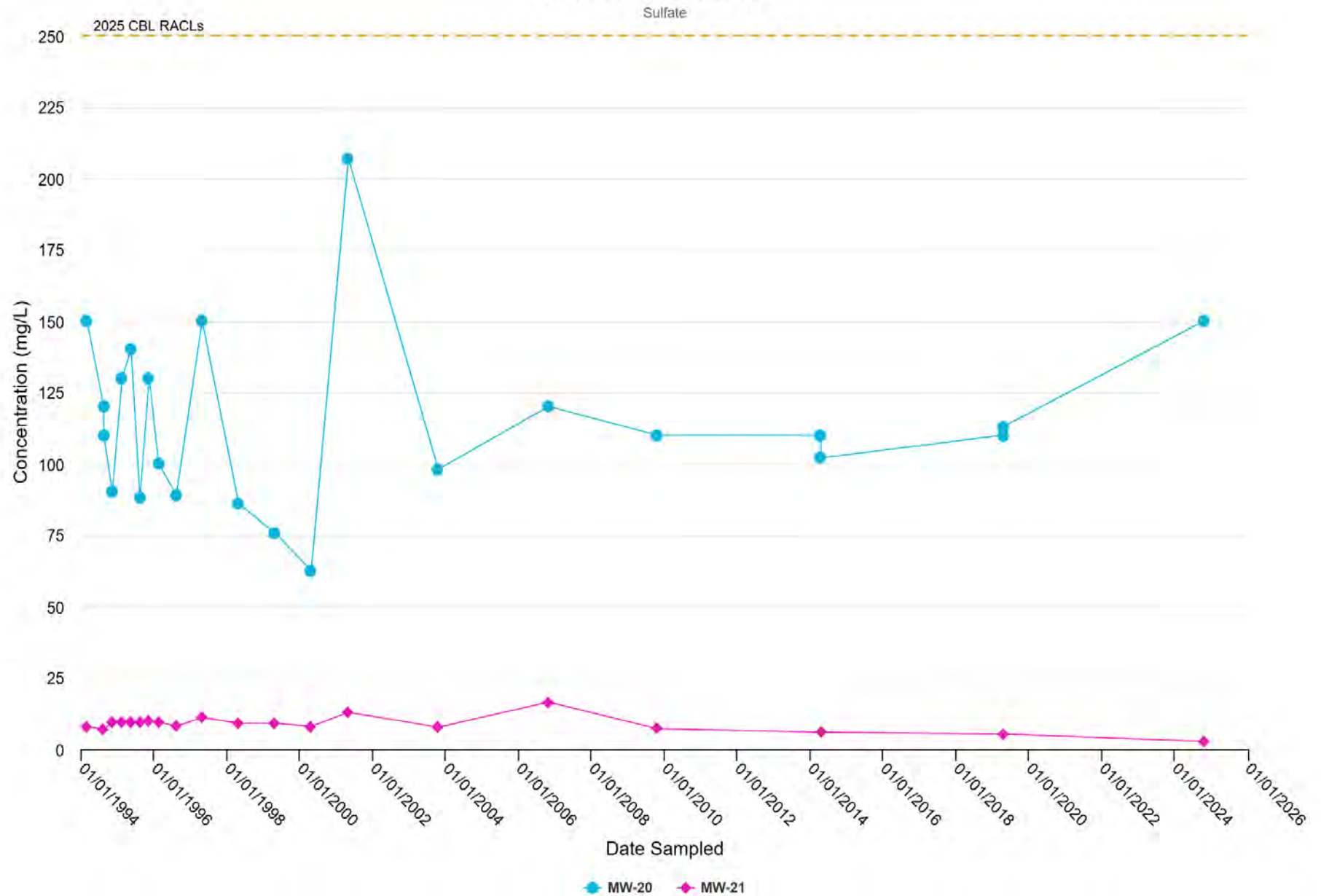


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Solids, Total Suspended

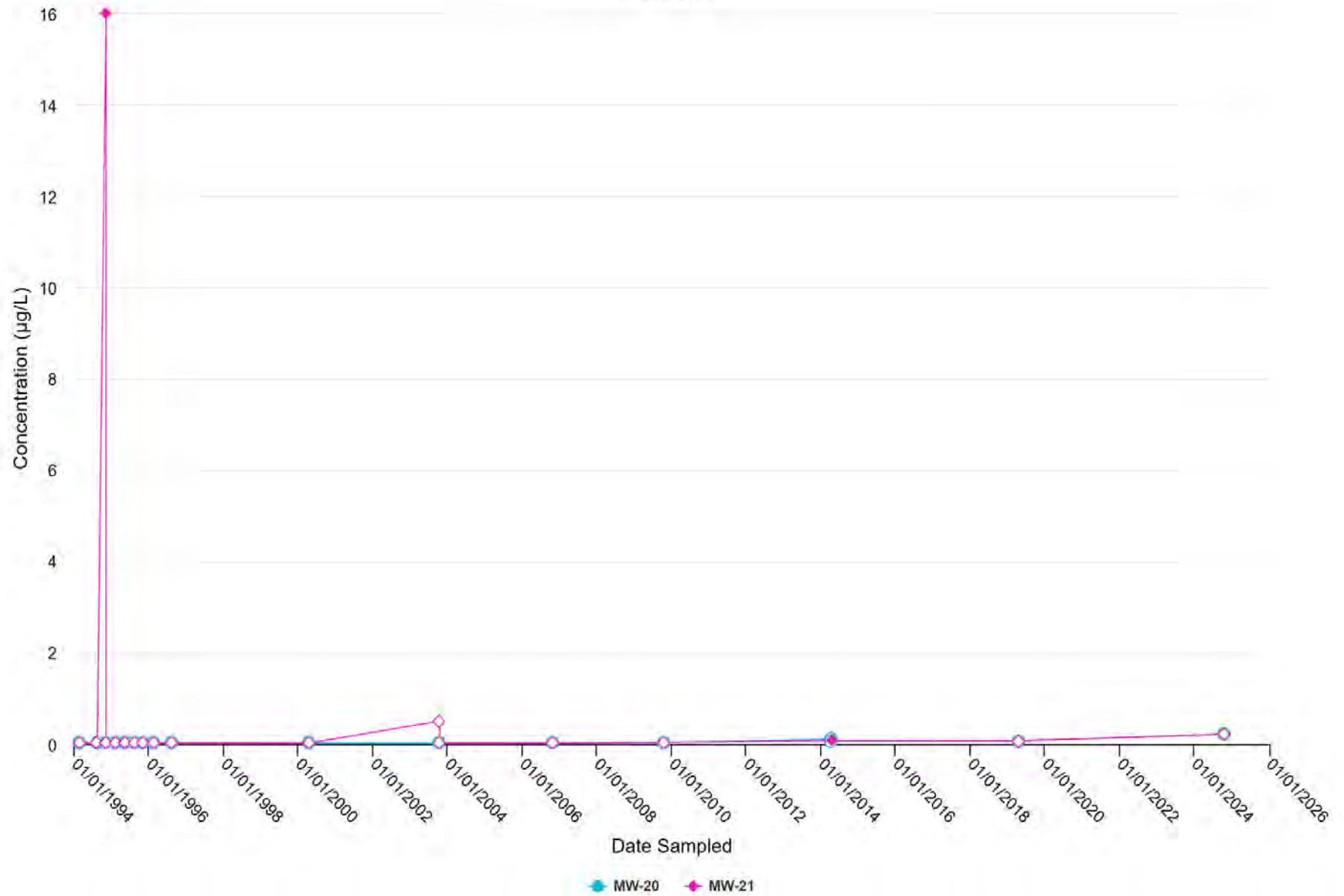


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL



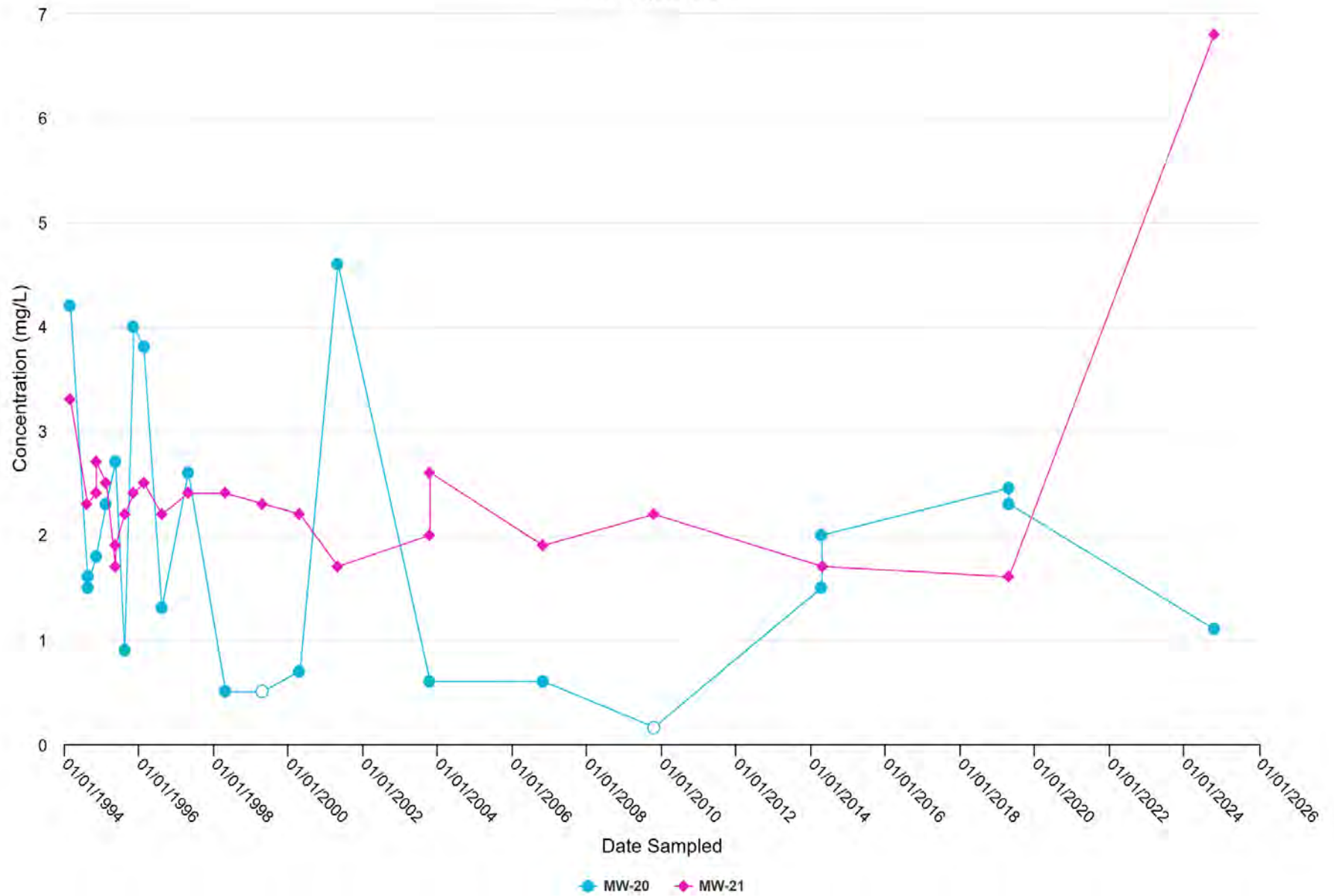
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Thallium, Total



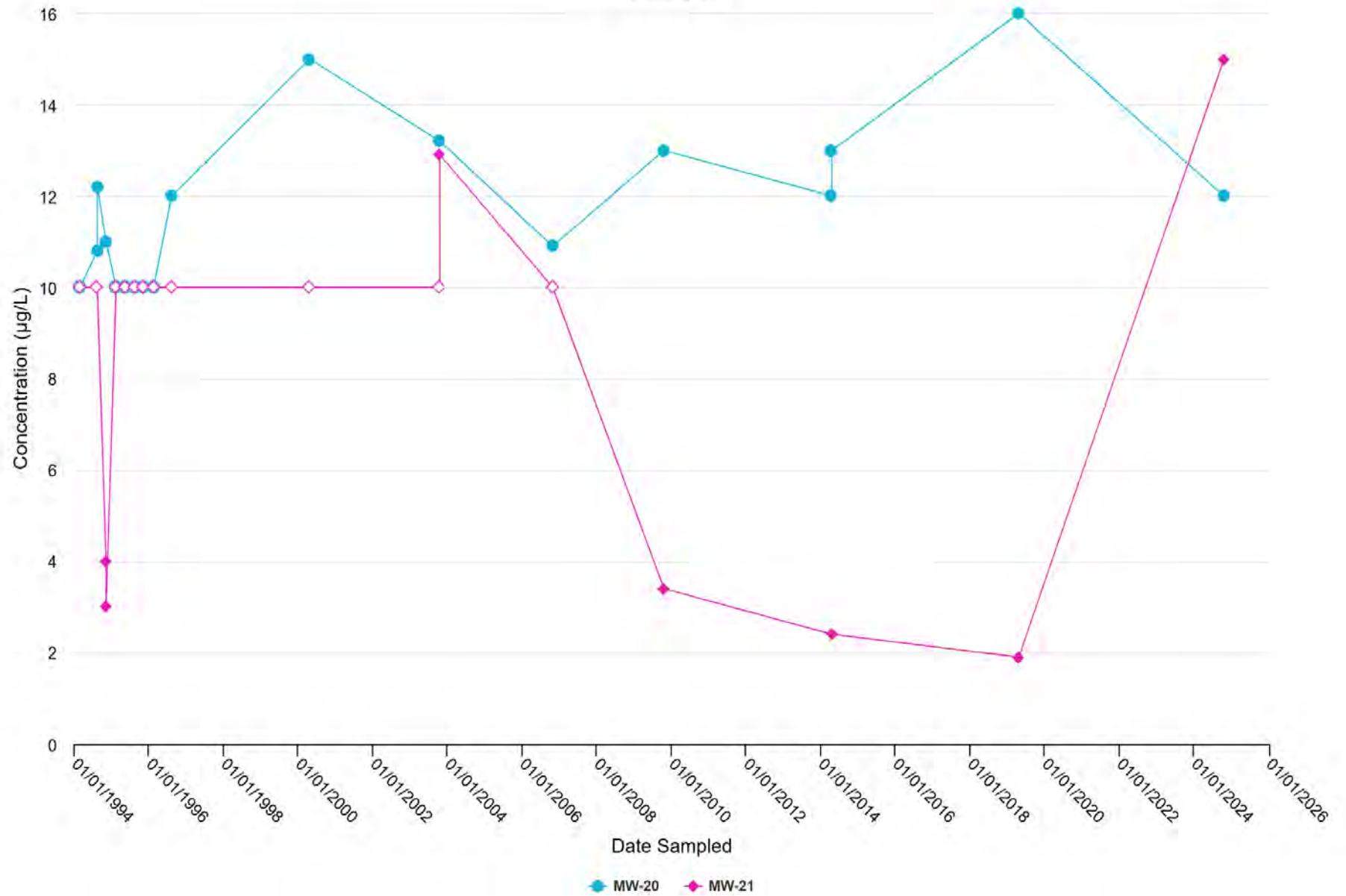
Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

Total Organic Carbon

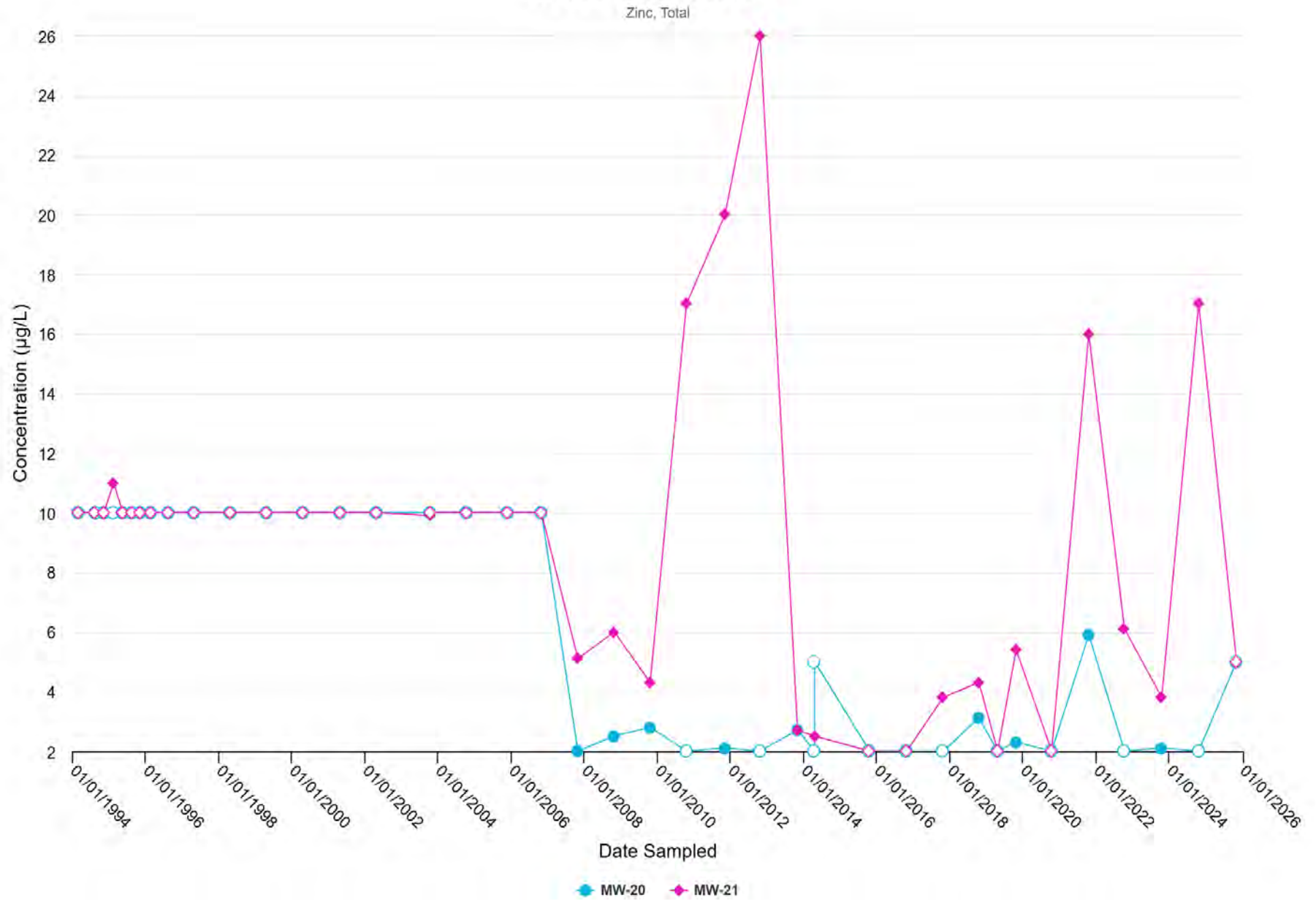


Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

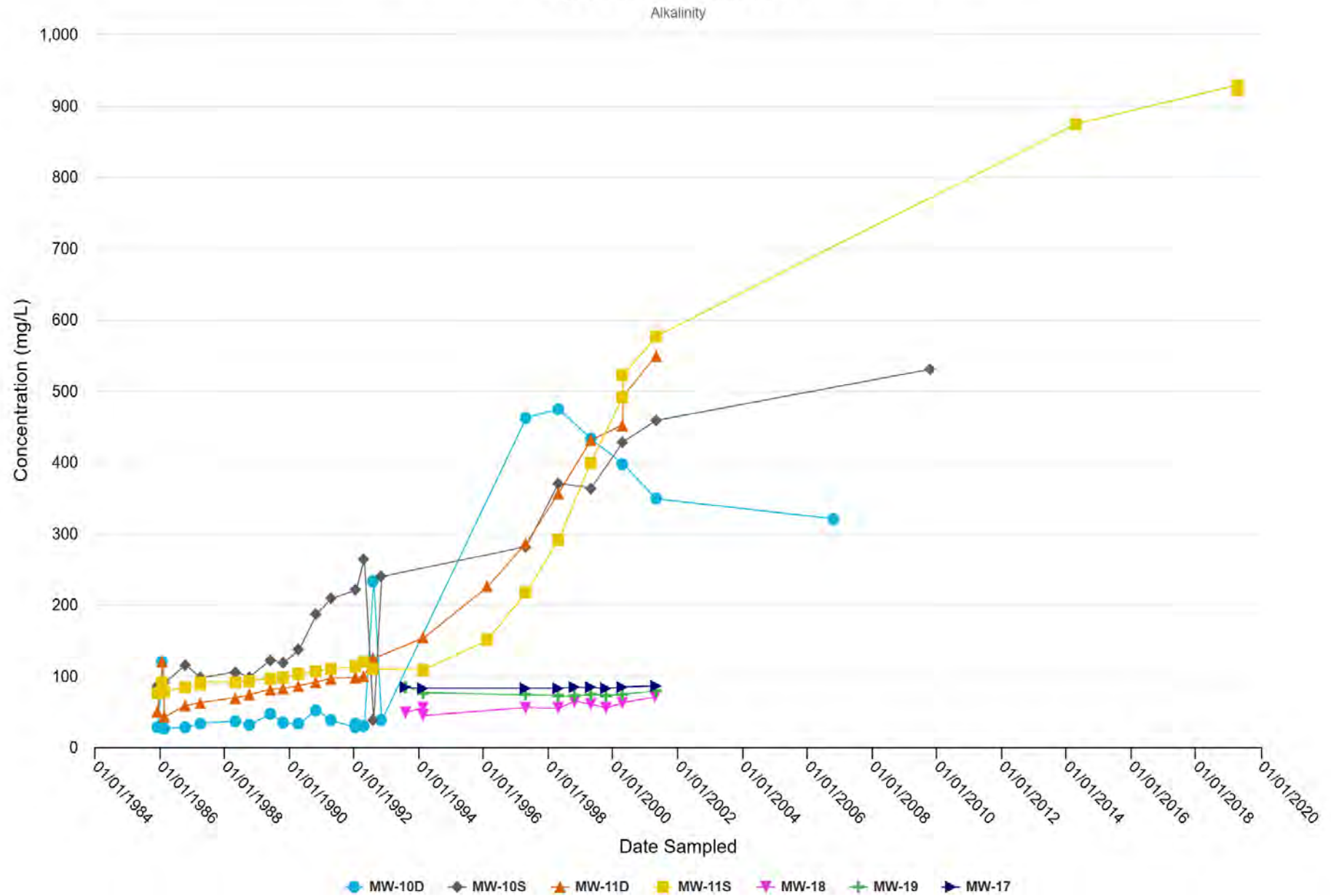
Vanadium, Total



Cell 6 Time Series (MW-20, MW-21)
COFFIN BUTTE LANDFILL

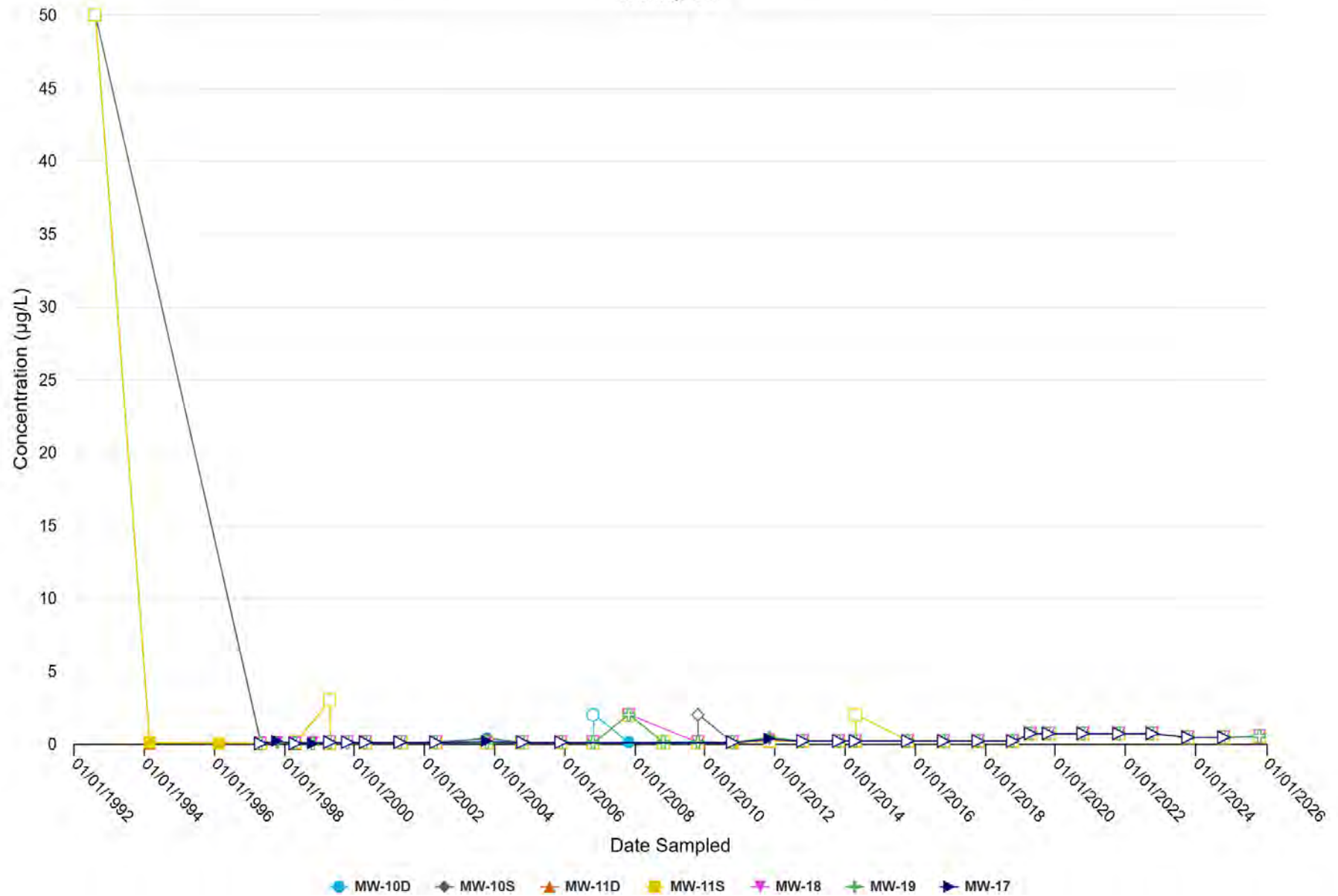


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL



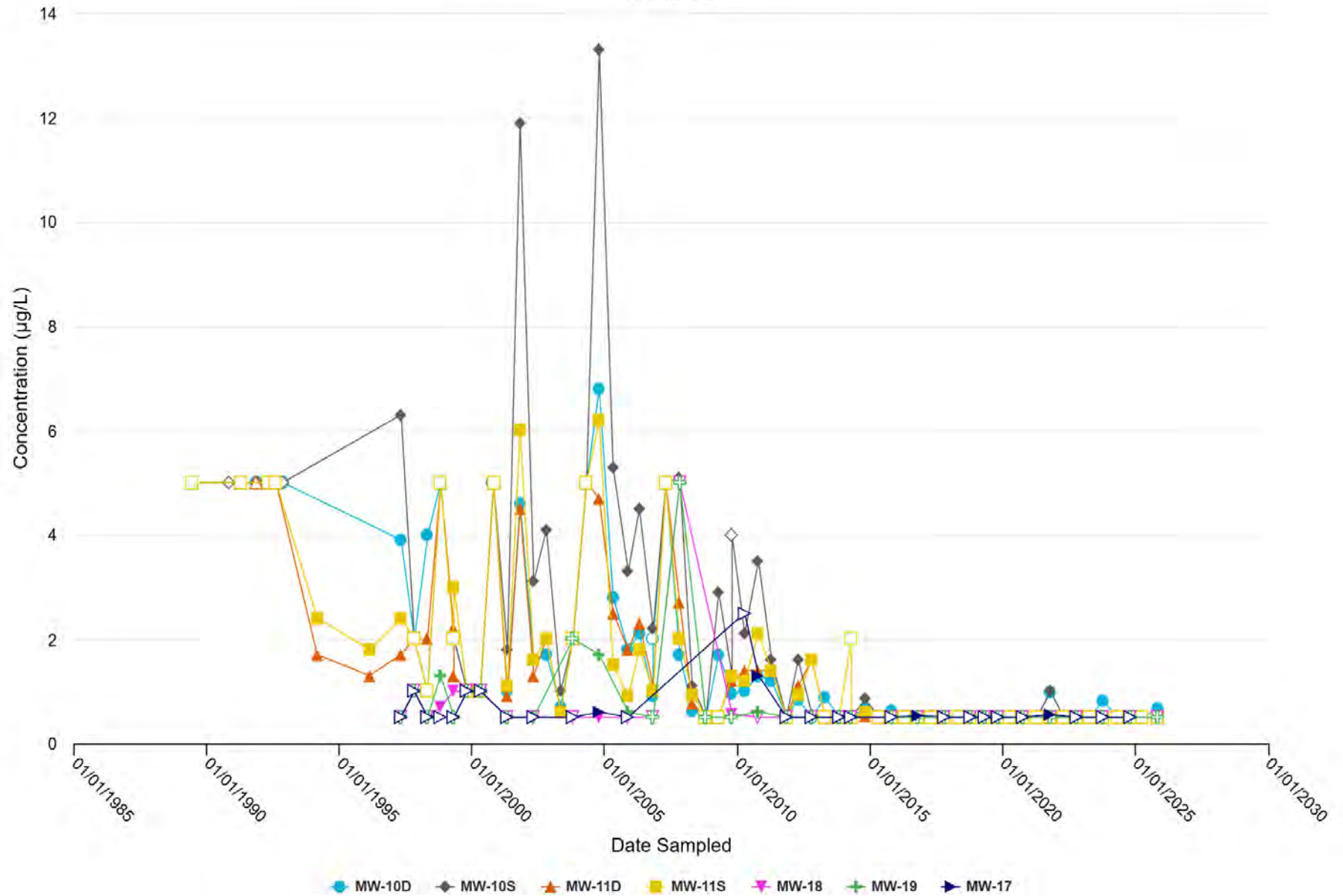
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Antimony, Total



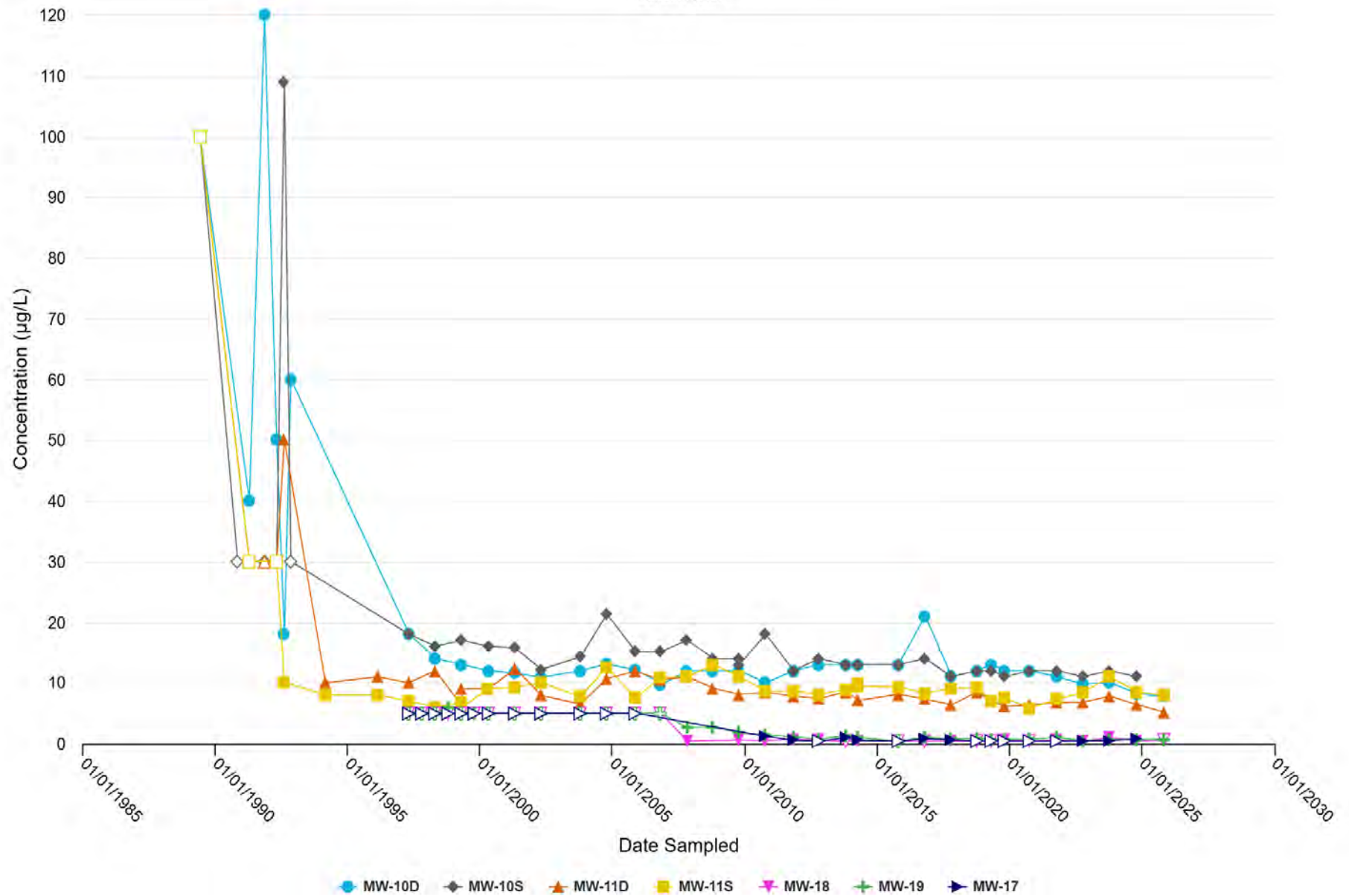
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL

Arsenic, Total

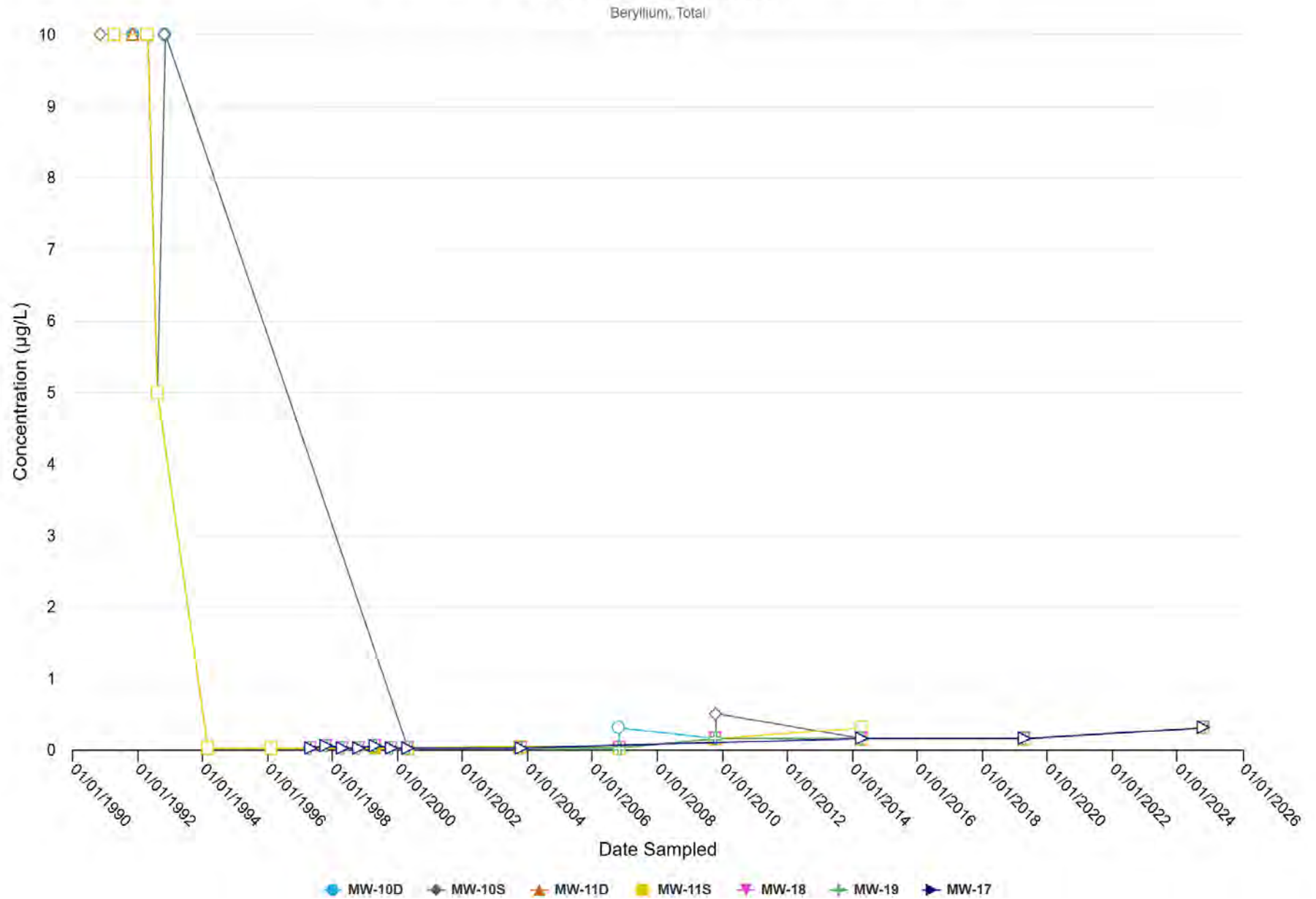


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

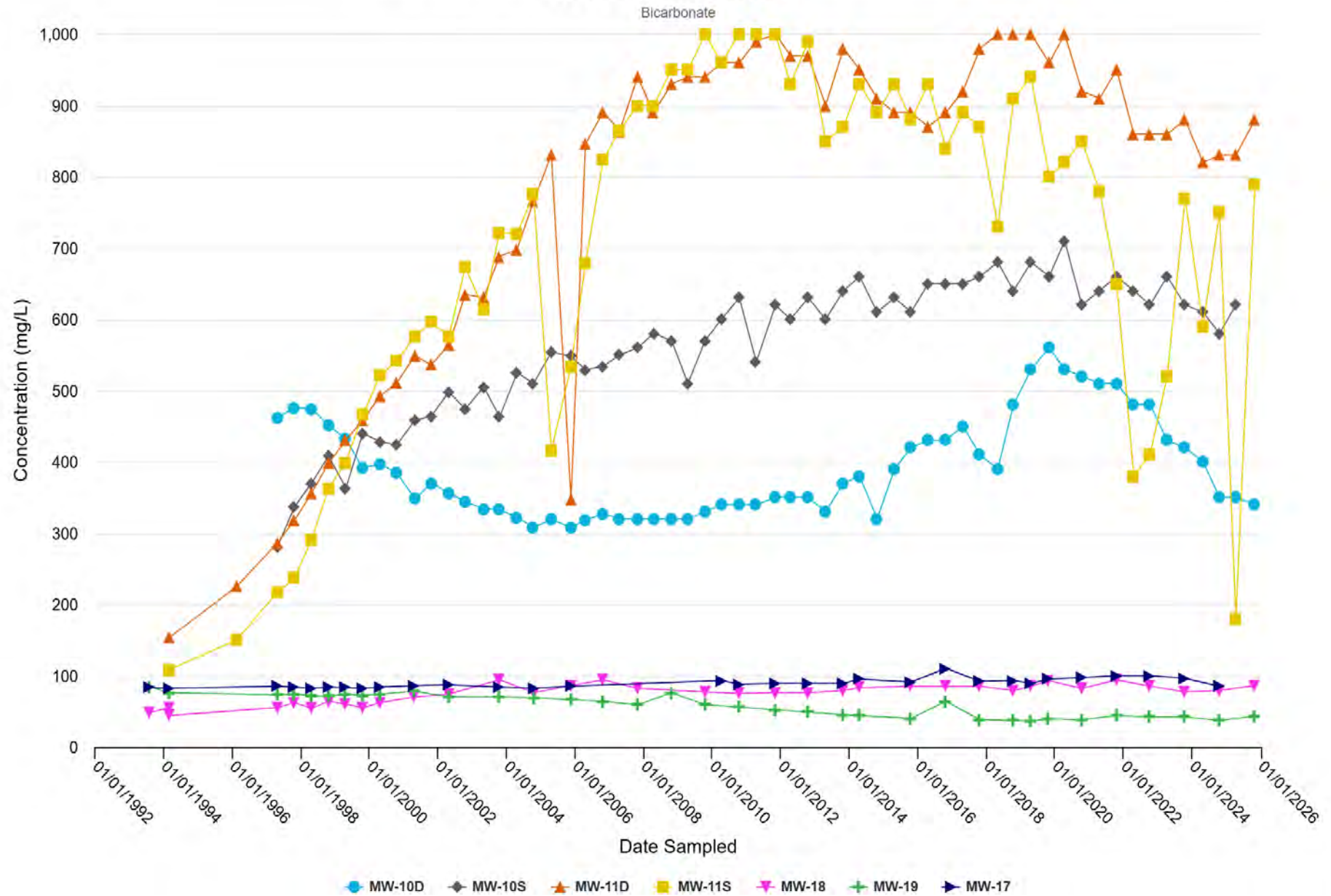
Barium, Total



Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

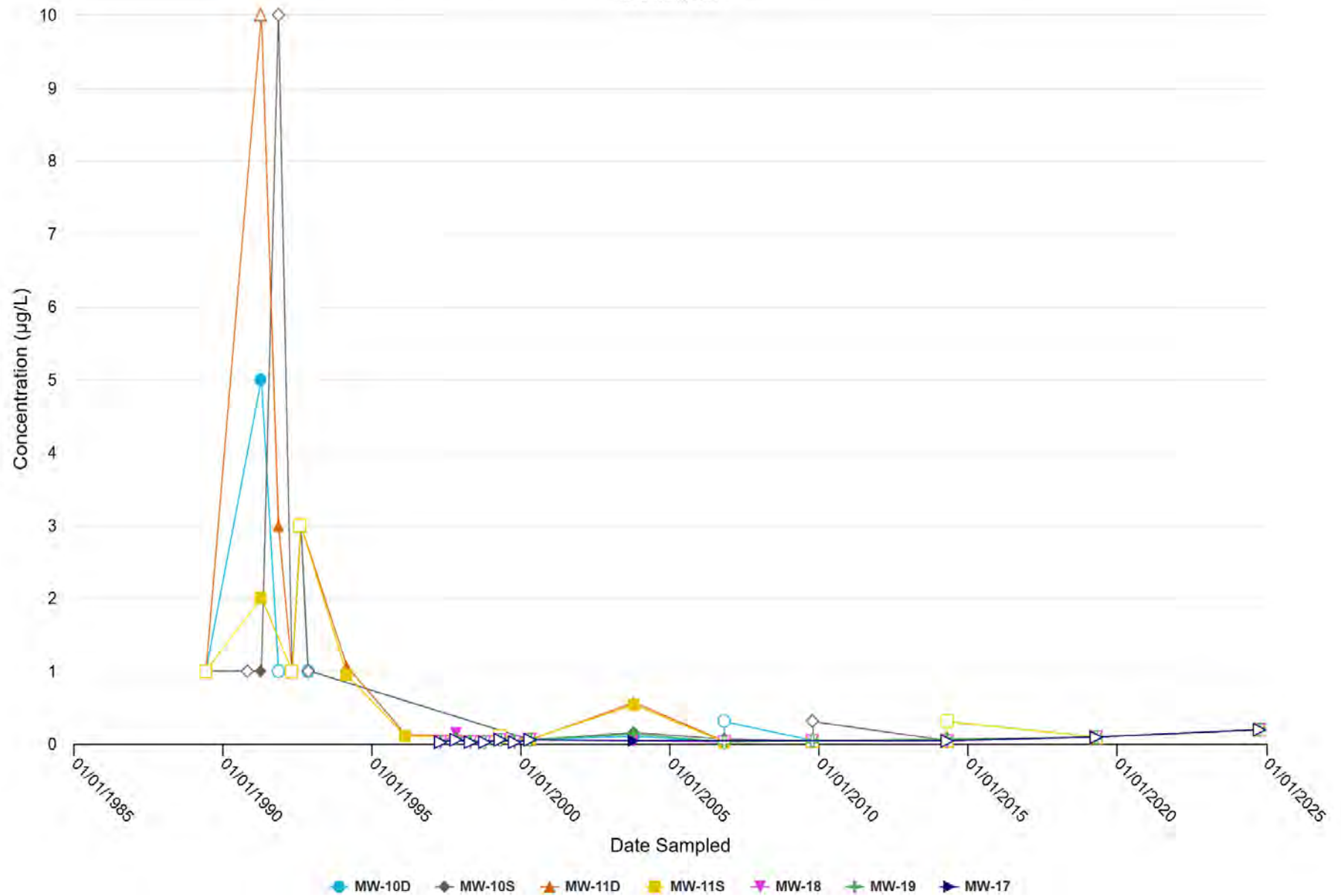


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL



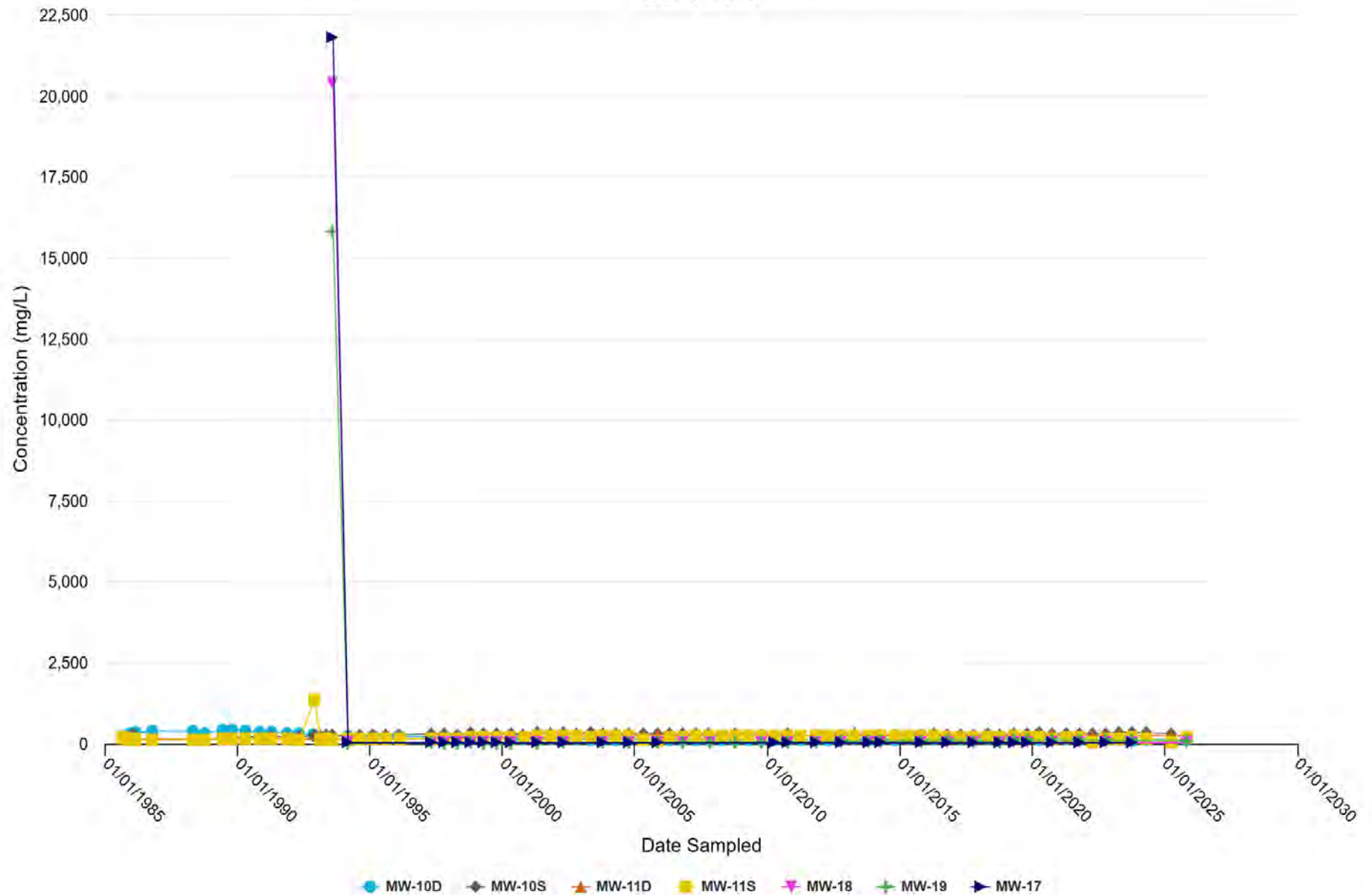
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Cadmium, Total



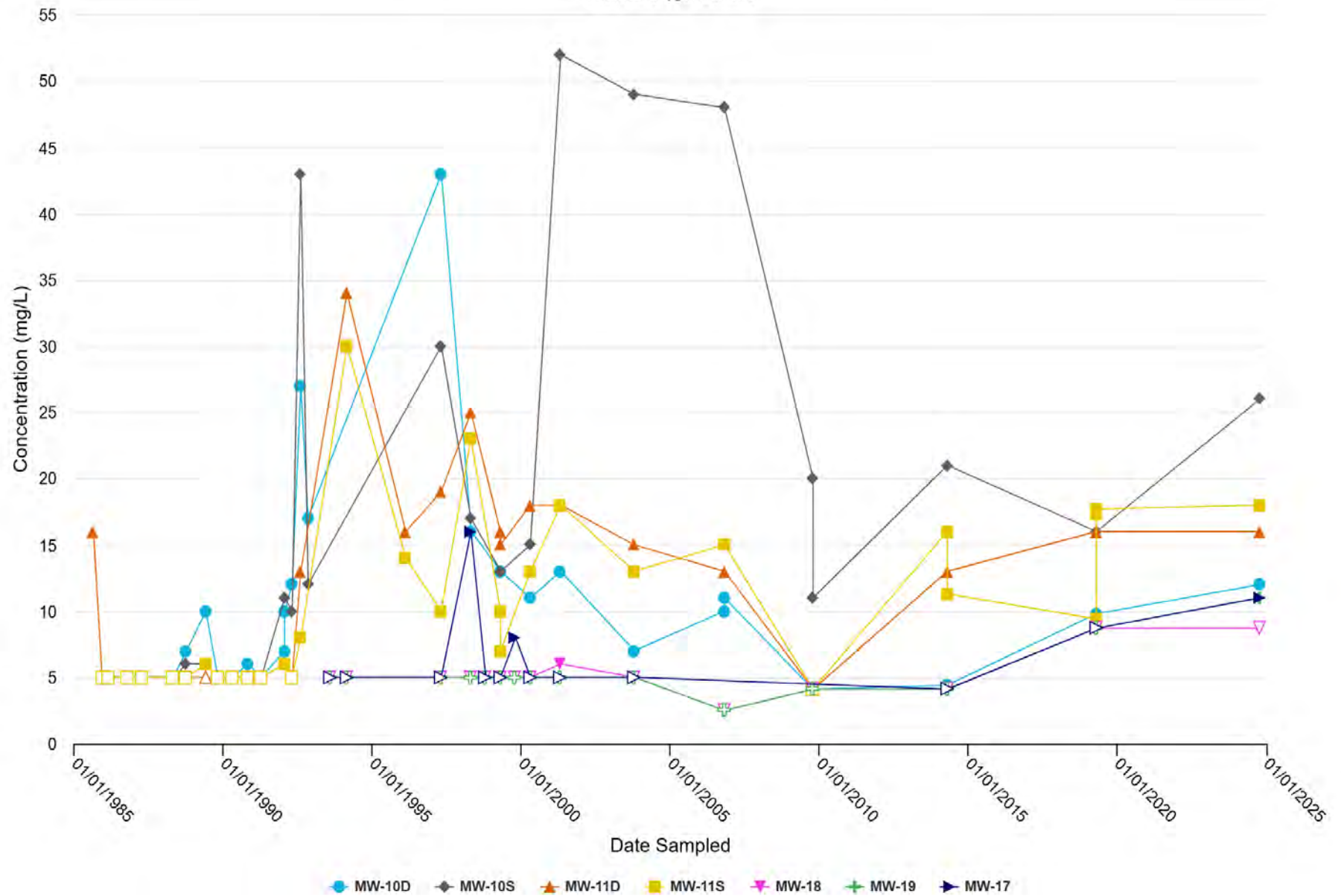
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Calcium, Dissolved



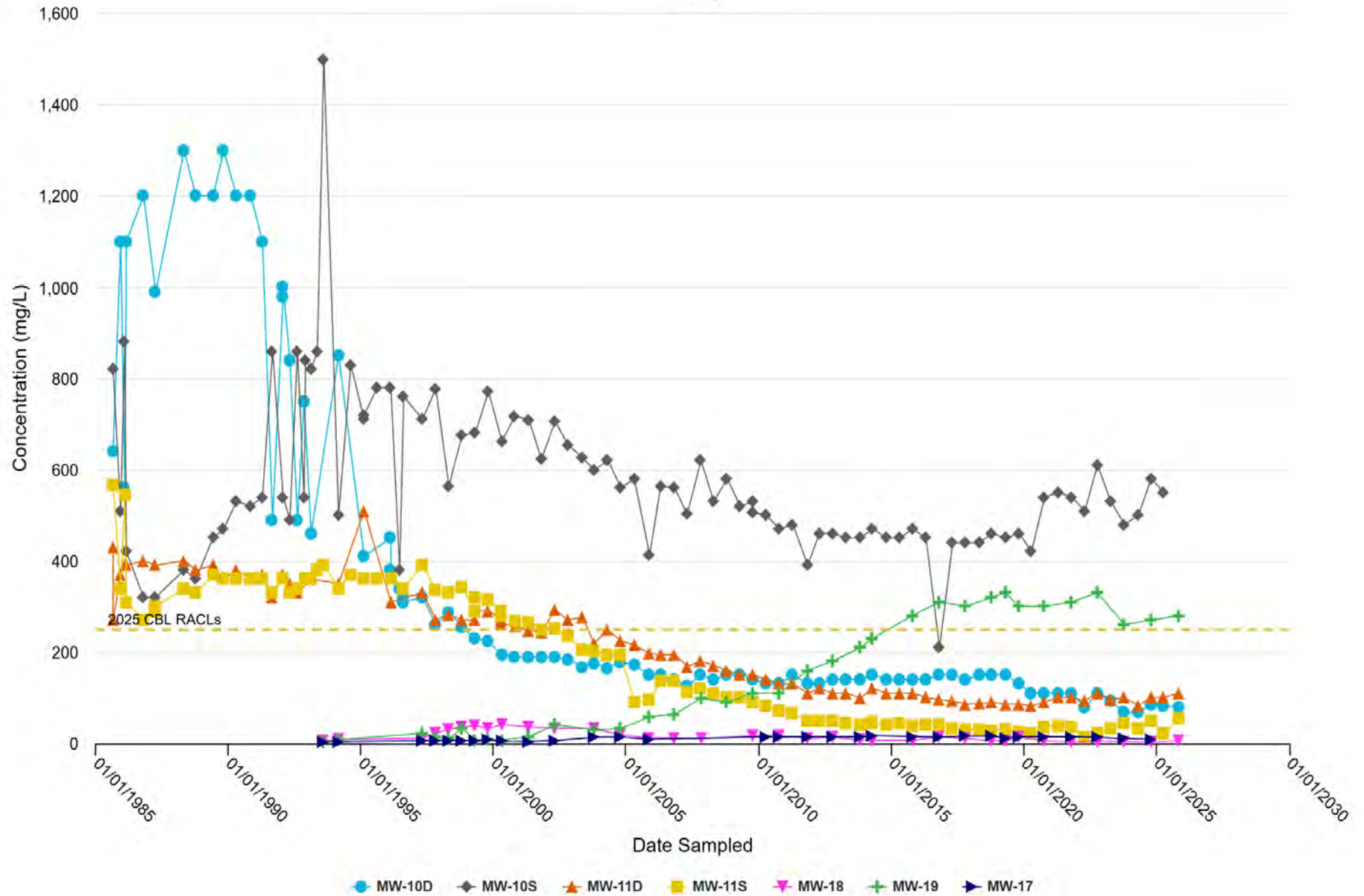
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL

Chemical Oxygen Demand



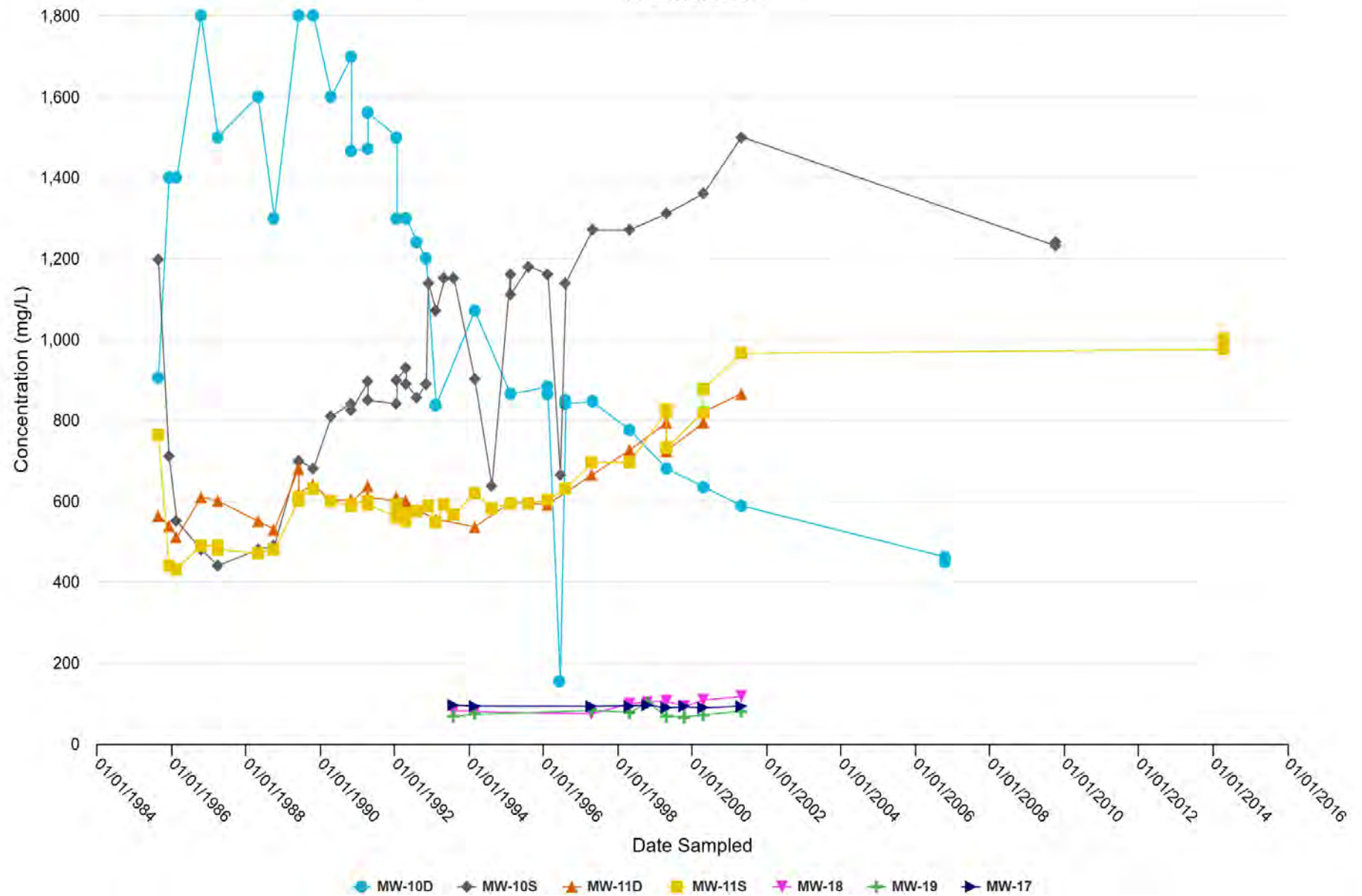
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Chloride

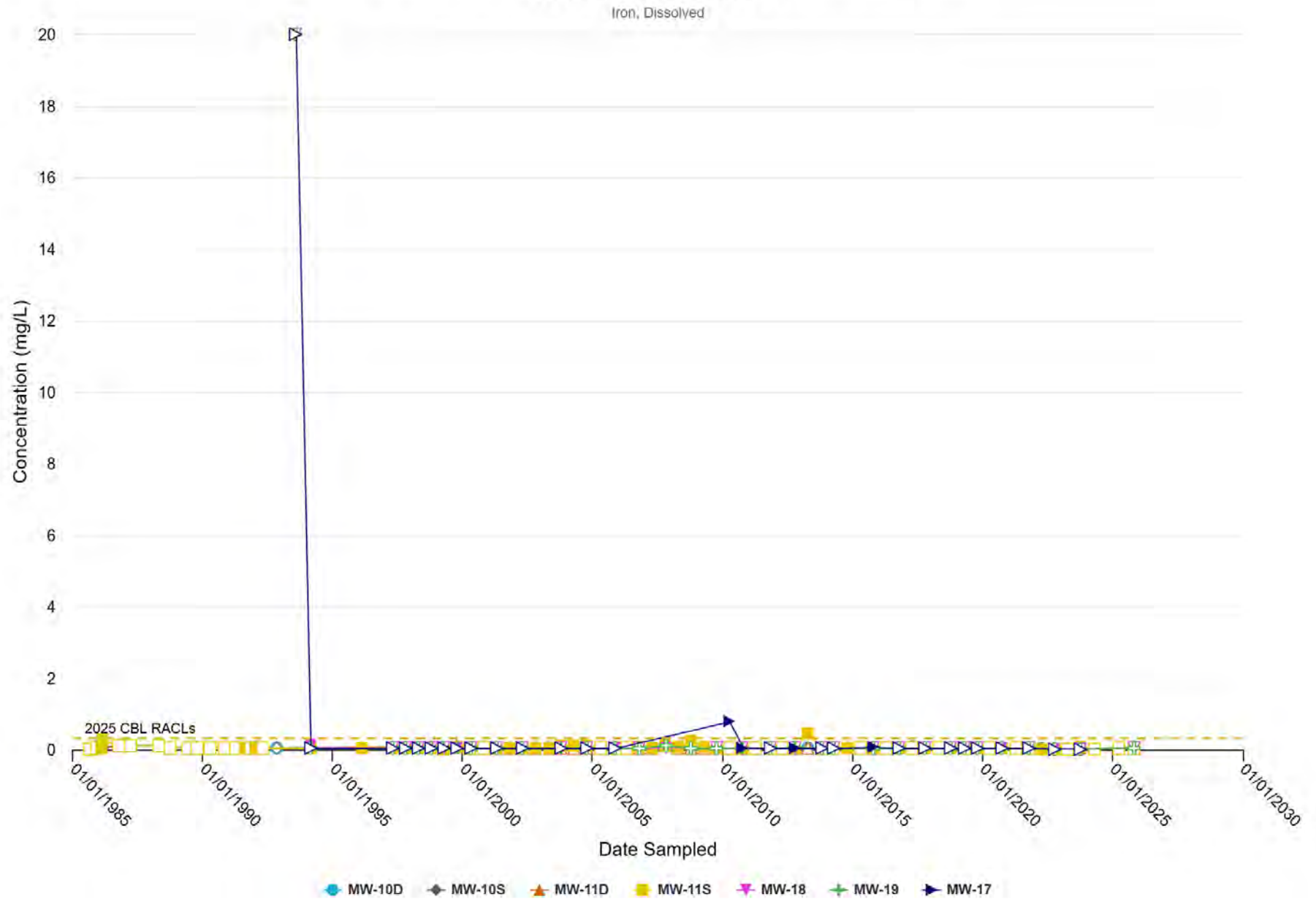


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

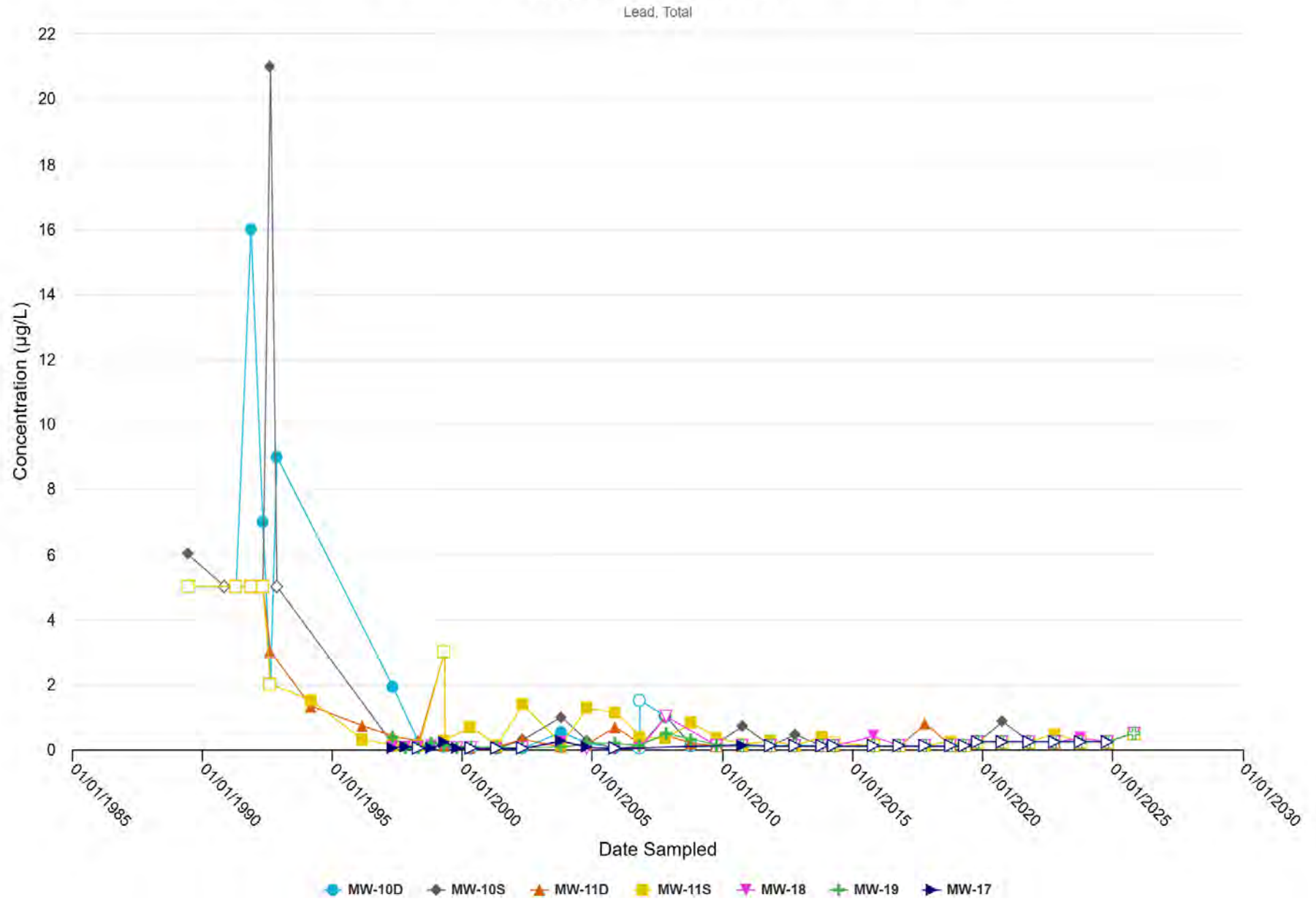
Hardness as CaCO₃



Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

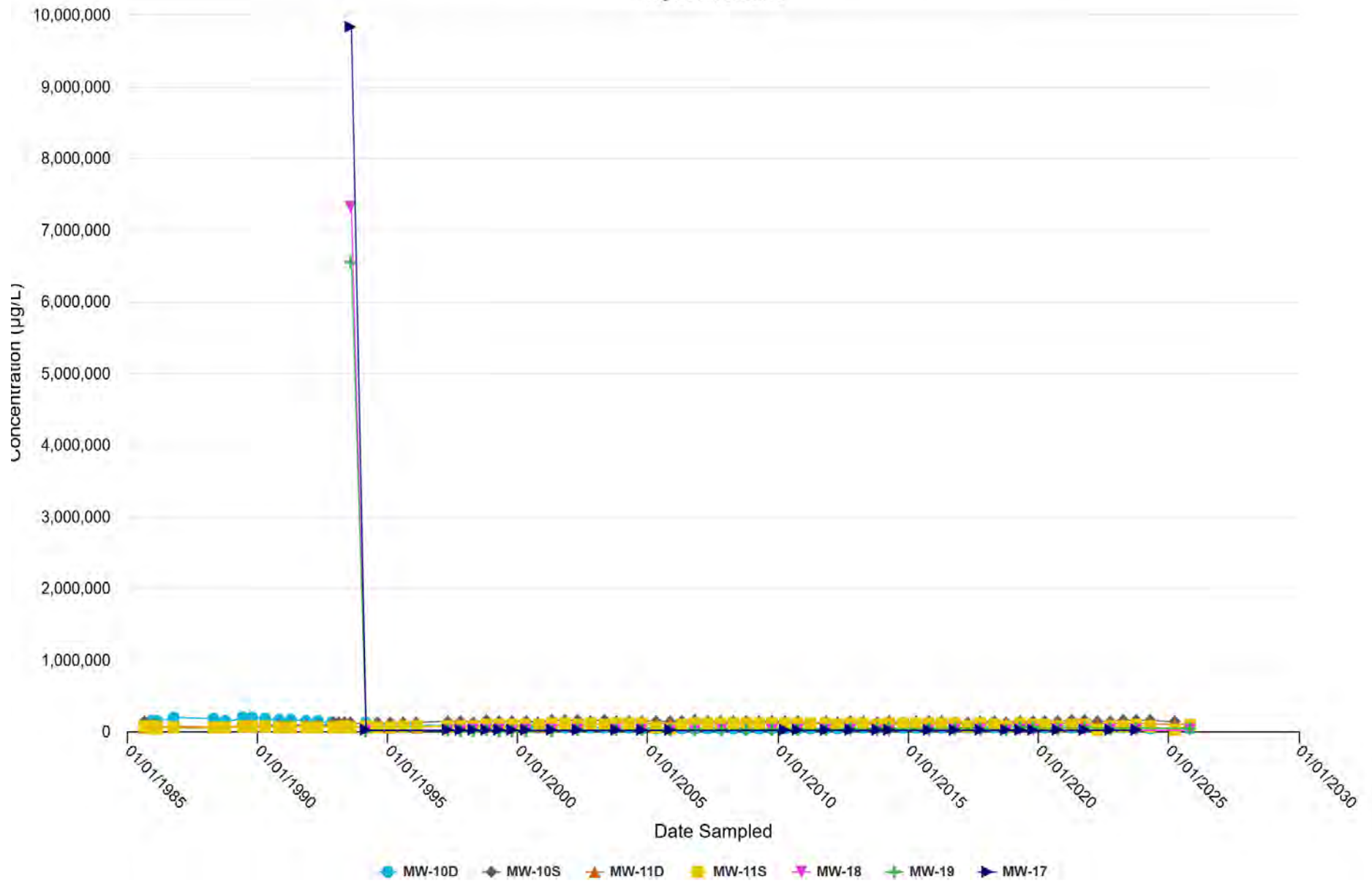


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL



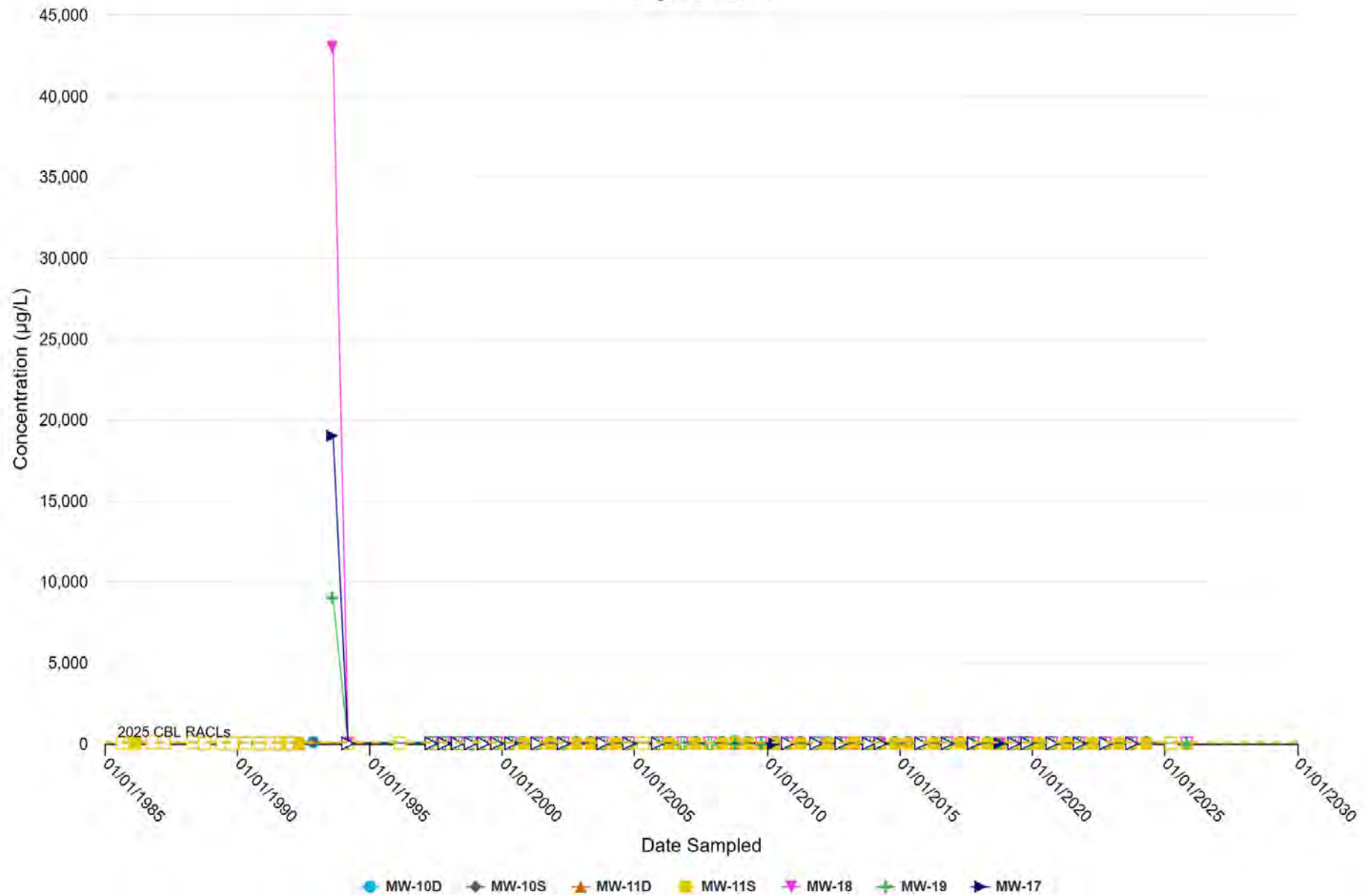
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Magnesium, Dissolved

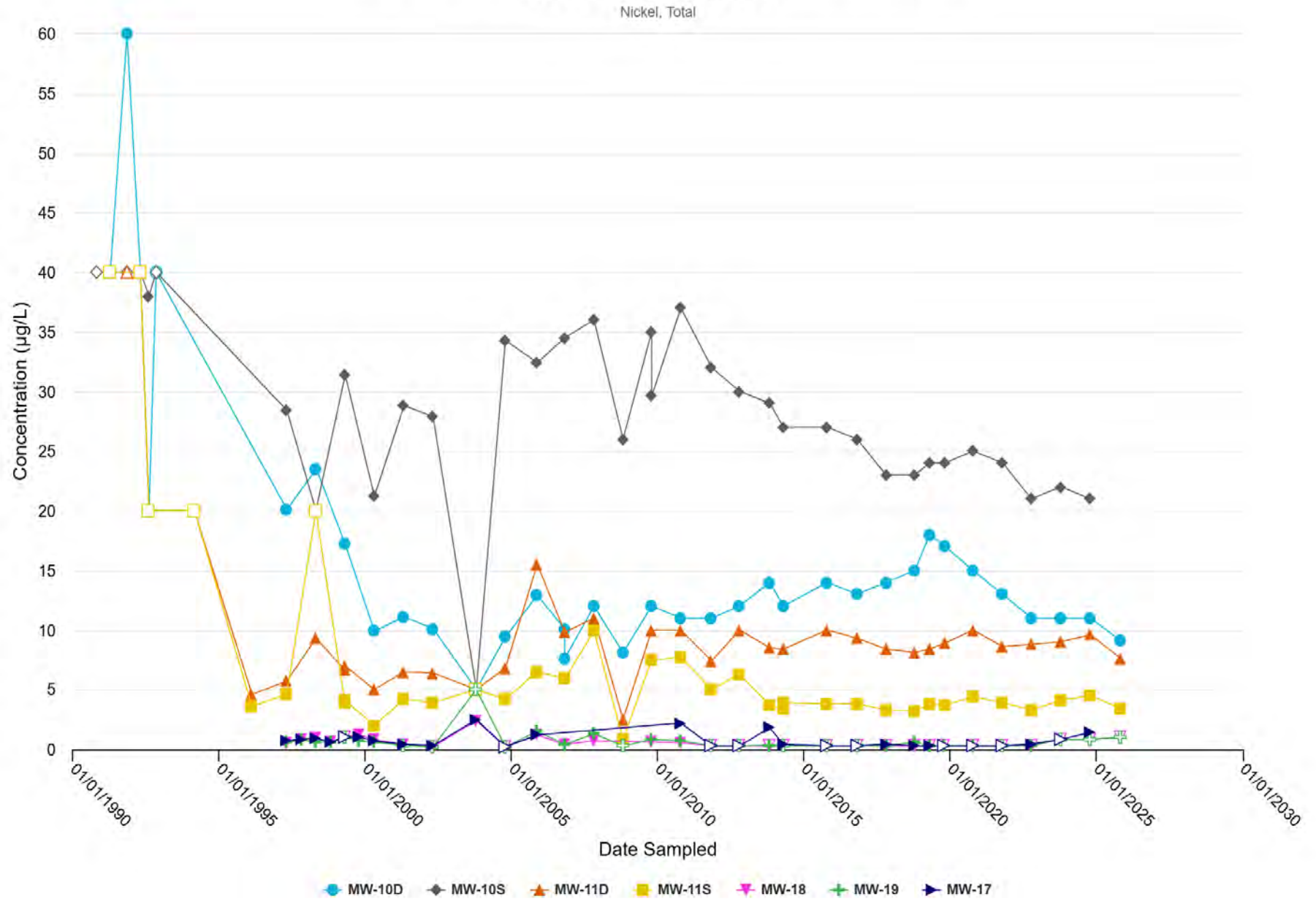


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Manganese, Dissolved

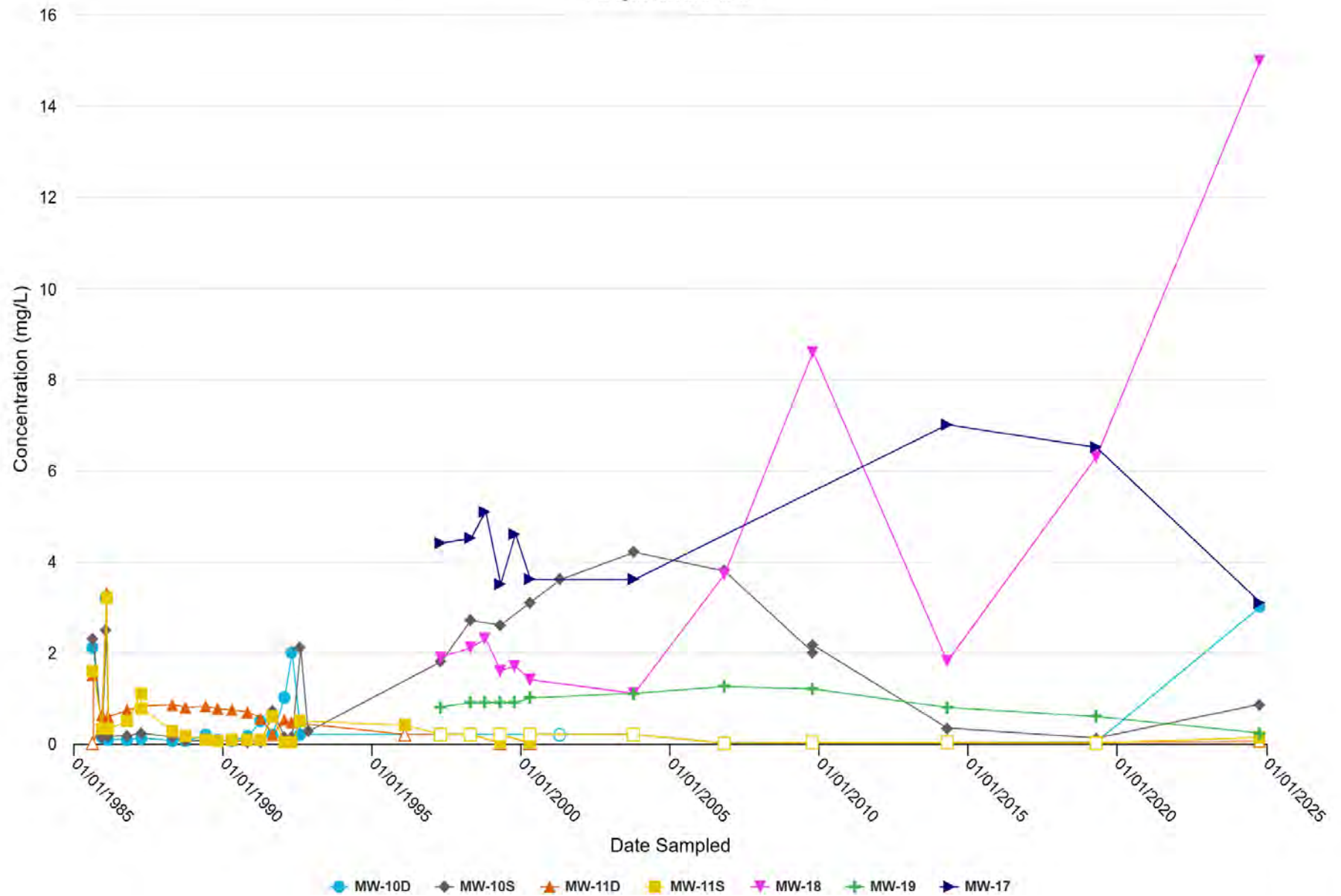


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

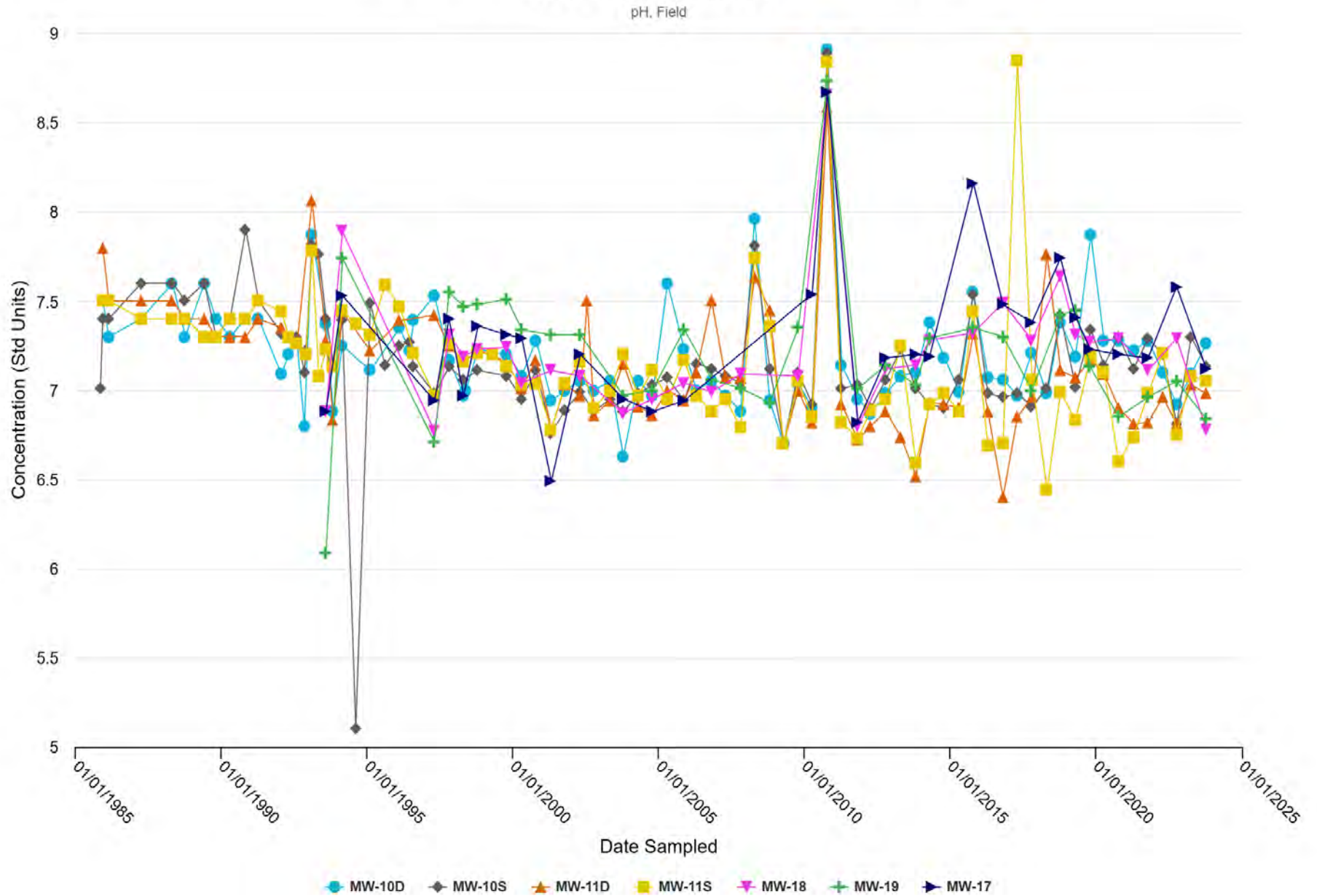


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL

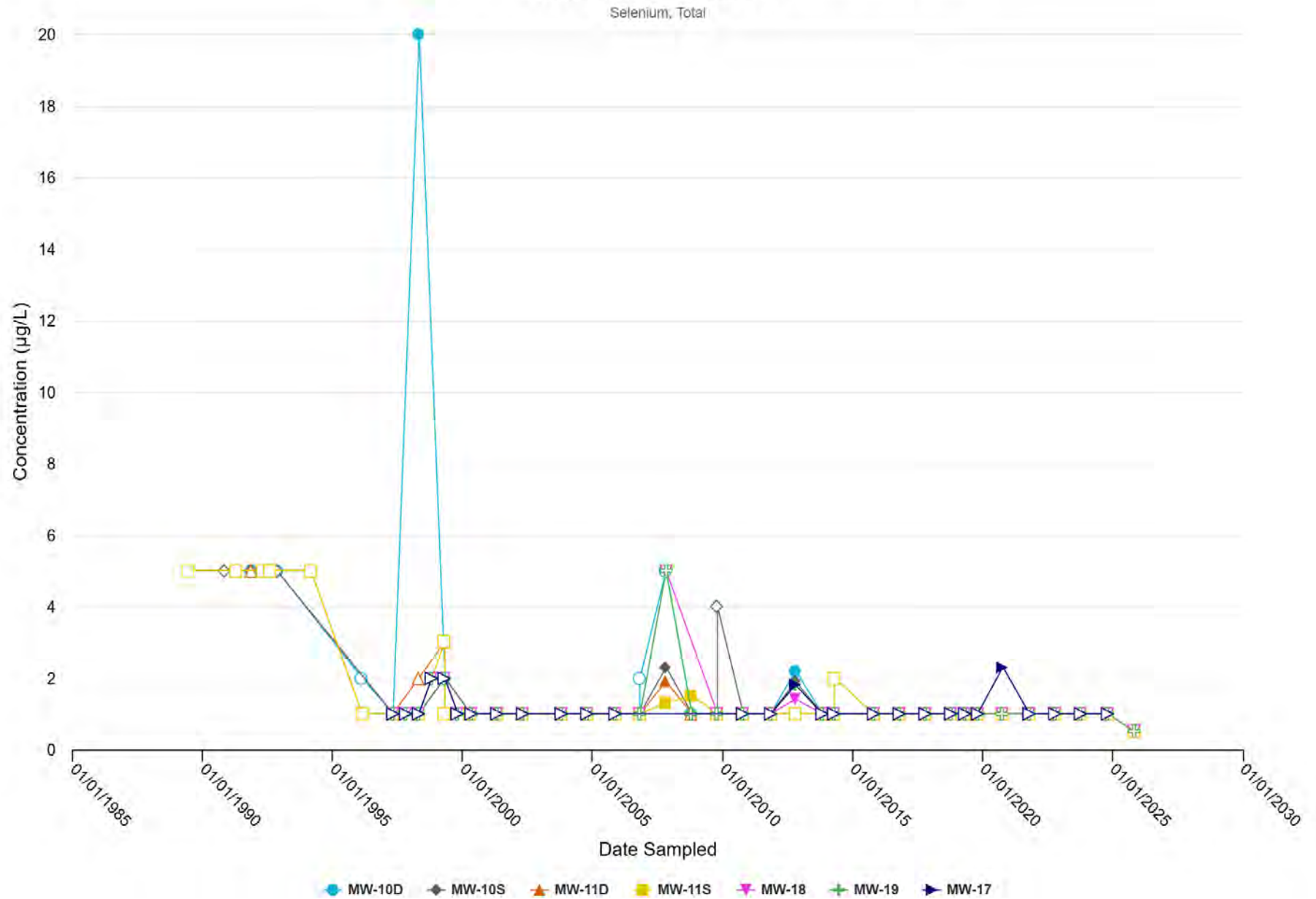
Nitrogen, Nitrate & Nitrite



Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

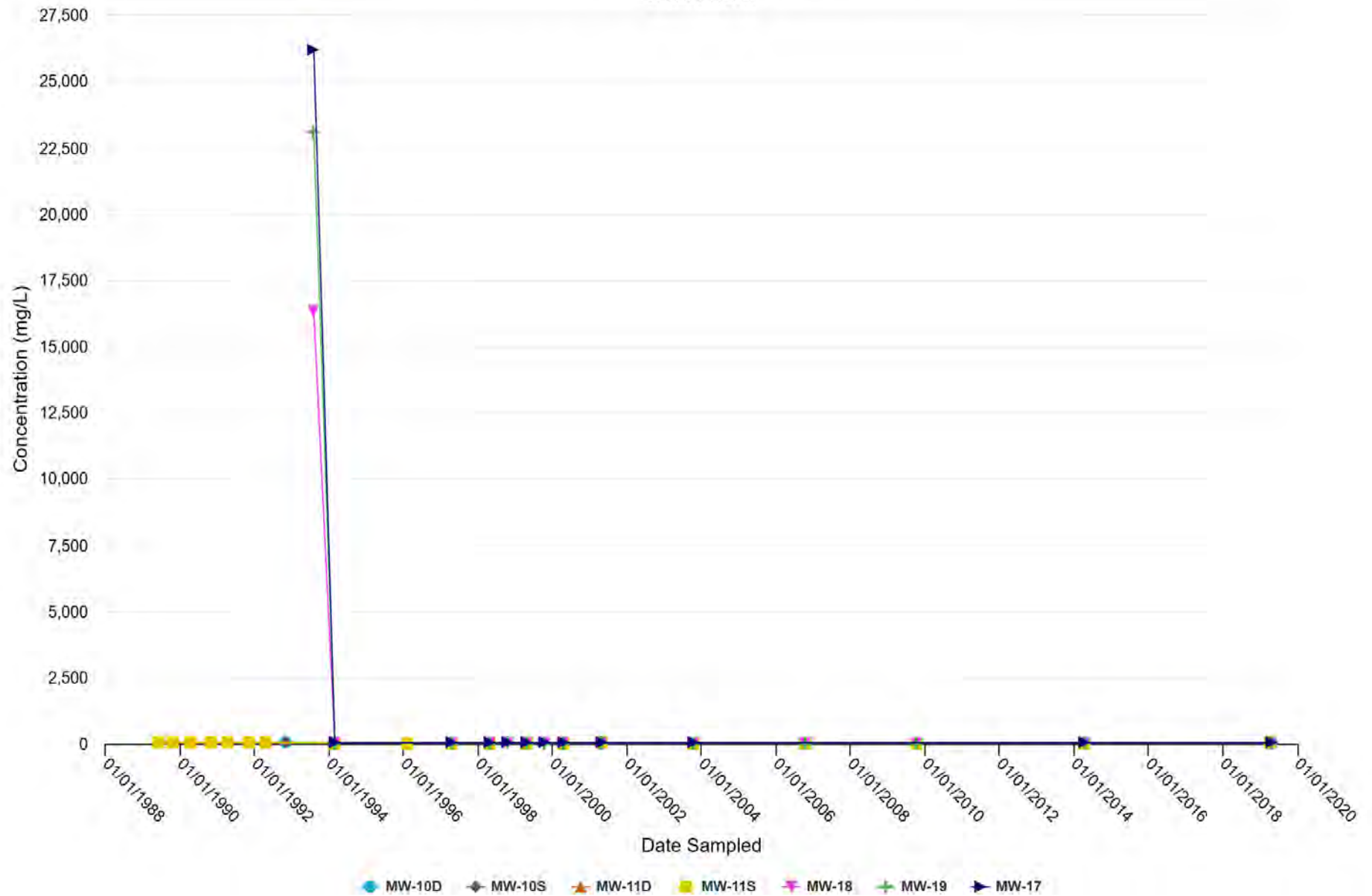


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL

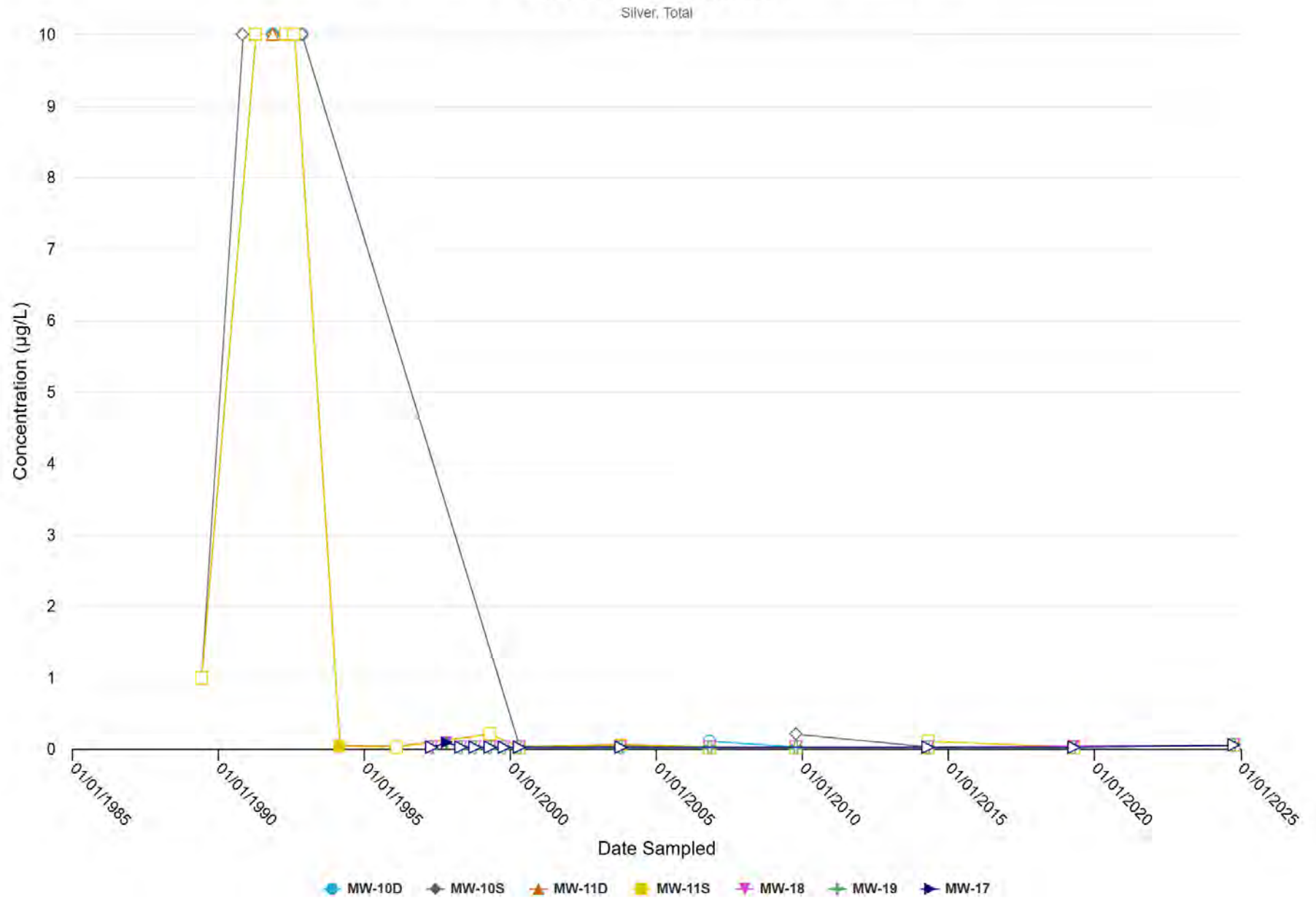


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Silicon, Dissolved

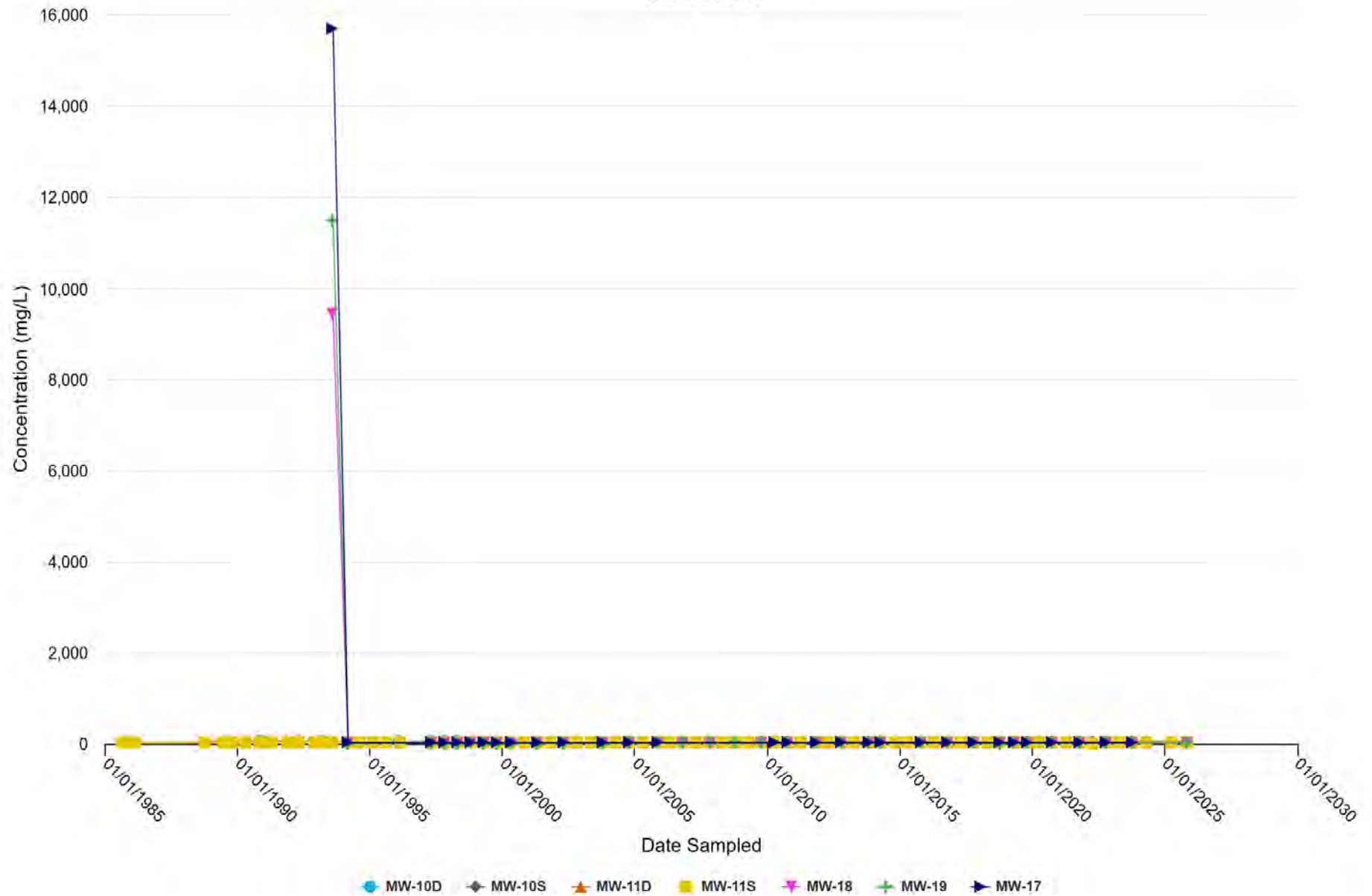


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL



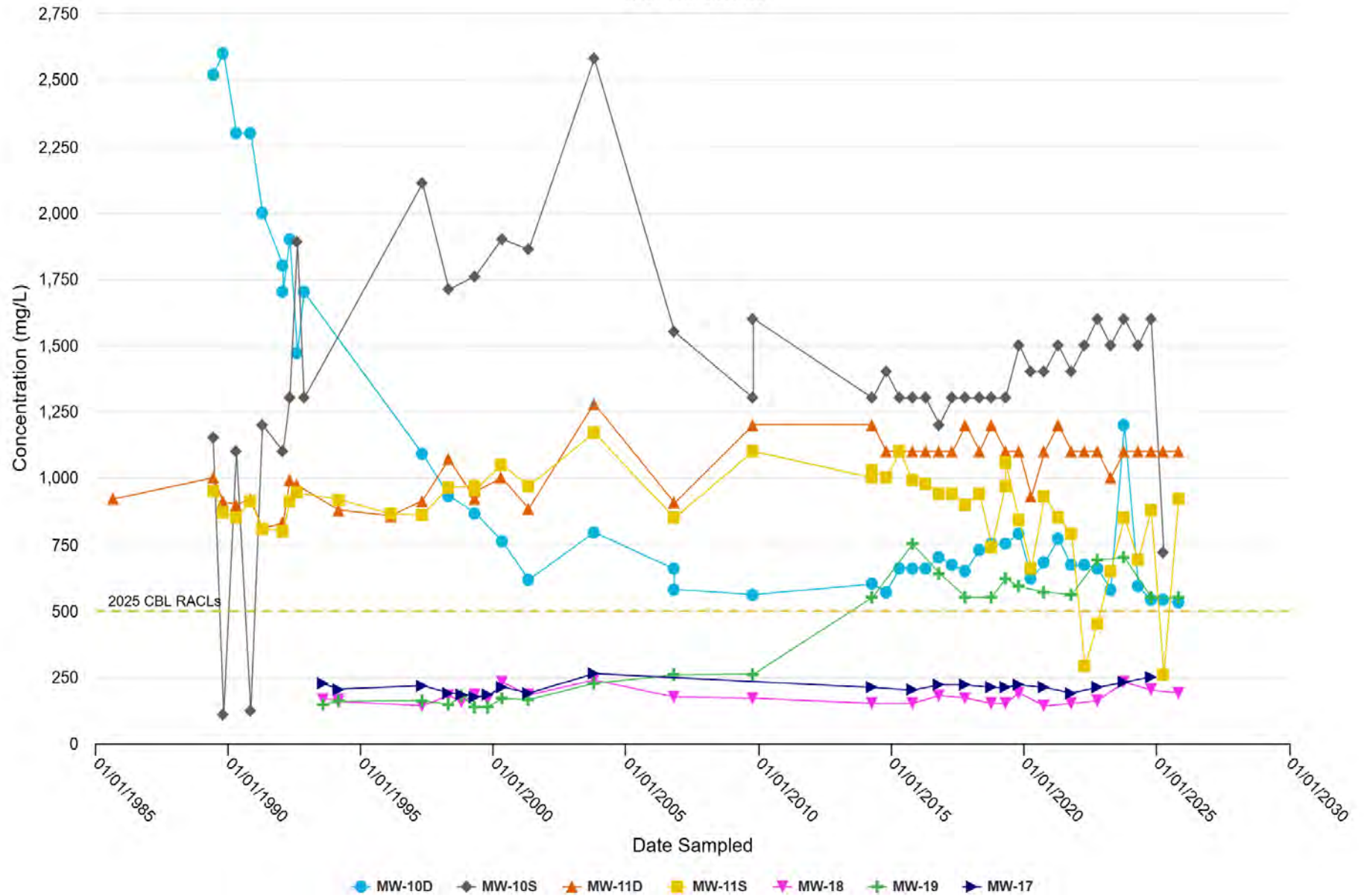
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Sodium, Dissolved



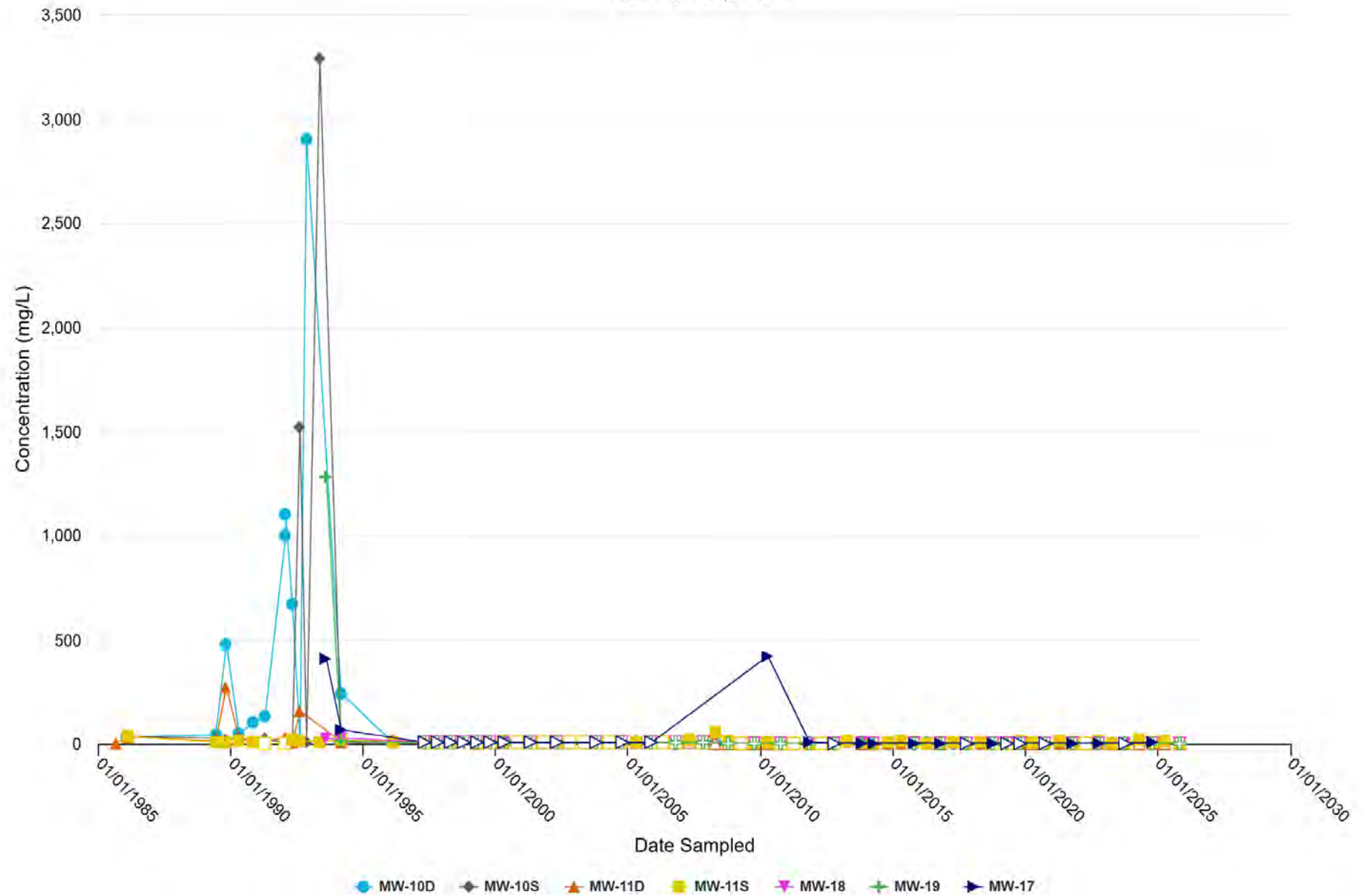
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19) COFFIN BUTTE LANDFILL

Solids, Total Dissolved

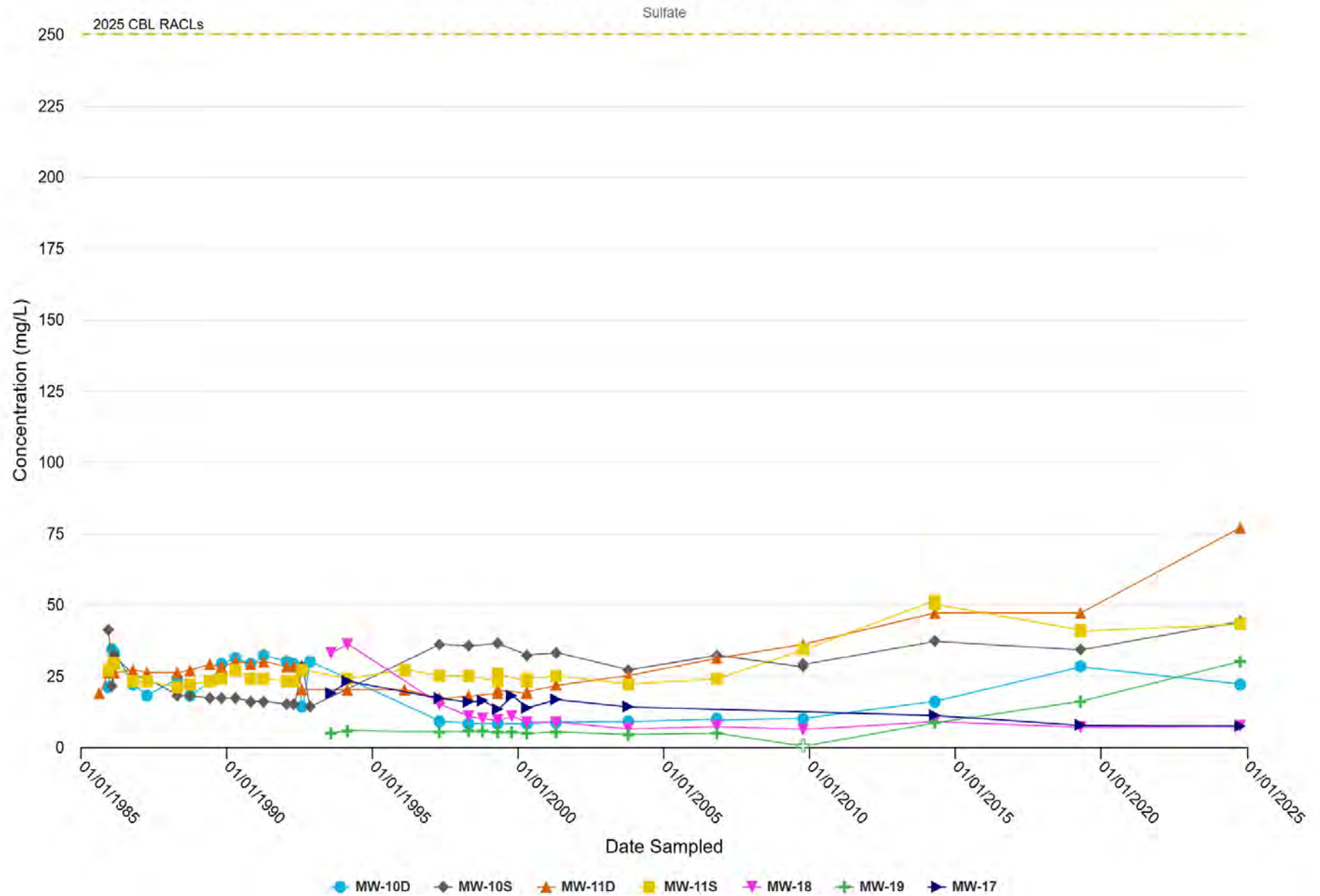


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Solids, Total Suspended

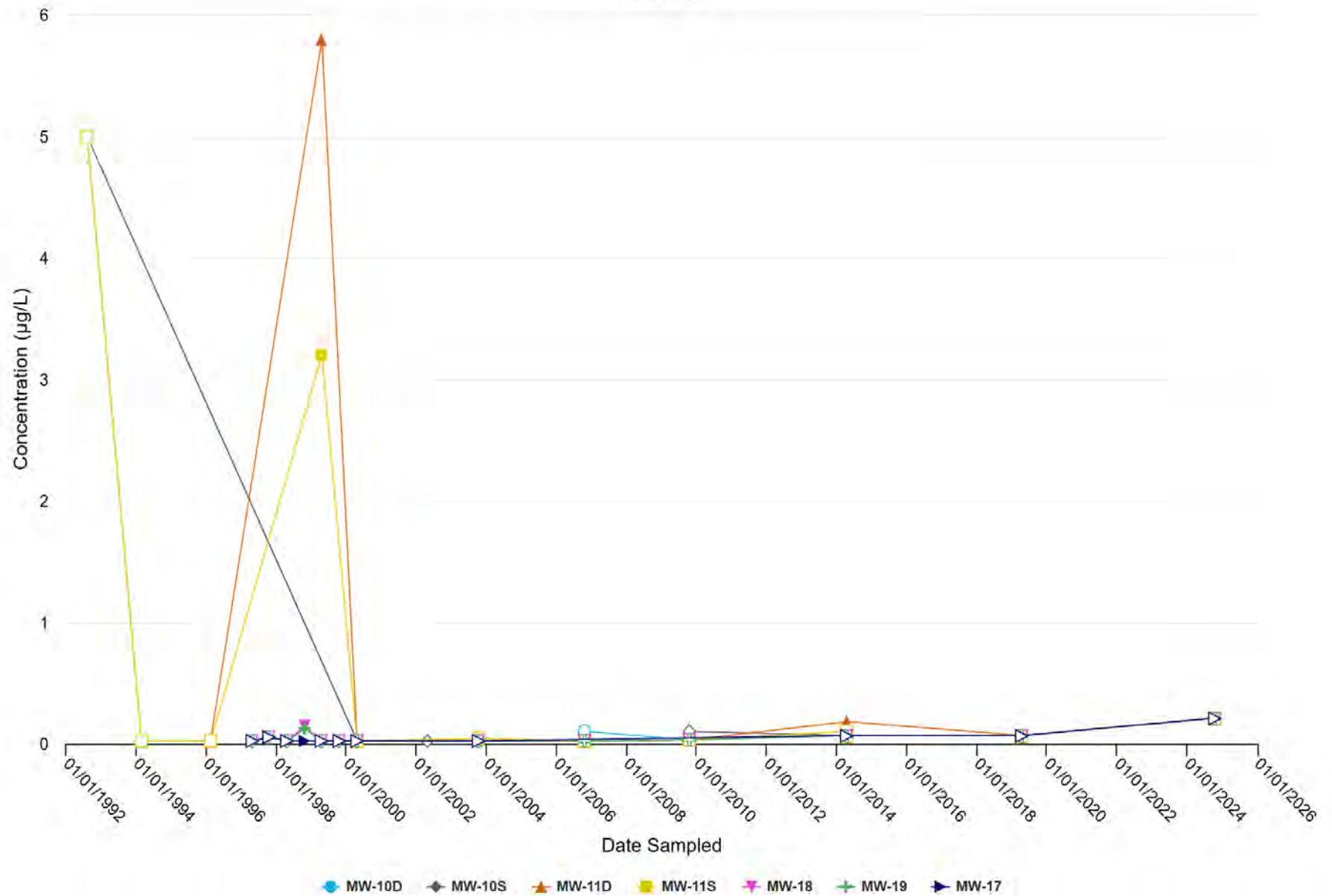


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL



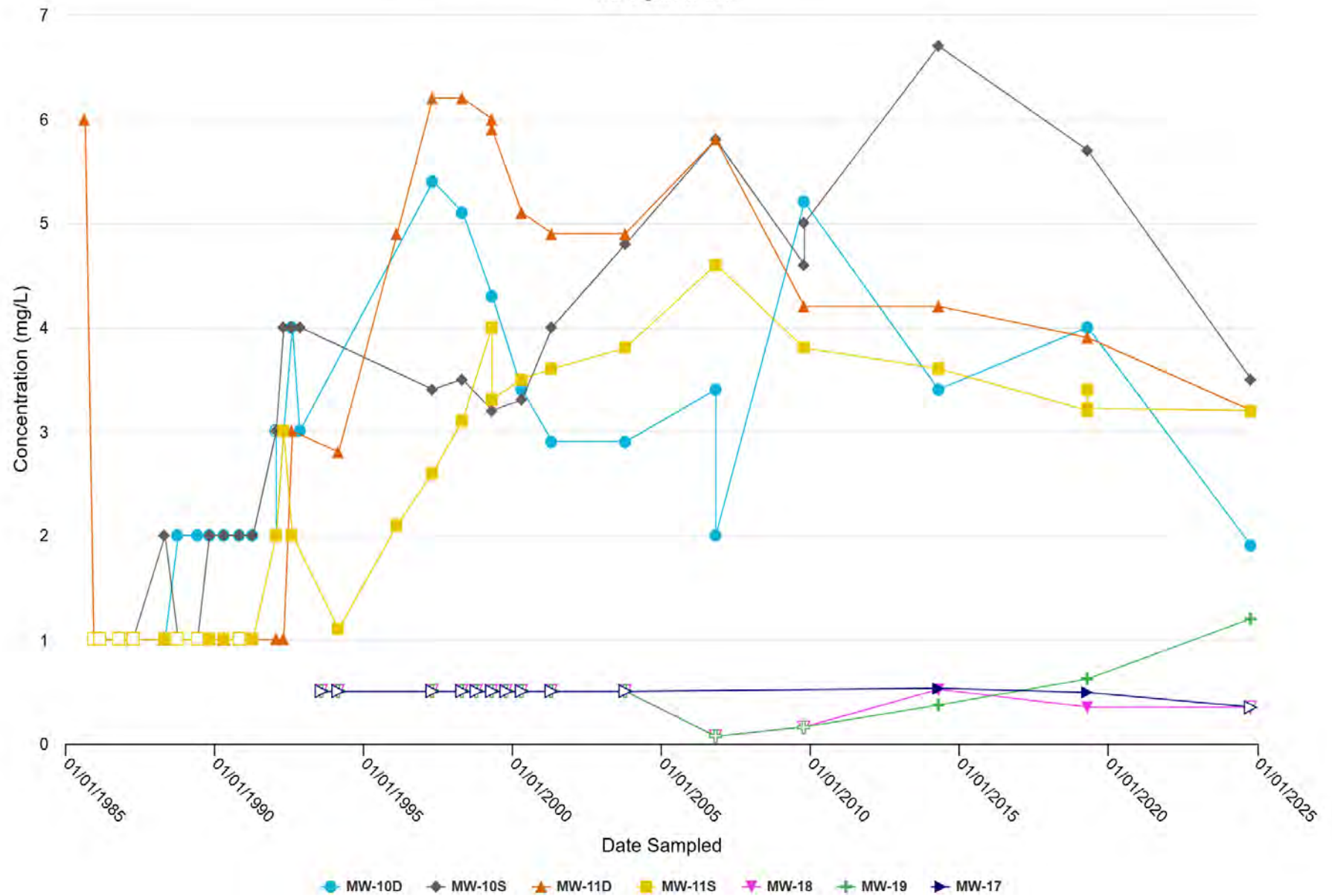
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Thallium, Total



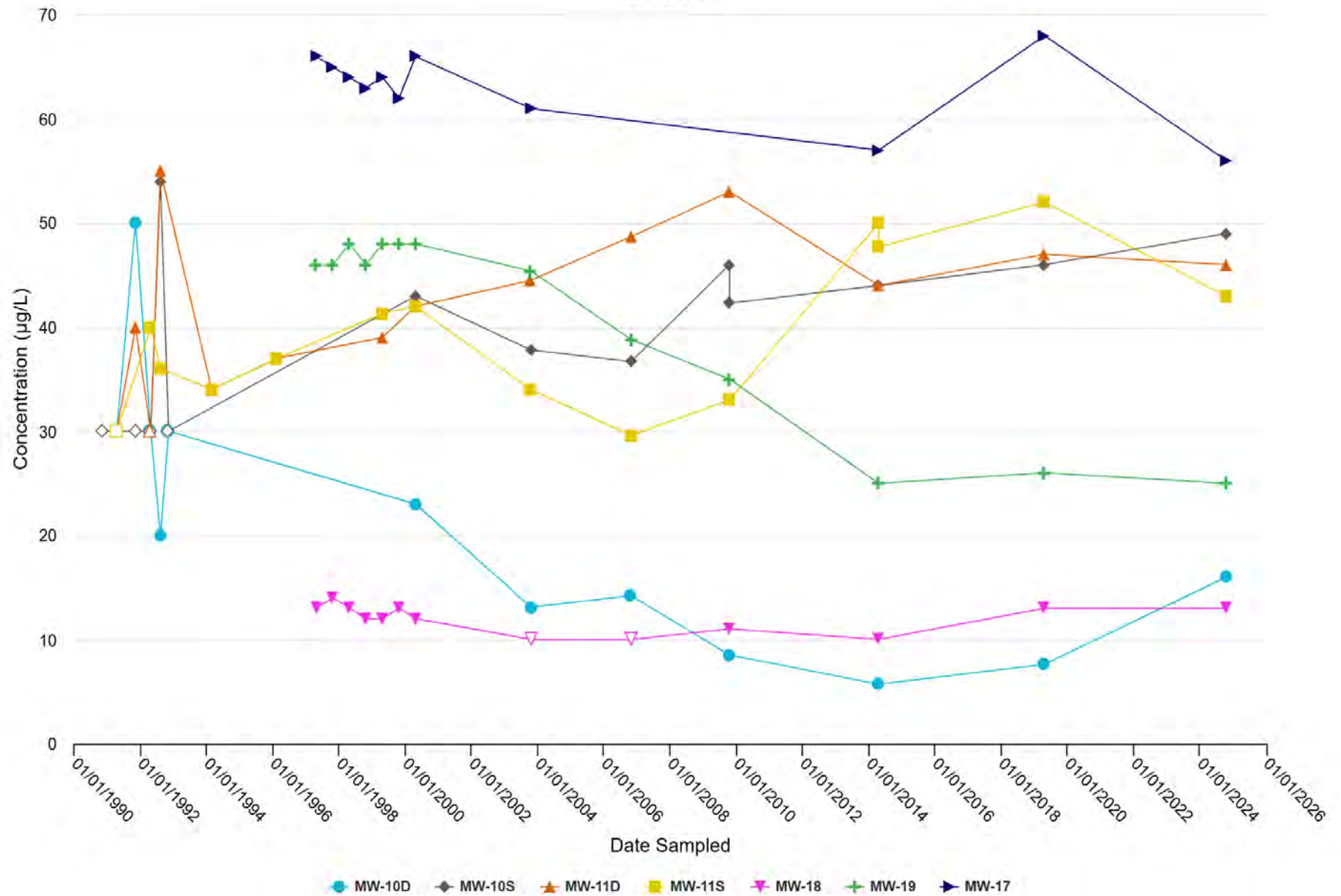
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Total Organic Carbon



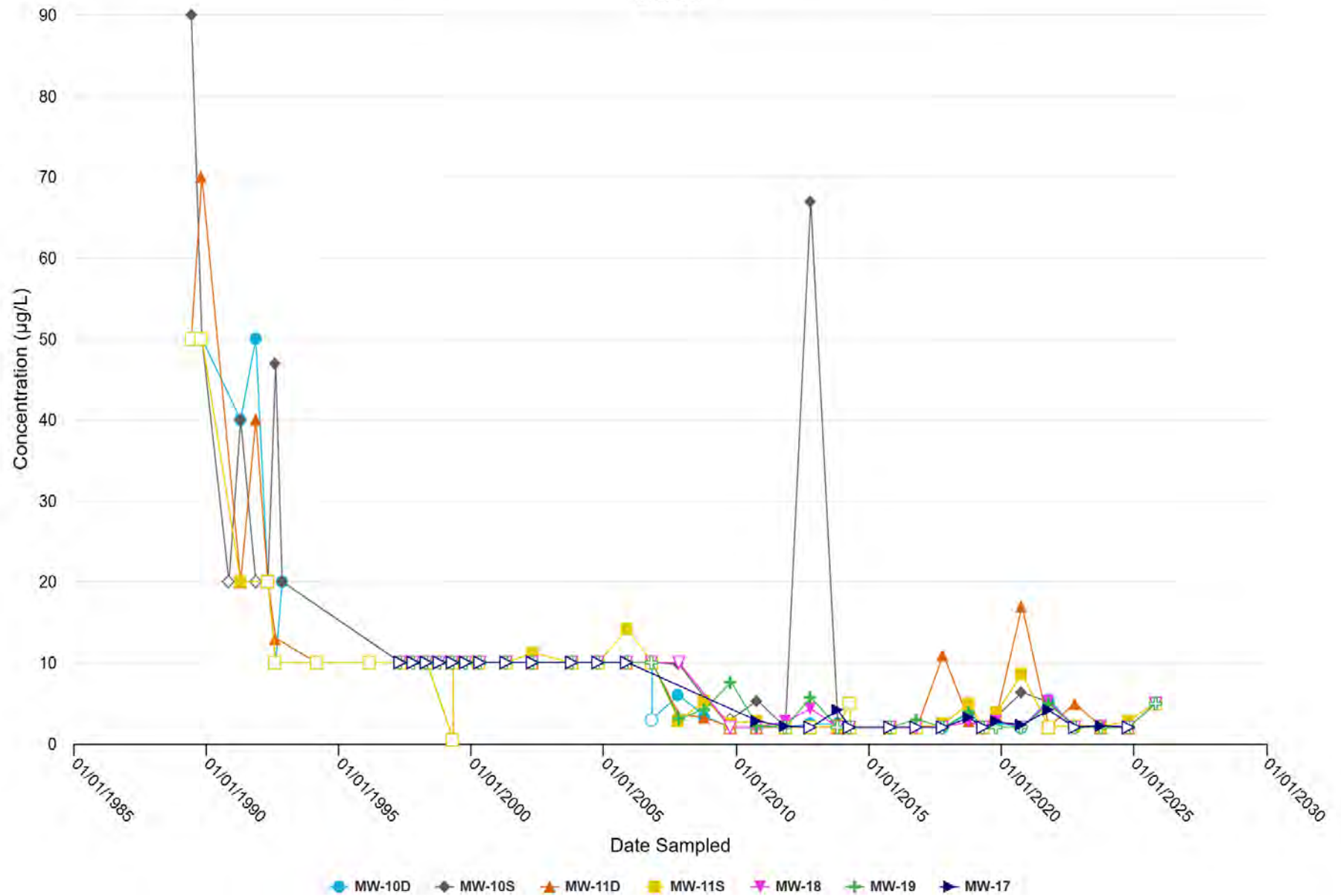
Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Vanadium, Total

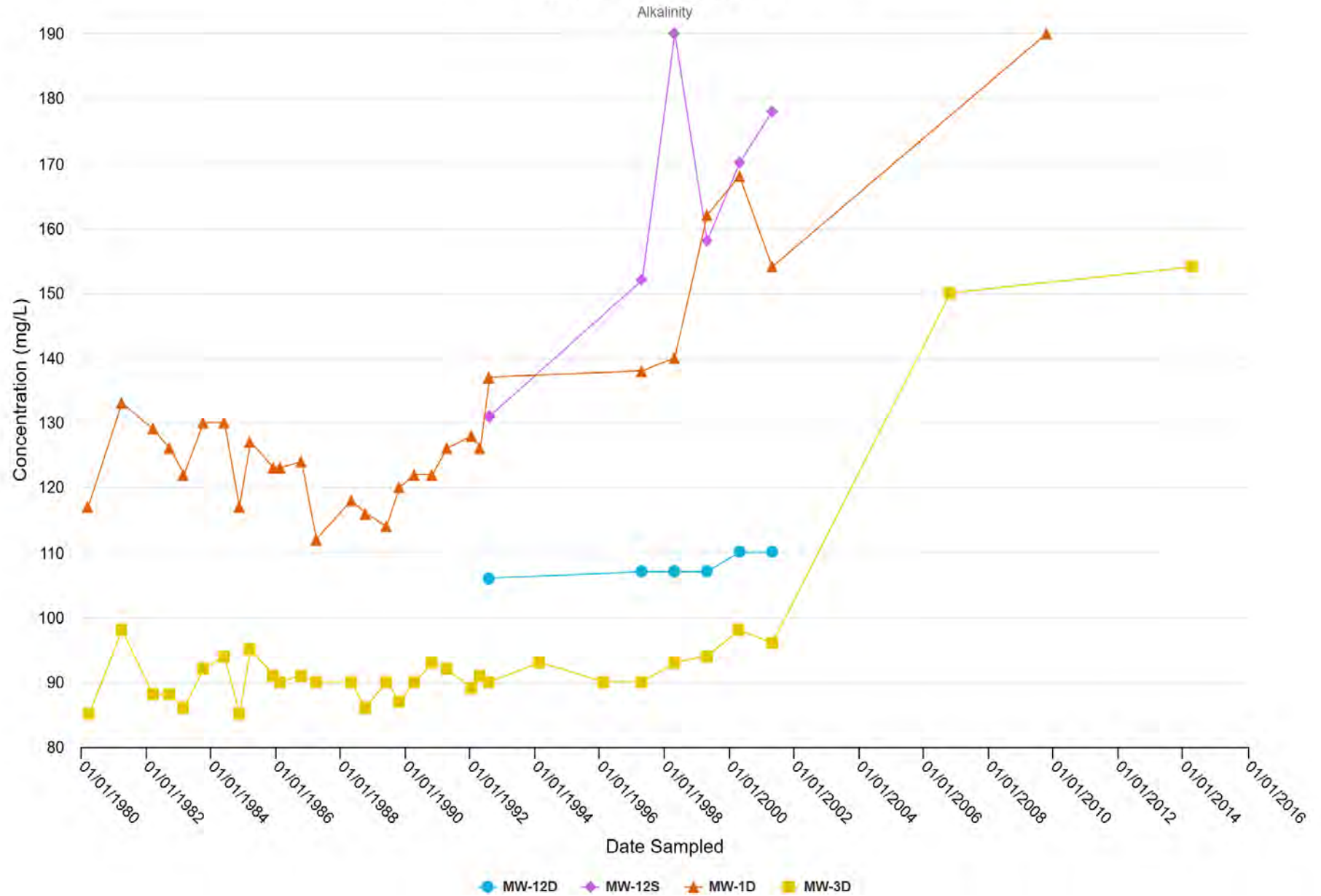


Cell 1A - Time Series (MW-10D/S, MW-11D/S, MW-17, MW-18, MW-19)
COFFIN BUTTE LANDFILL

Zinc, Total

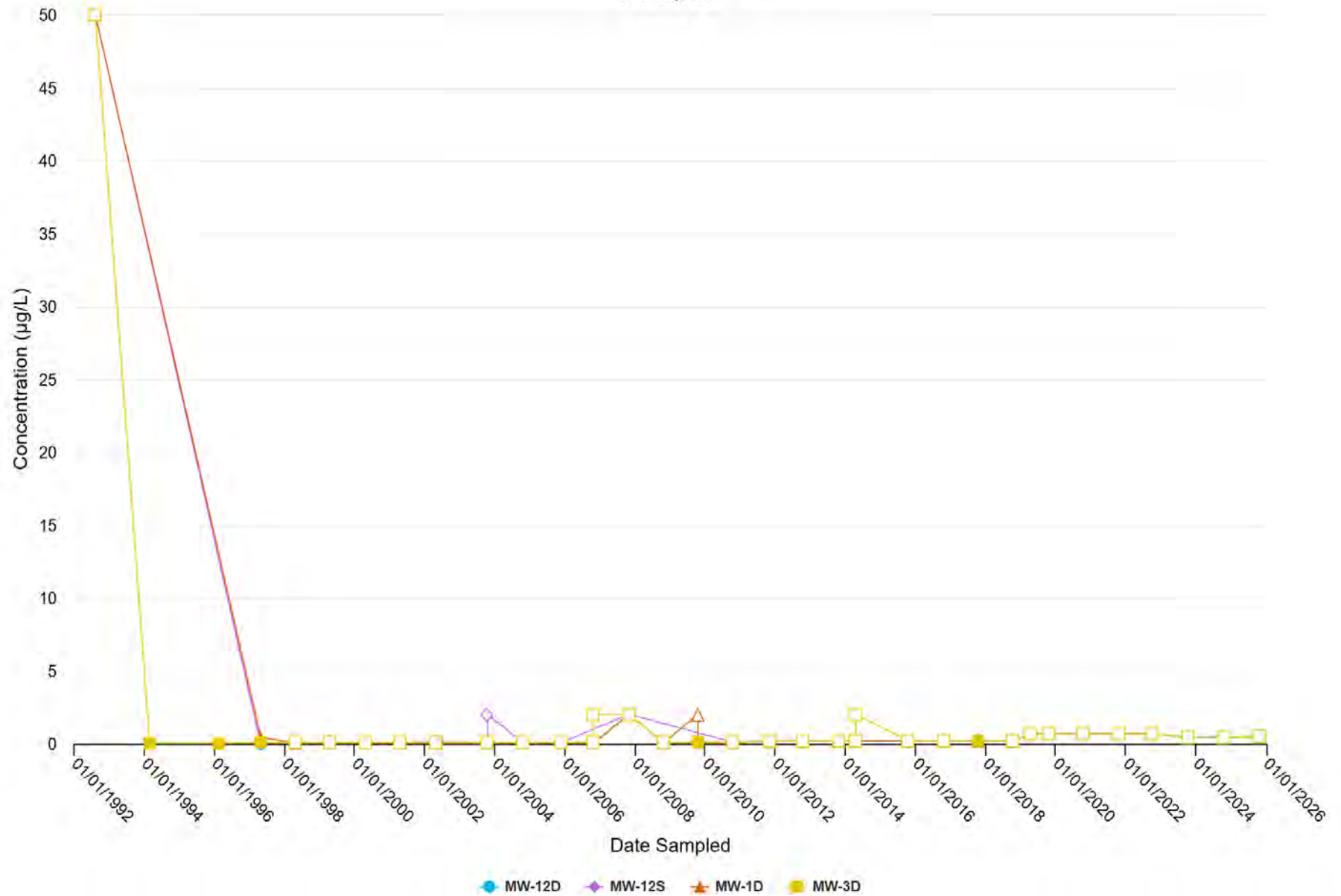


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

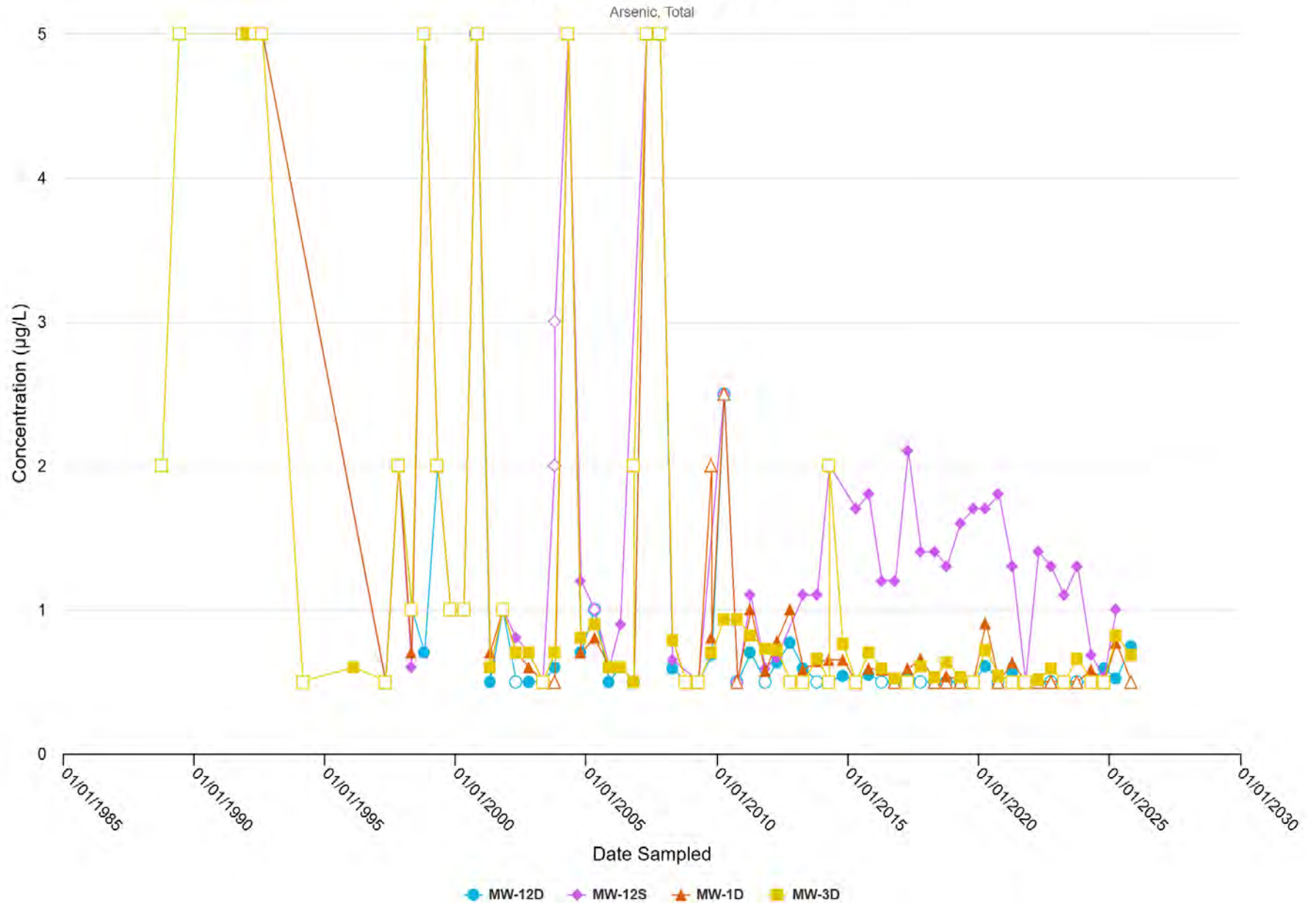


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Antimony, Total

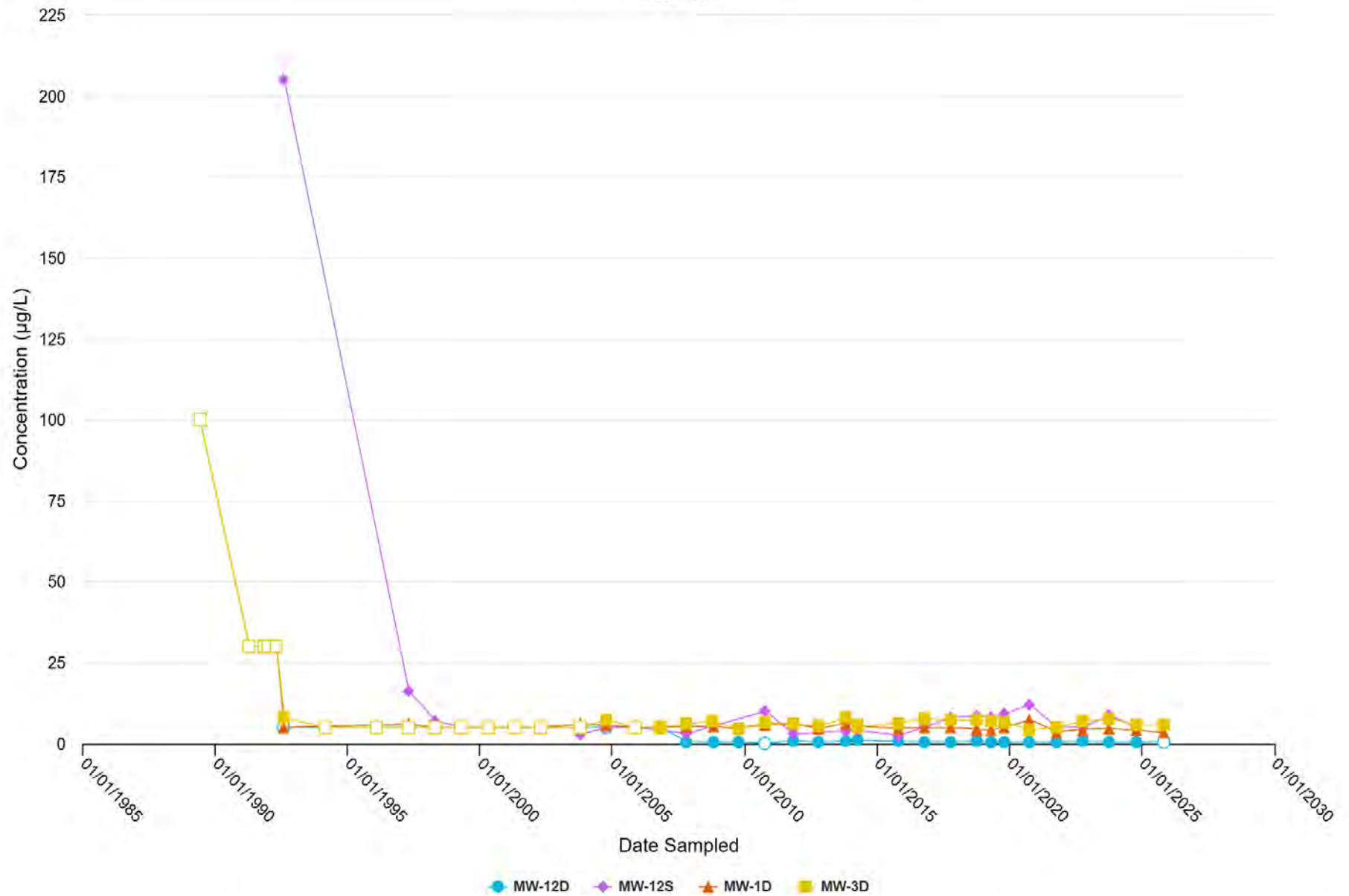


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL



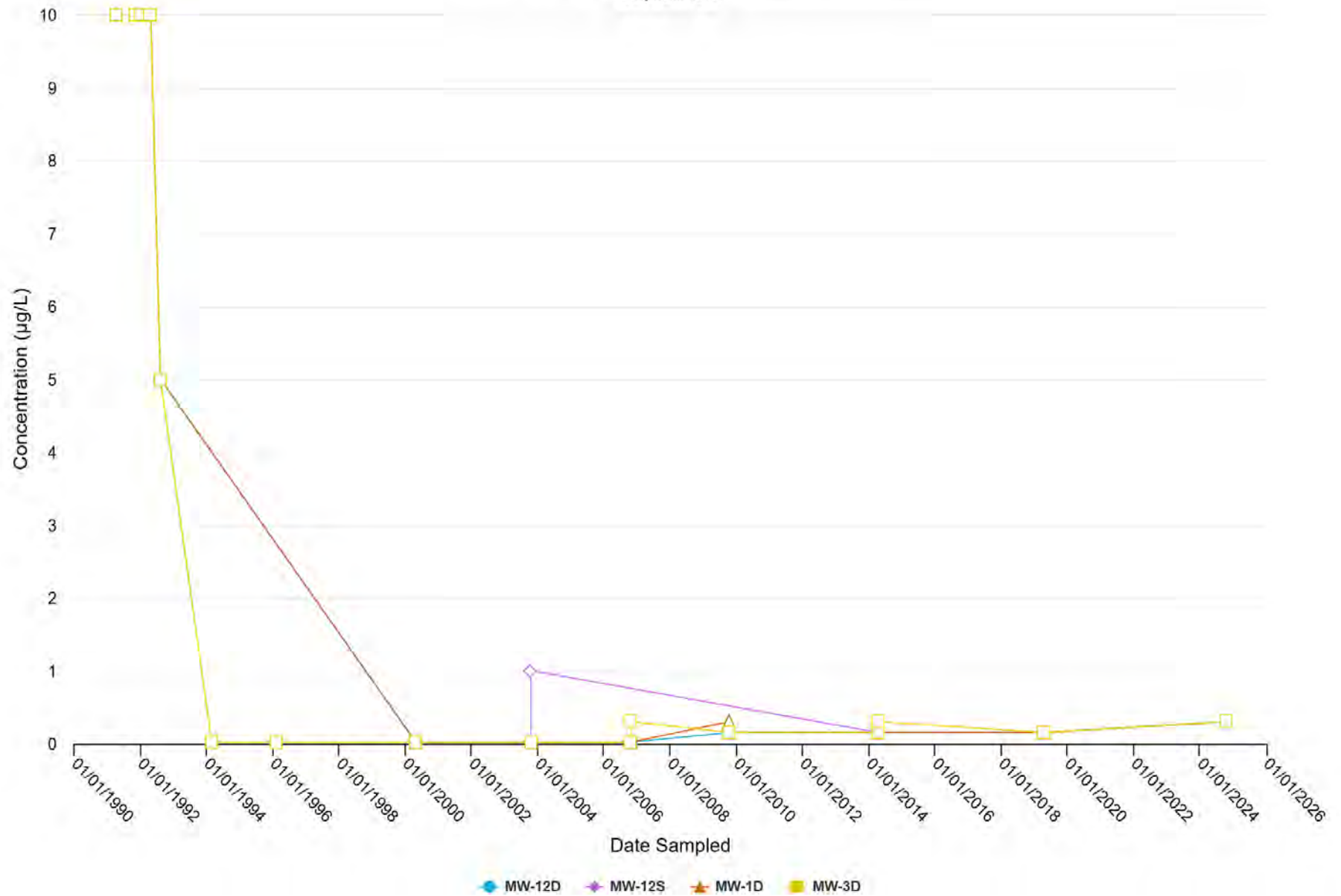
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Barium, Total



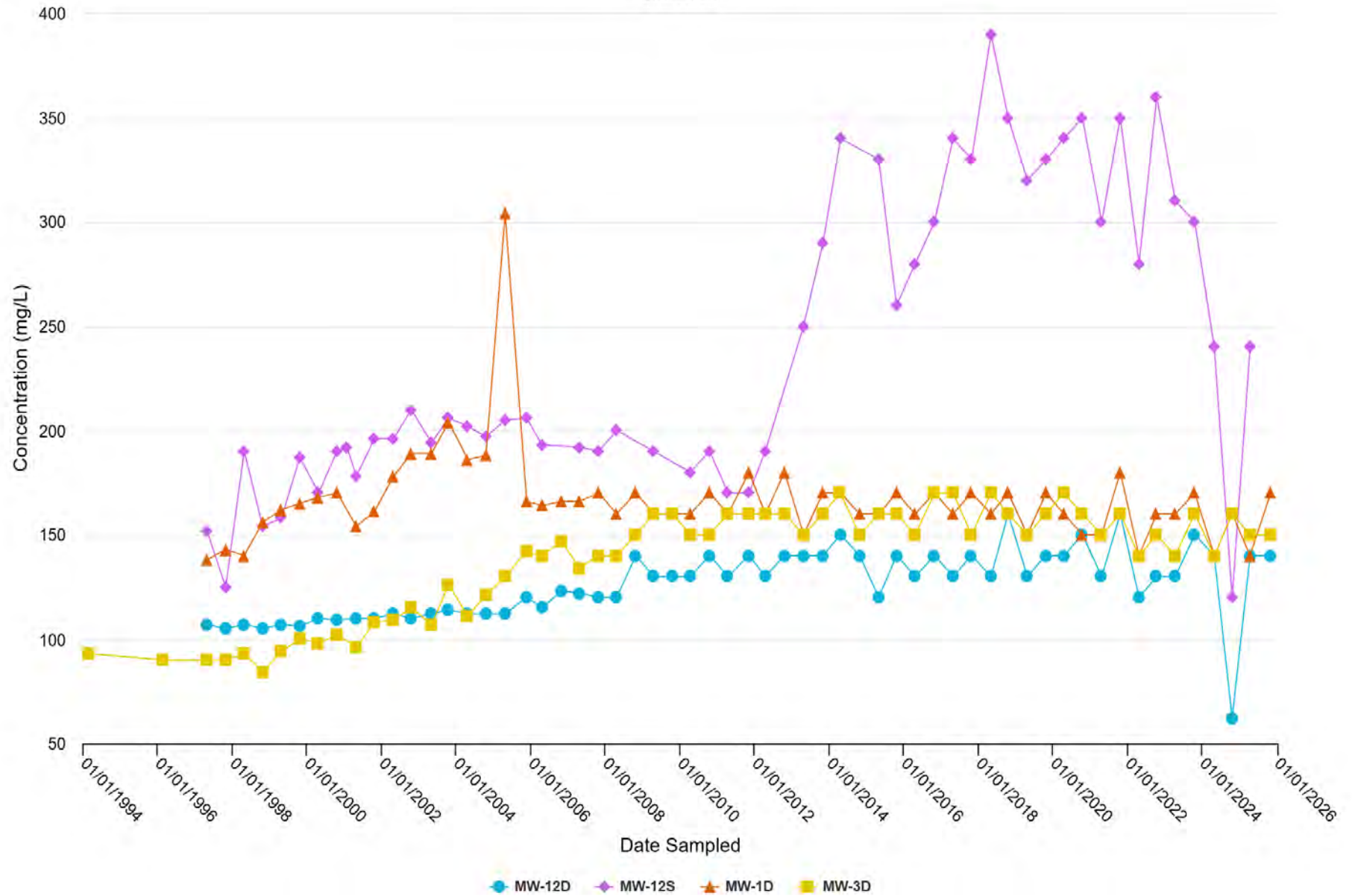
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Beryllium, Total



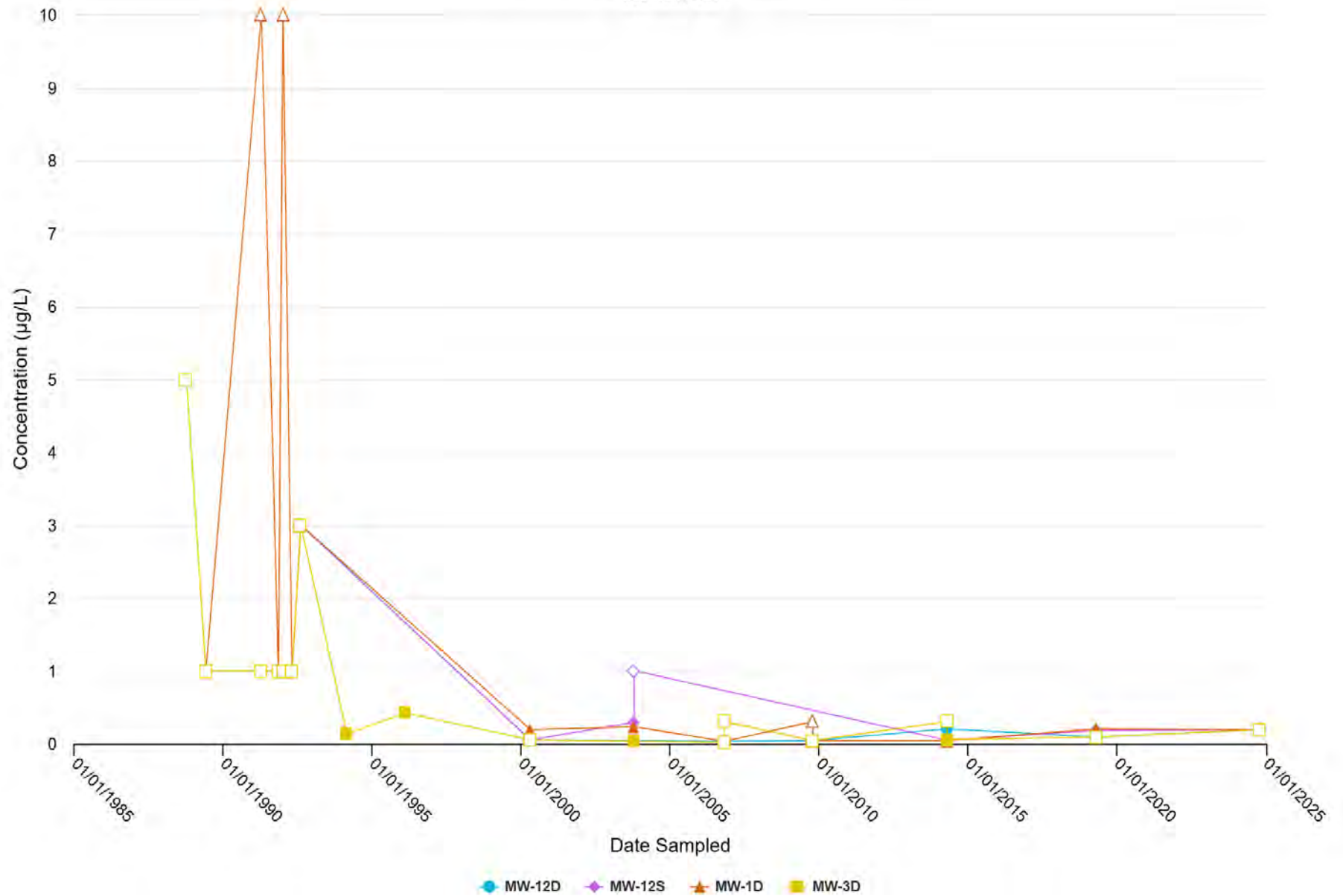
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Bicarbonate



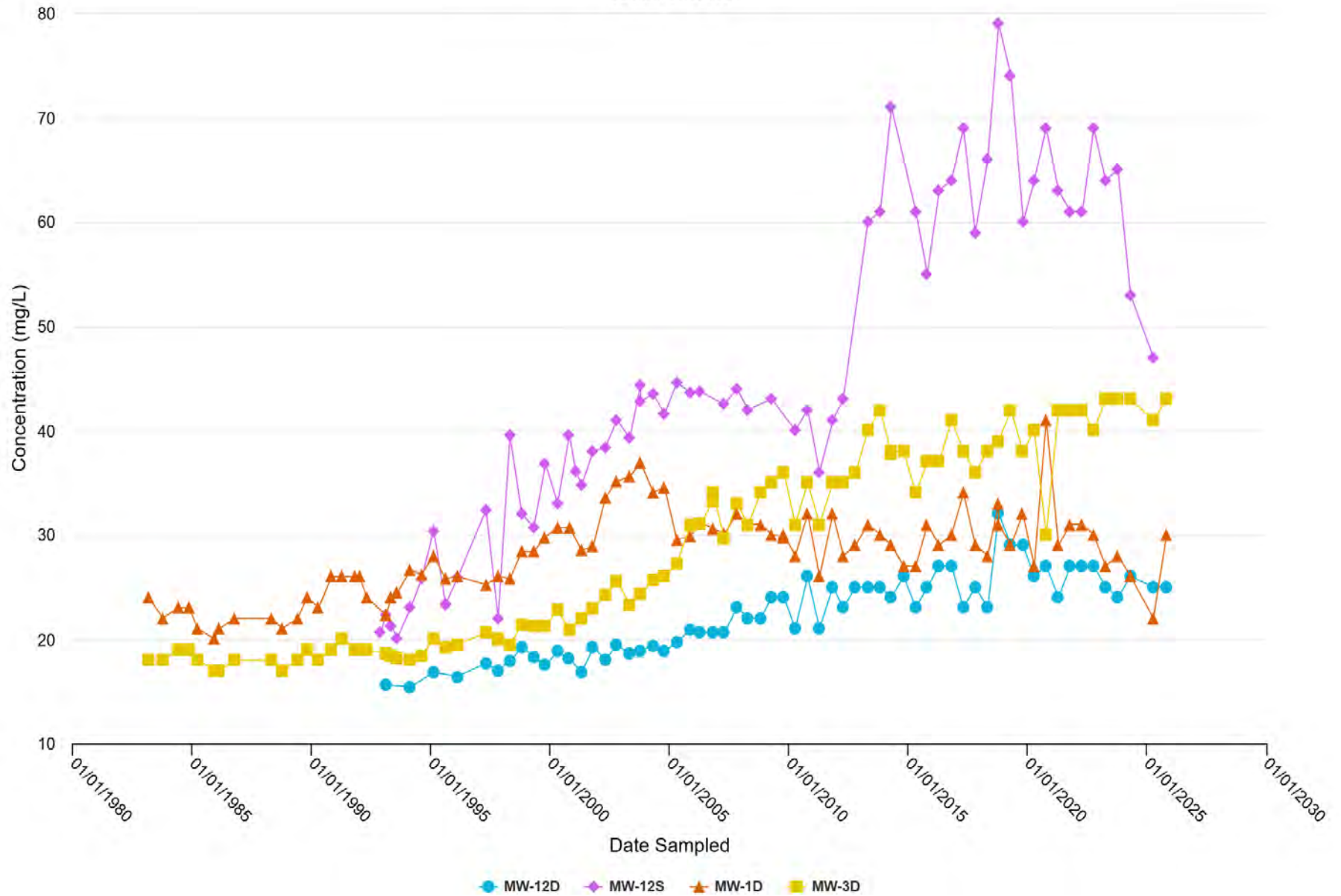
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Cadmium, Total



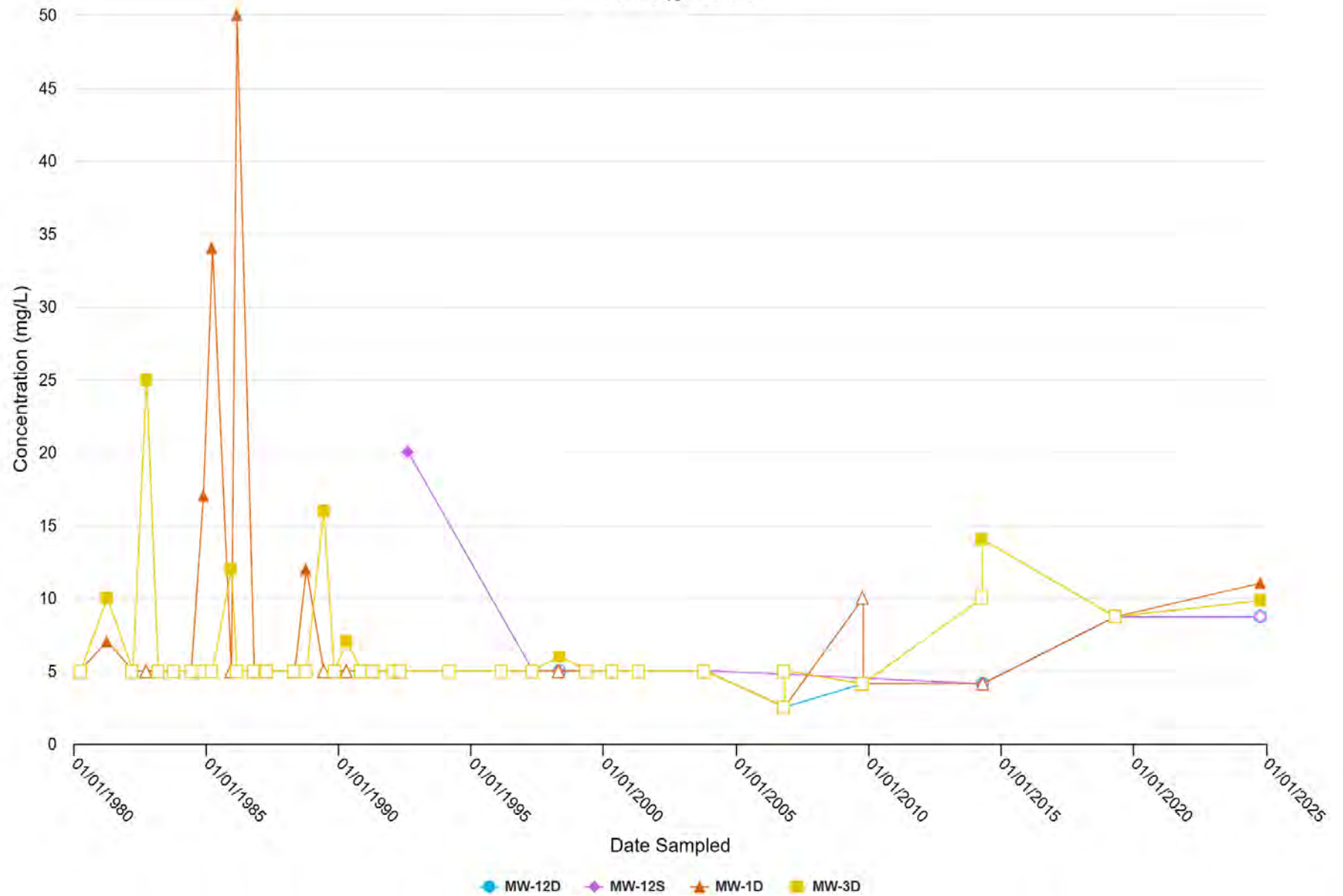
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Calcium, Dissolved

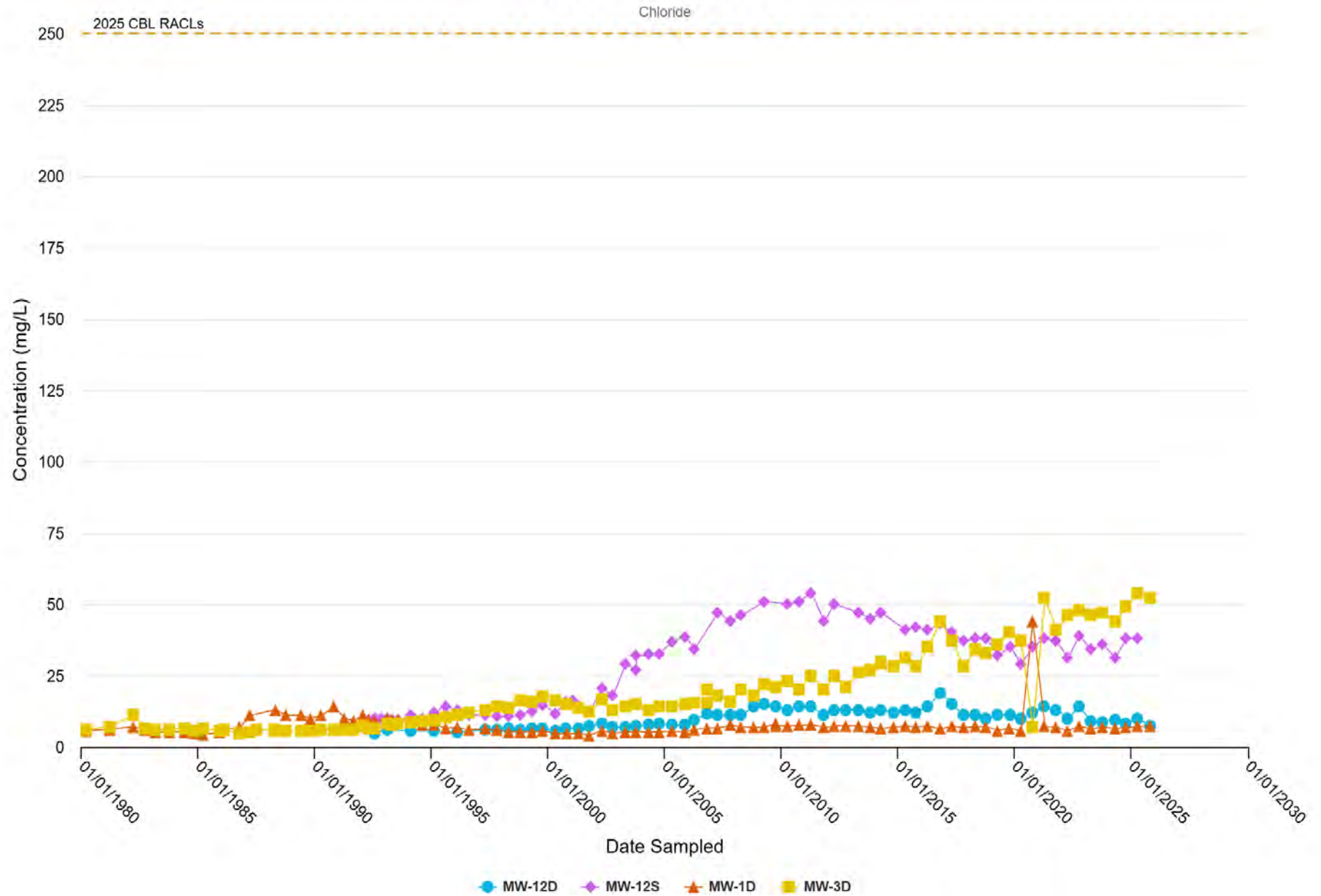


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Chemical Oxygen Demand

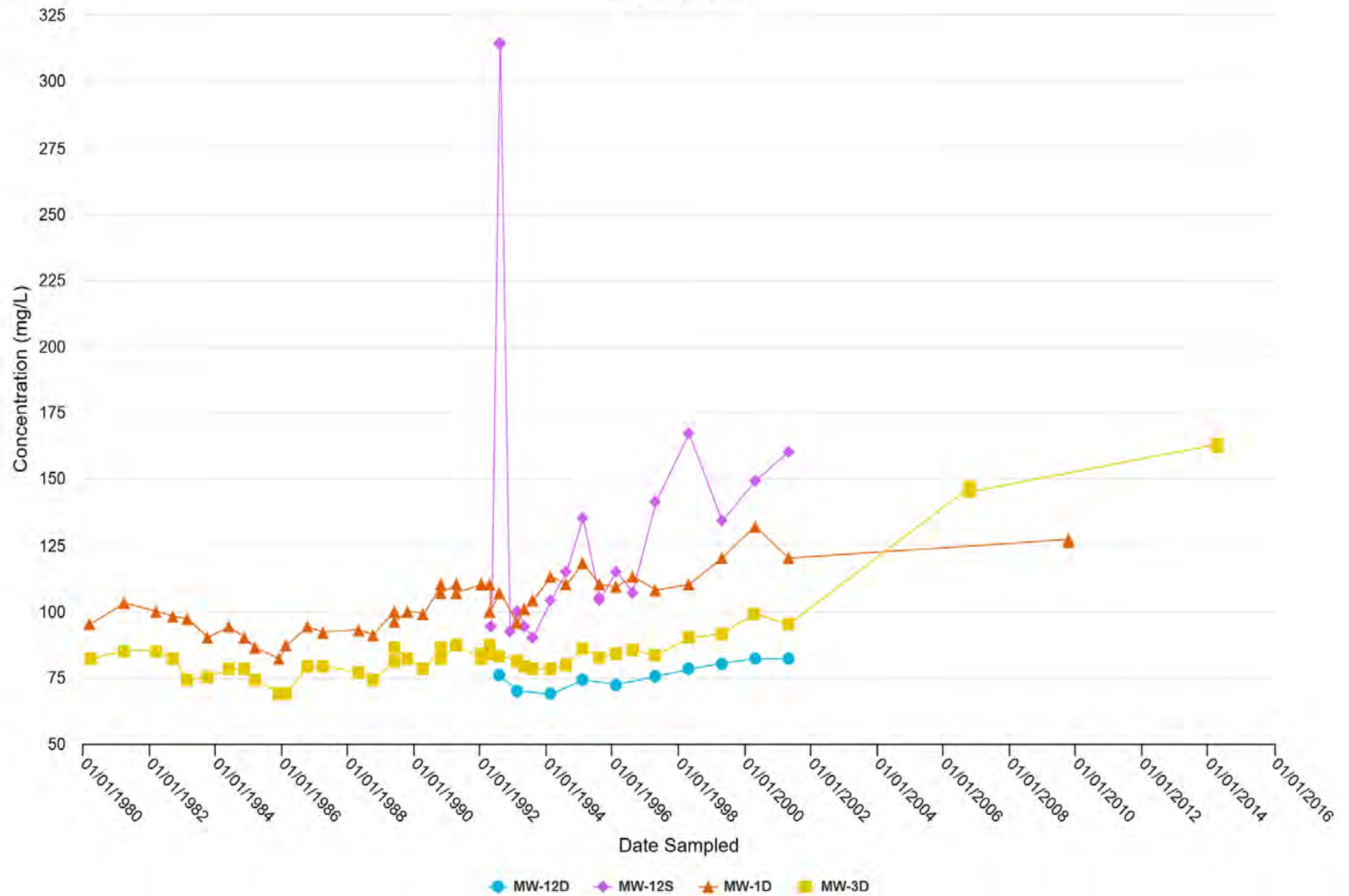


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL



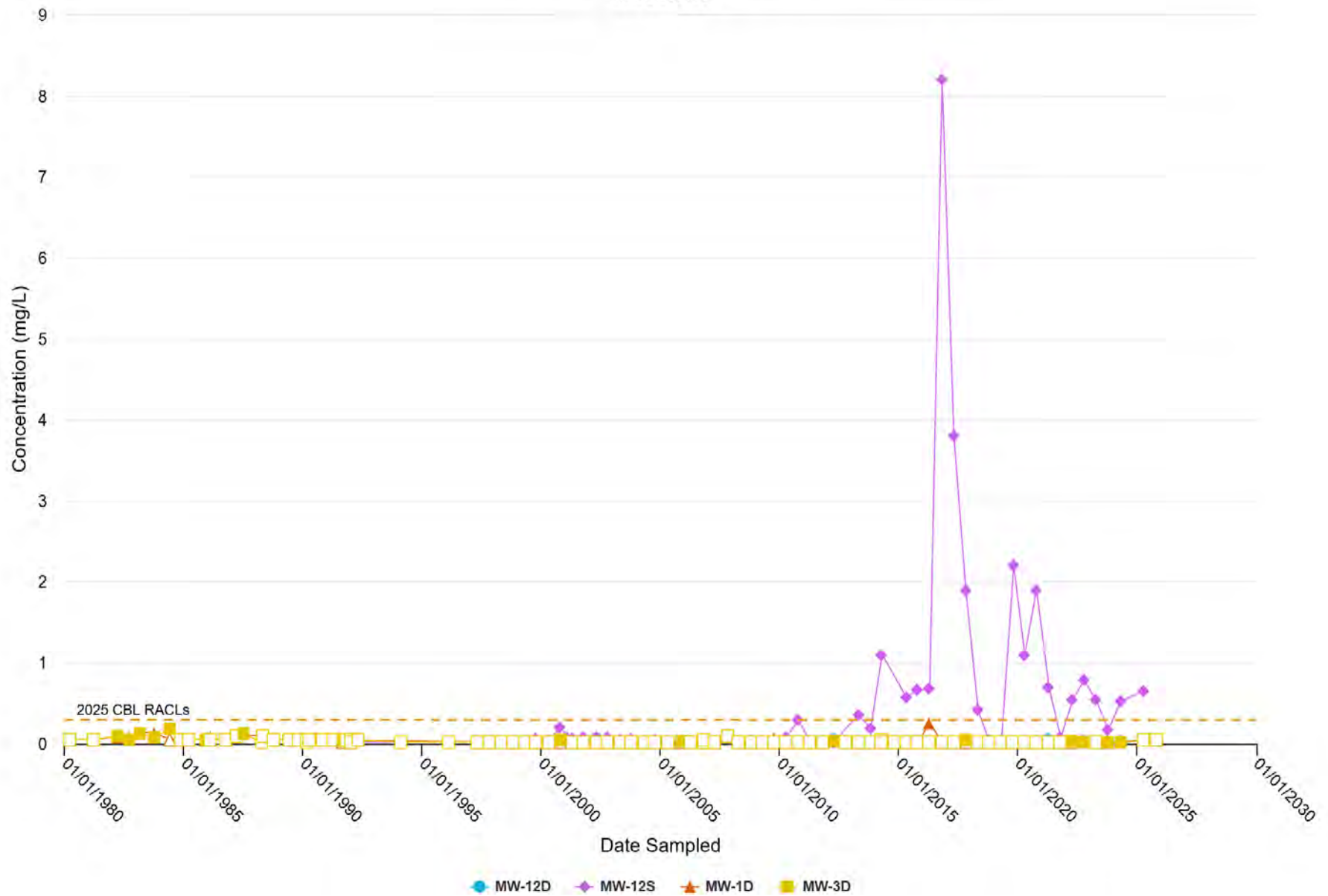
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Hardness as CaCO₃

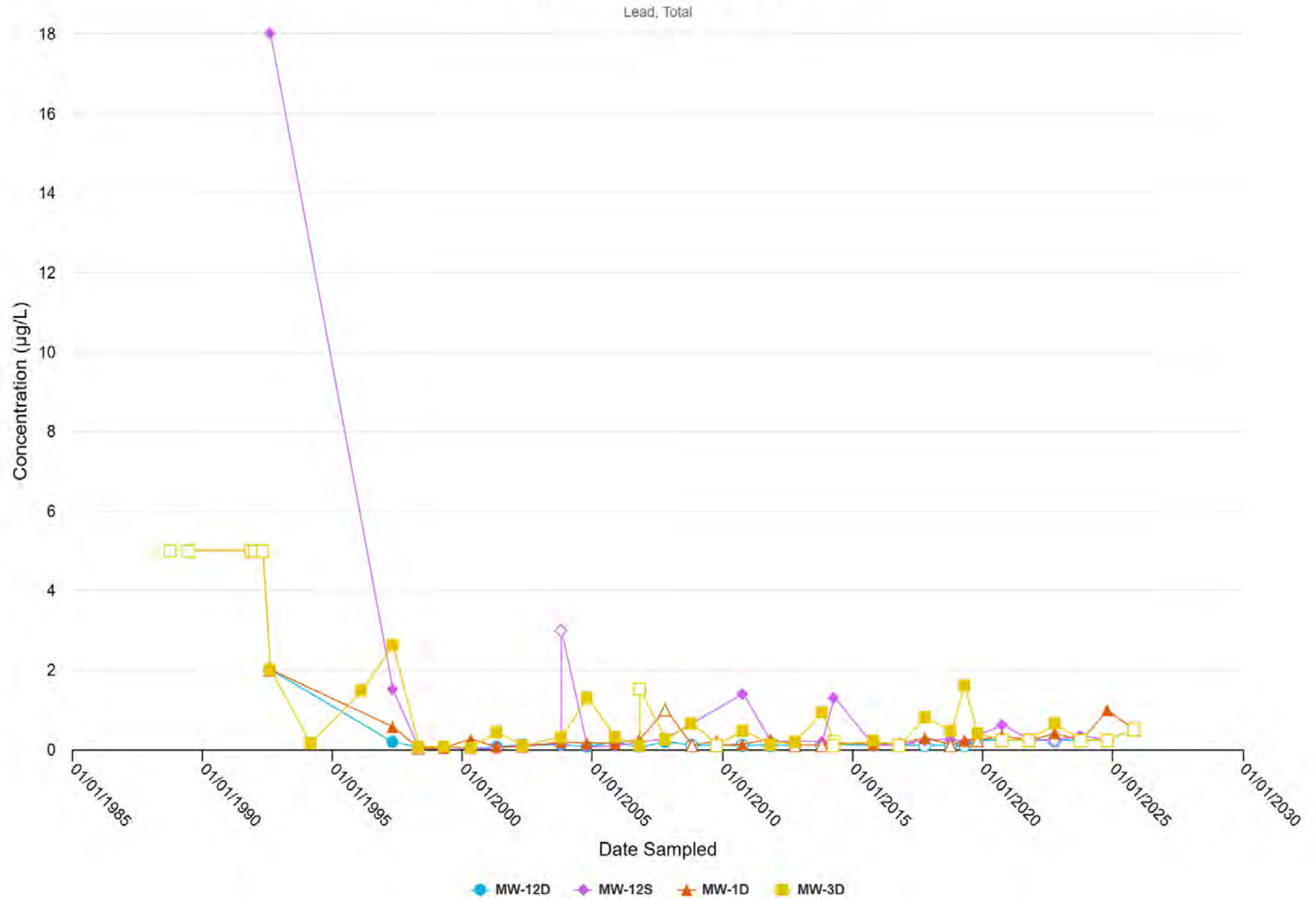


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Iron, Dissolved

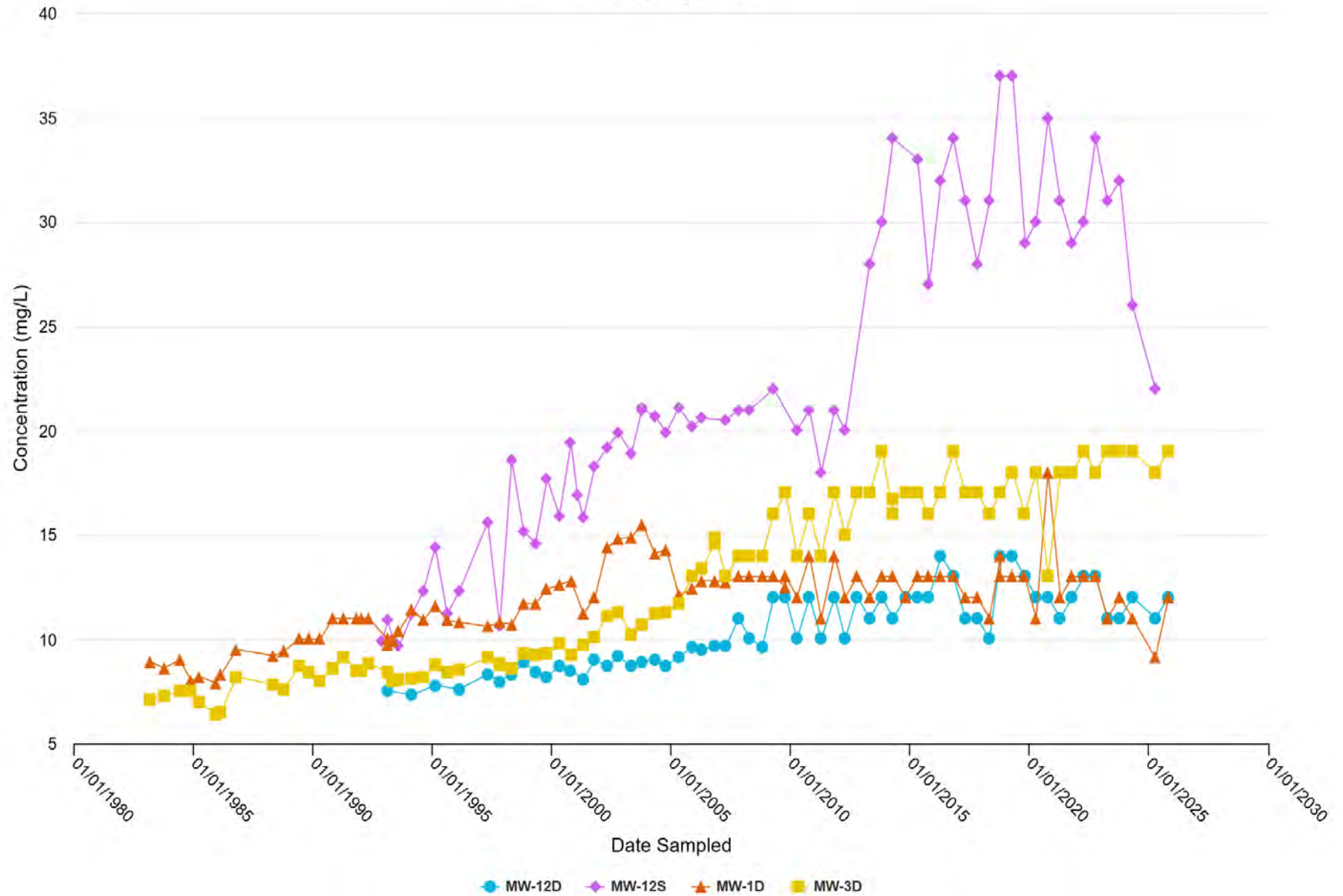


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S) COFFIN BUTTE LANDFILL



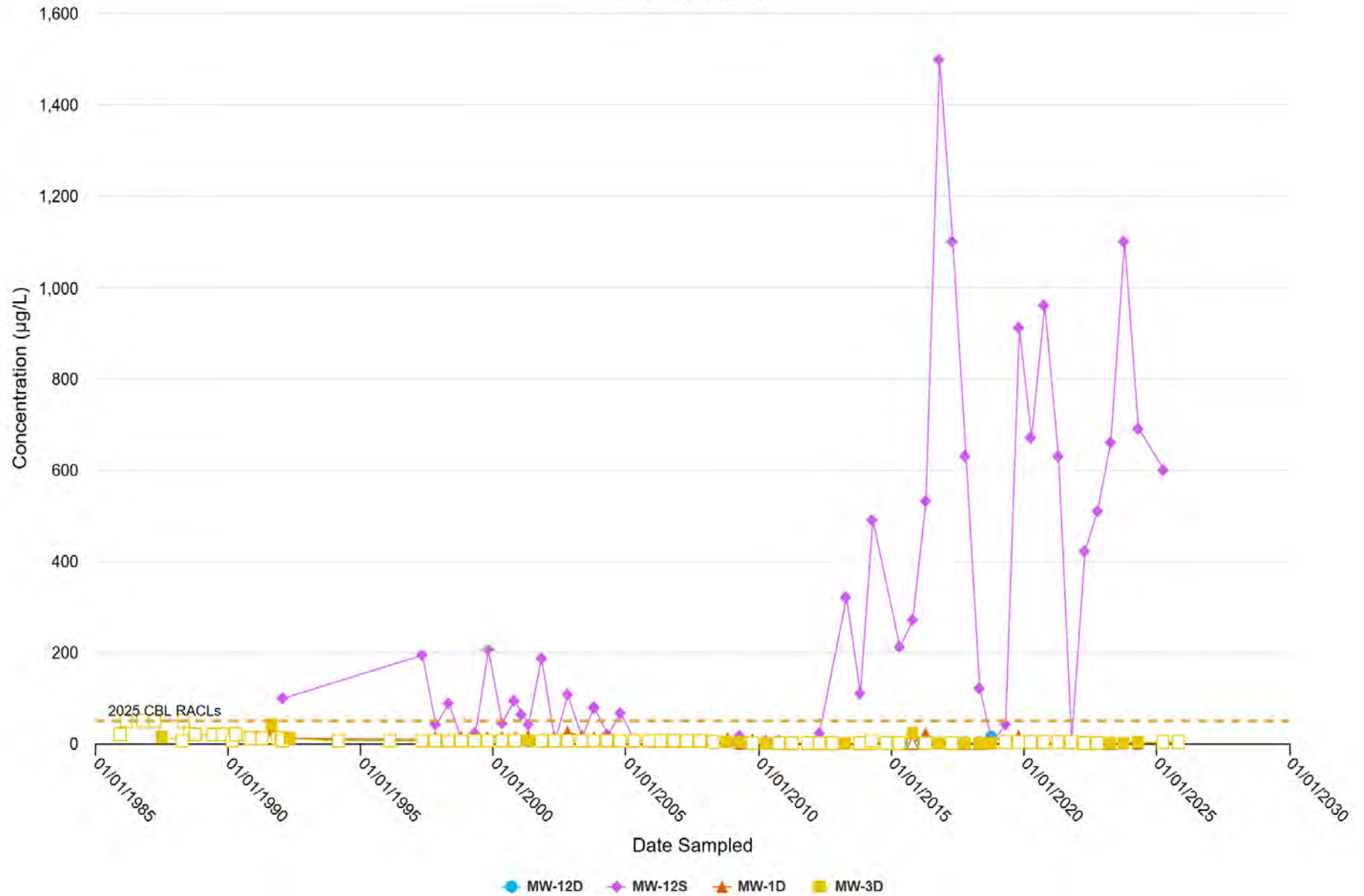
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Magnesium, Dissolved

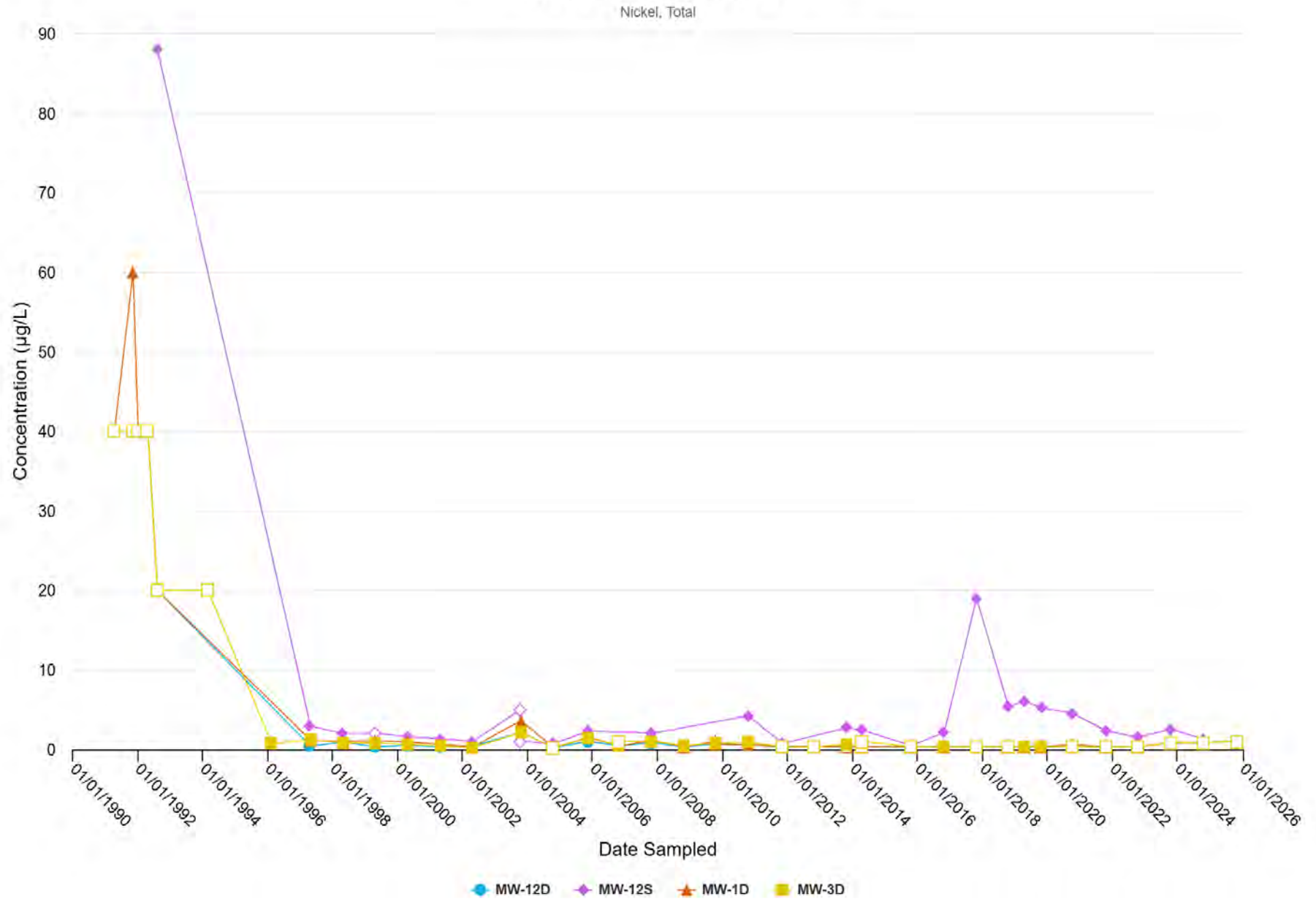


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Manganese, Dissolved

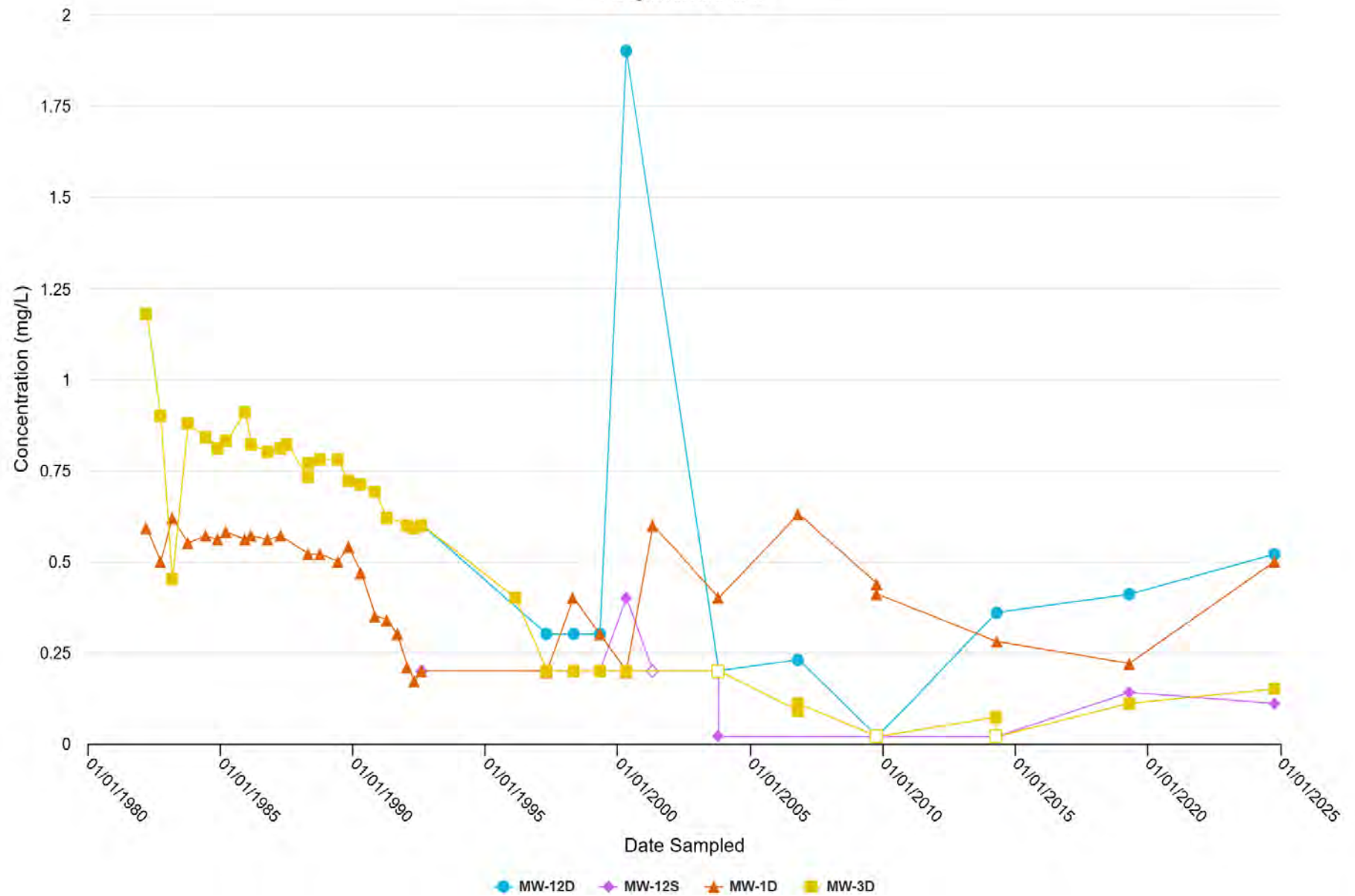


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

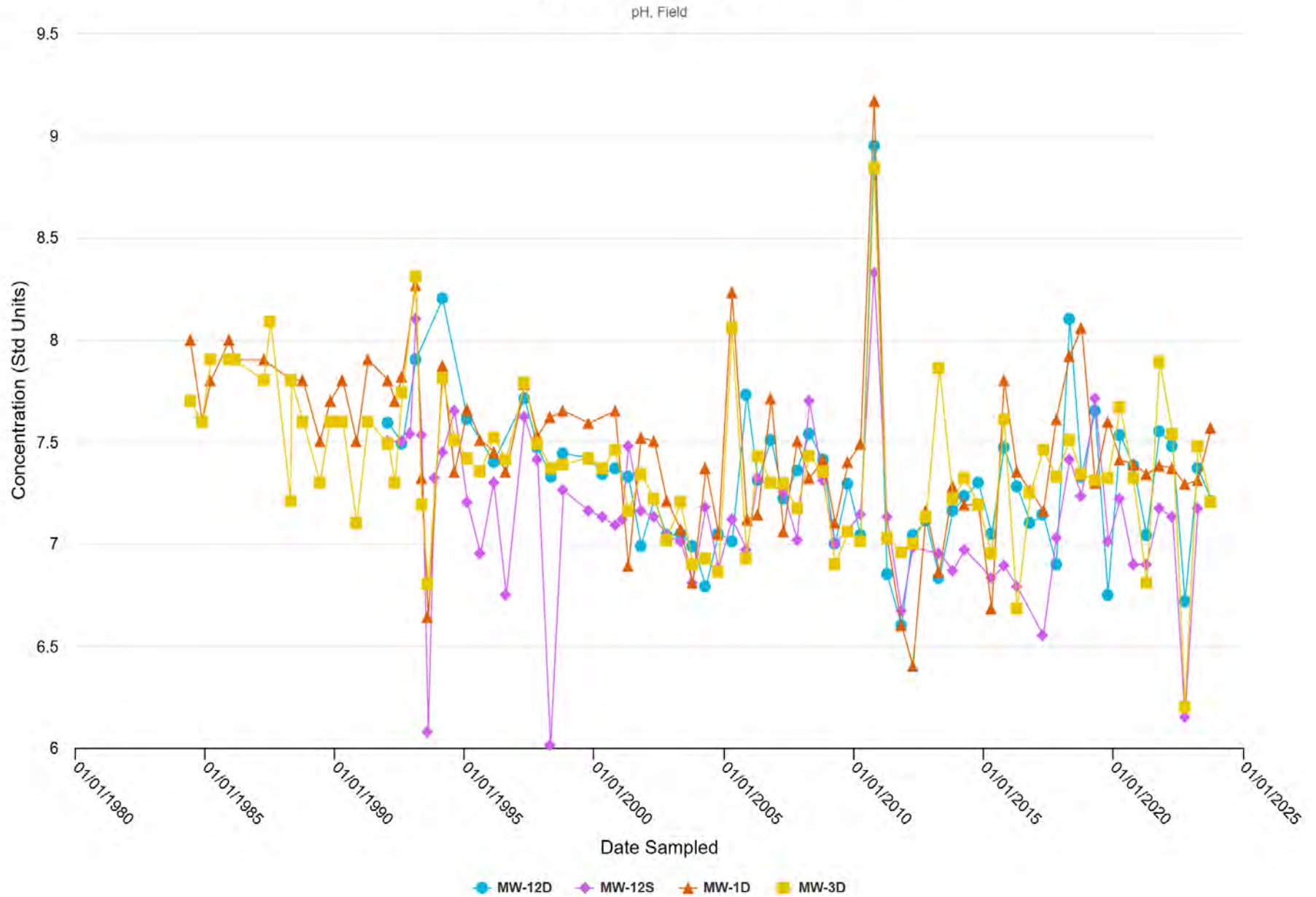


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

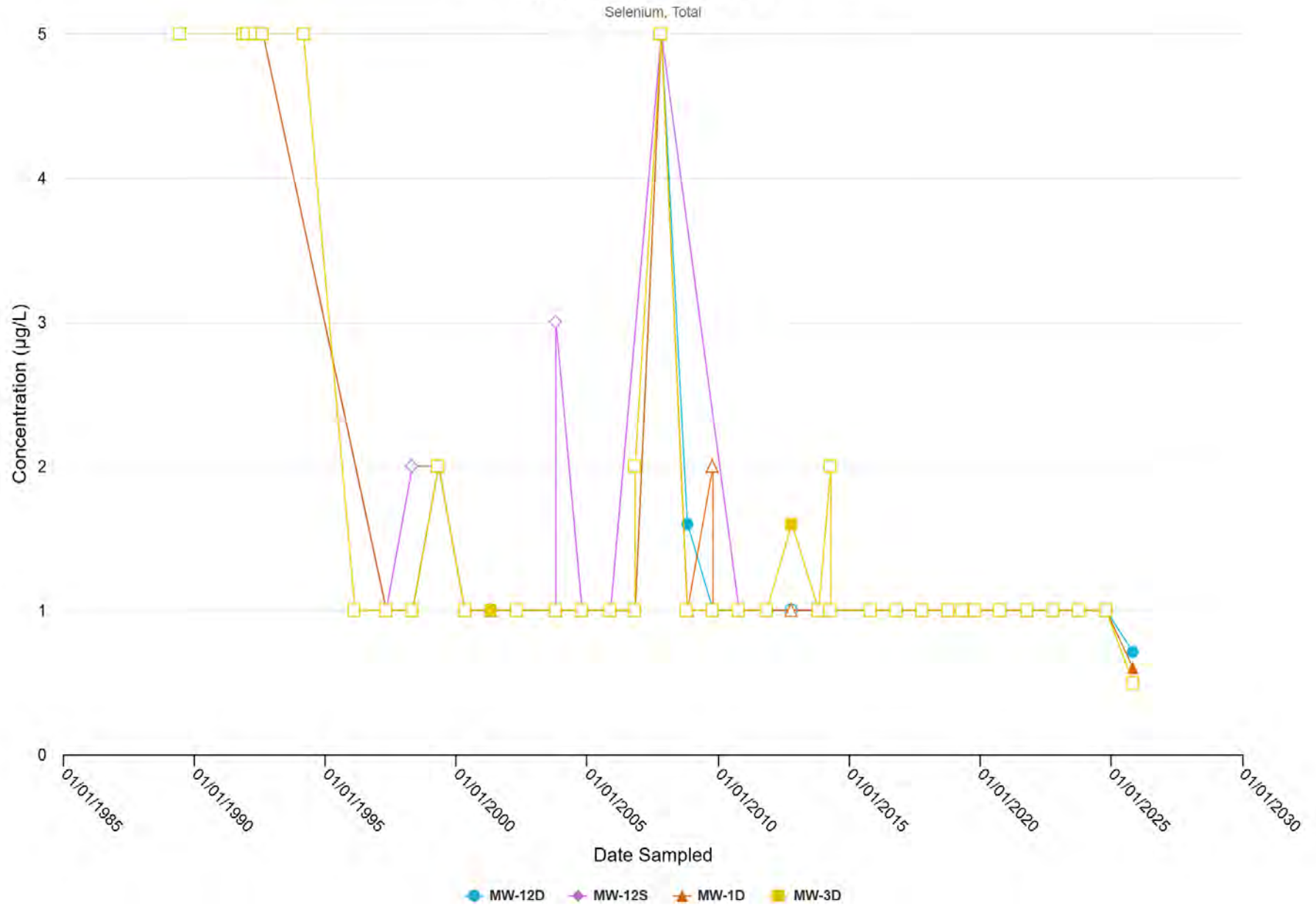
Nitrogen, Nitrate & Nitrite



Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

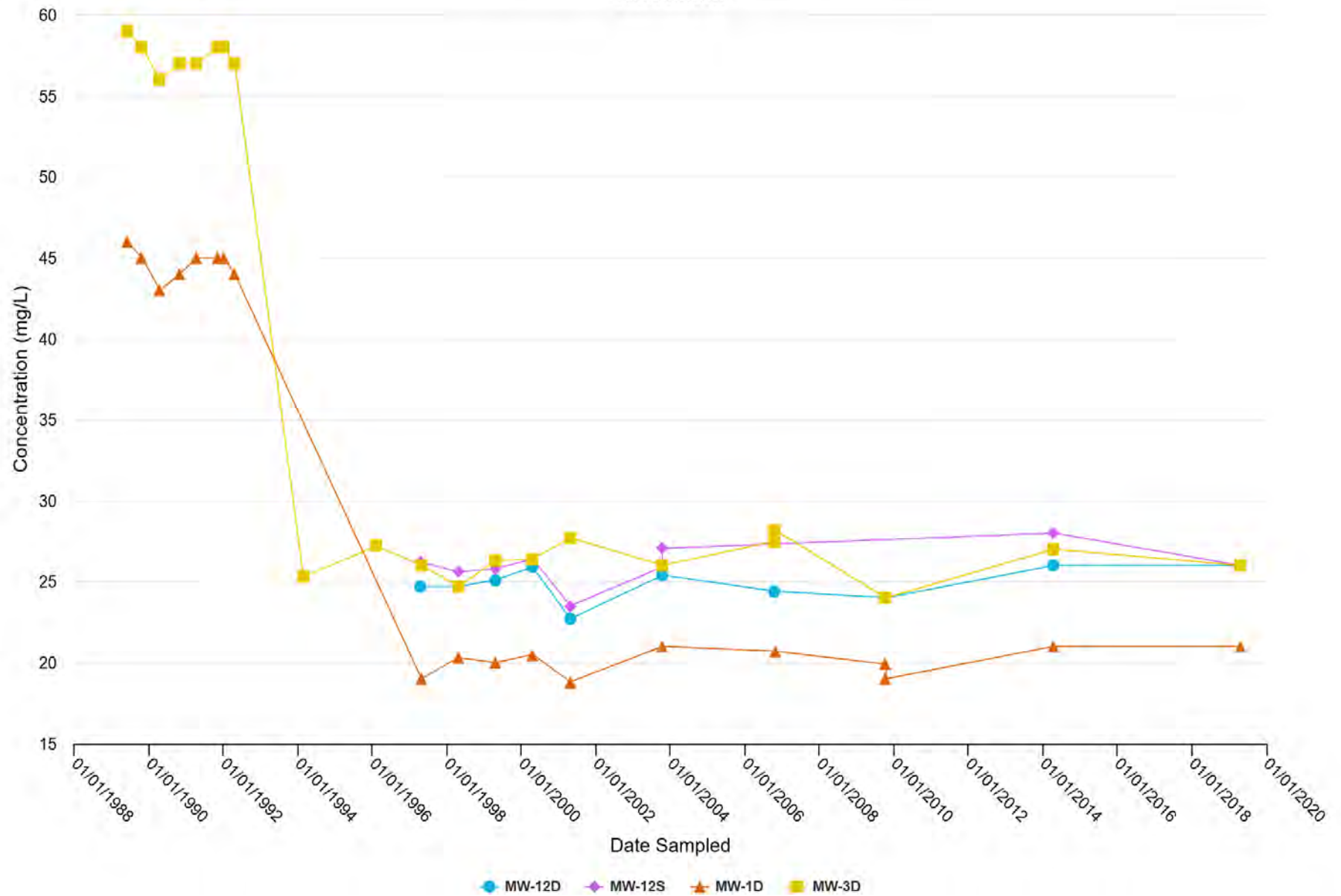


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

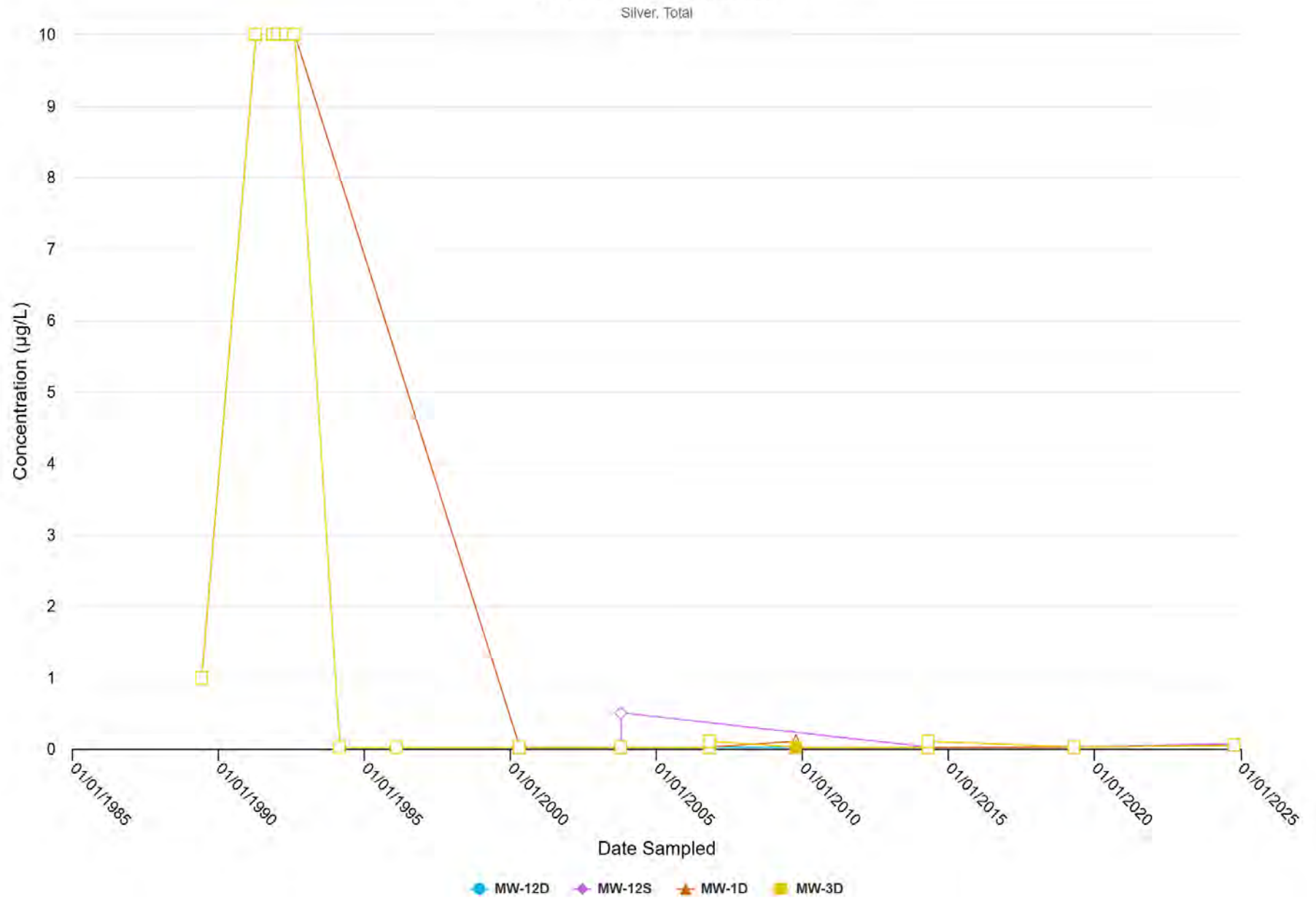


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Silicon, Dissolved

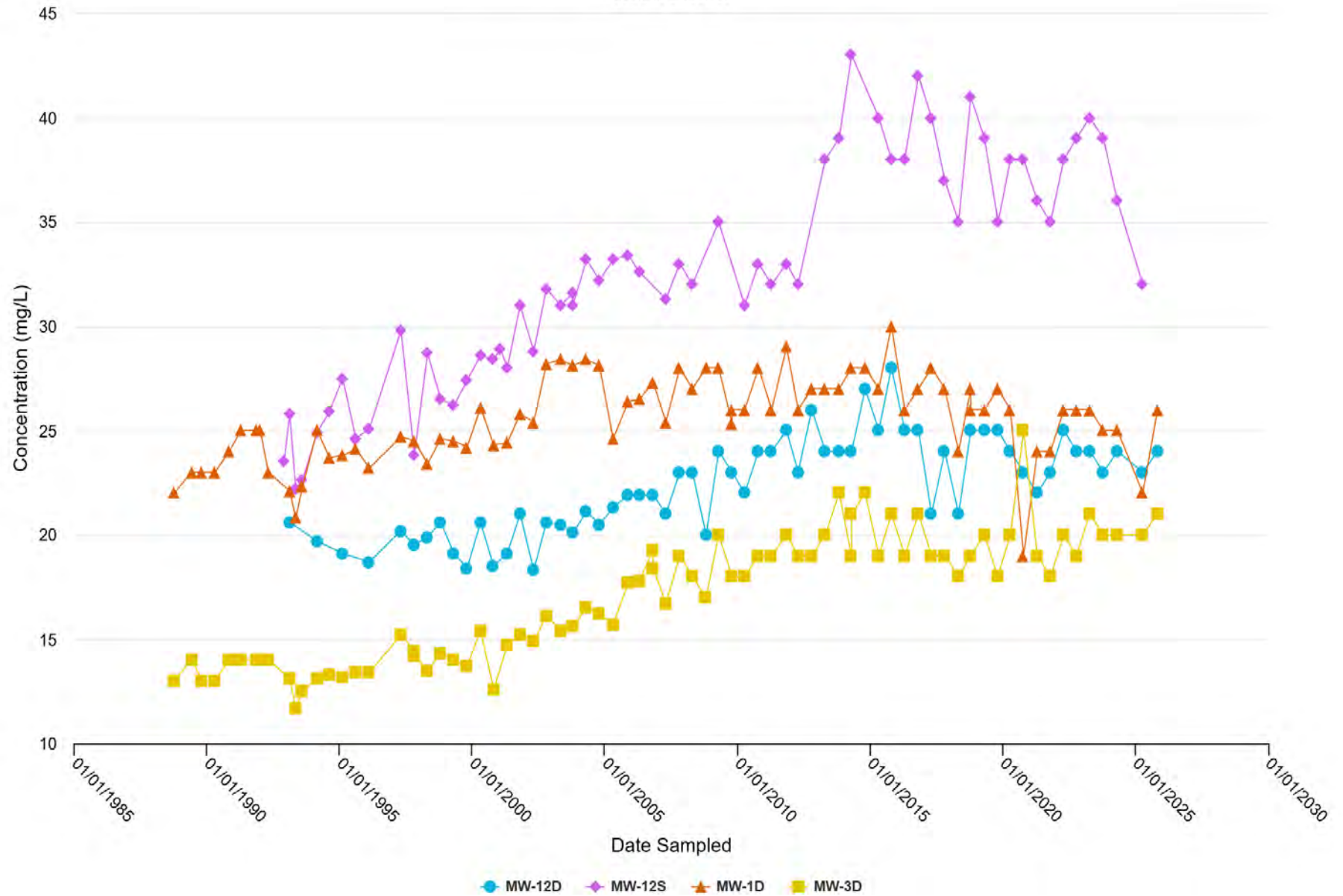


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

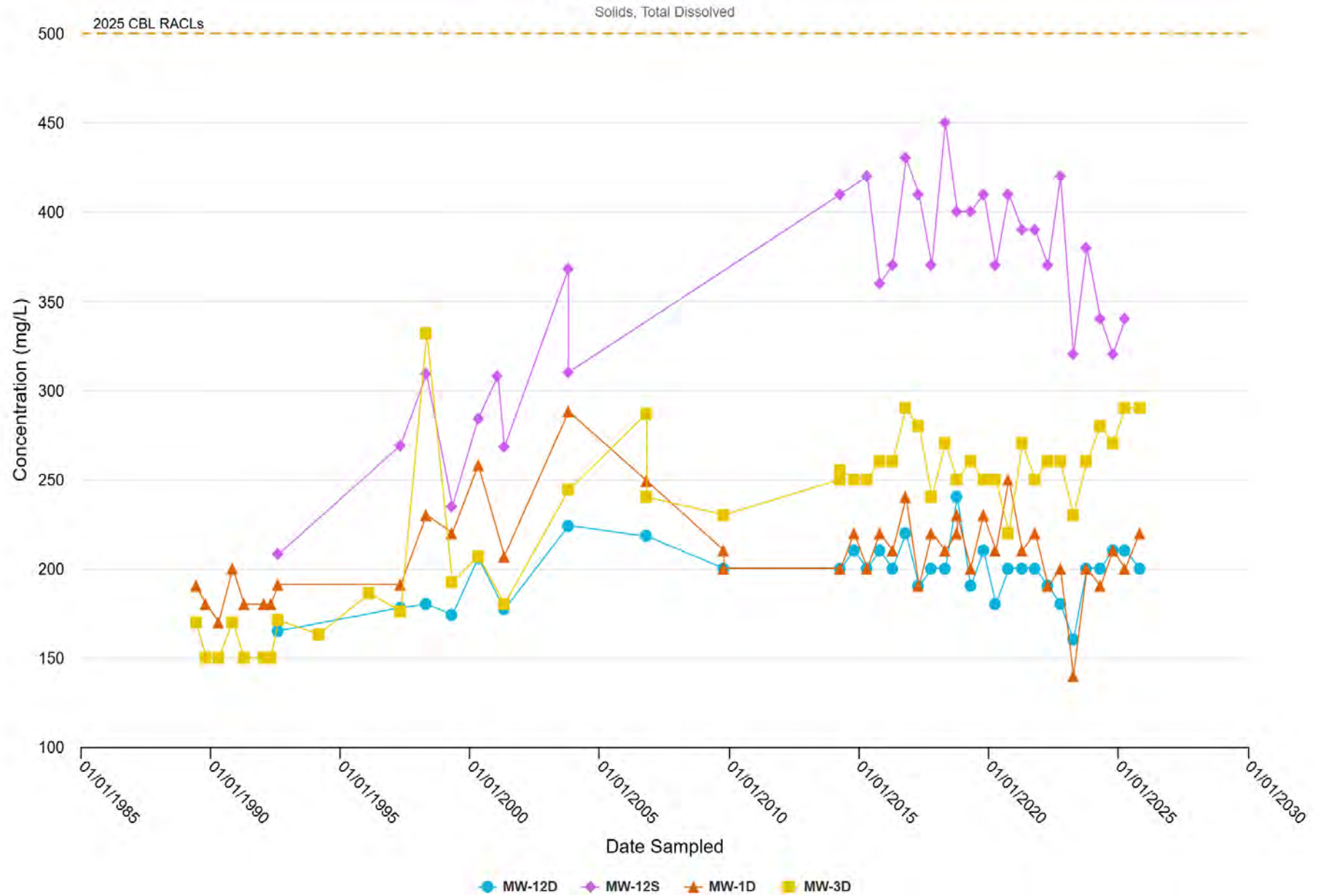


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S) COFFIN BUTTE LANDFILL

Sodium, Dissolved

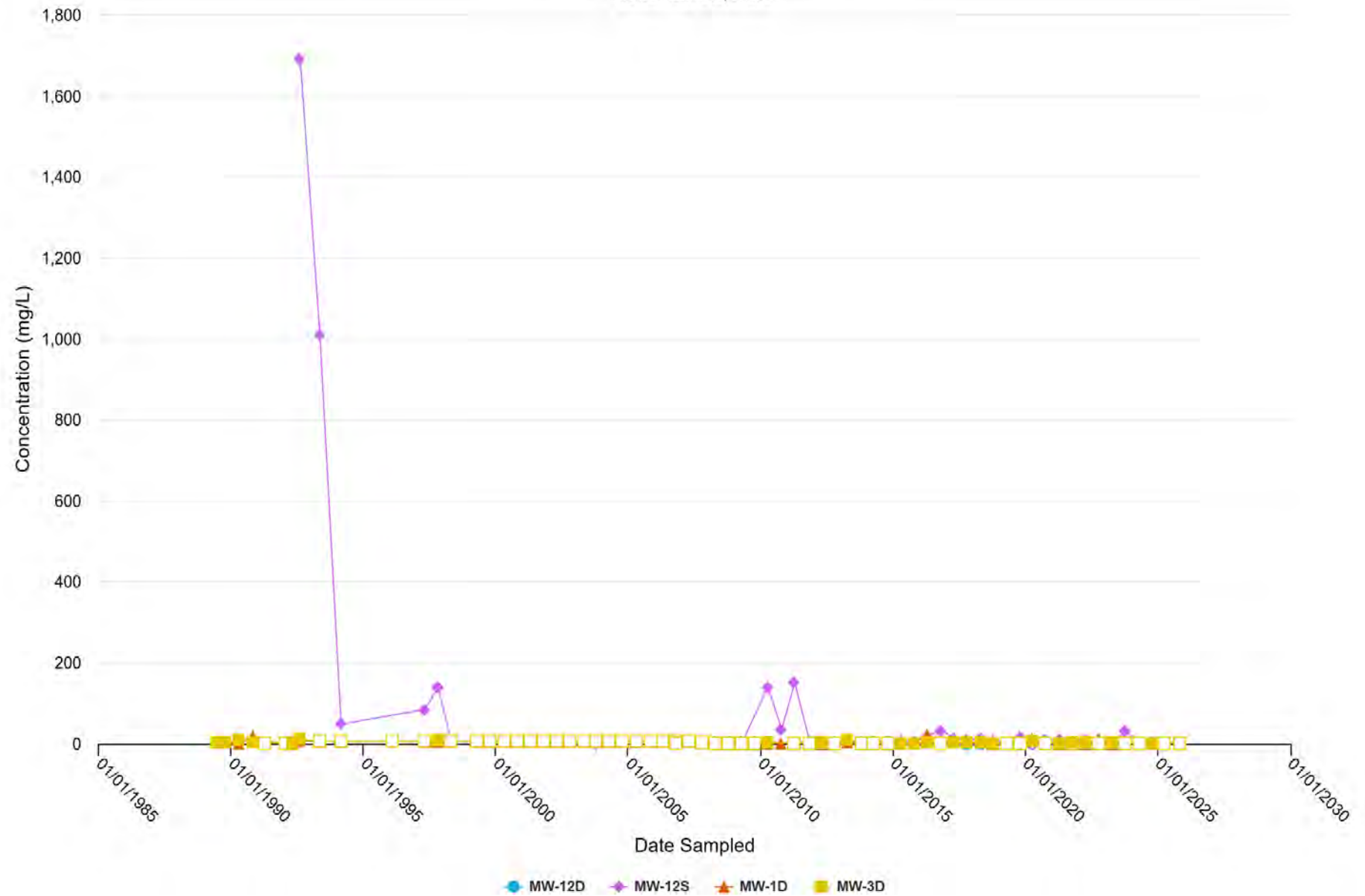


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

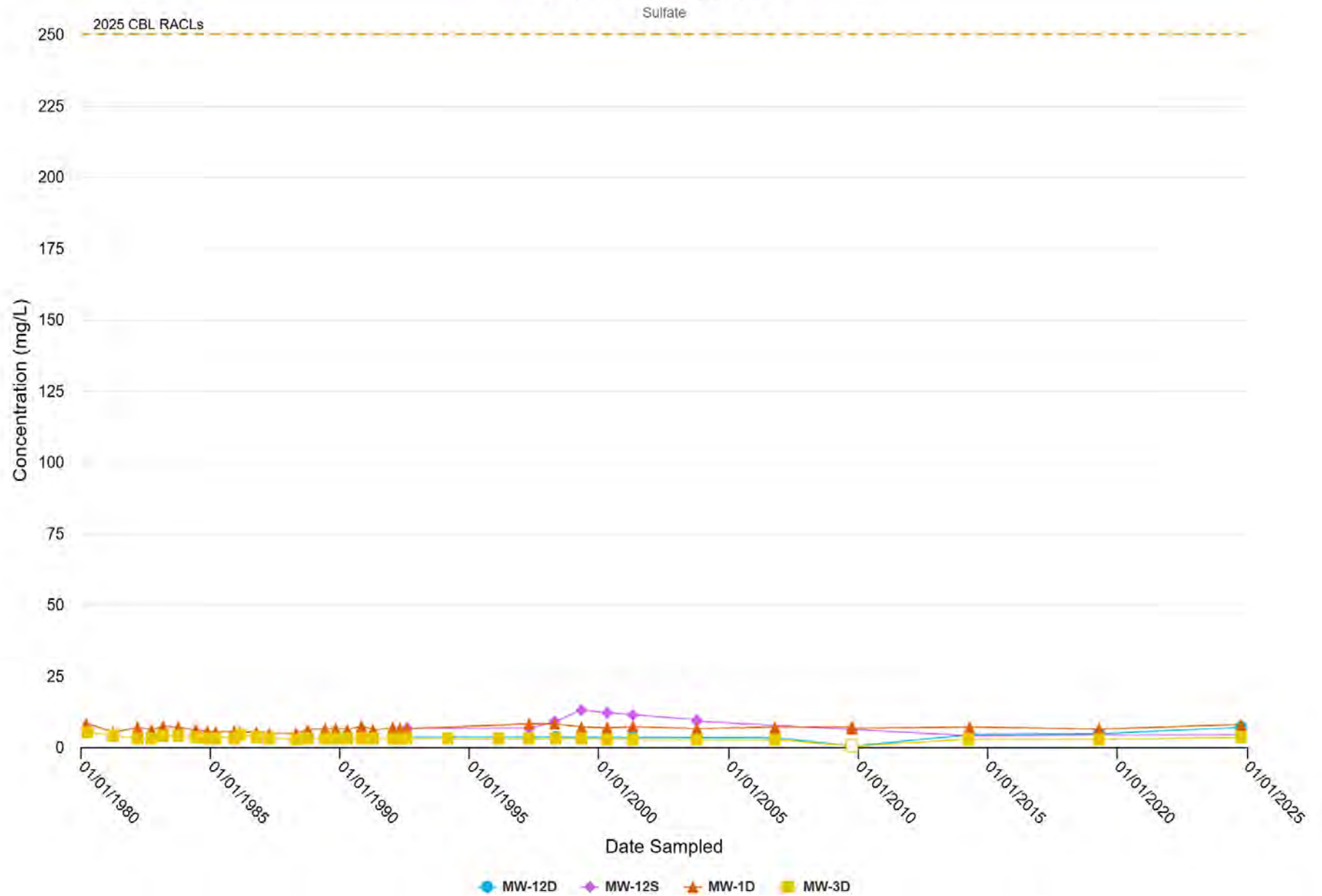


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Solids, Total Suspended

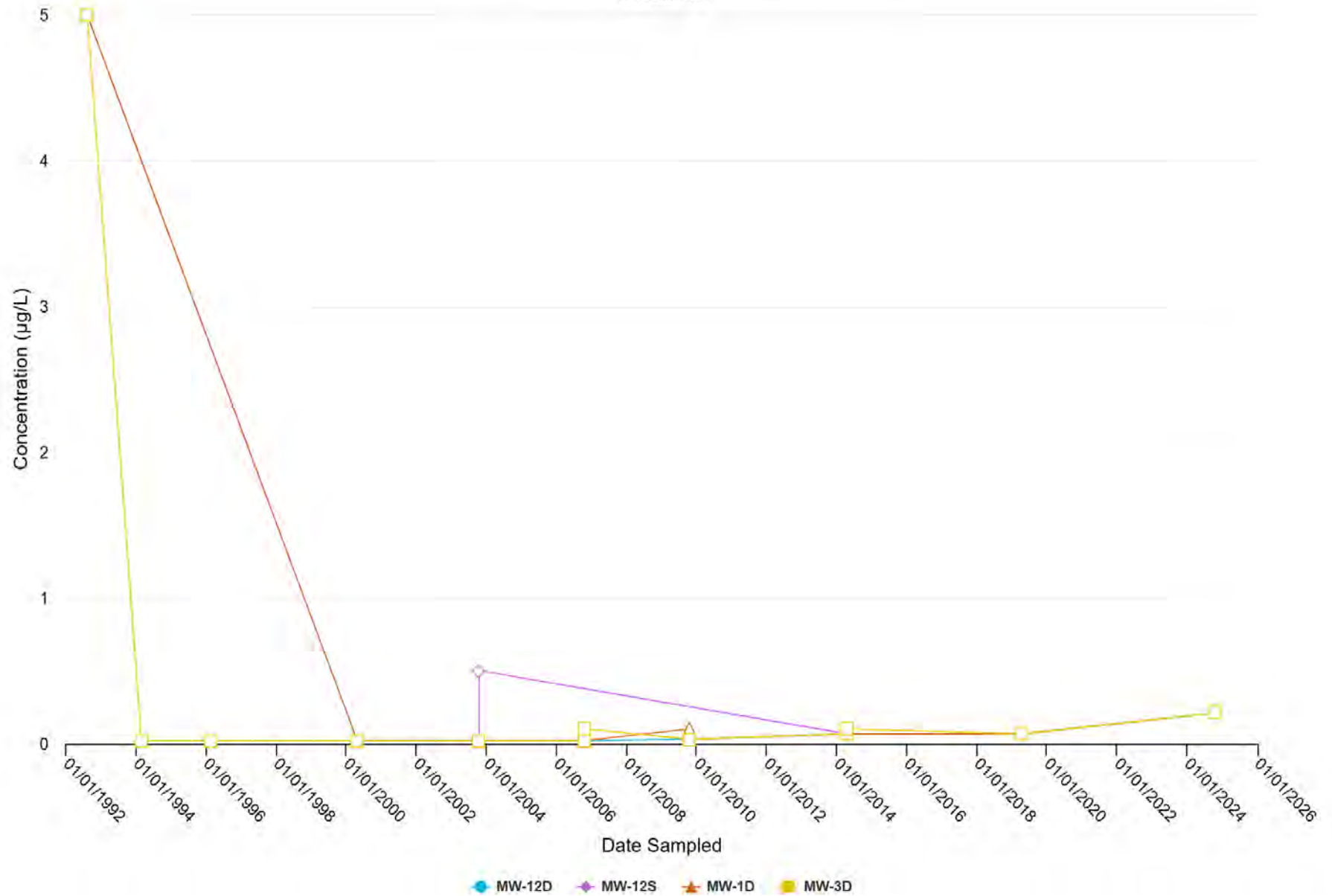


Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL



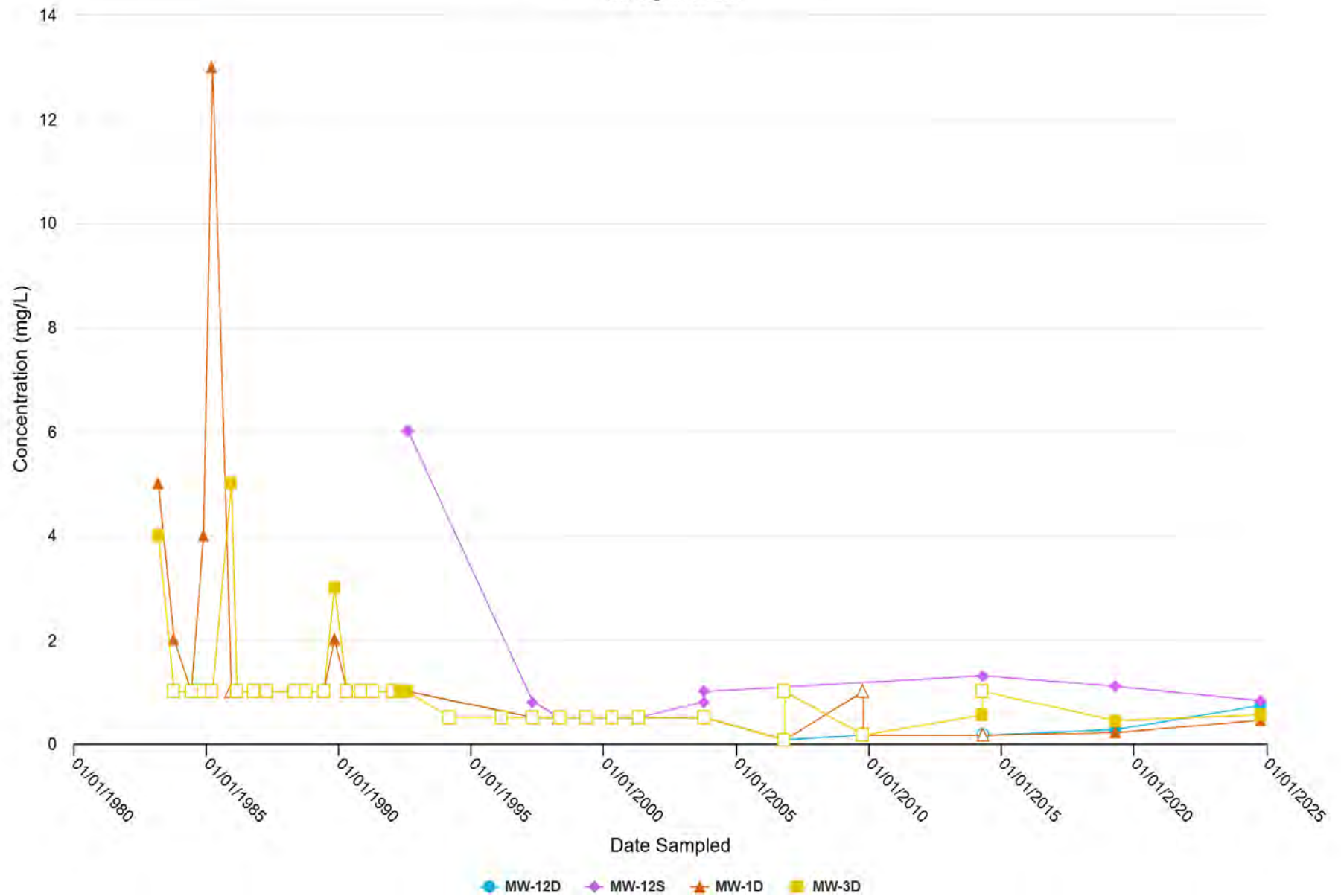
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Thallium, Total



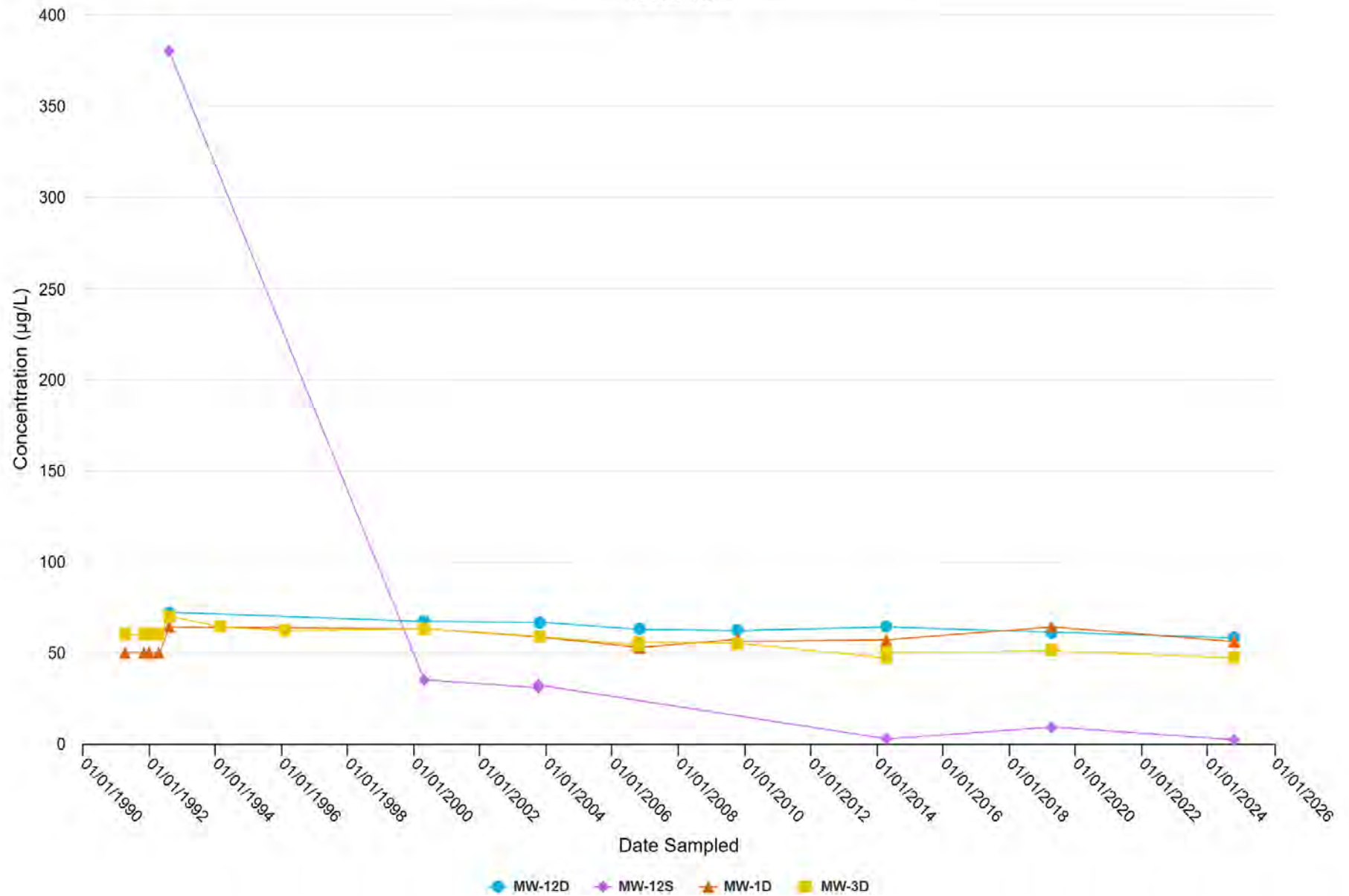
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Total Organic Carbon



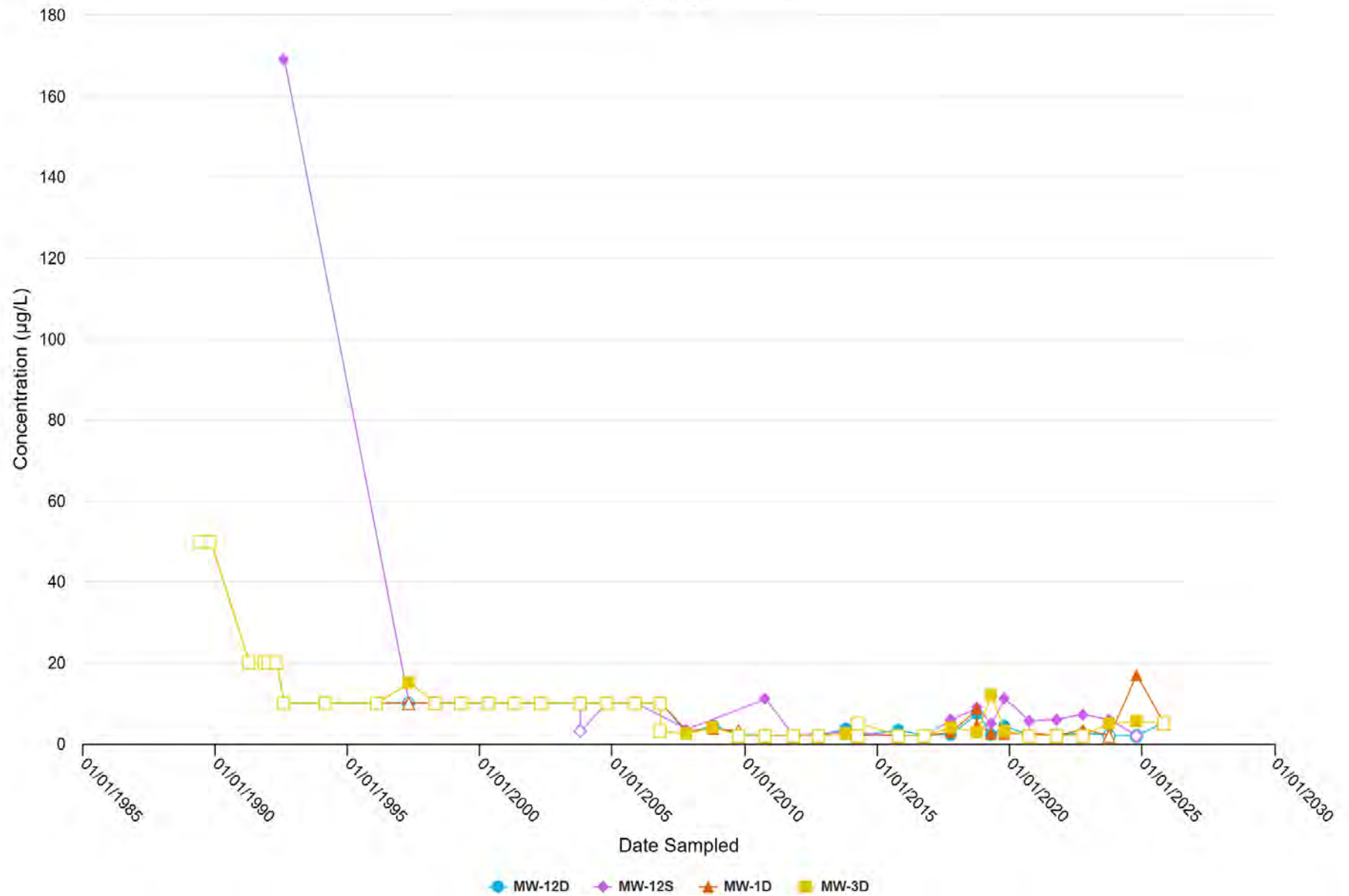
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Vanadium, Total



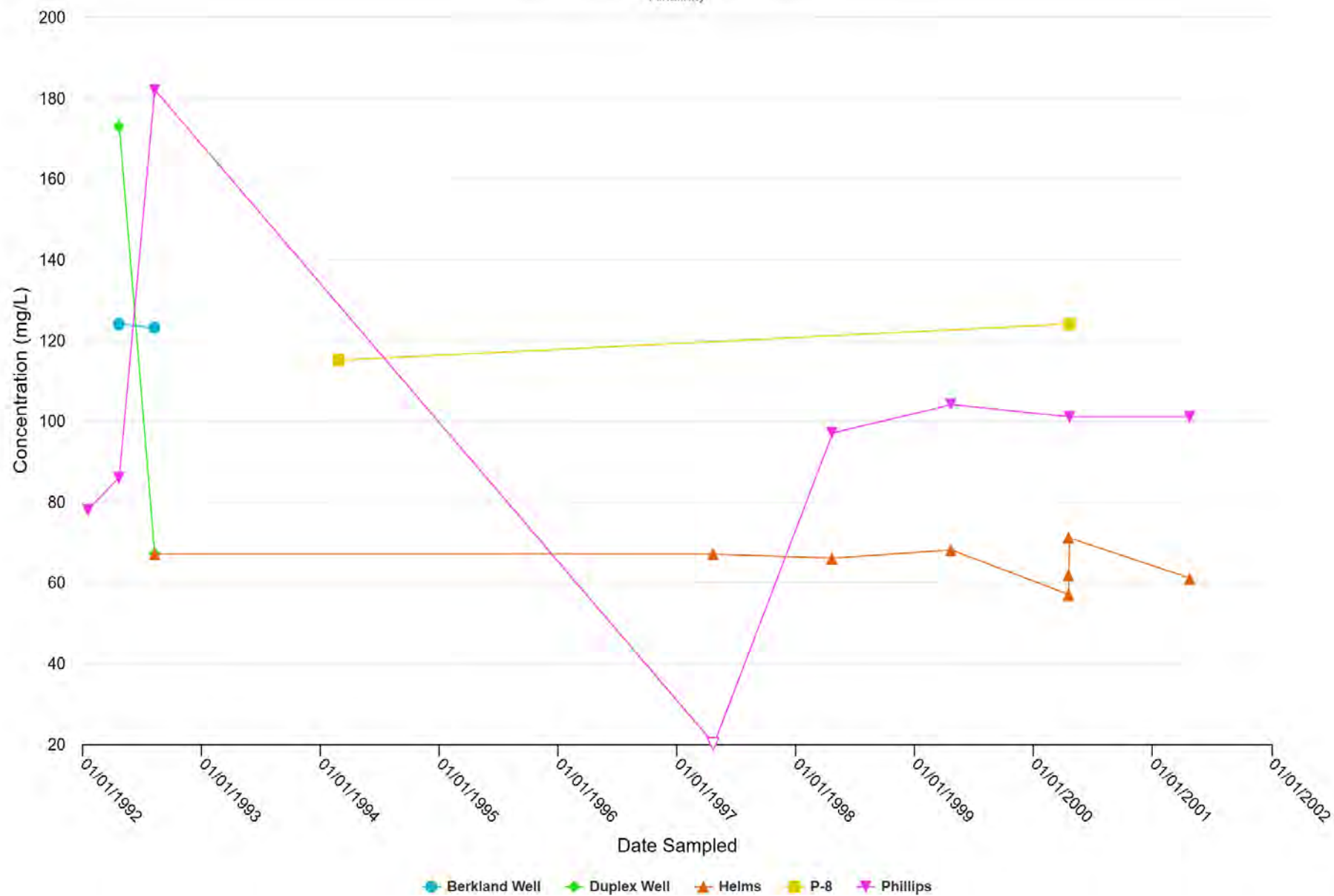
Cell 1 - Time Series (MW-1D, MW-3D, MW-12D/S)
COFFIN BUTTE LANDFILL

Zinc, Total



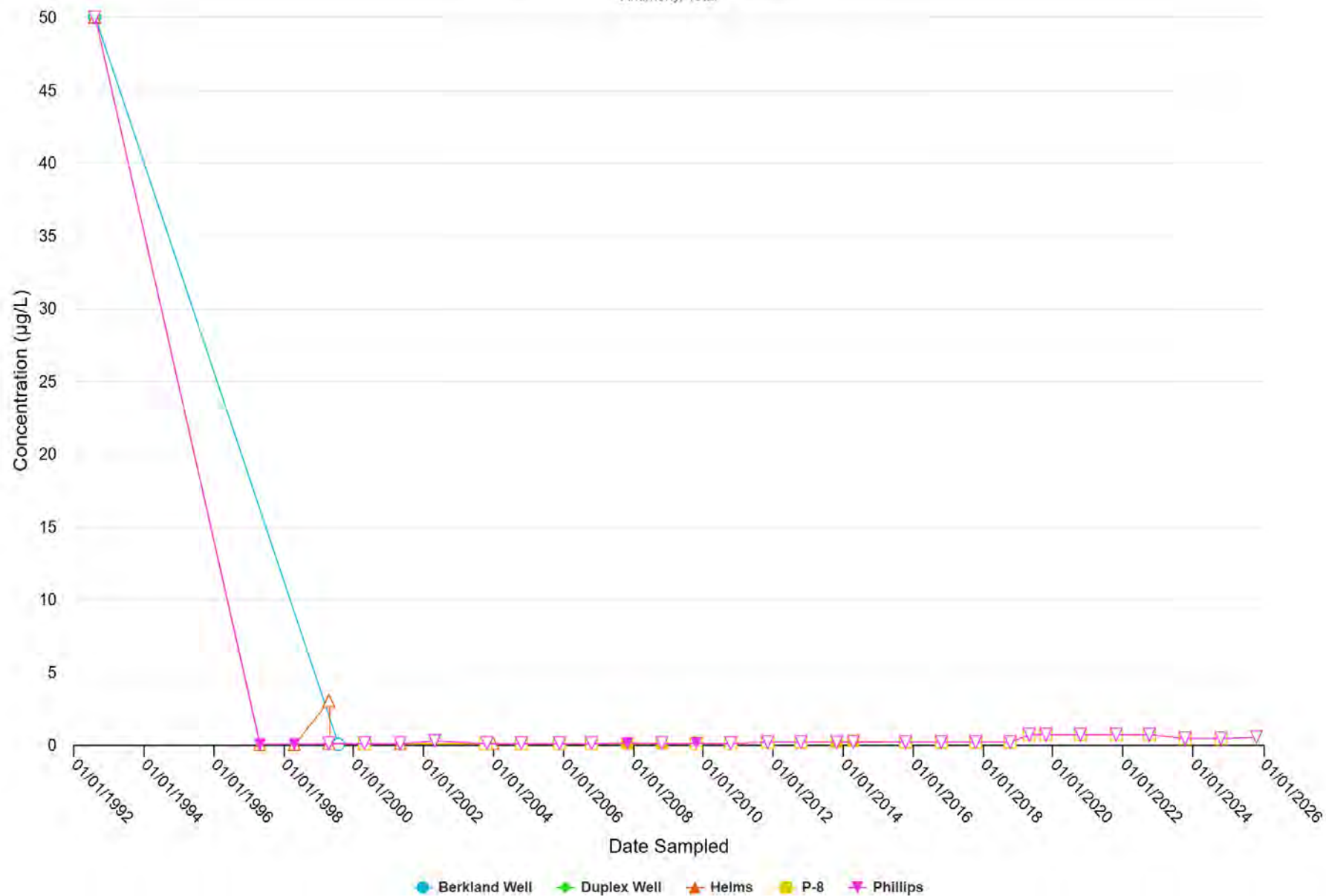
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Alkalinity

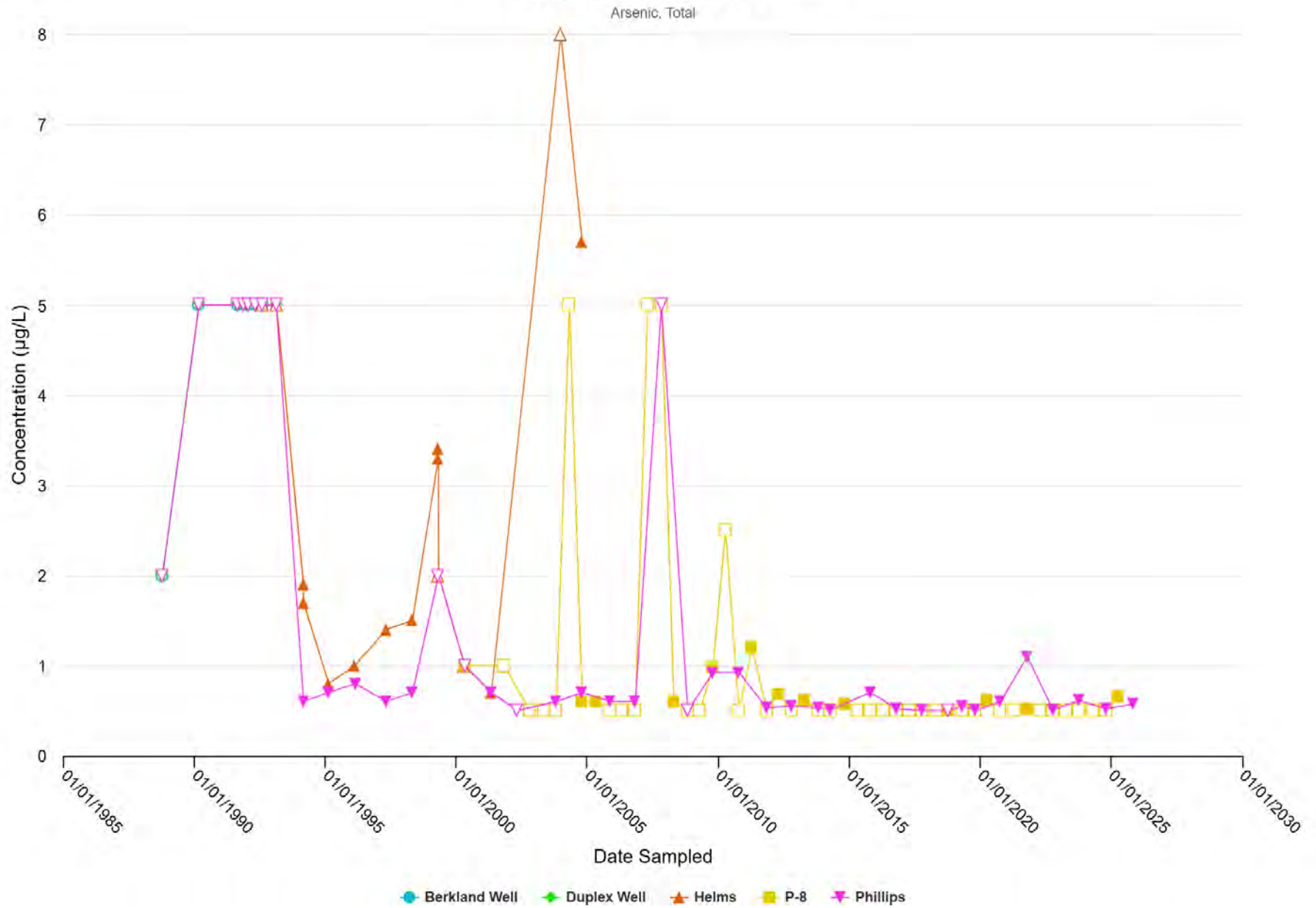


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Antimony, Total

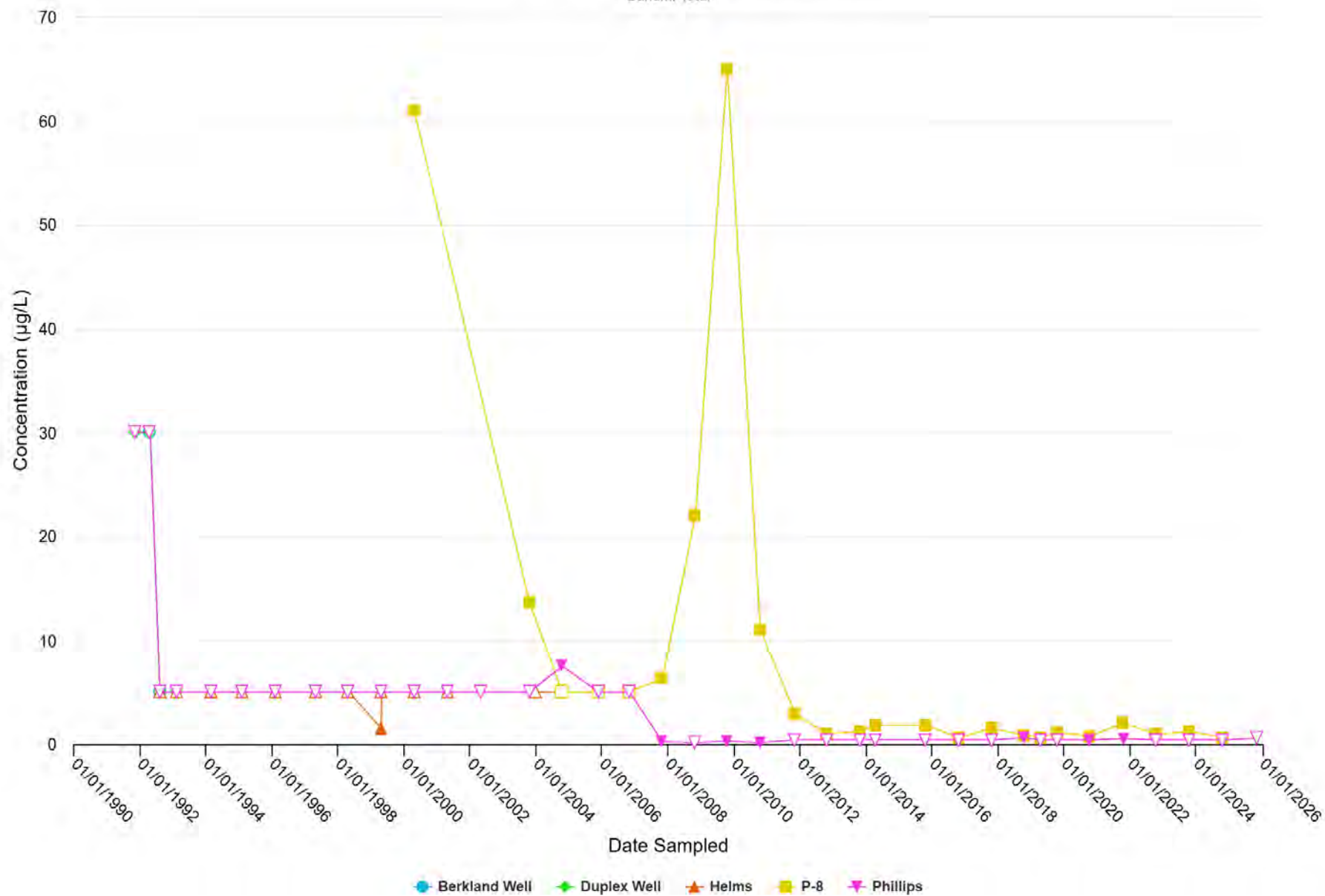


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL



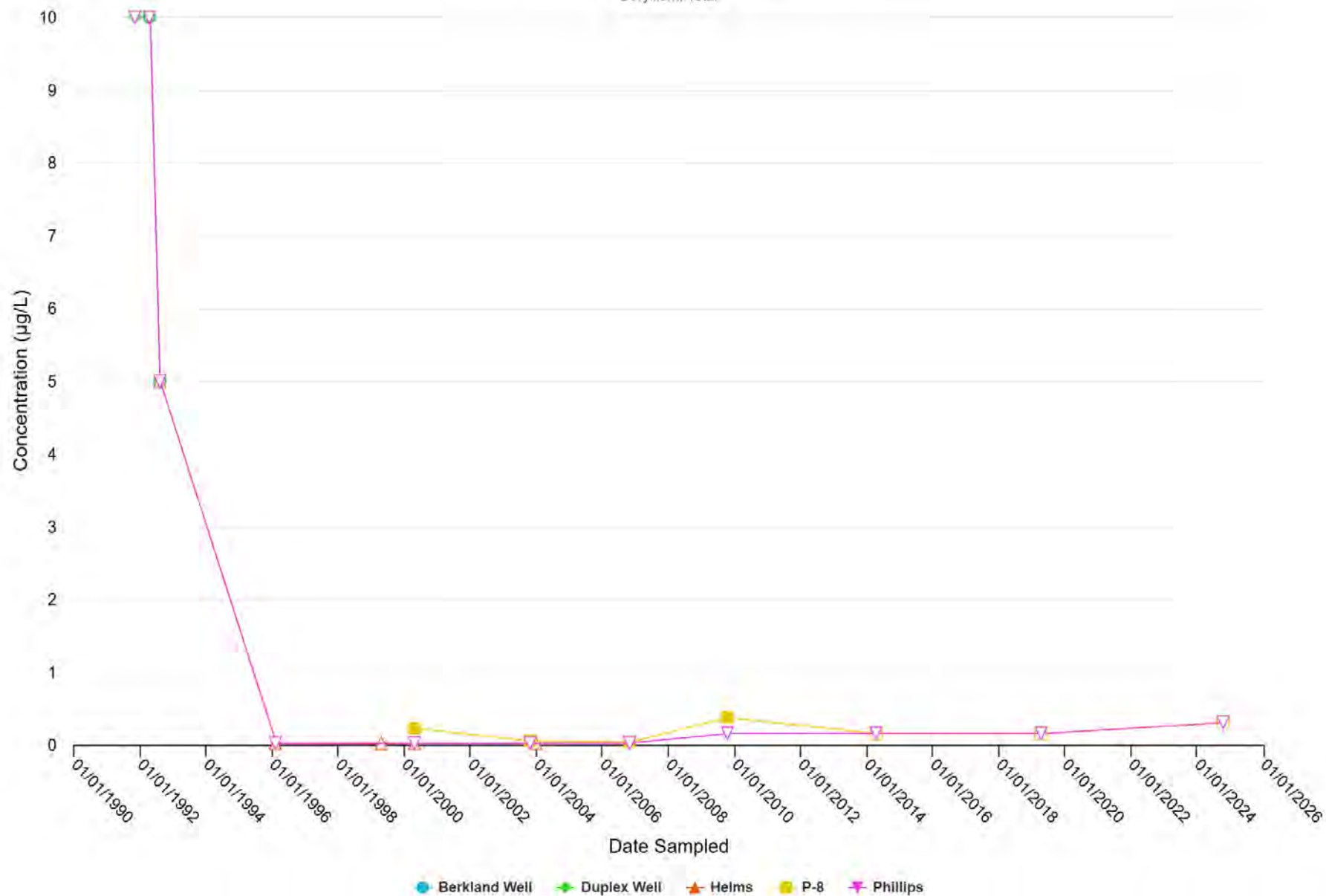
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Barium, Total



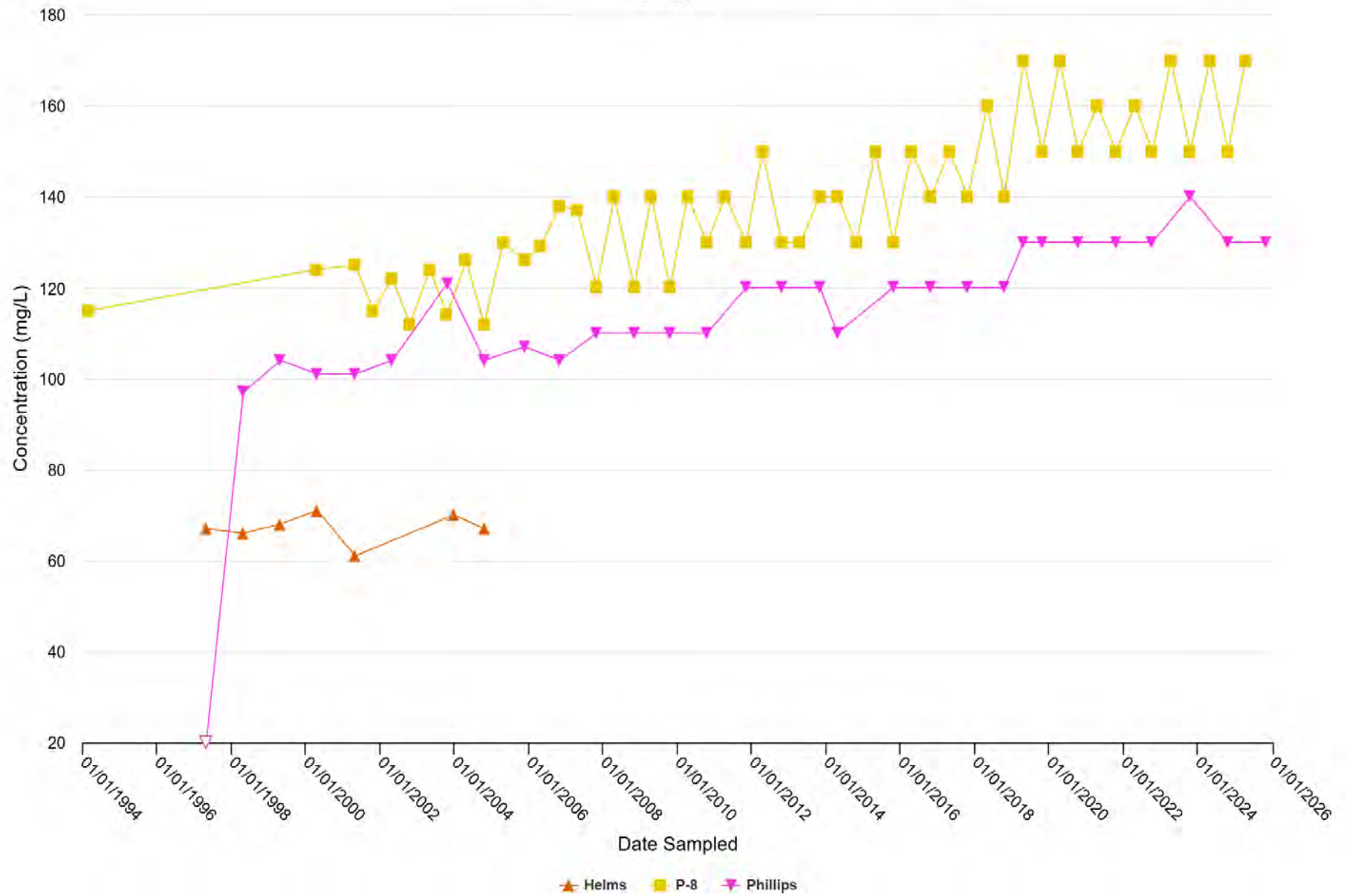
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Beryllium, Total



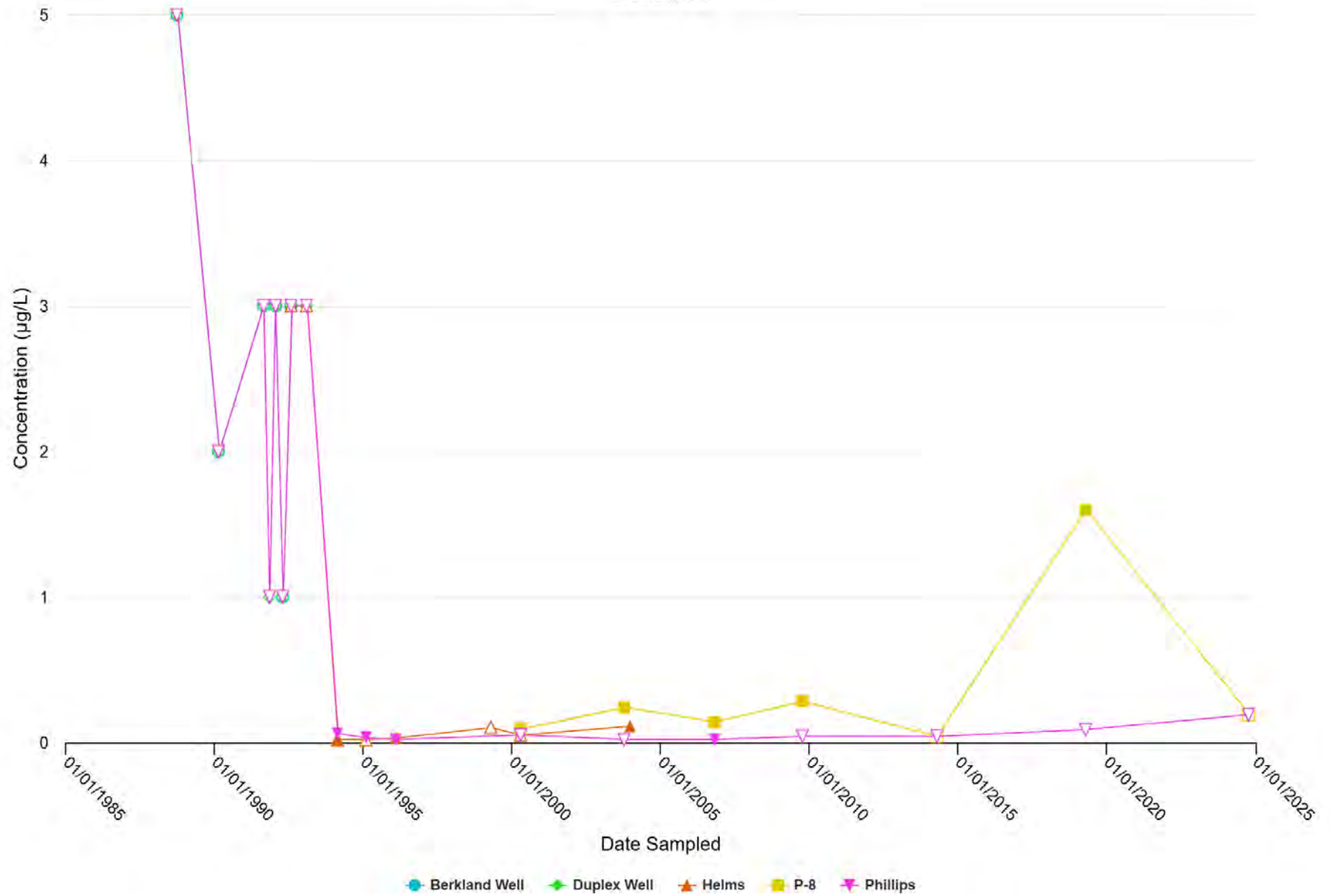
Public Supply Wells - Time Series (Phillips, P-8)
COFFIN BUTTE LANDFILL

Bicarbonate



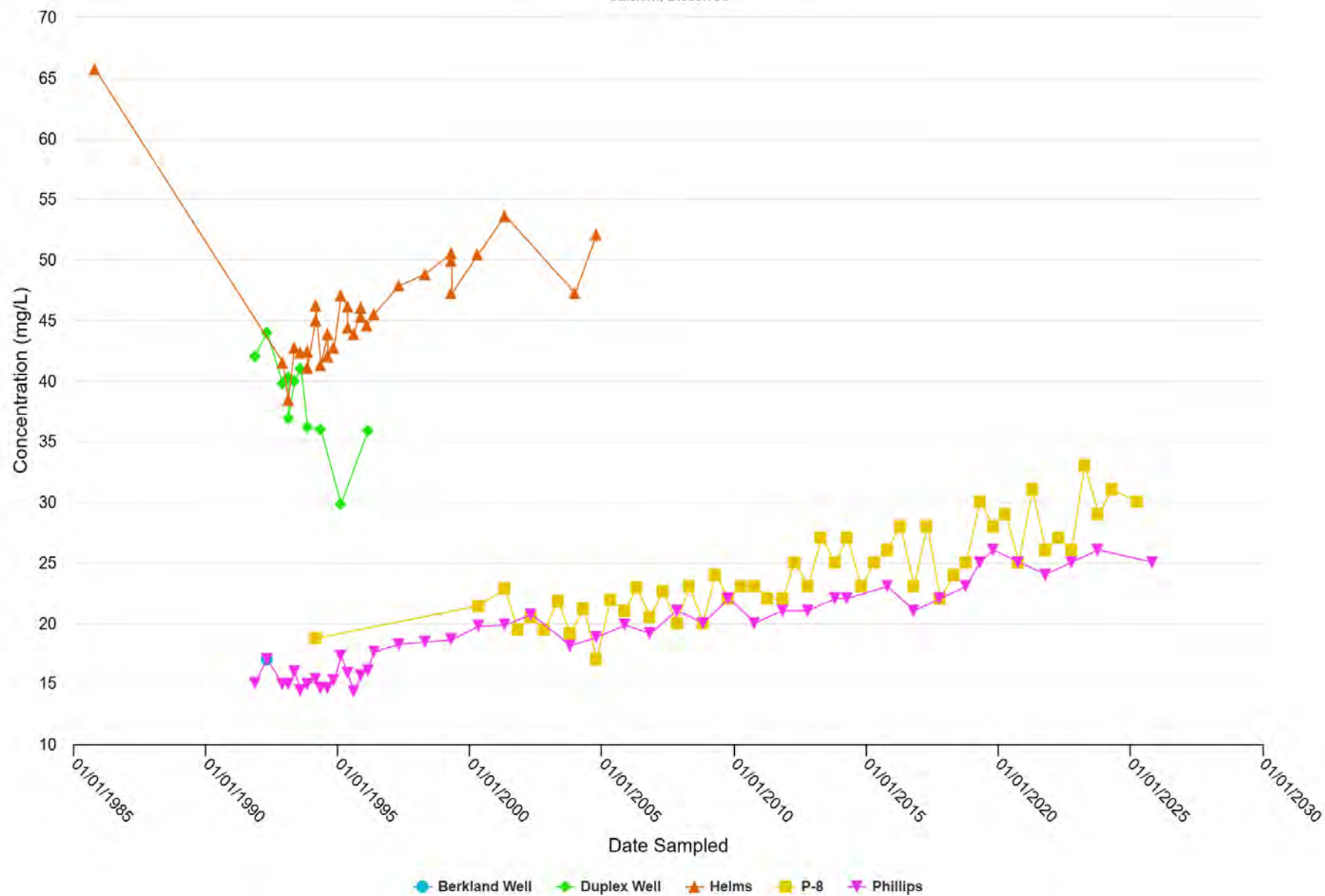
Public Supply Wells - Time Series (Phillips, P-8)
COFFIN BUTTE LANDFILL

Cadmium, Total



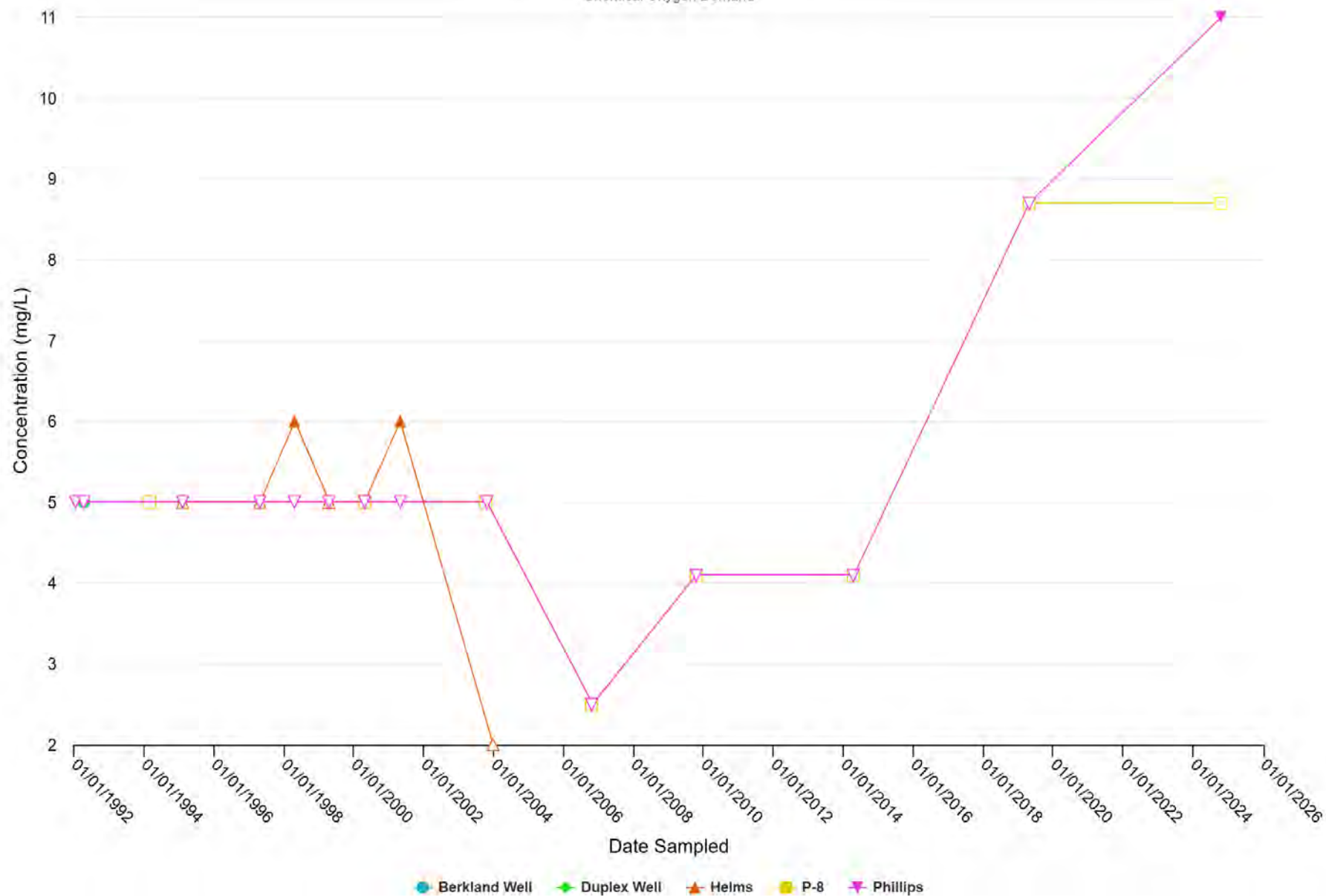
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Calcium, Dissolved

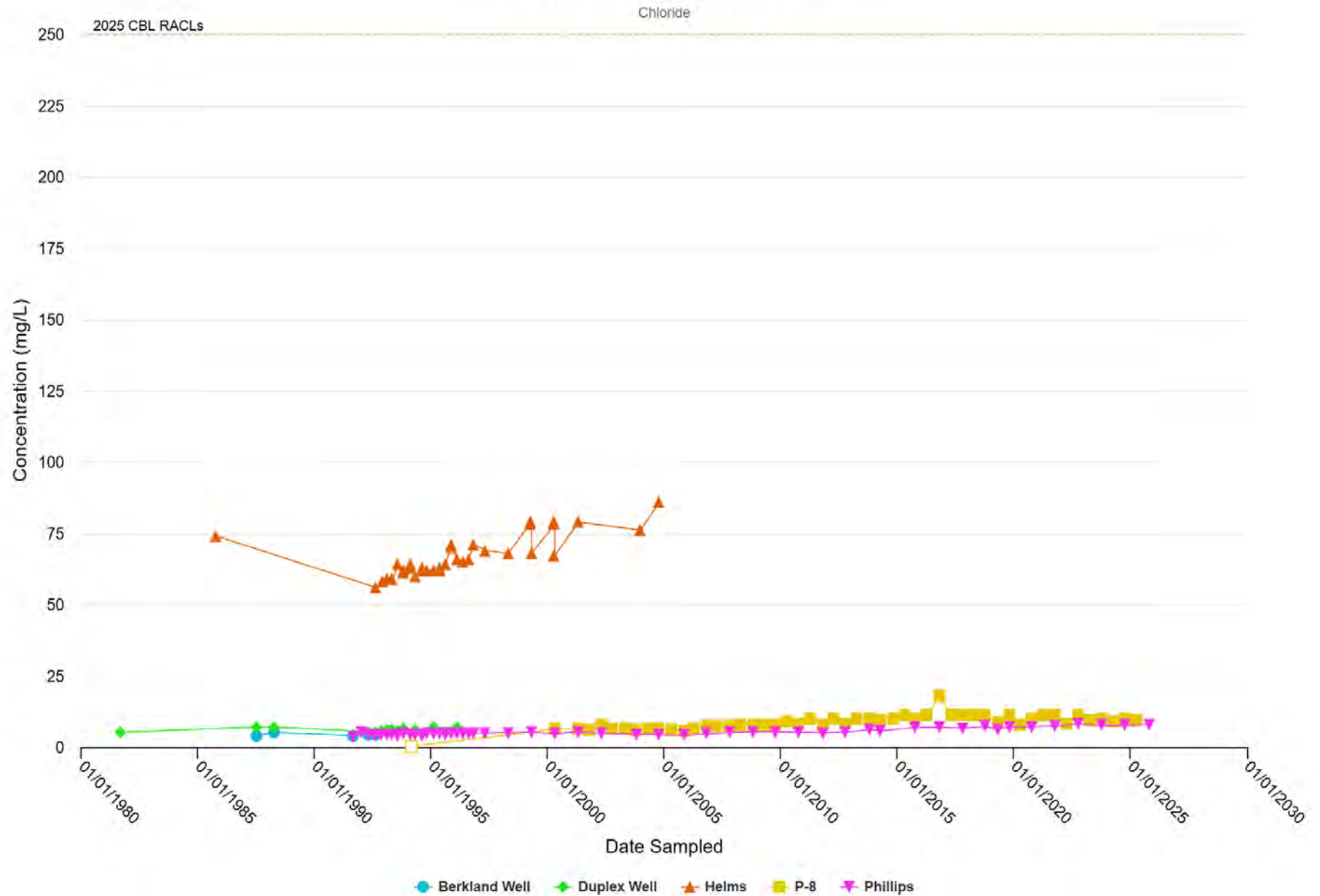


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Chemical Oxygen Demand

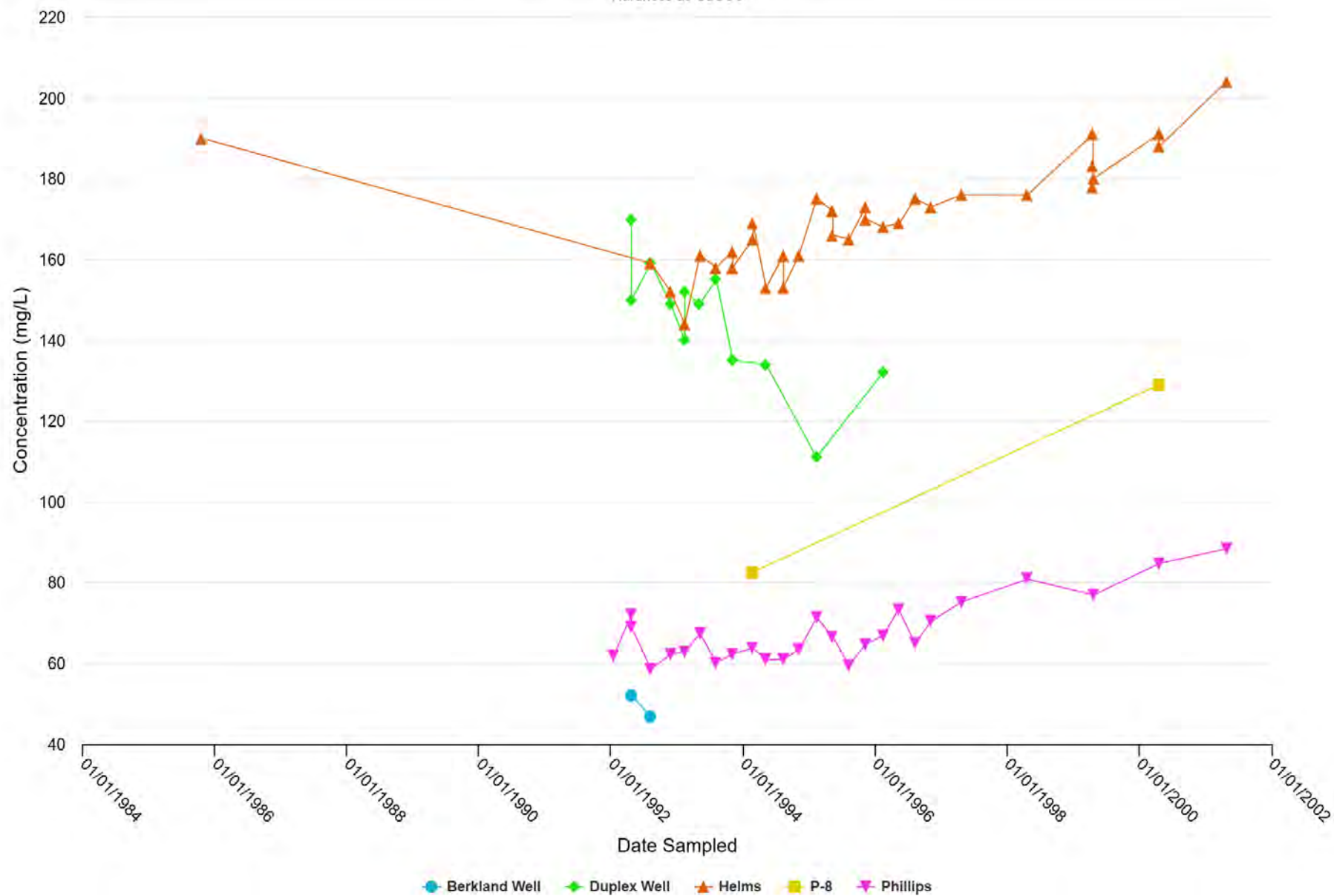


Public Supply Wells - Time Series (Phillips, P-8)
COFFIN BUTTE LANDFILL



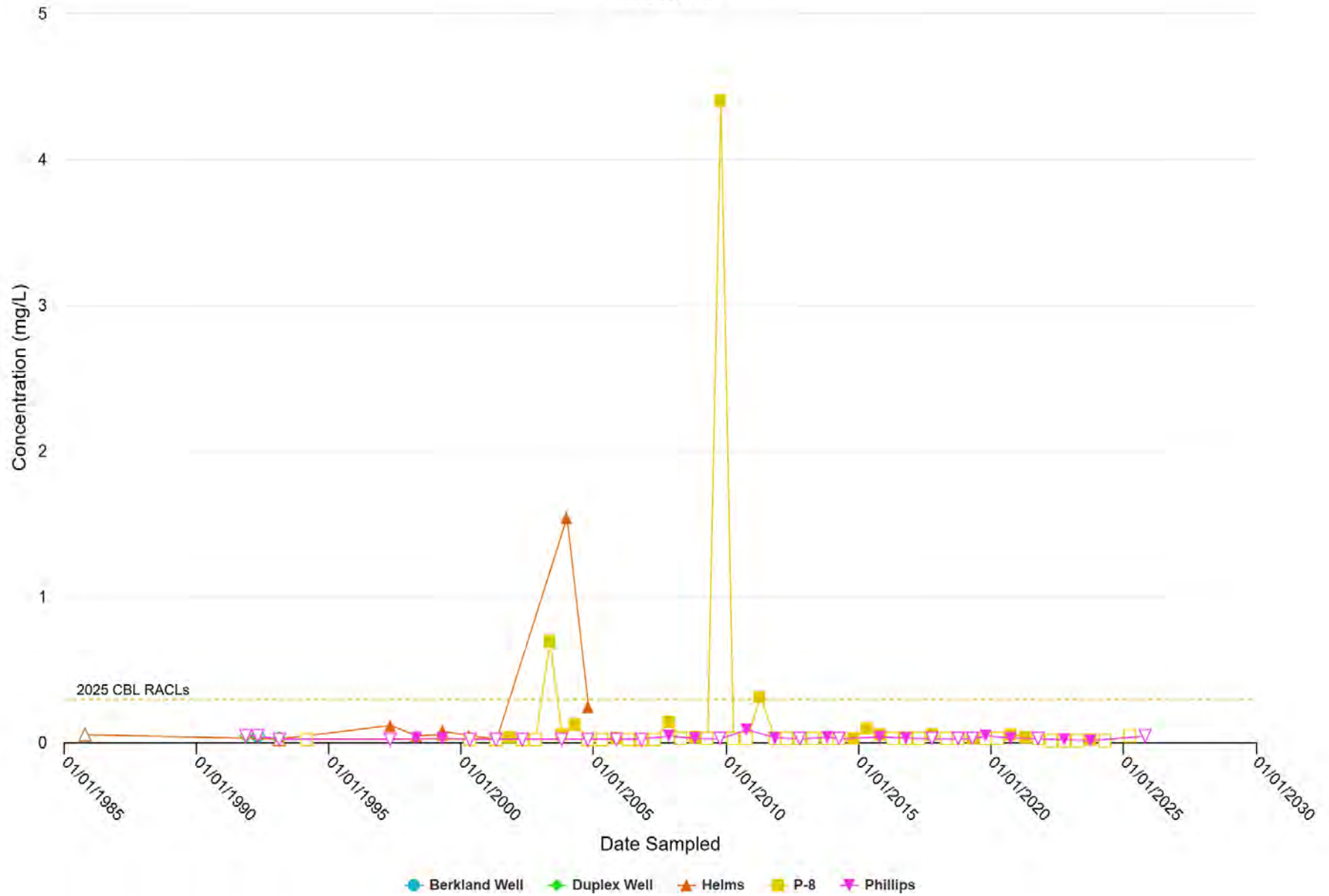
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Hardness as CaCO3



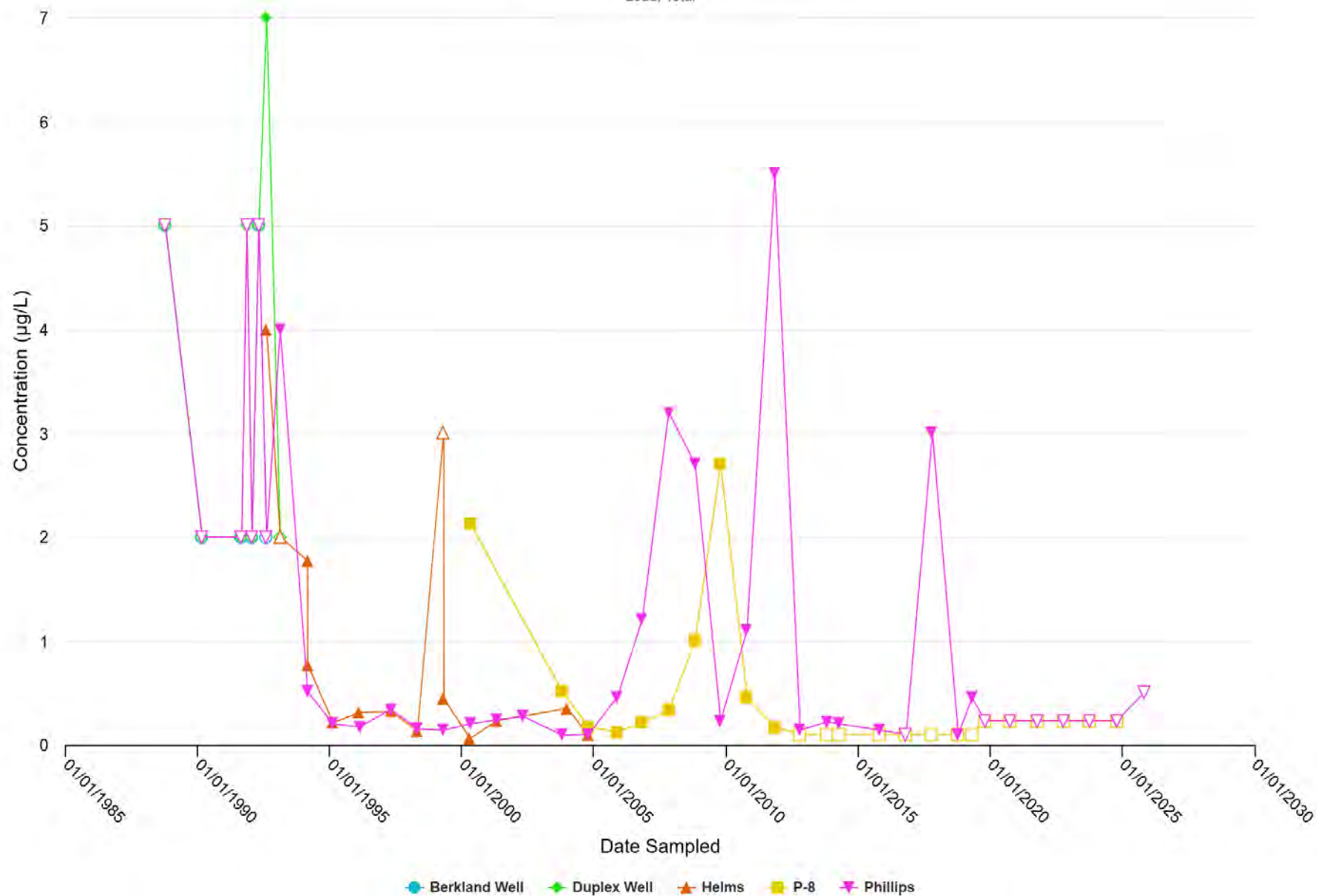
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Iron, Dissolved



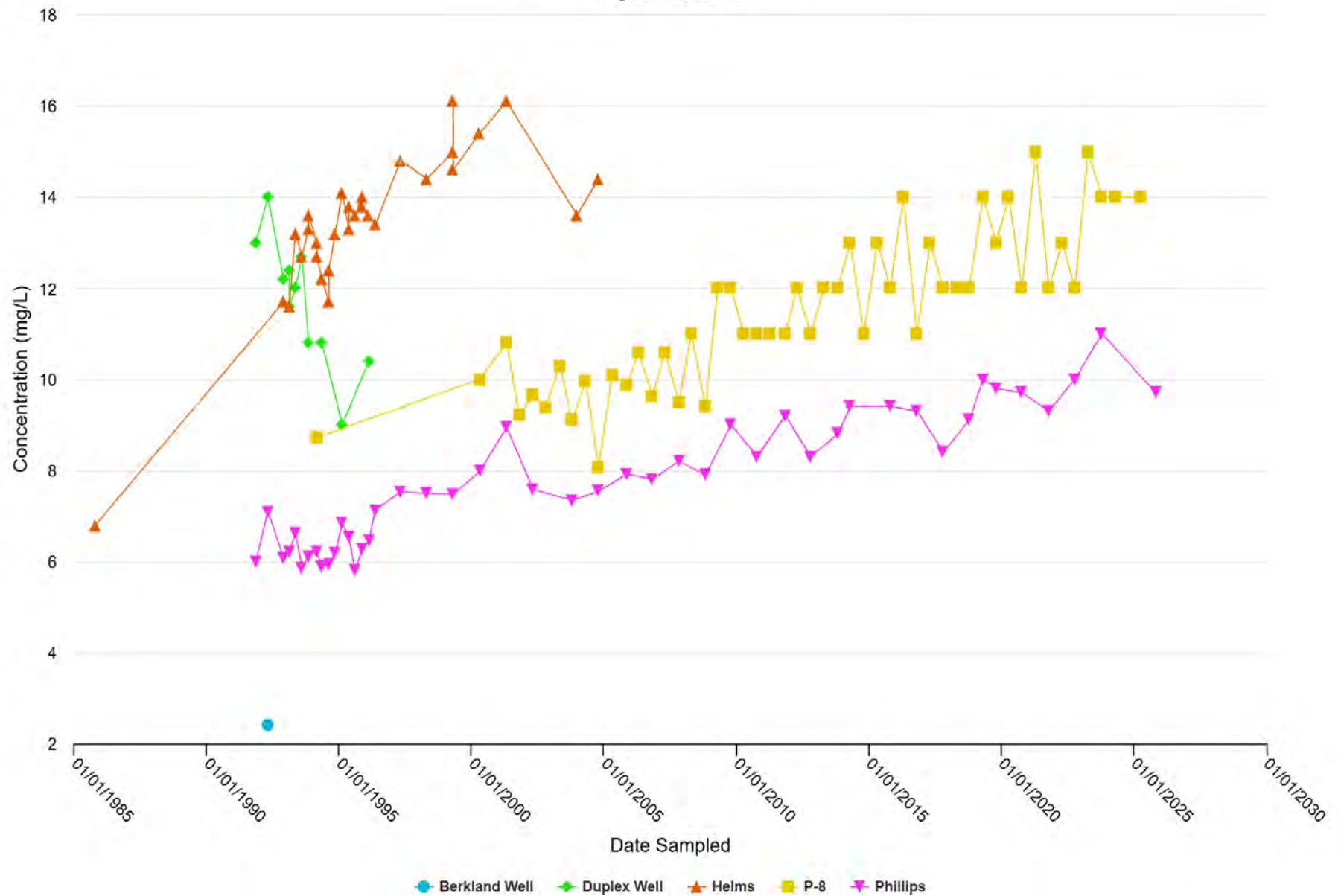
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Lead, Total



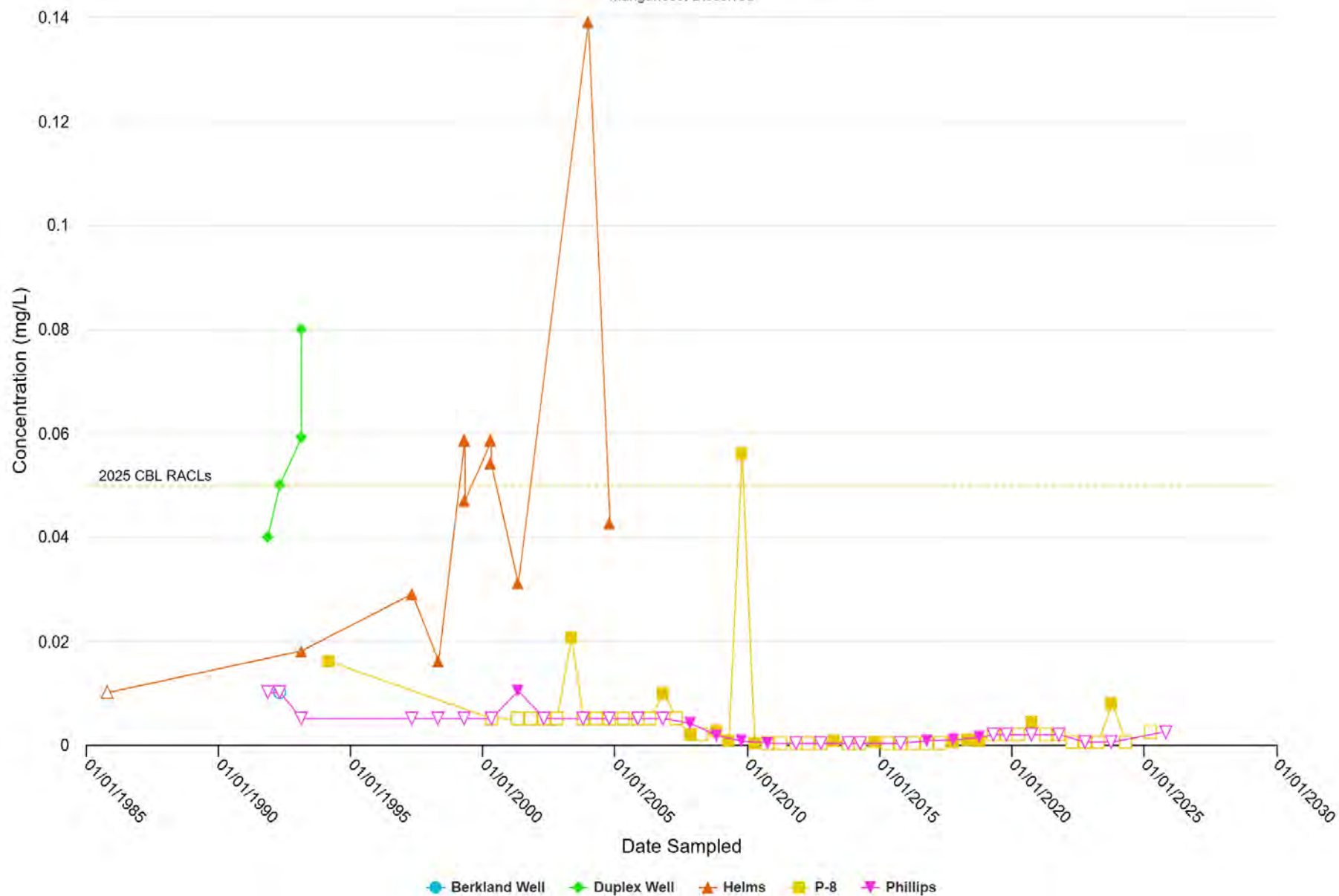
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Magnesium, Dissolved



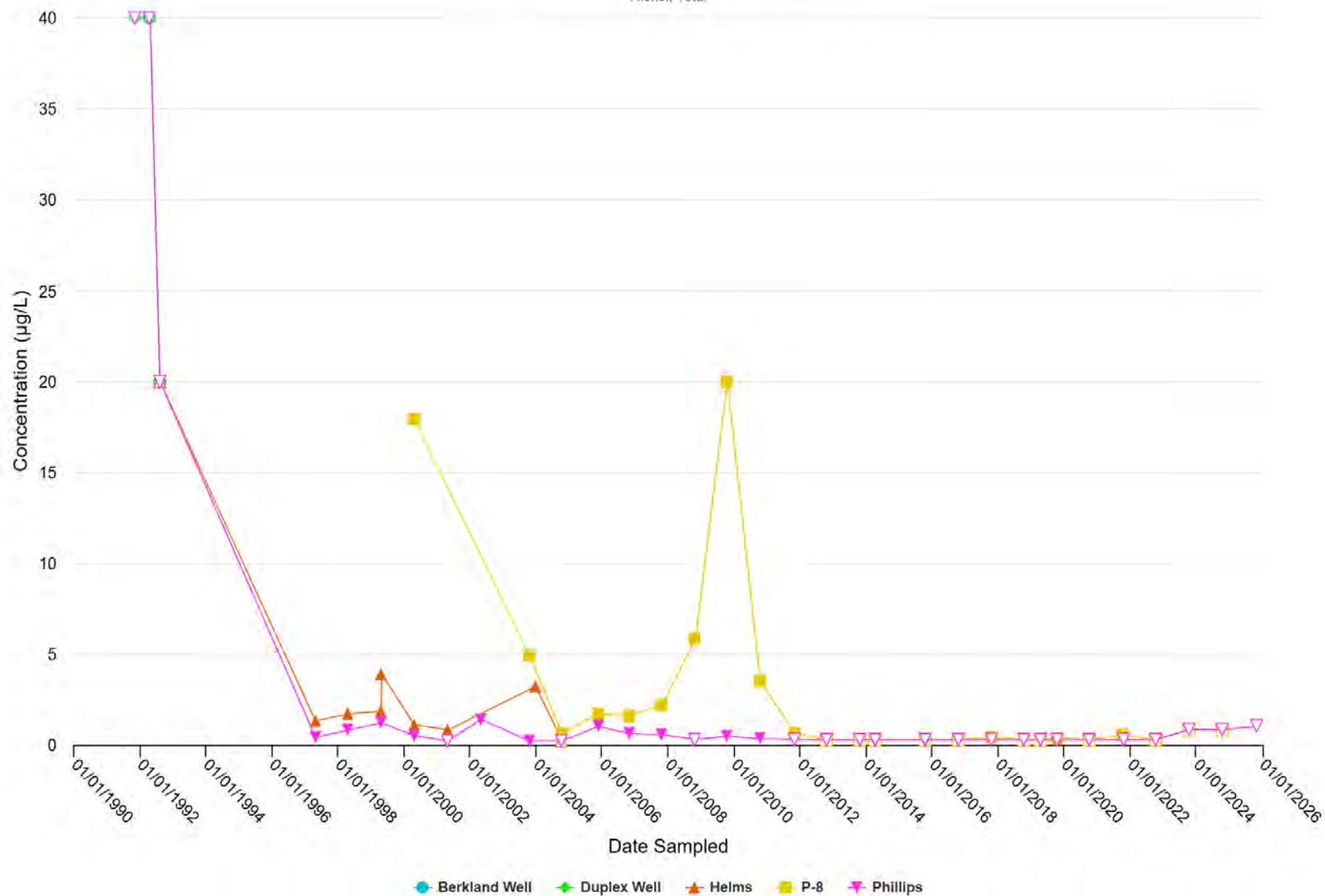
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Manganese, Dissolved



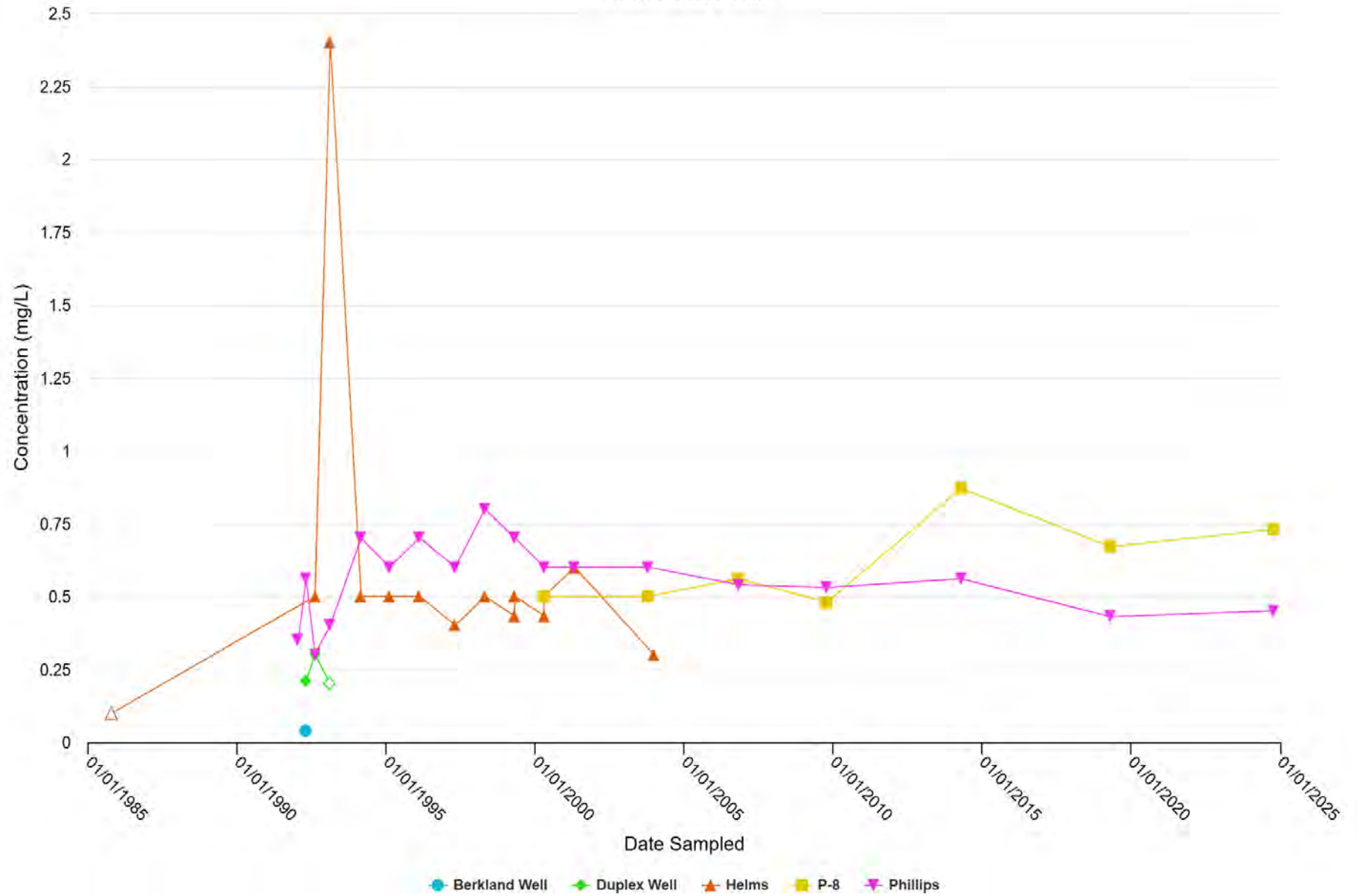
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Nickel, Total



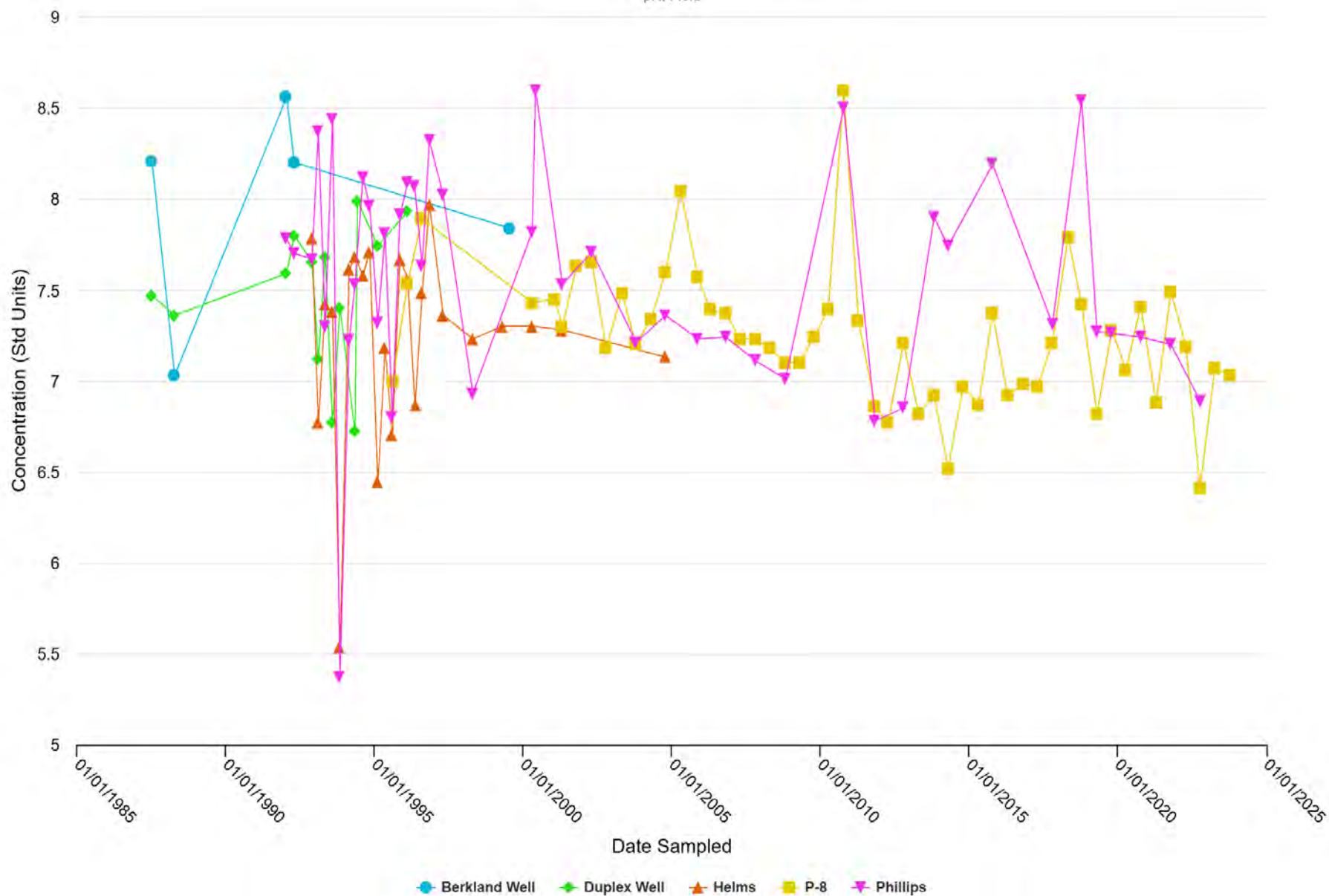
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Nitrogen, Nitrate & Nitrite

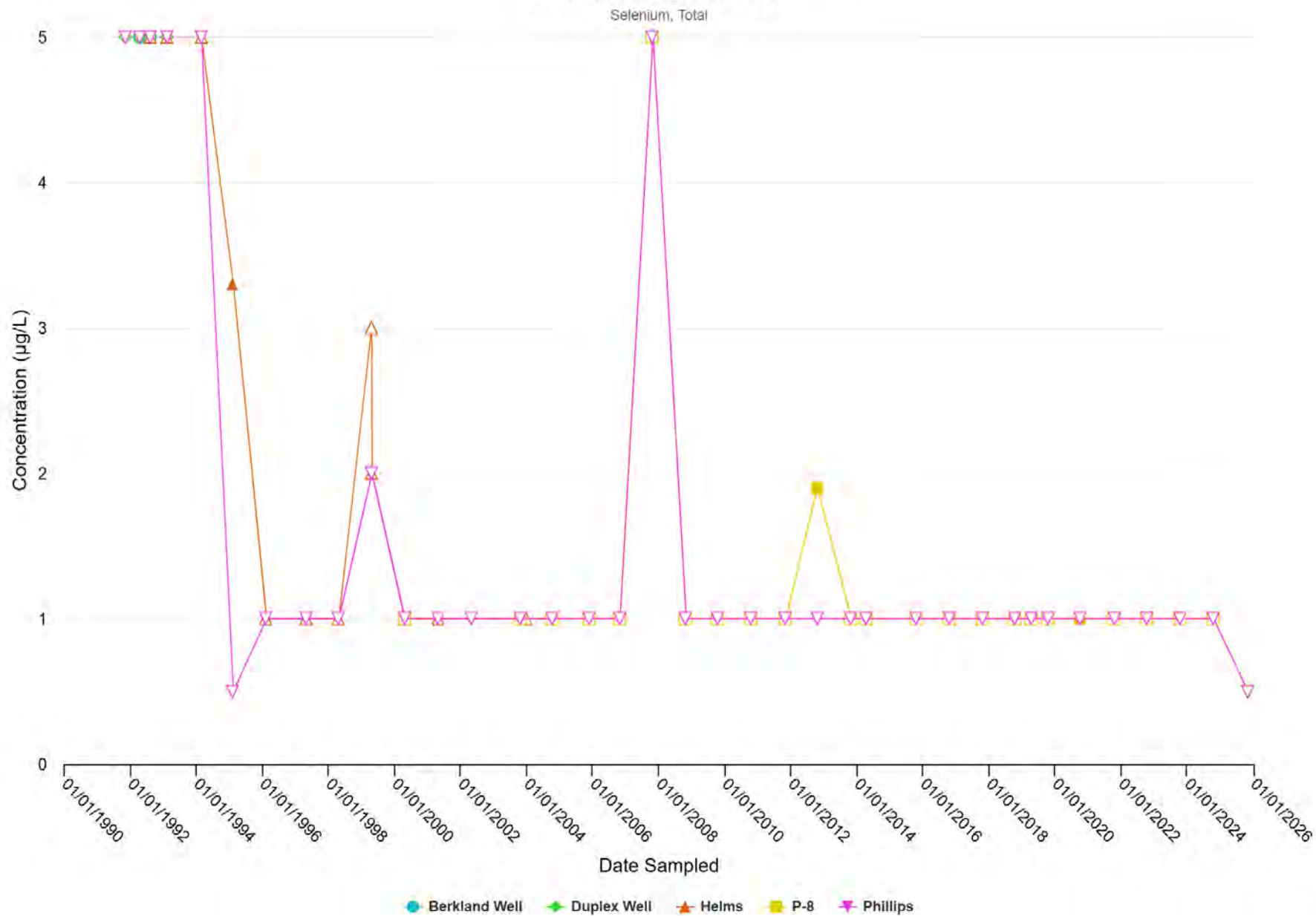


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

pH, Field

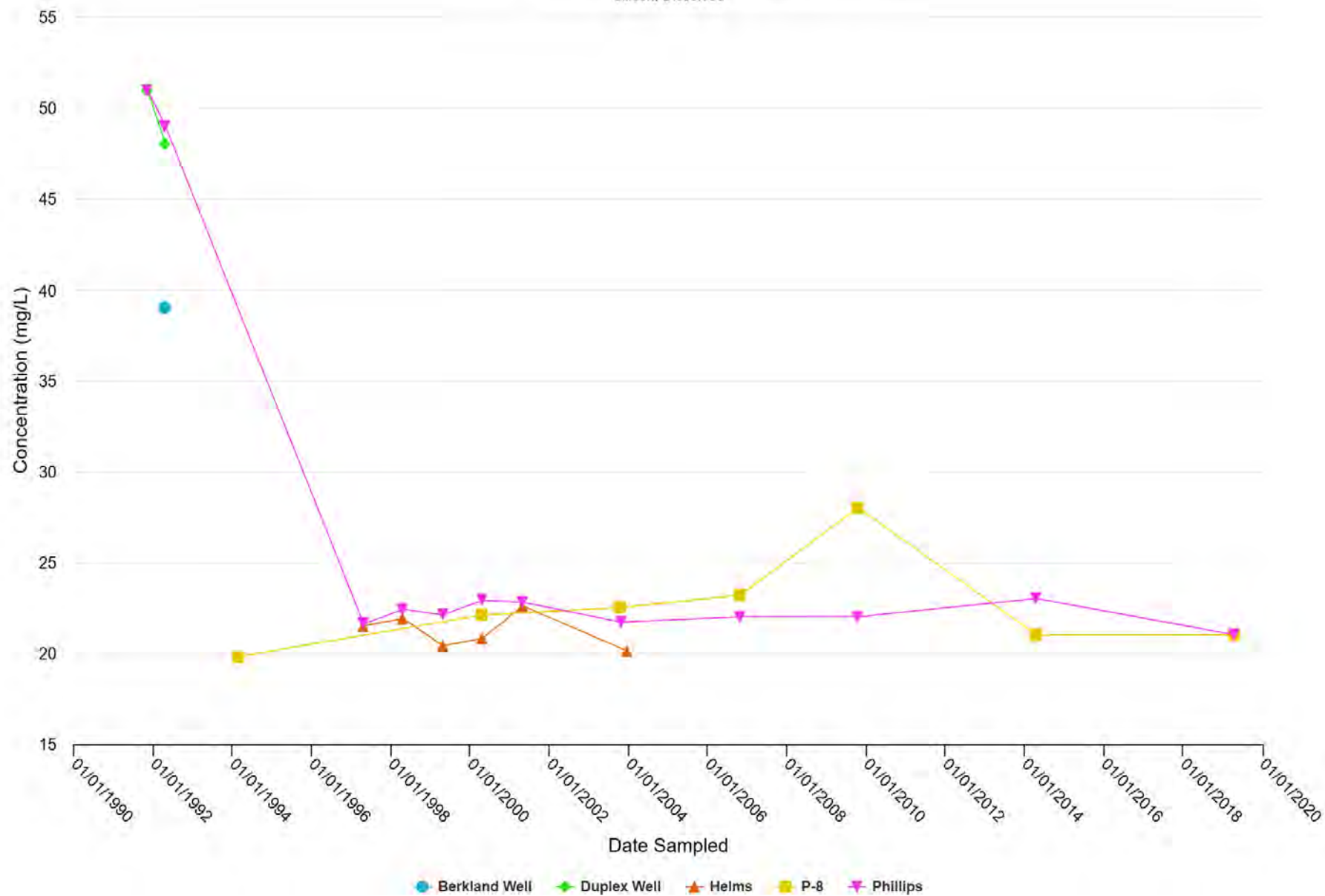


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL



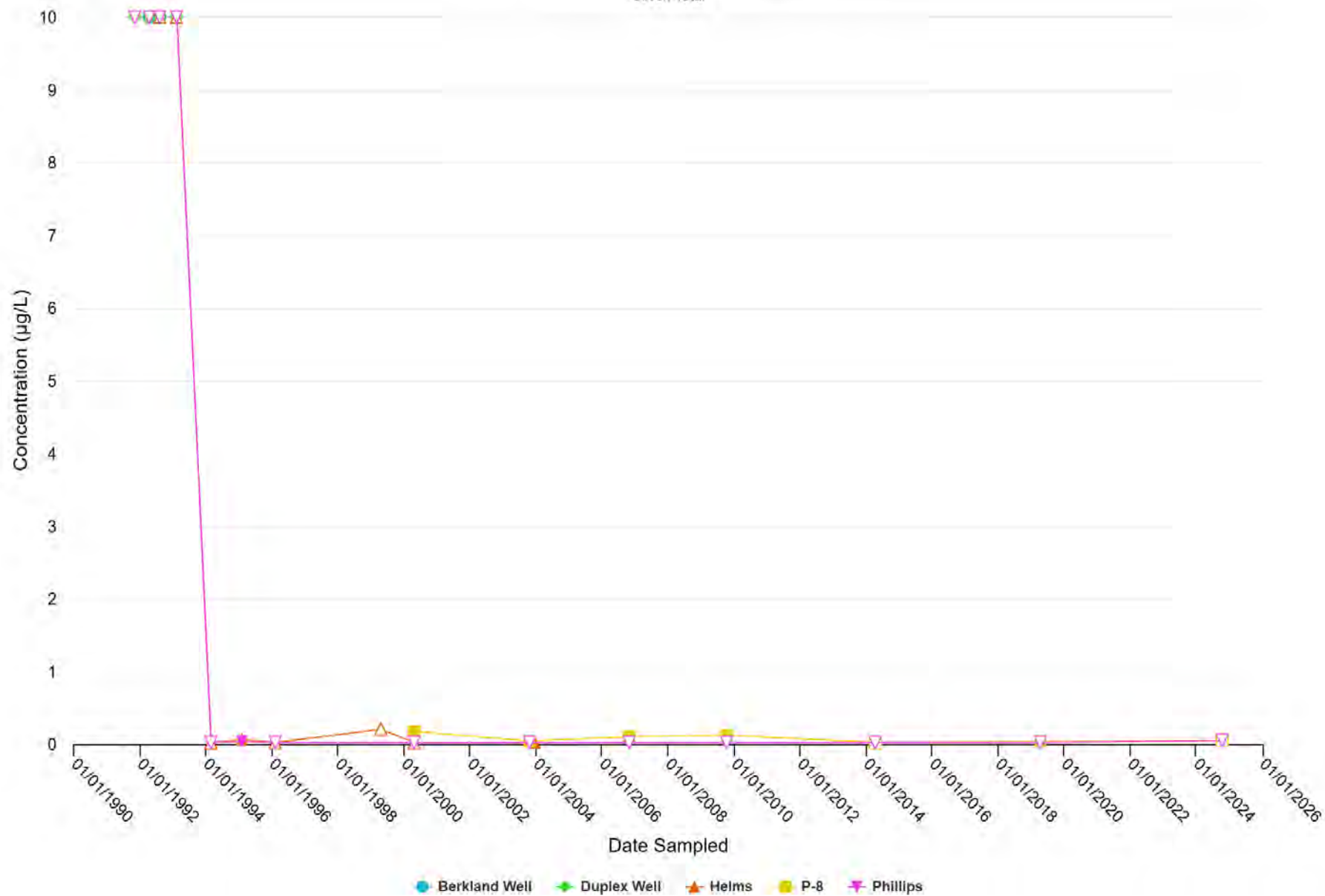
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Silicon, Dissolved



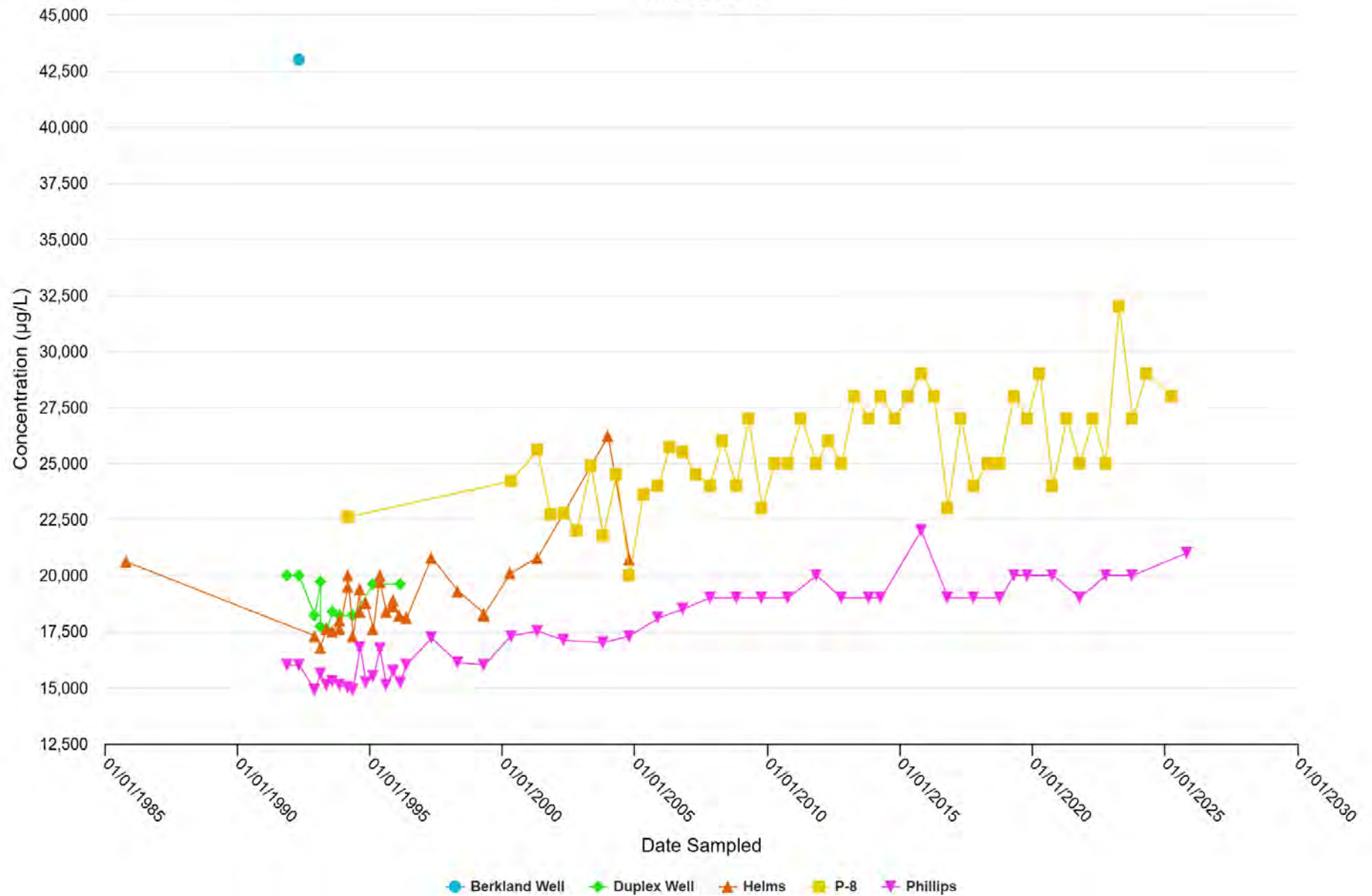
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Silver, Total



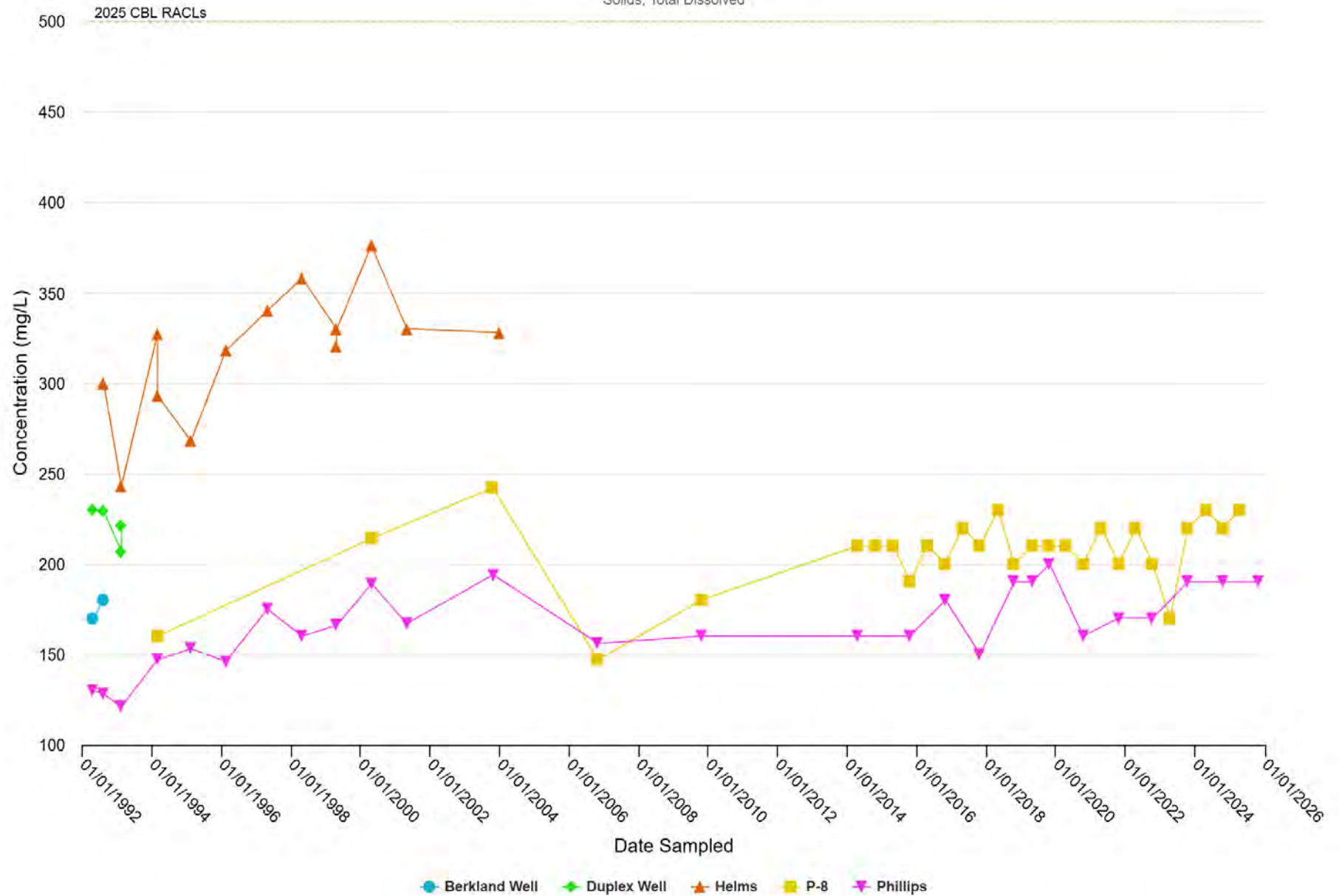
Public Supply Wells - Time Series (Phillips, P-8)
COFFIN BUTTE LANDFILL

Sodium, Dissolved



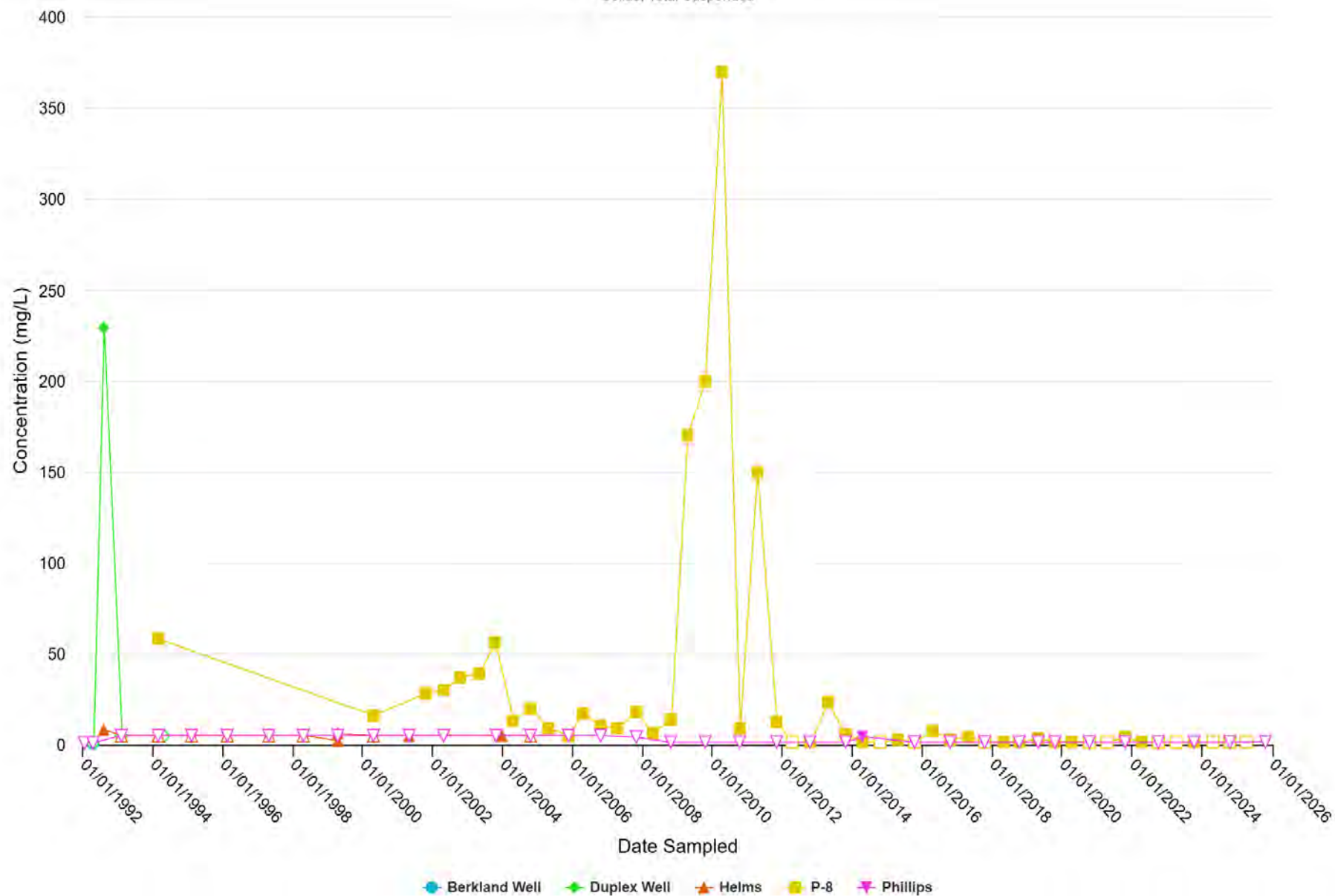
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Solids, Total Dissolved

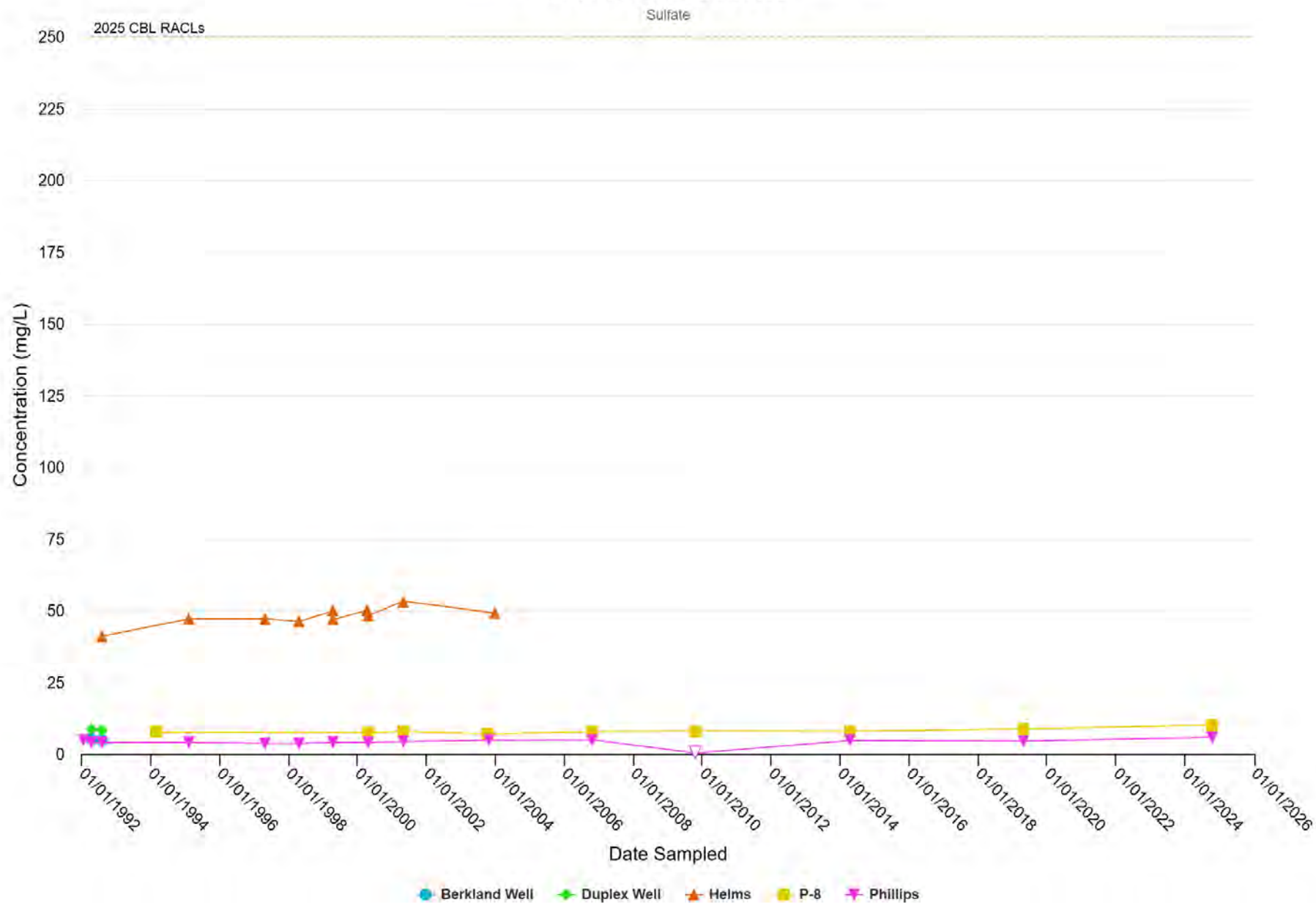


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Solids, Total Suspended

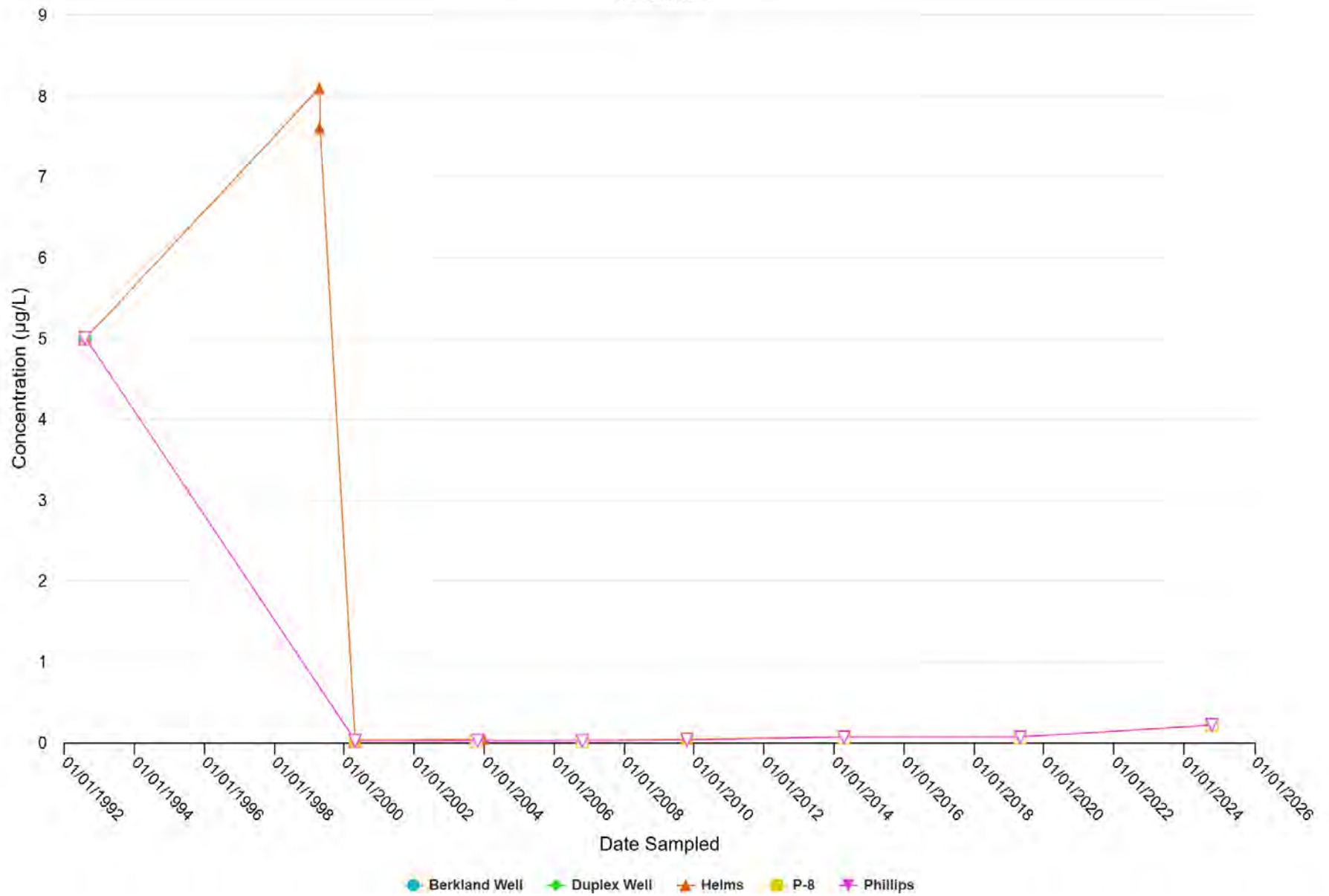


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL



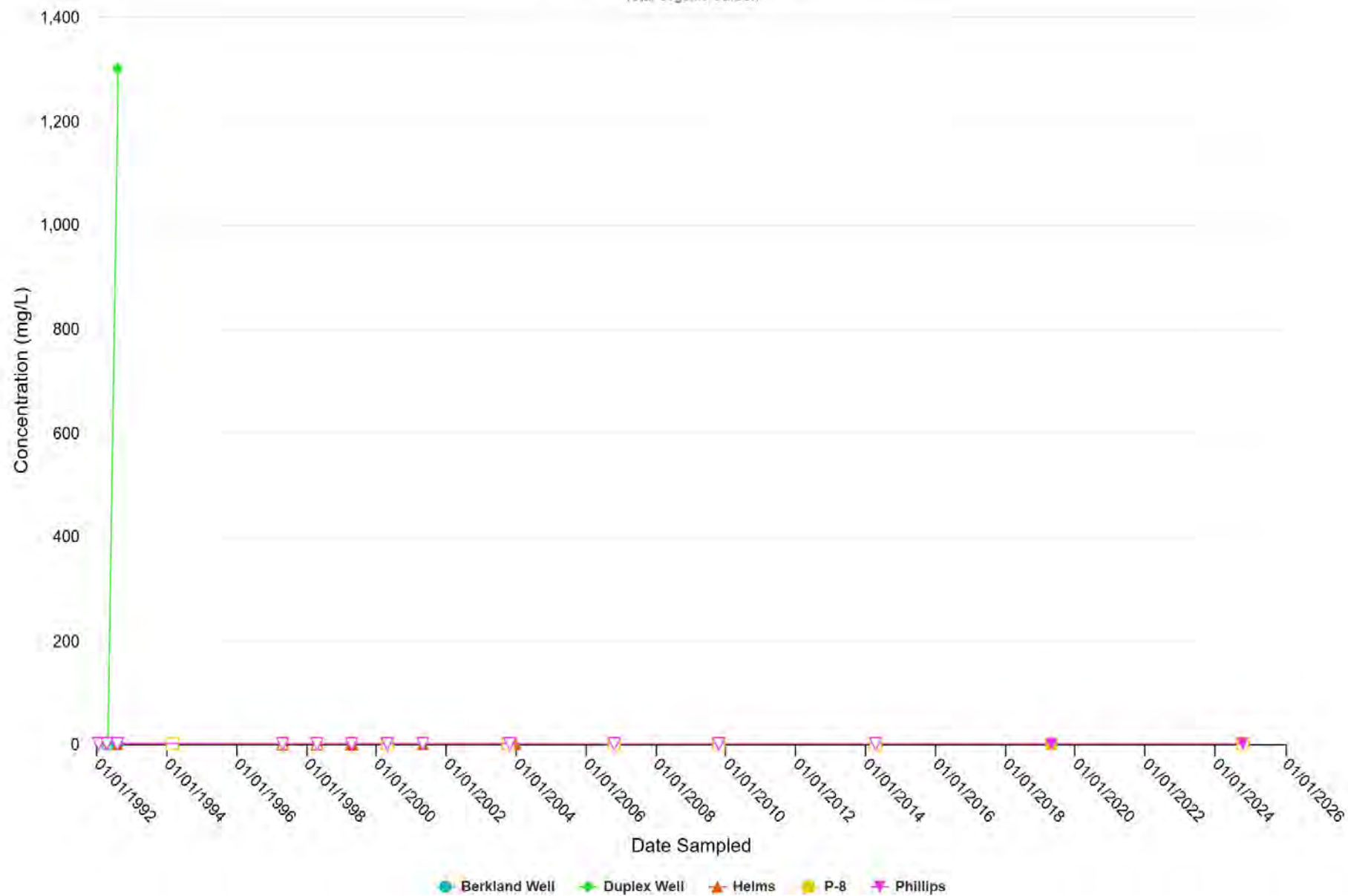
Public Supply Wells - Time Series (Phillips, P-8)
COFFIN BUTTE LANDFILL

Thallium, Total



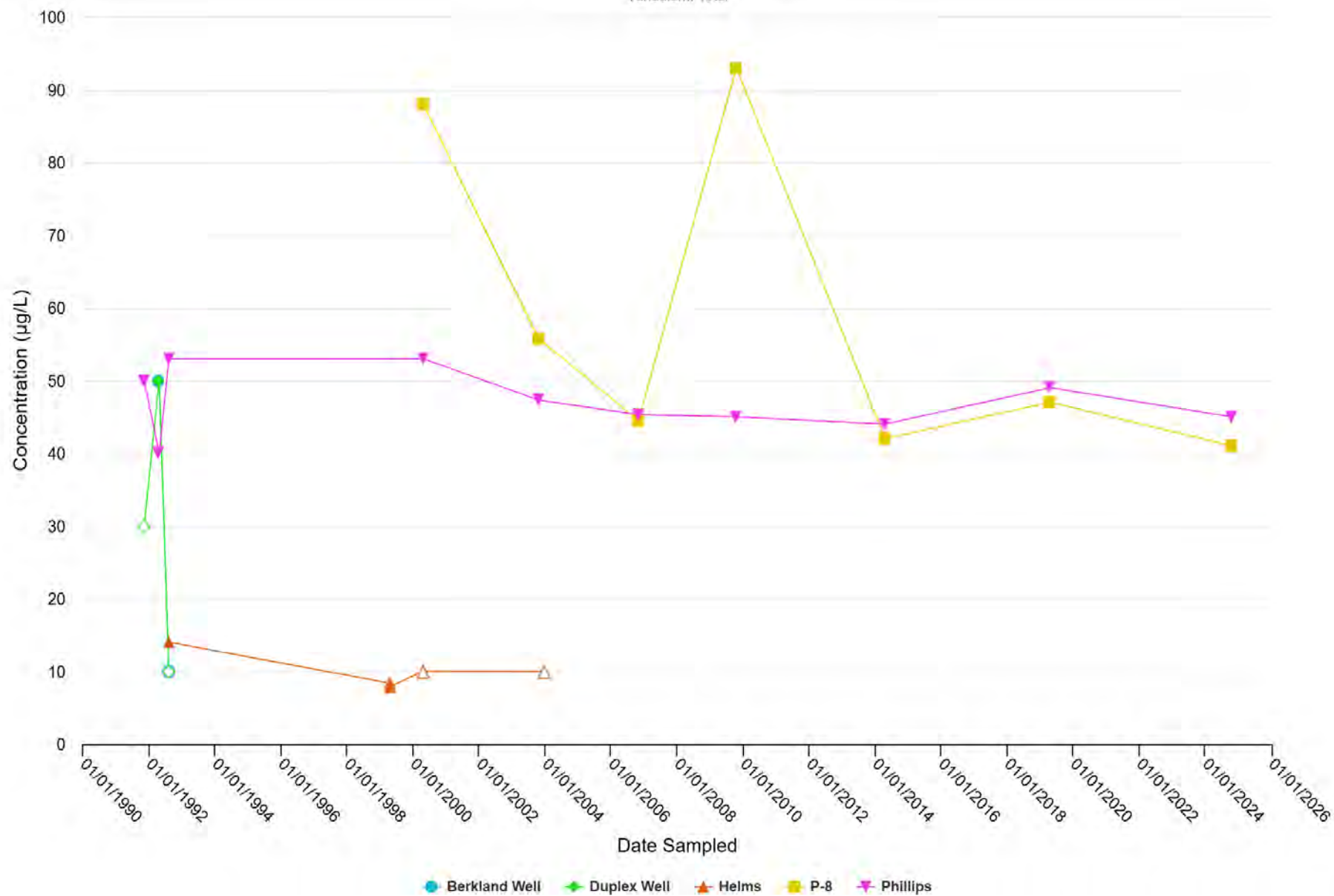
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Total Organic Carbon



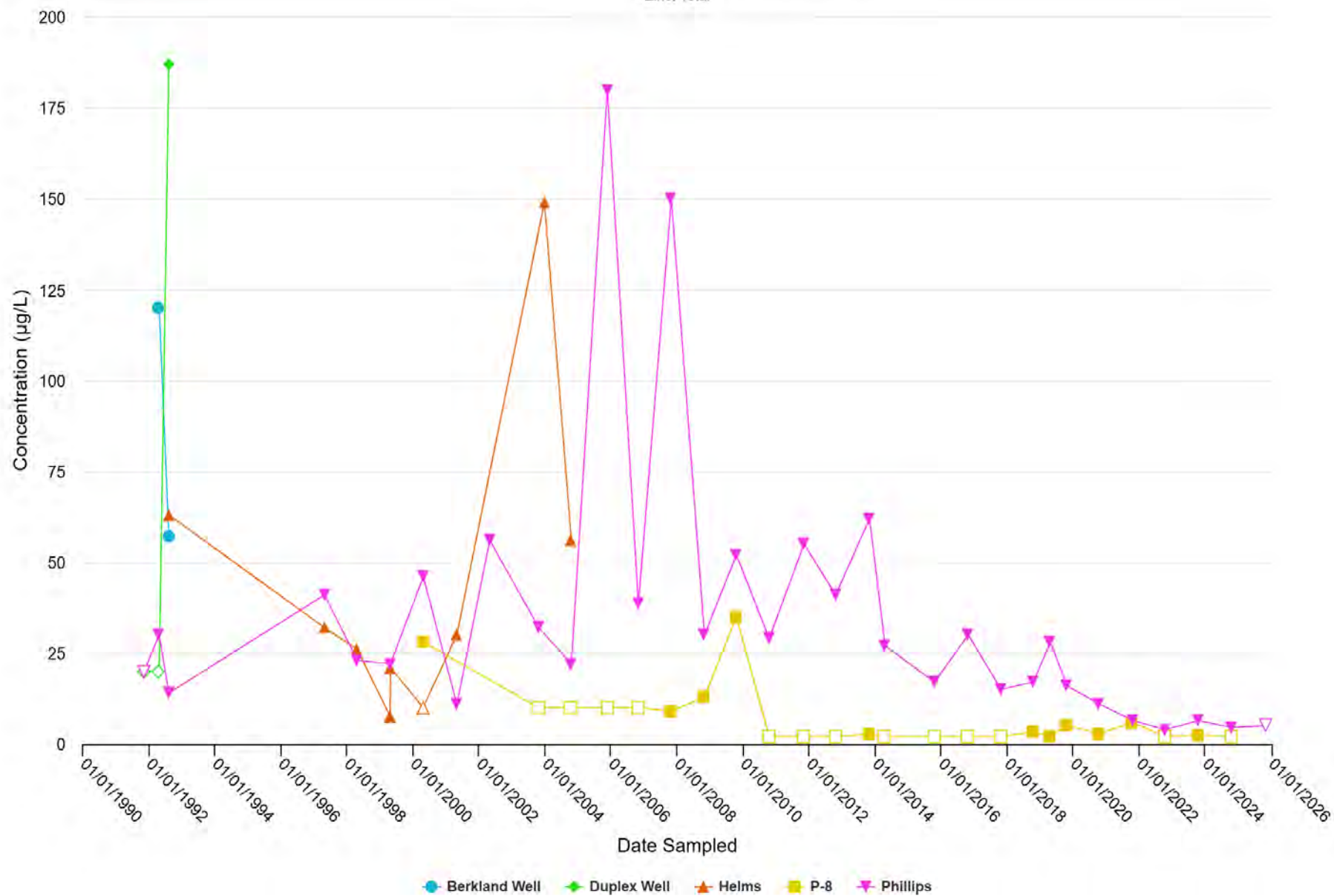
Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Vanadium, Total

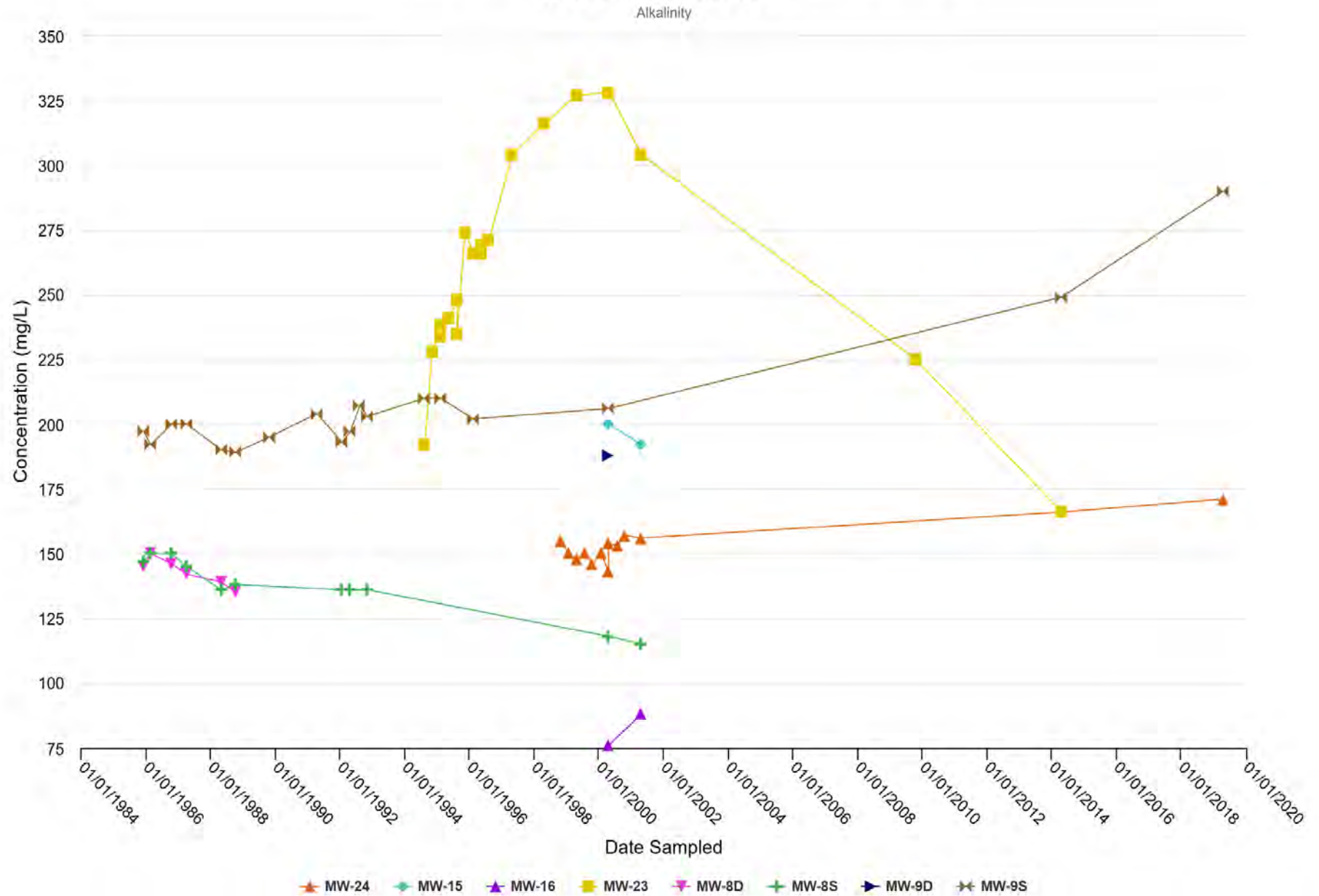


Public Supply Wells - Time Series (Phillips, P-8) COFFIN BUTTE LANDFILL

Zinc, Total

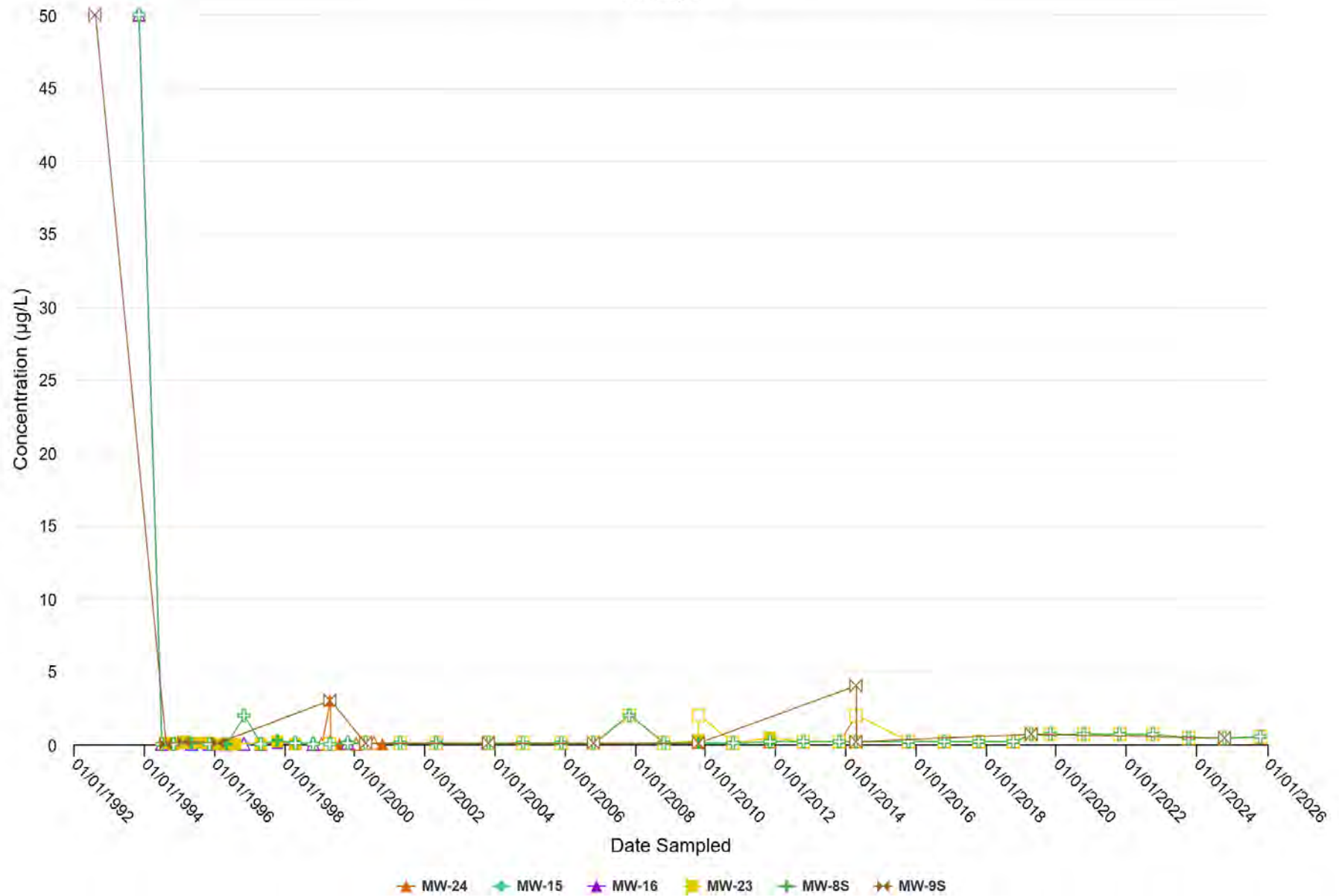


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24) COFFIN BUTTE LANDFILL



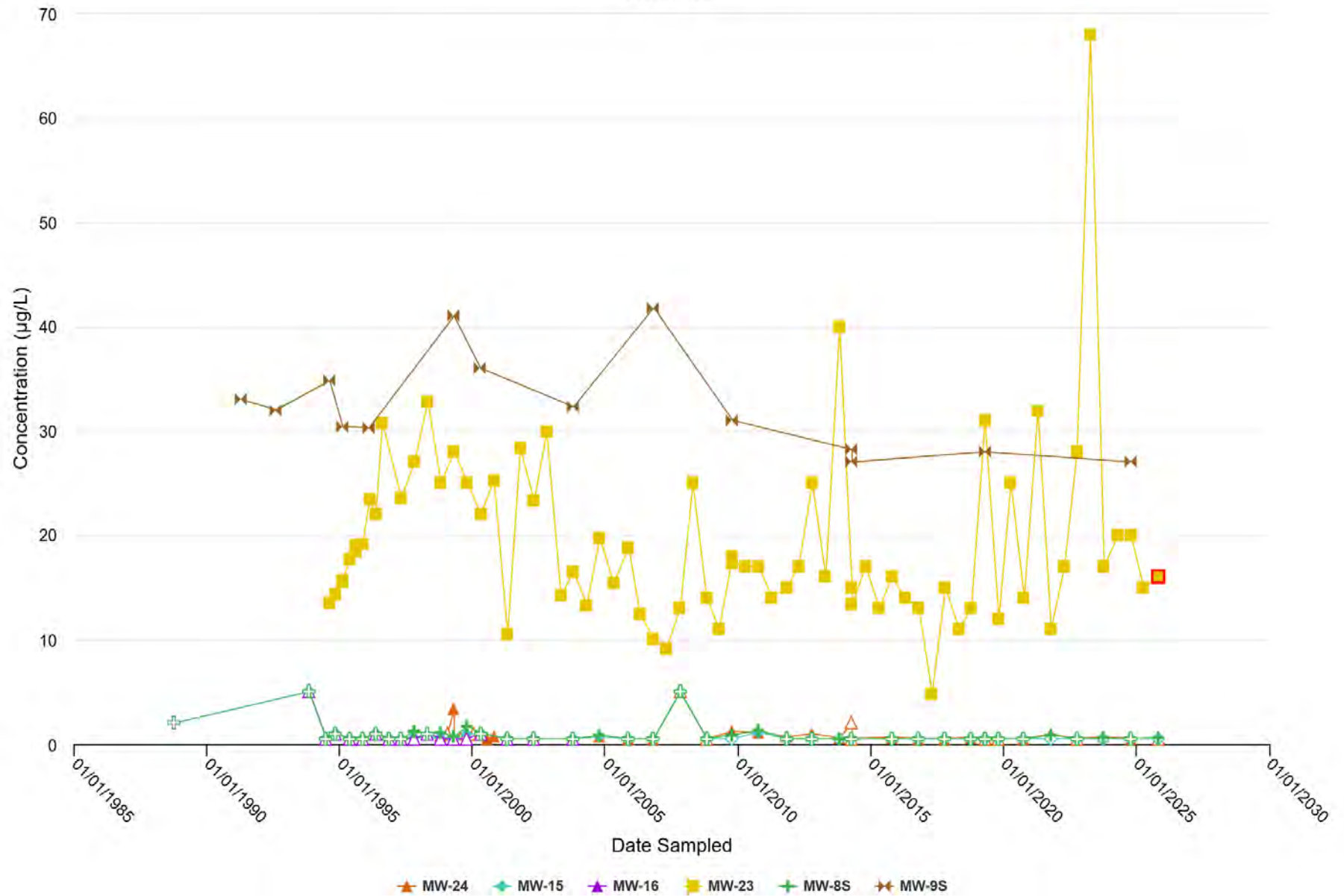
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Antimony, Total

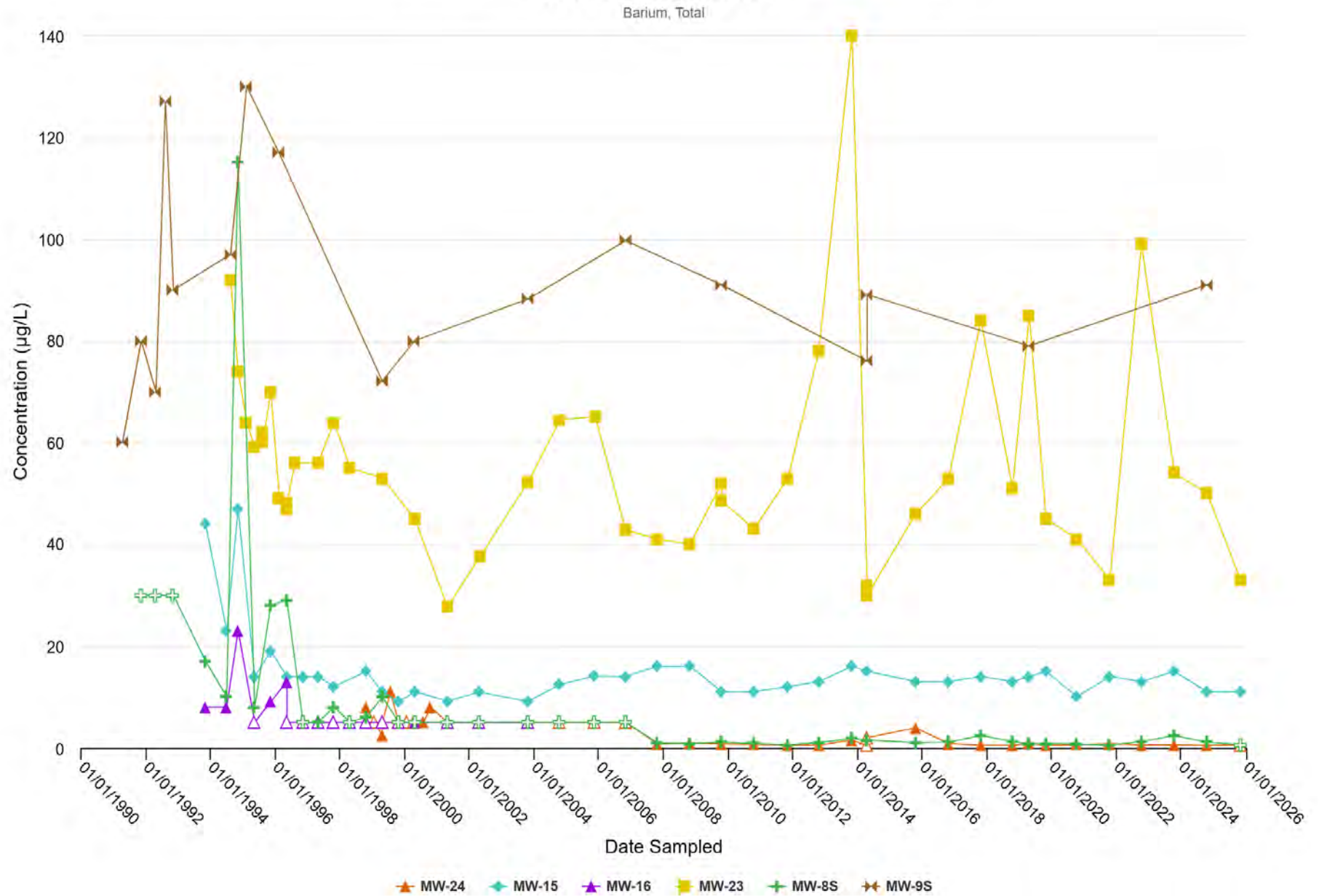


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Arsenic, Total

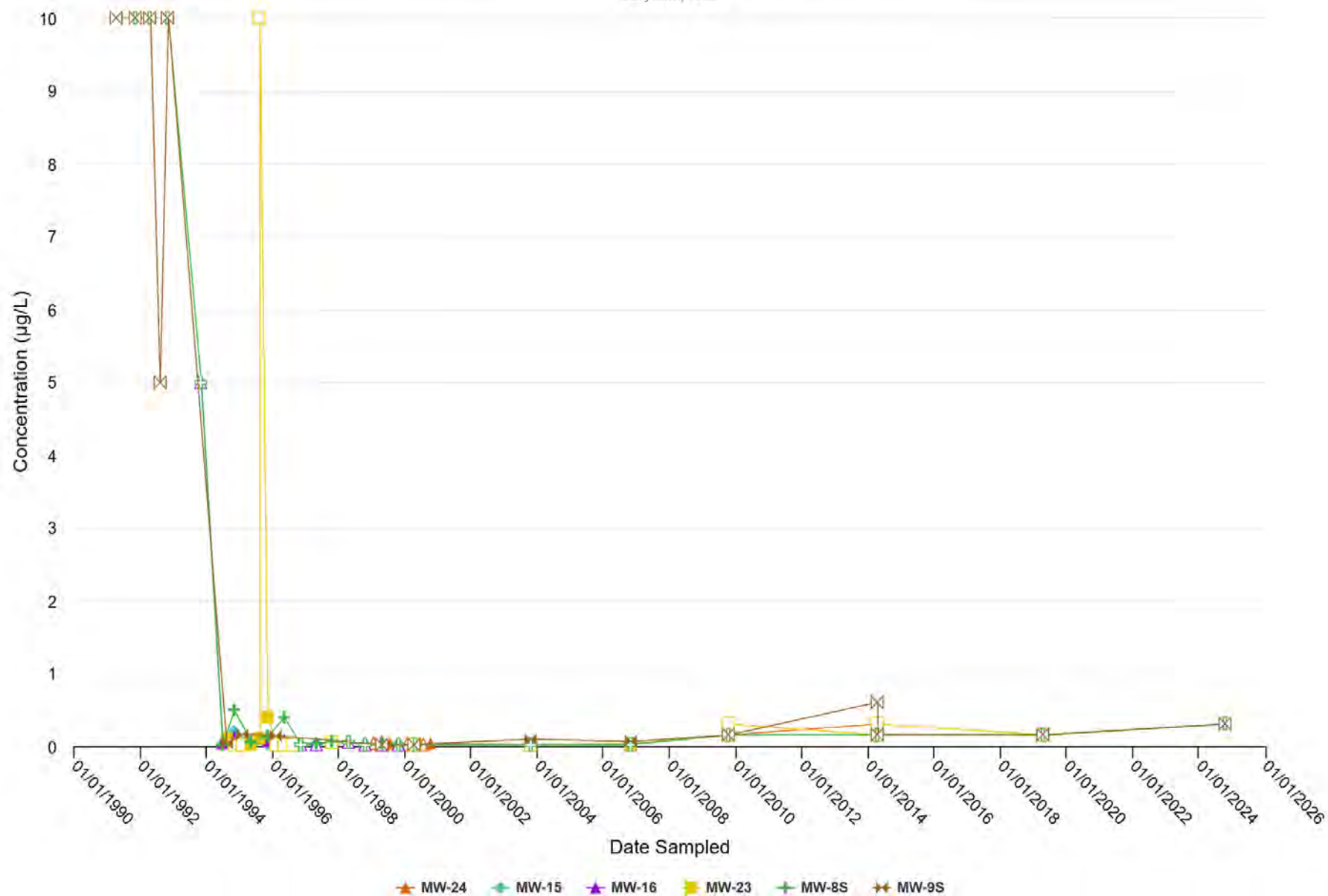


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL



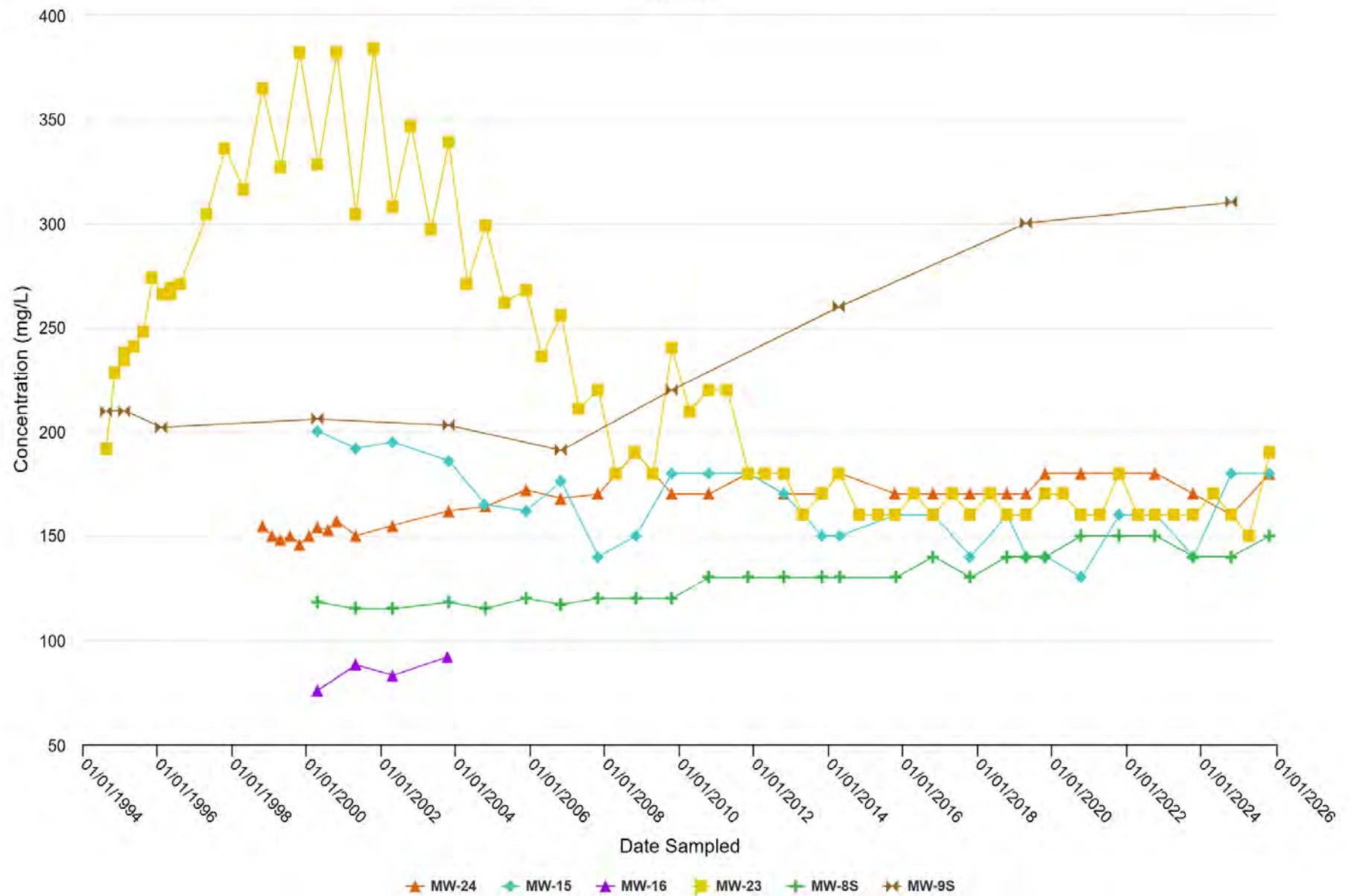
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Beryllium, Total



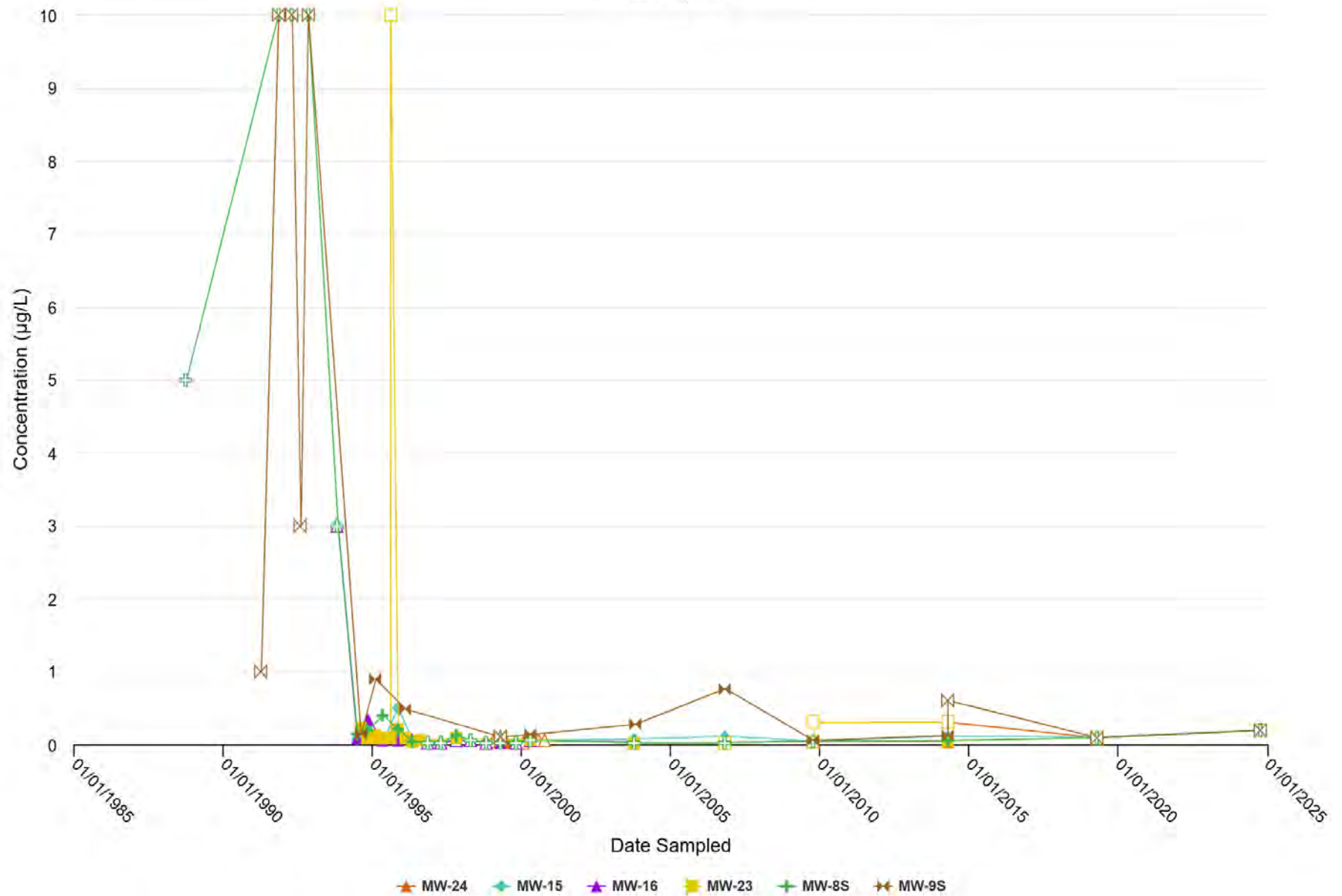
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Bicarbonate



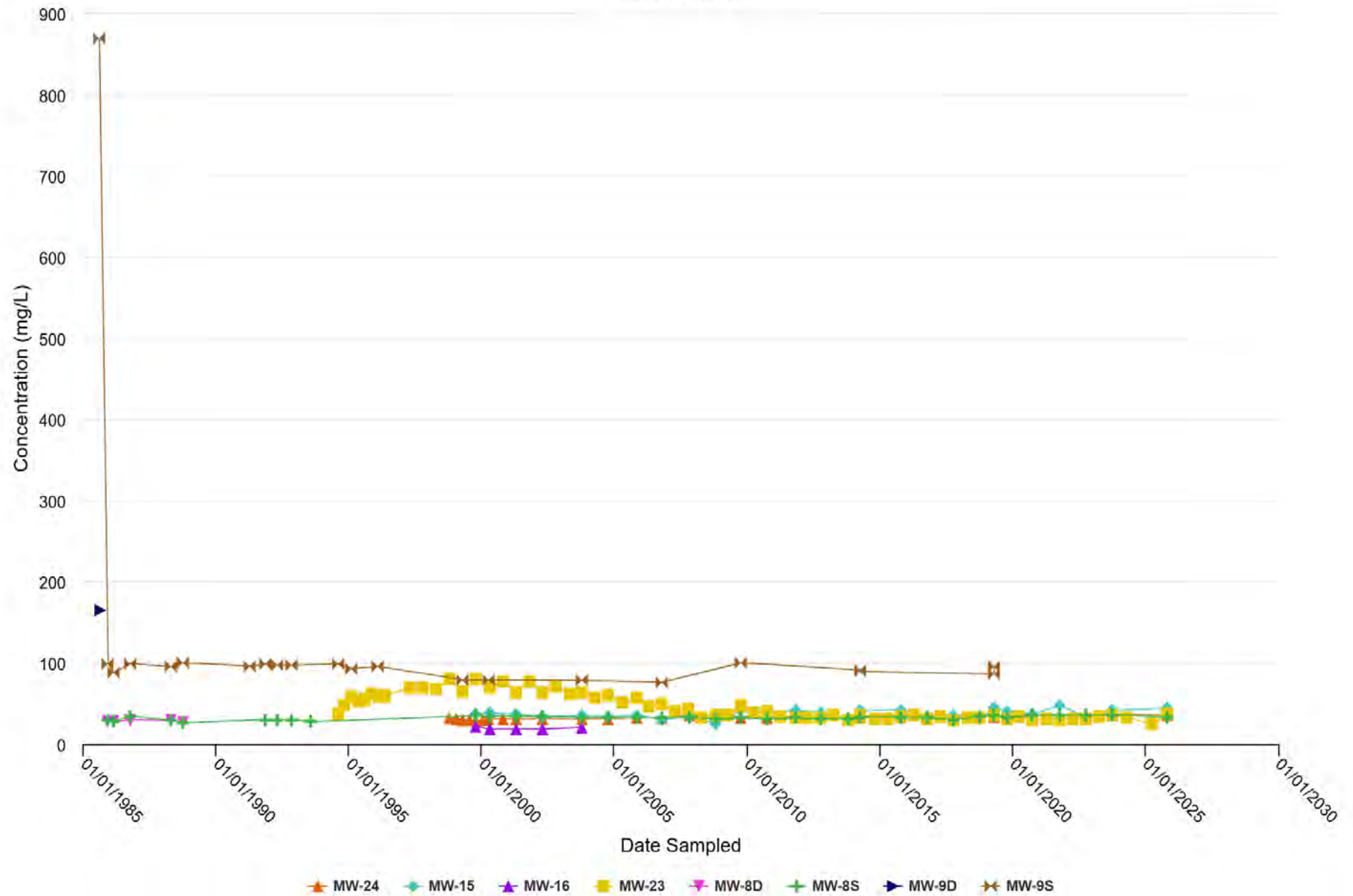
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Cadmium, Total



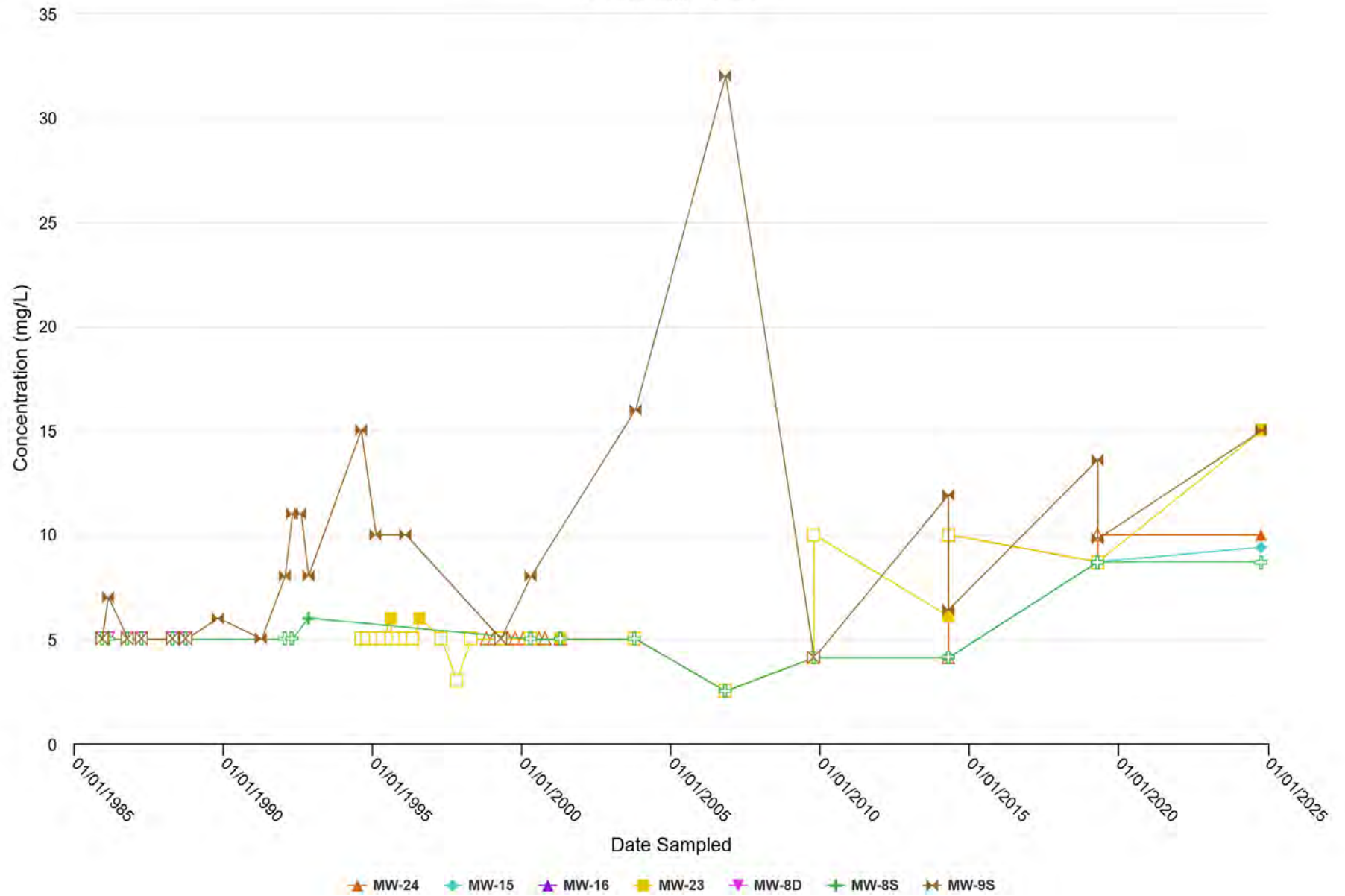
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Calcium, Dissolved



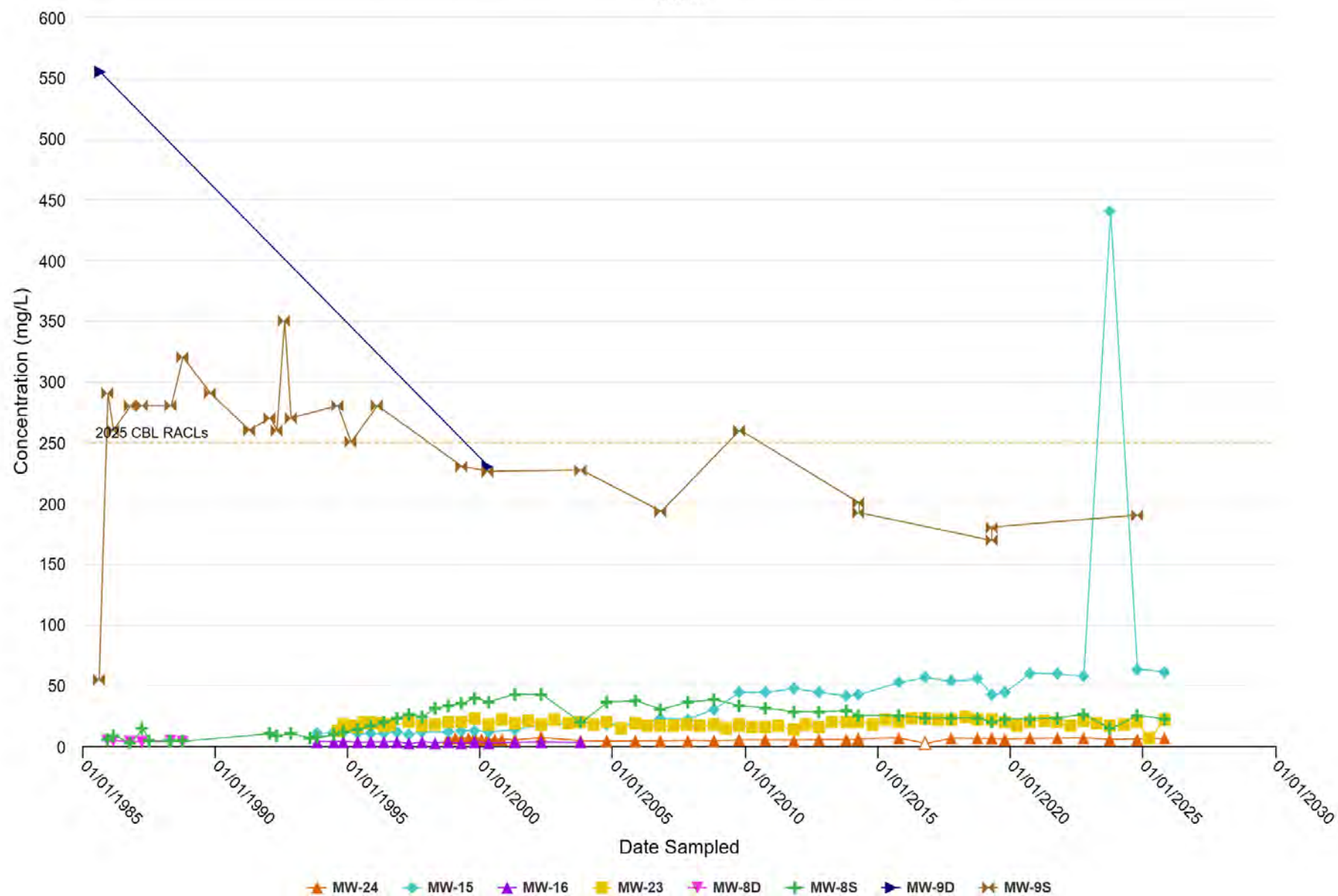
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Chemical Oxygen Demand



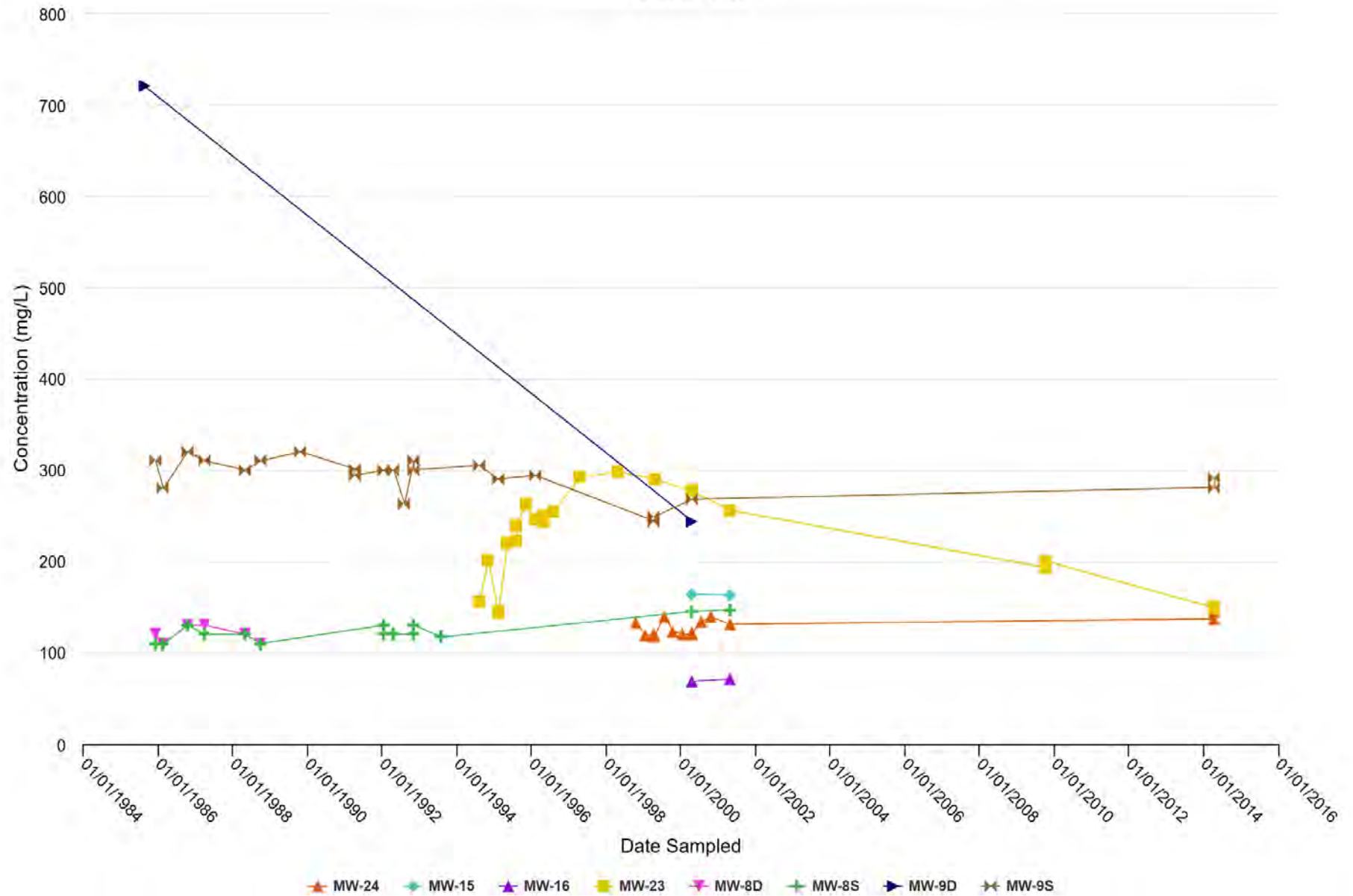
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24) COFFIN BUTTE LANDFILL

Chloride



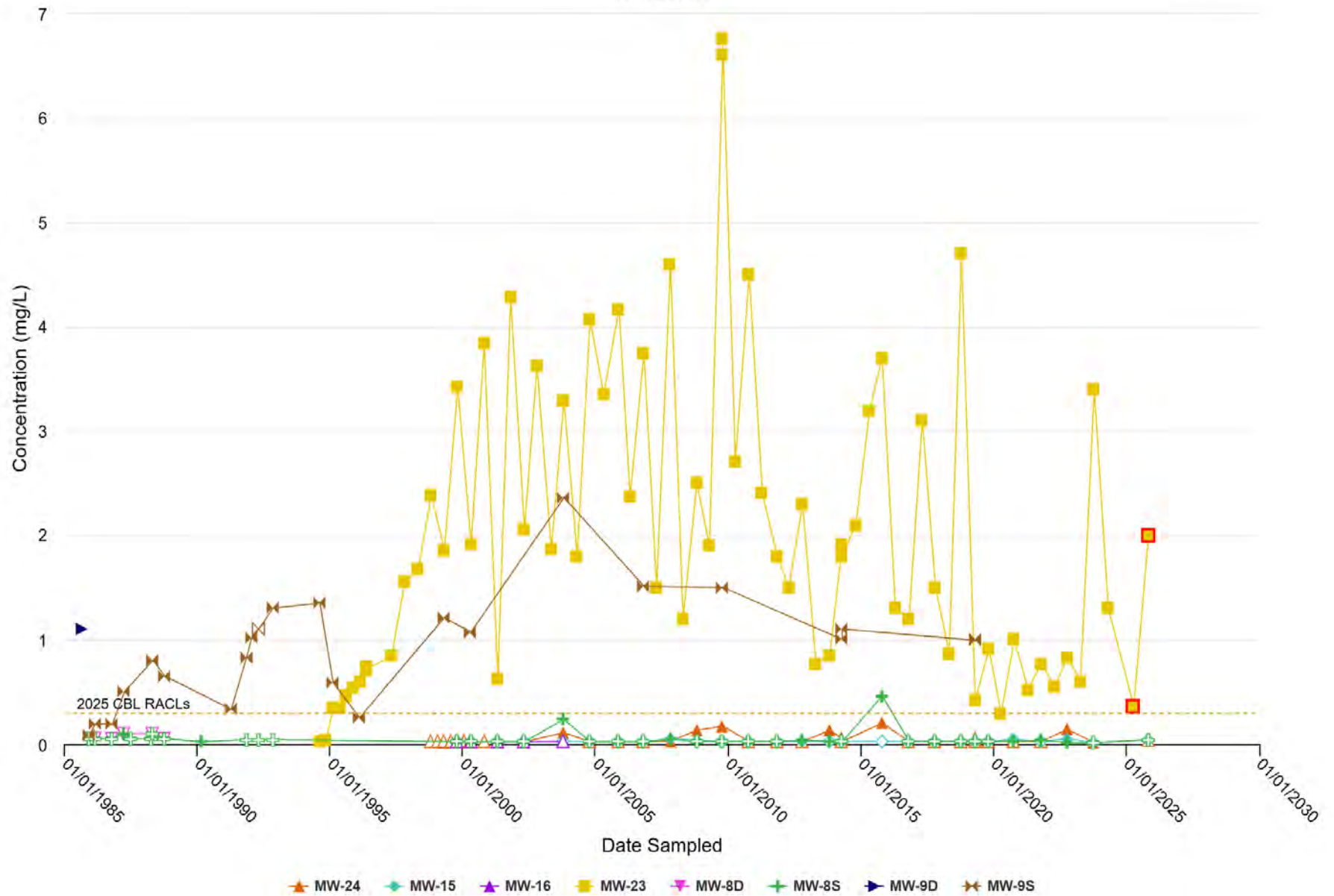
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Hardness as CaCO₃



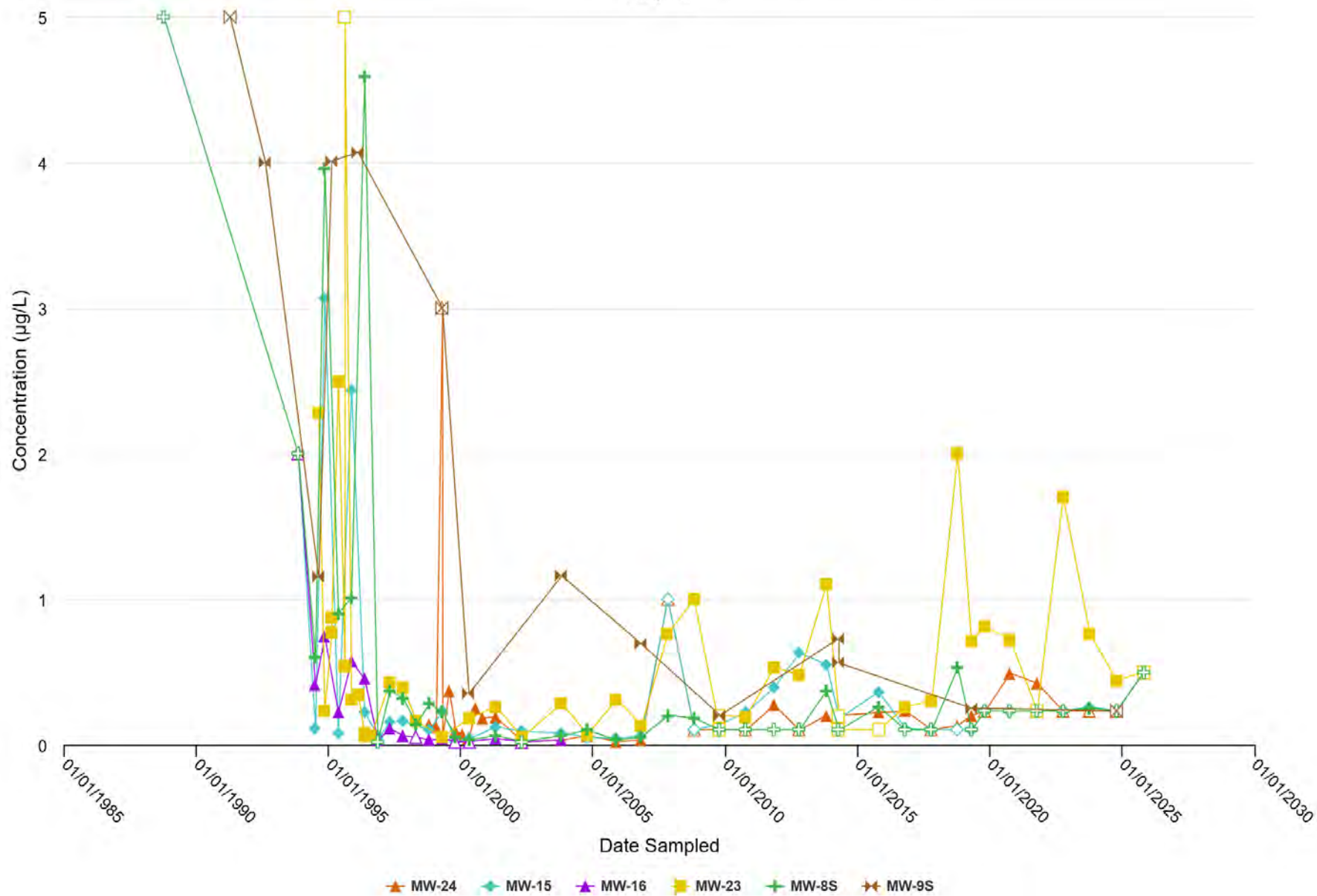
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Iron, Dissolved



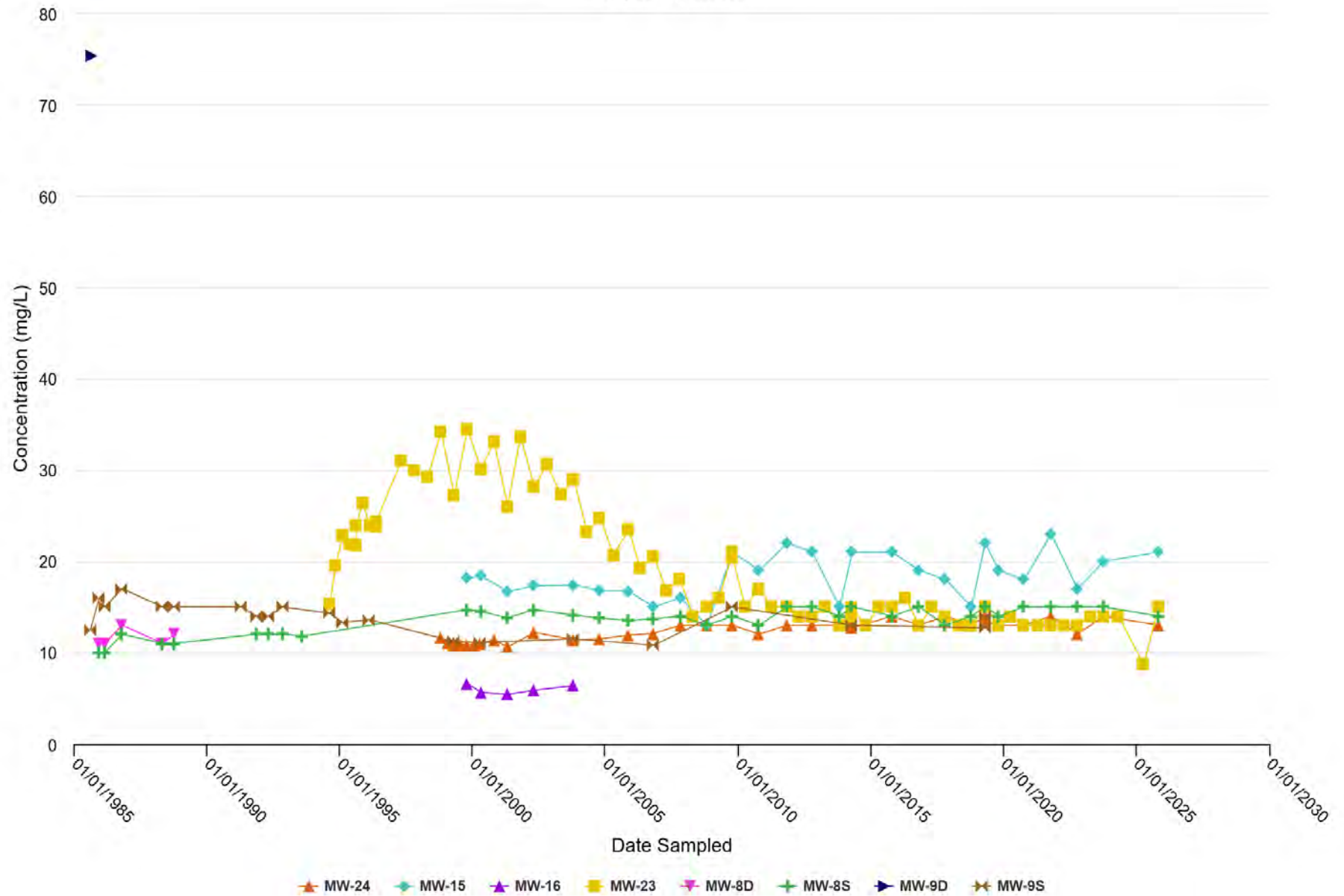
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Lead, Total



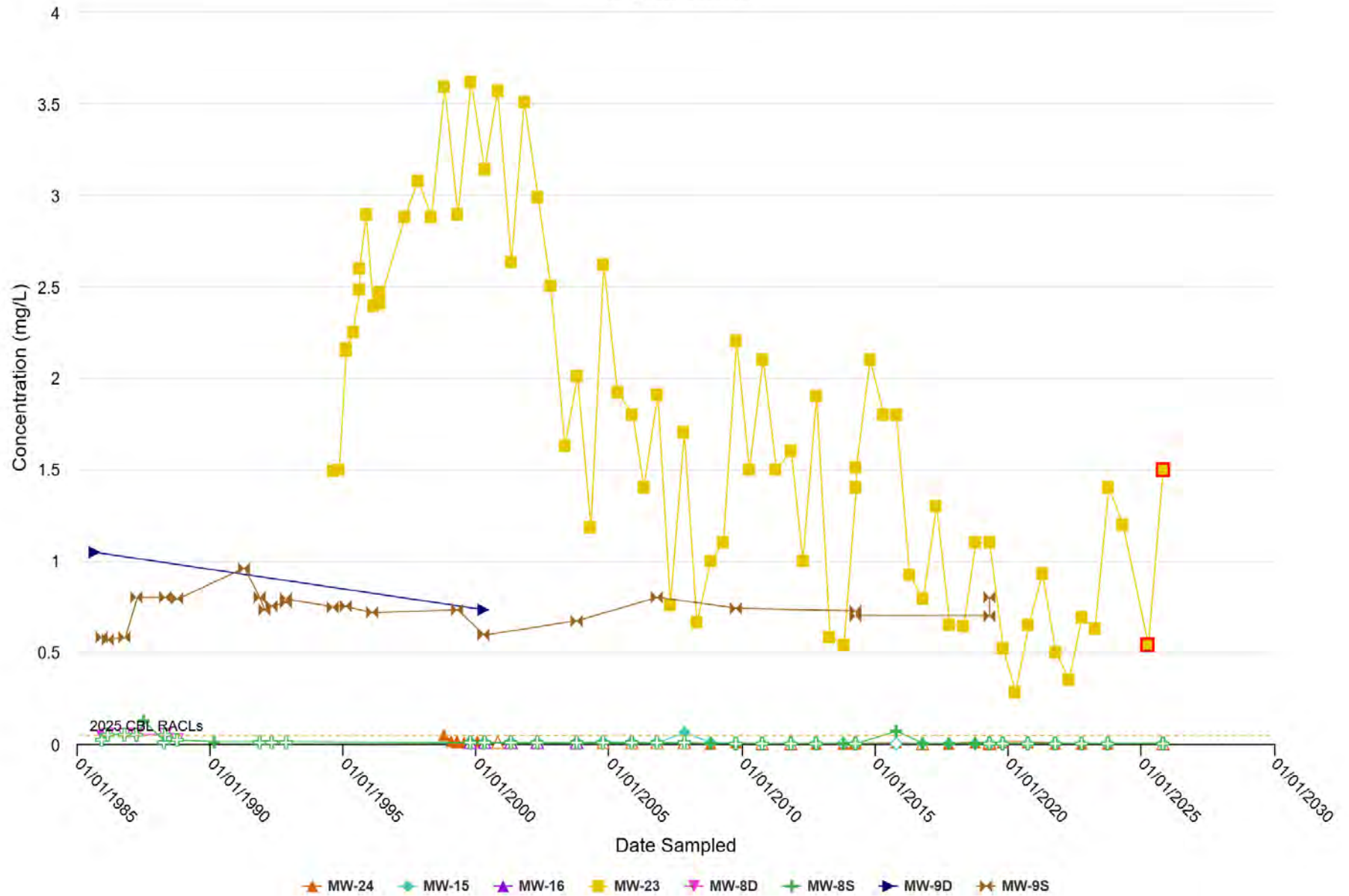
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Magnesium, Dissolved



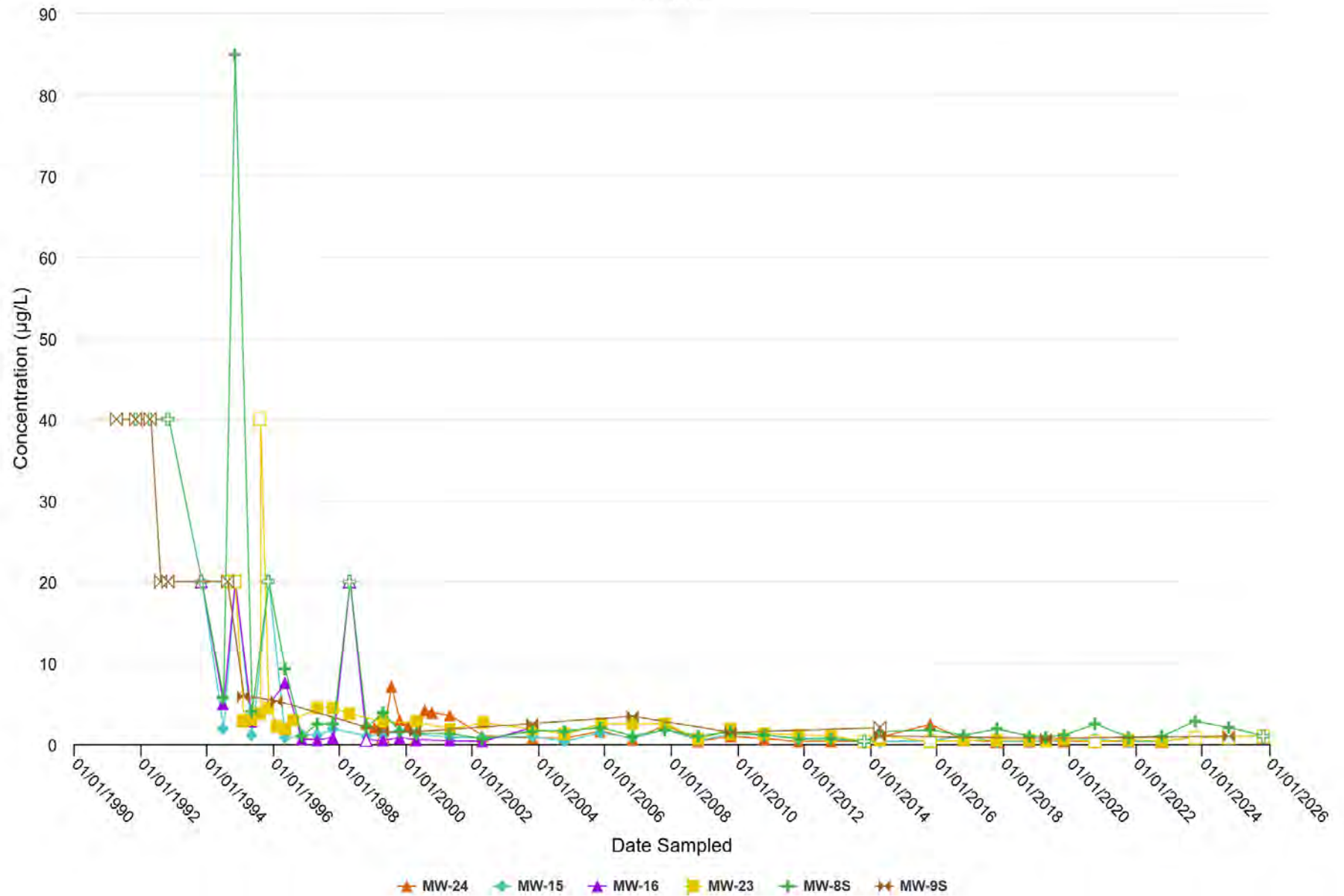
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Manganese, Dissolved



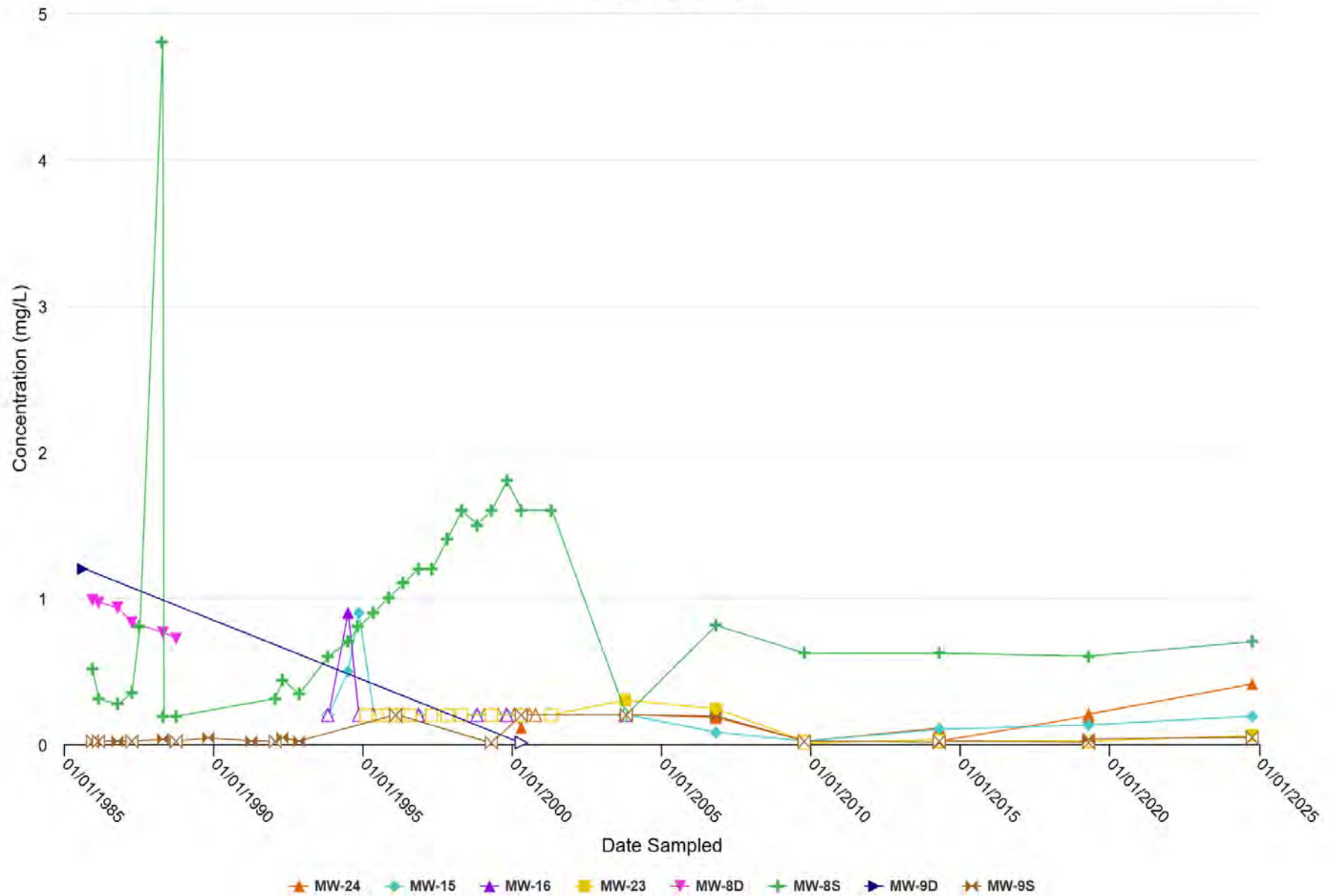
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Nickel, Total



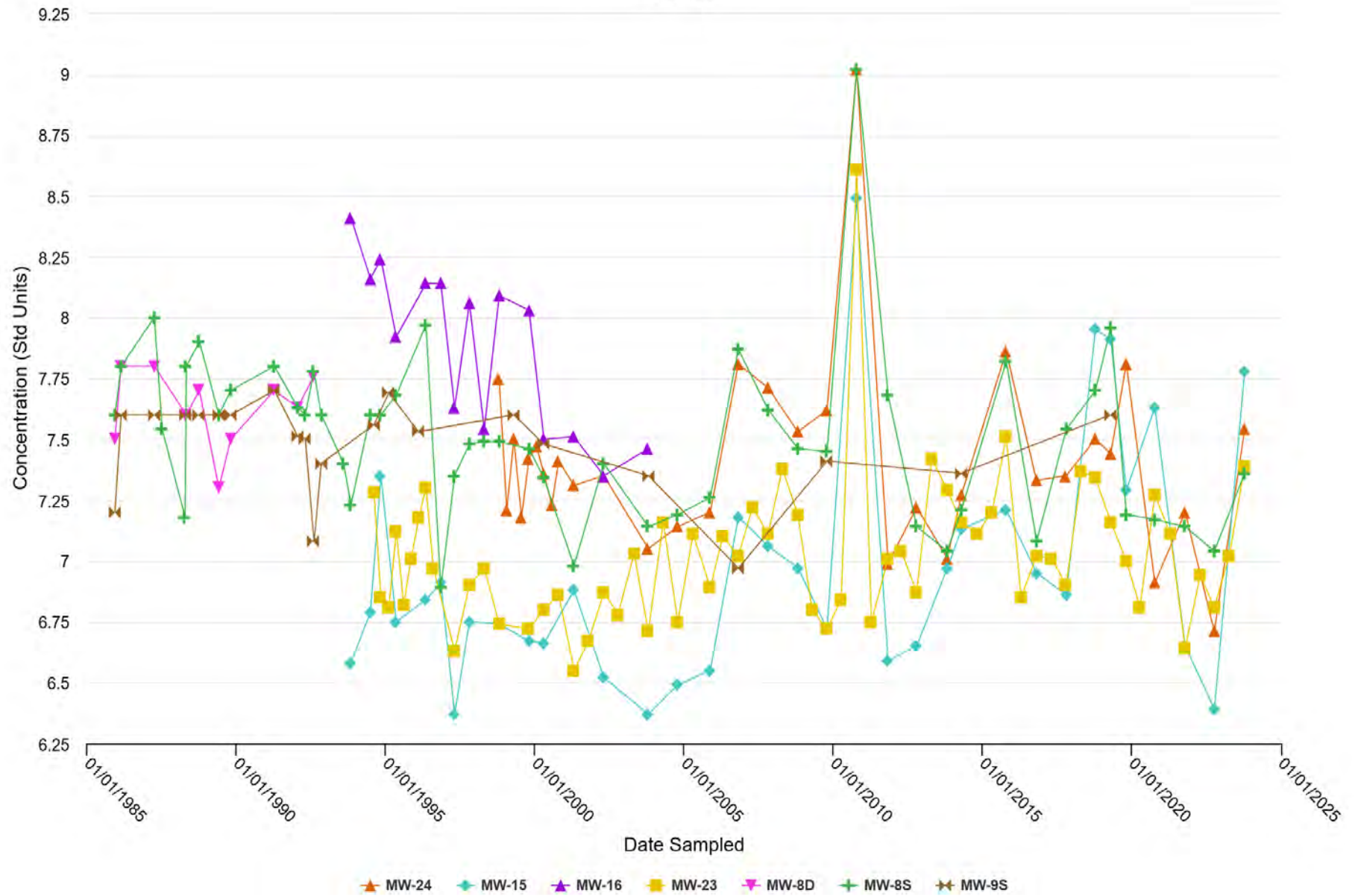
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Nitrogen, Nitrate & Nitrite

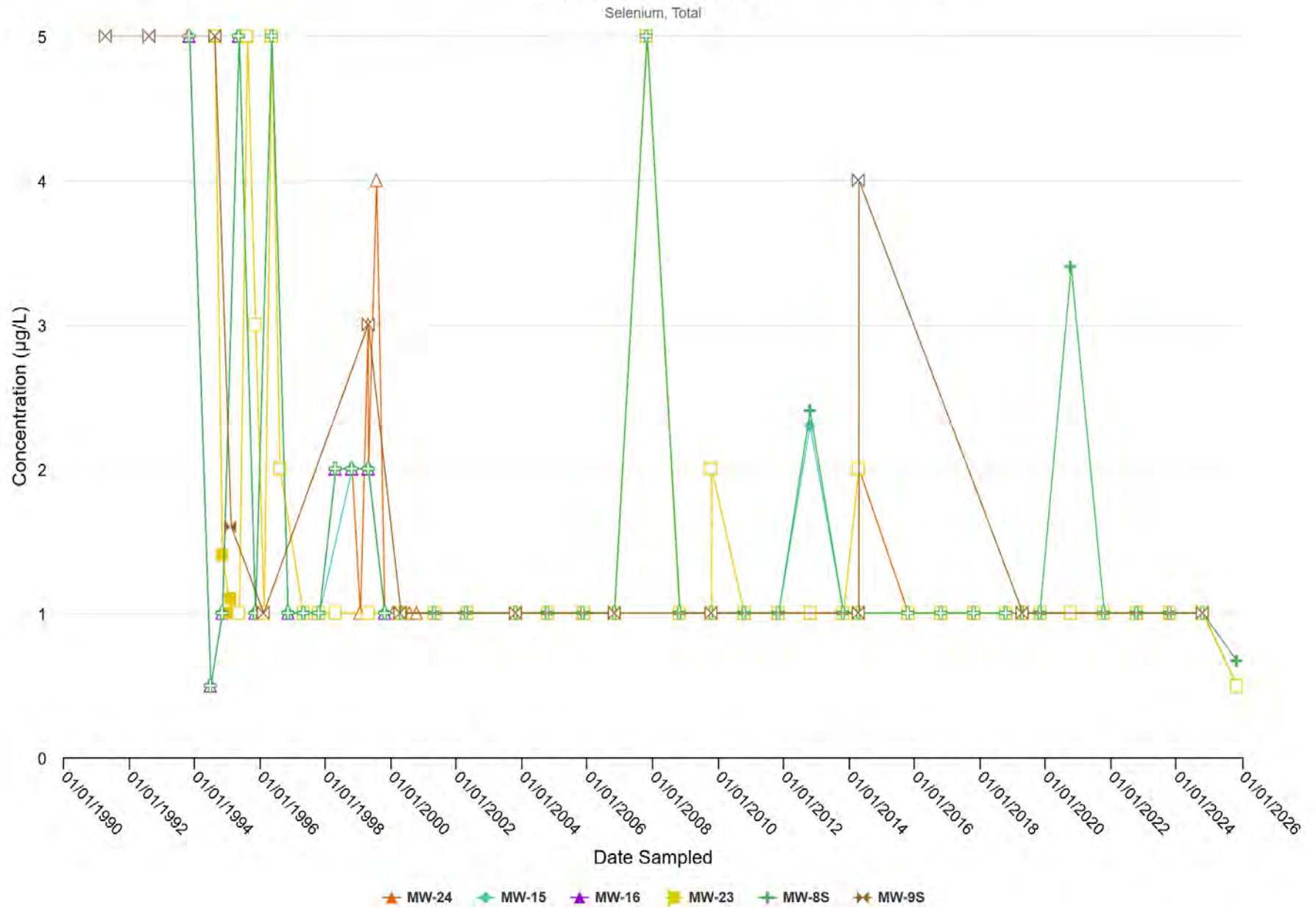


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

pH, Field

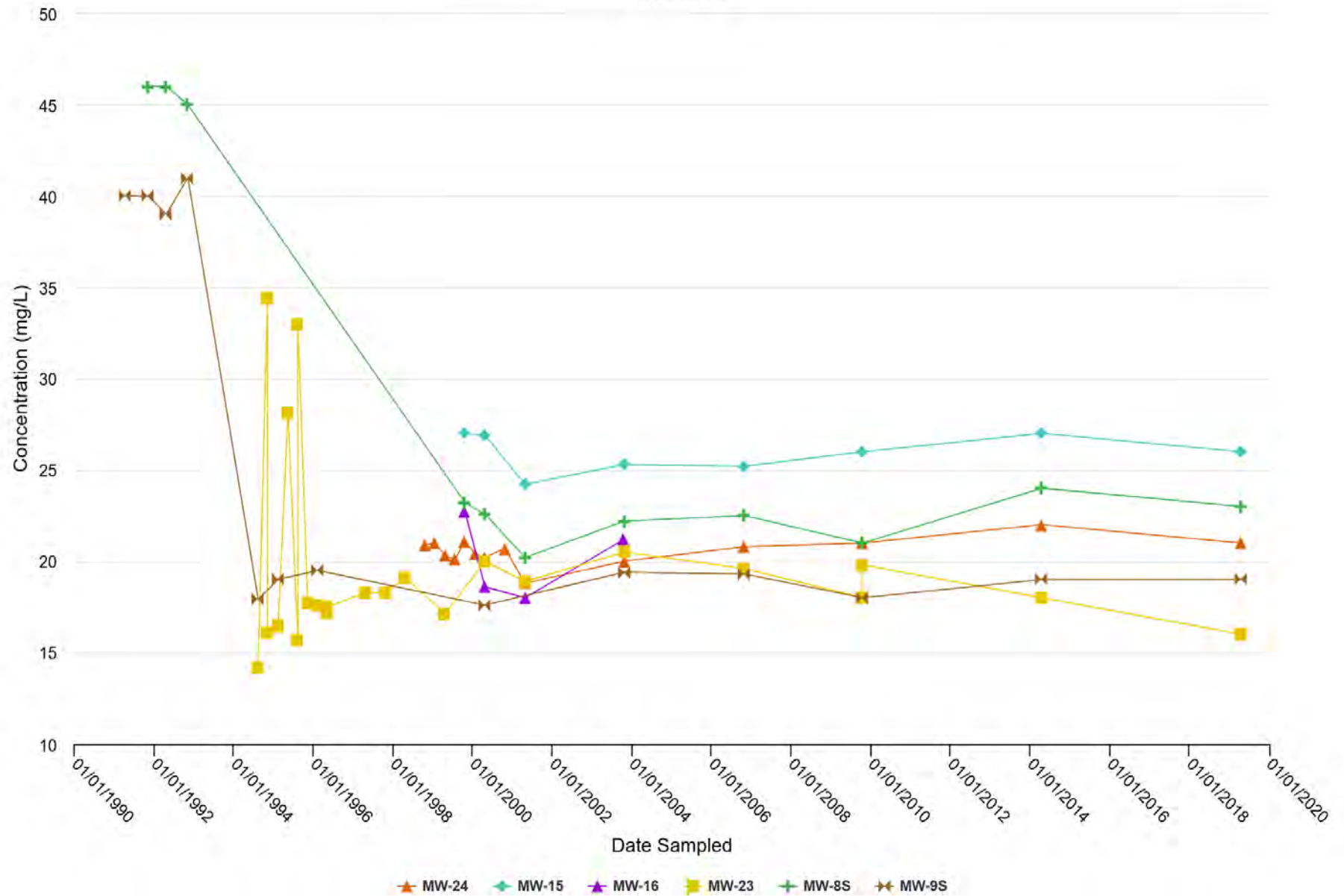


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

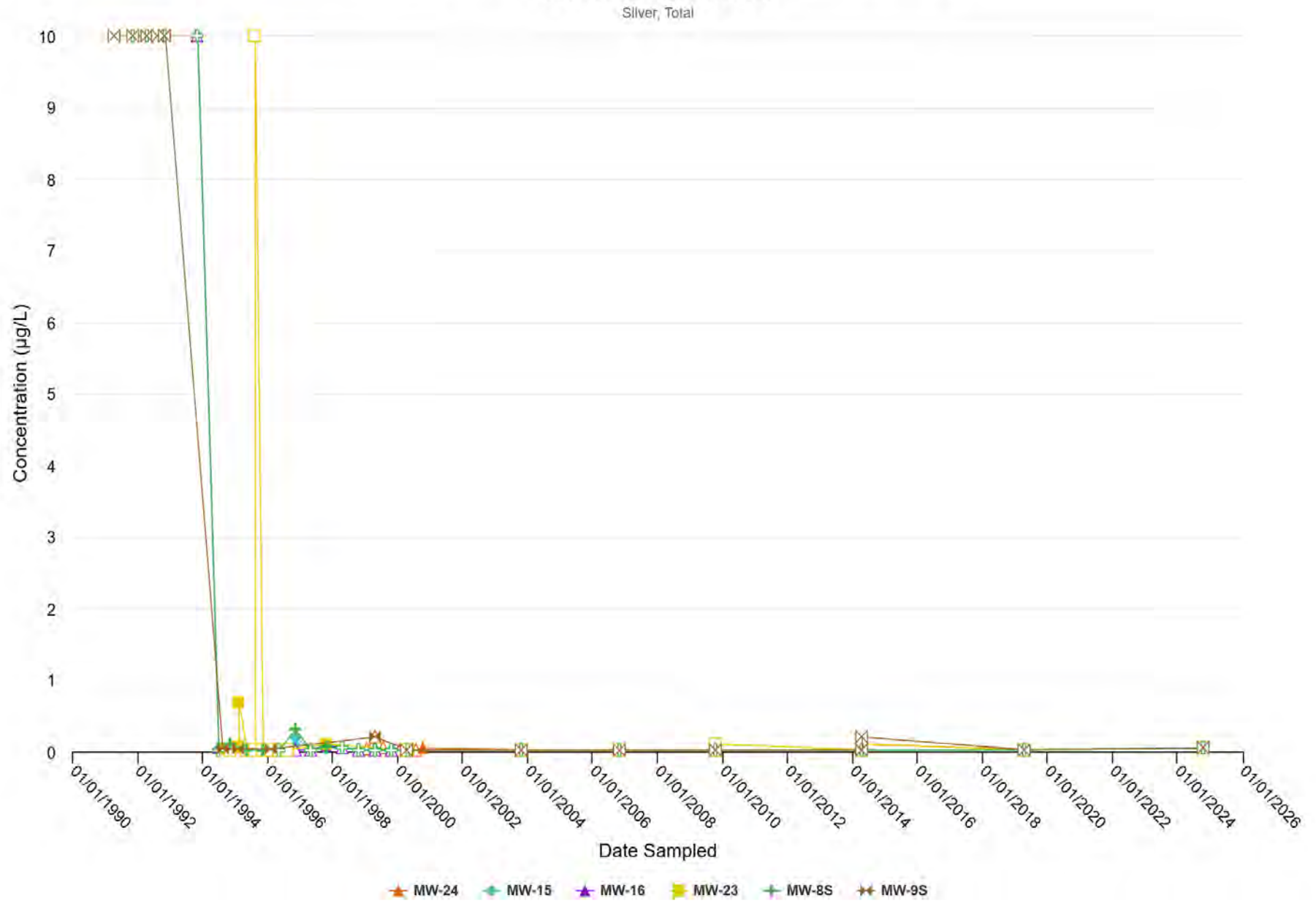


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Silicon, Dissolved

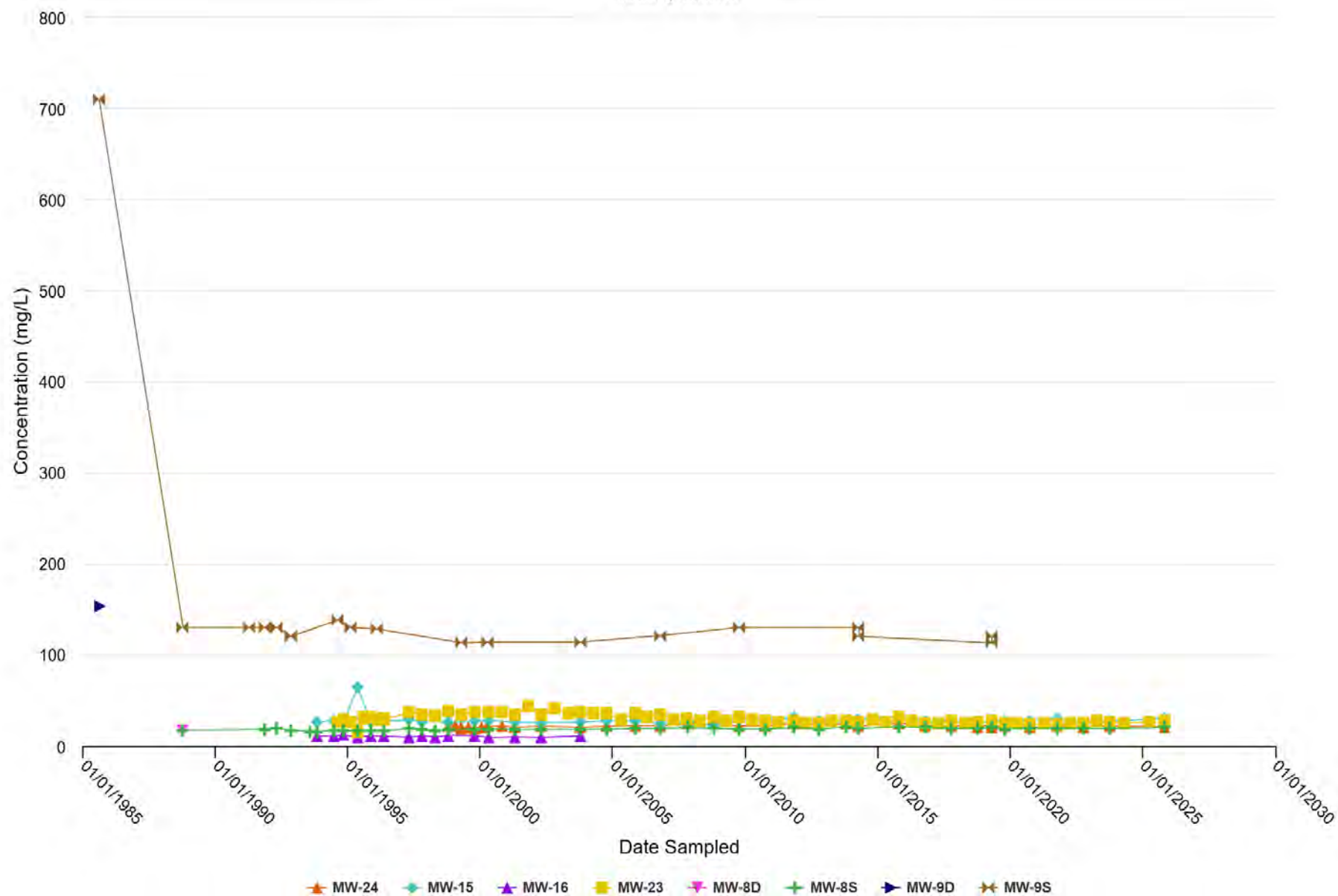


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL



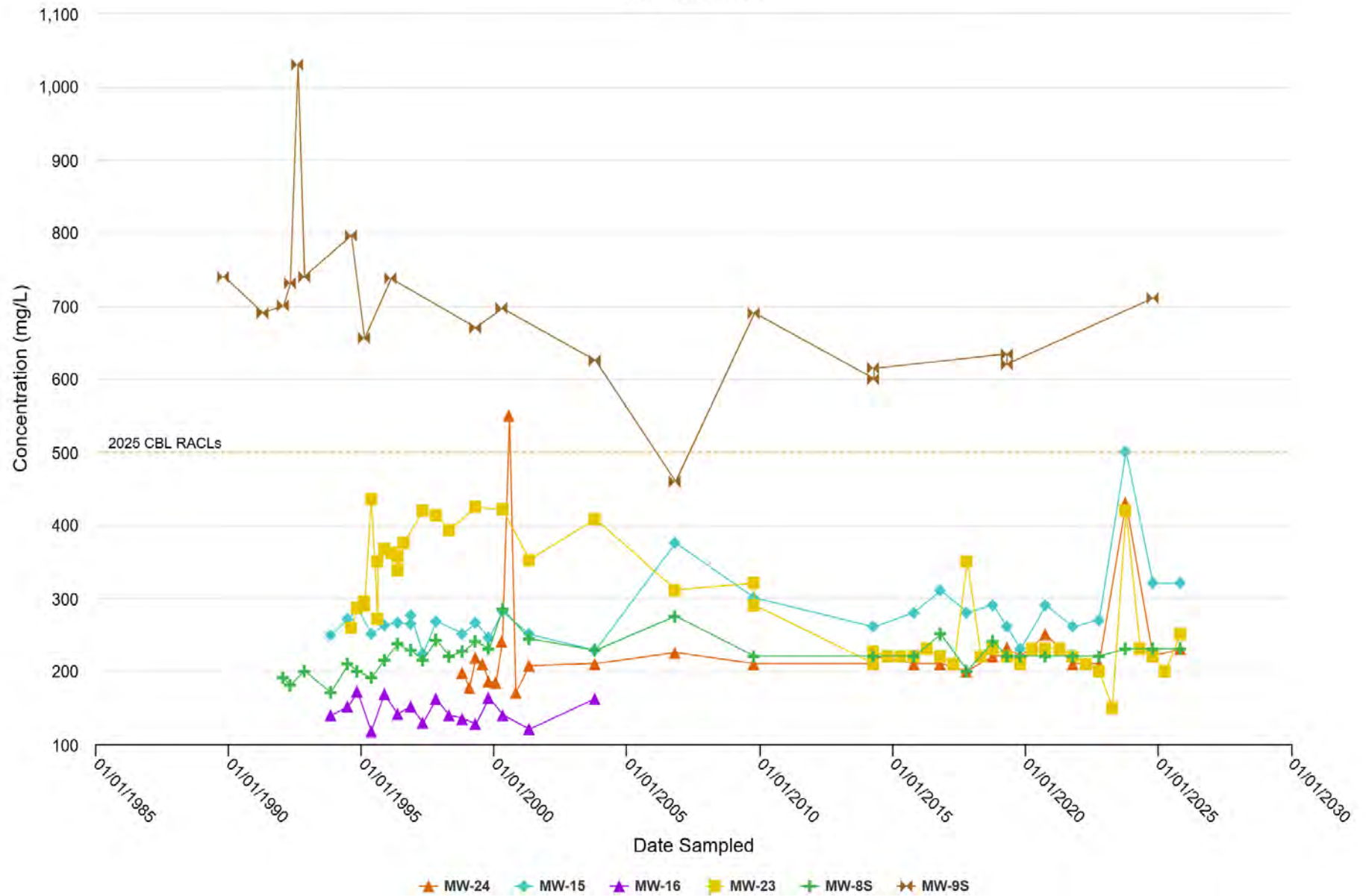
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24) COFFIN BUTTE LANDFILL

Sodium, Dissolved



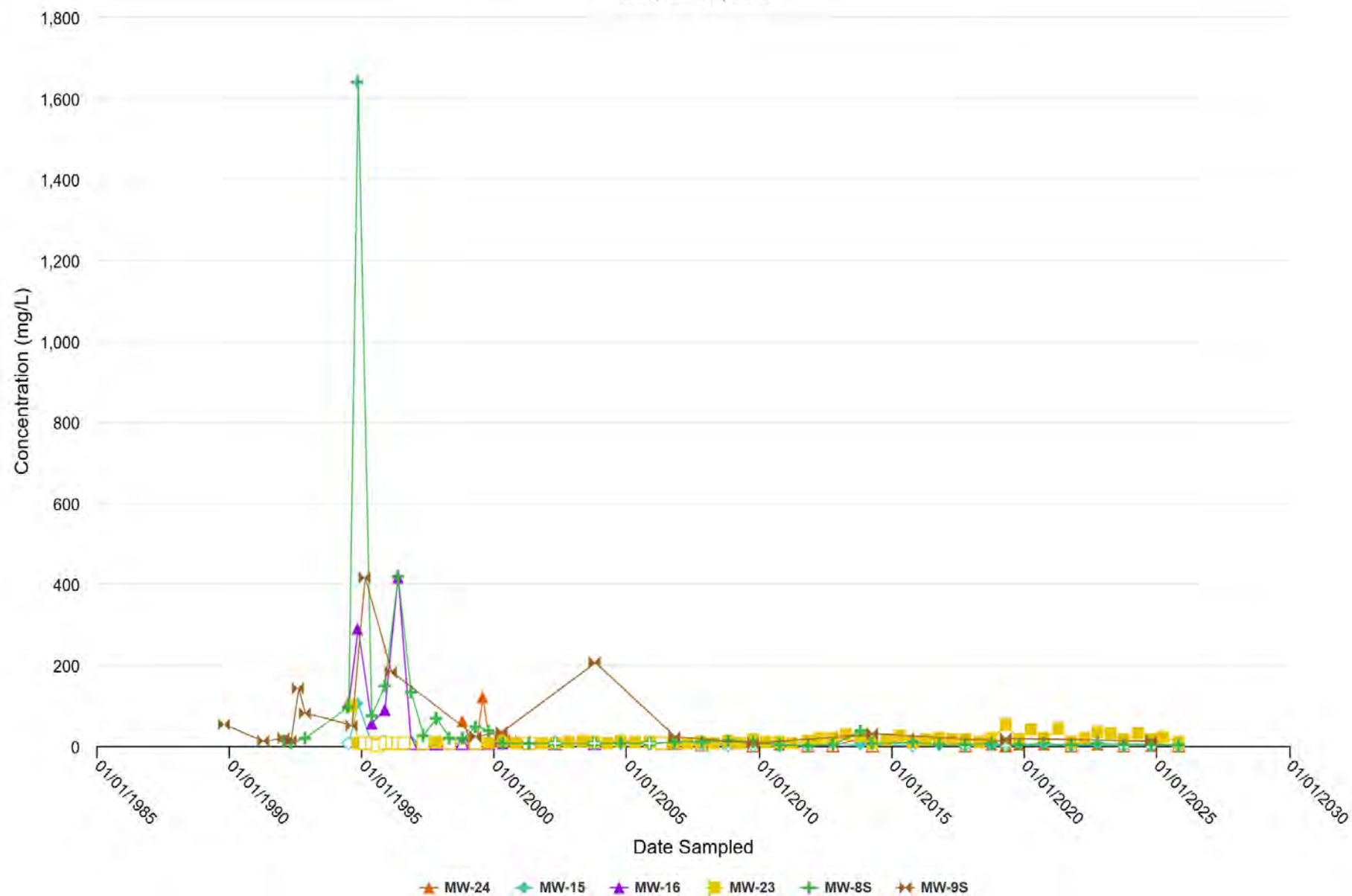
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Solids, Total Dissolved

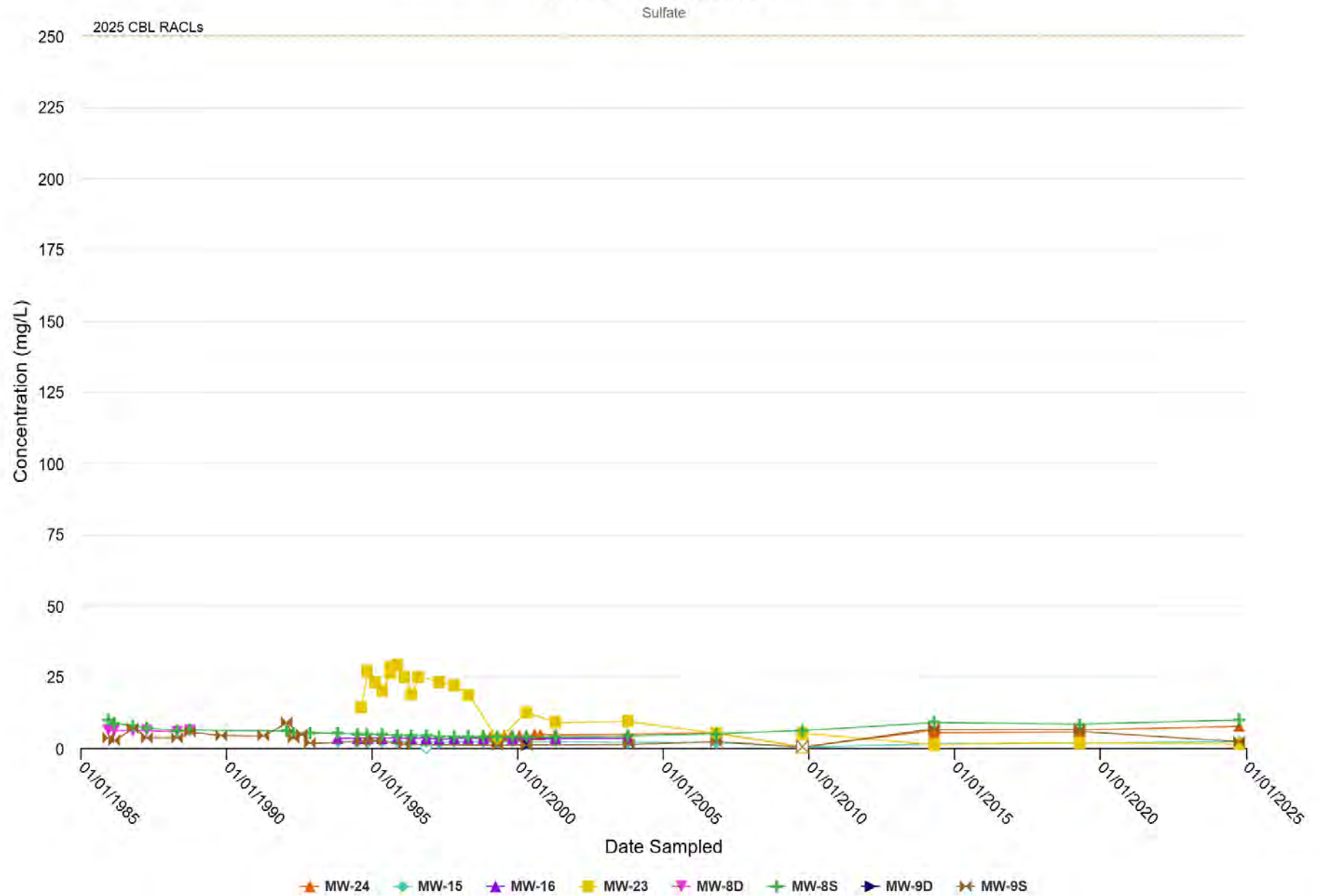


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Solids, Total Suspended

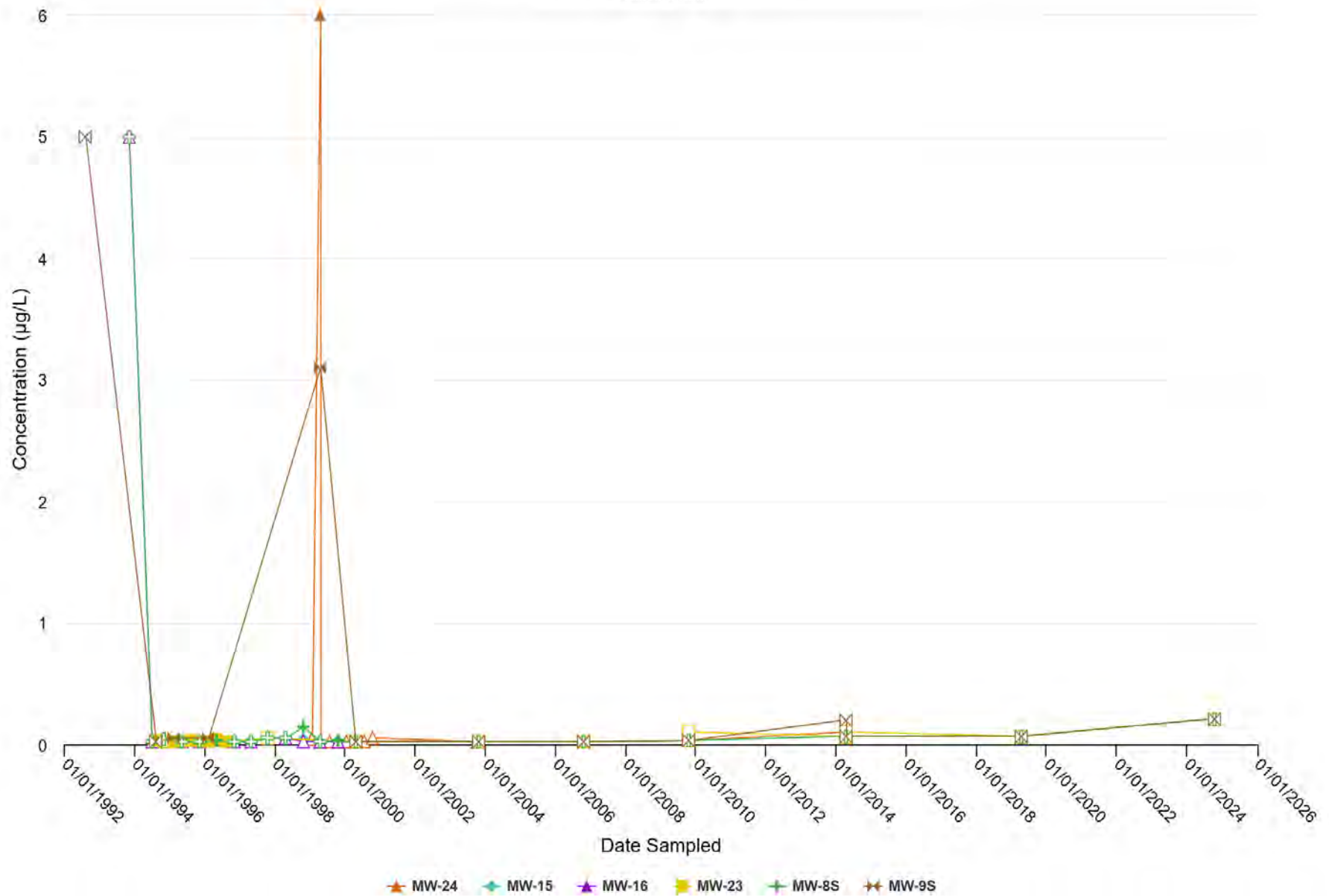


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL



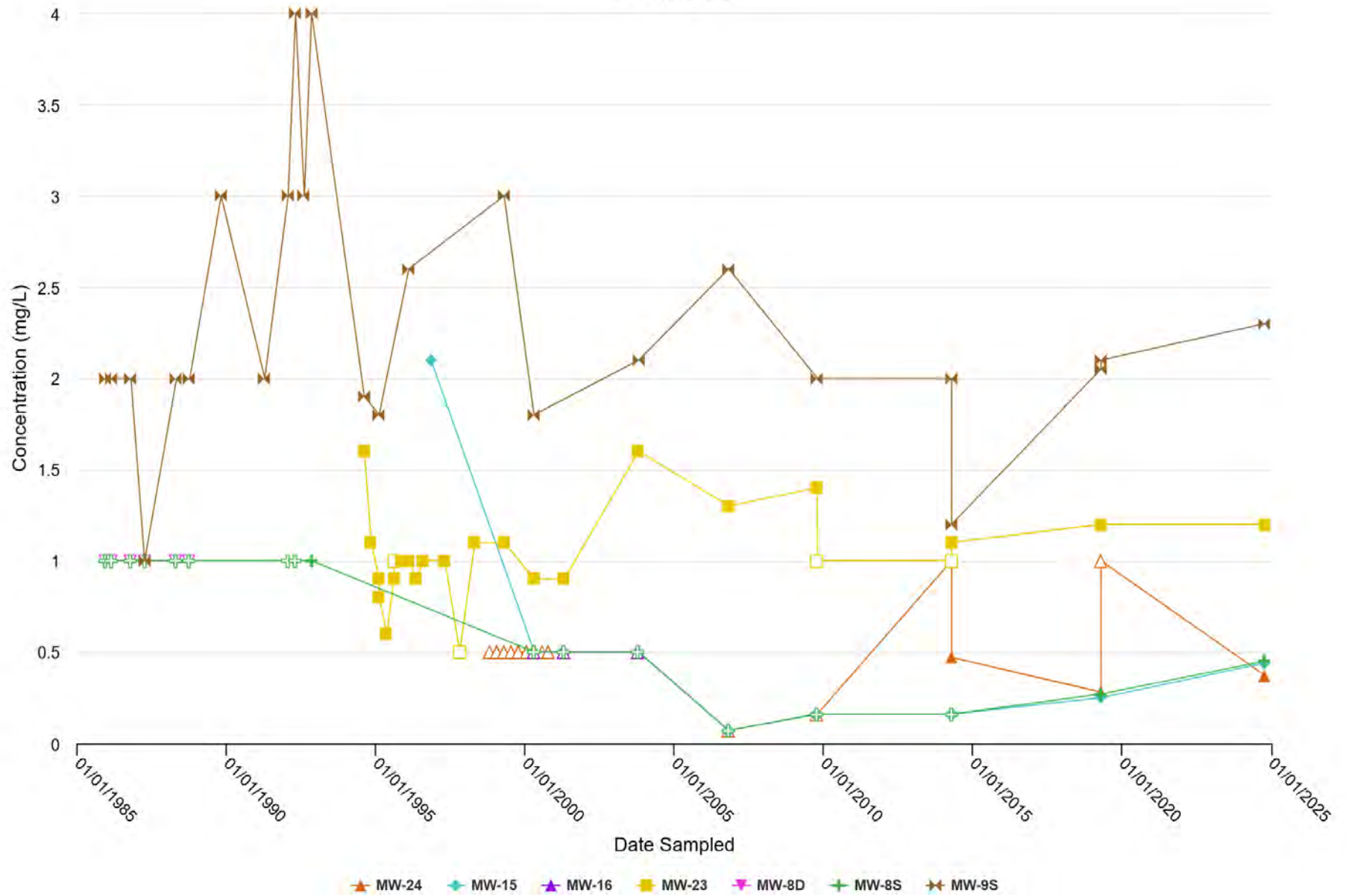
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Thallium, Total



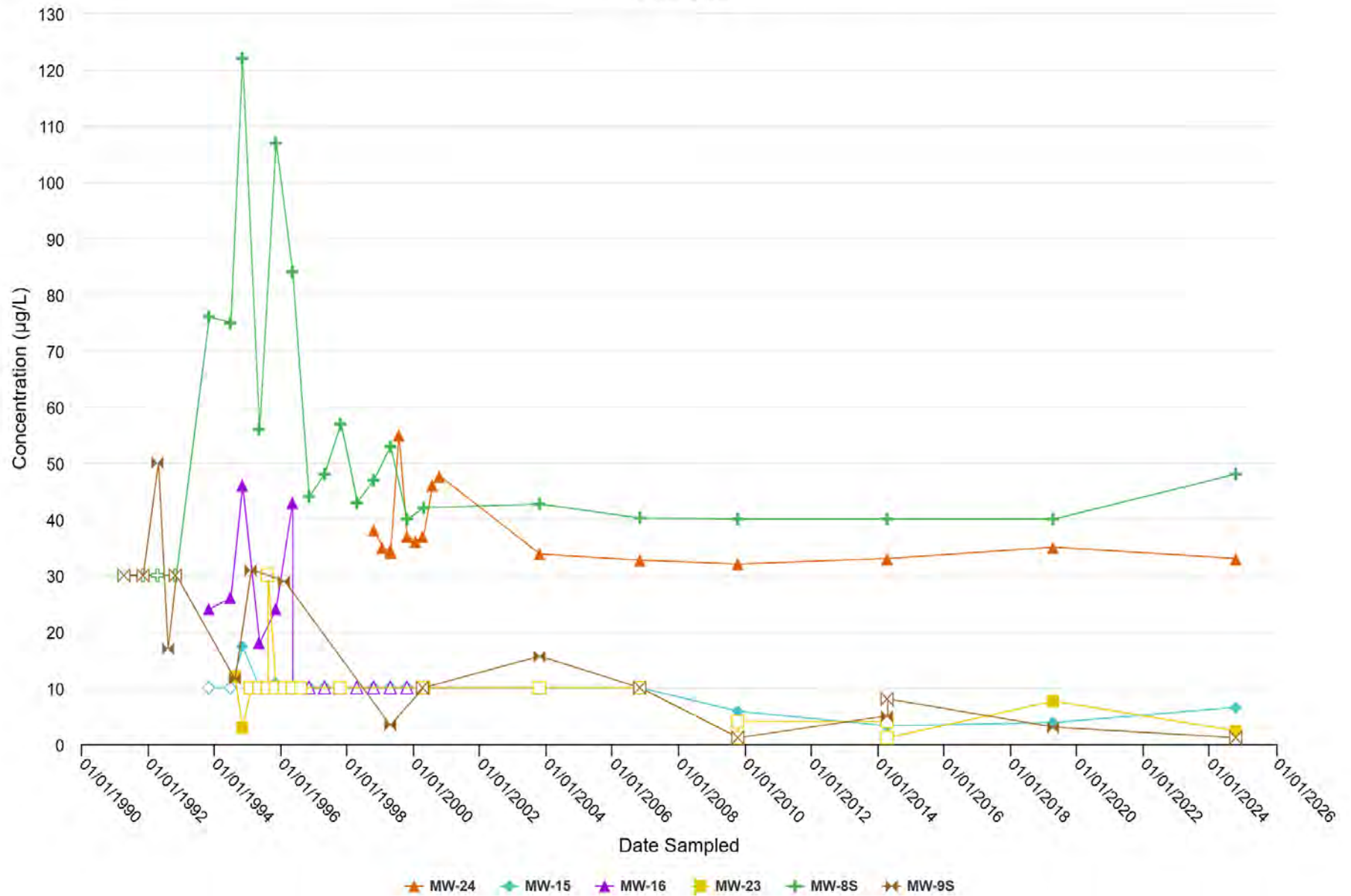
Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

Total Organic Carbon

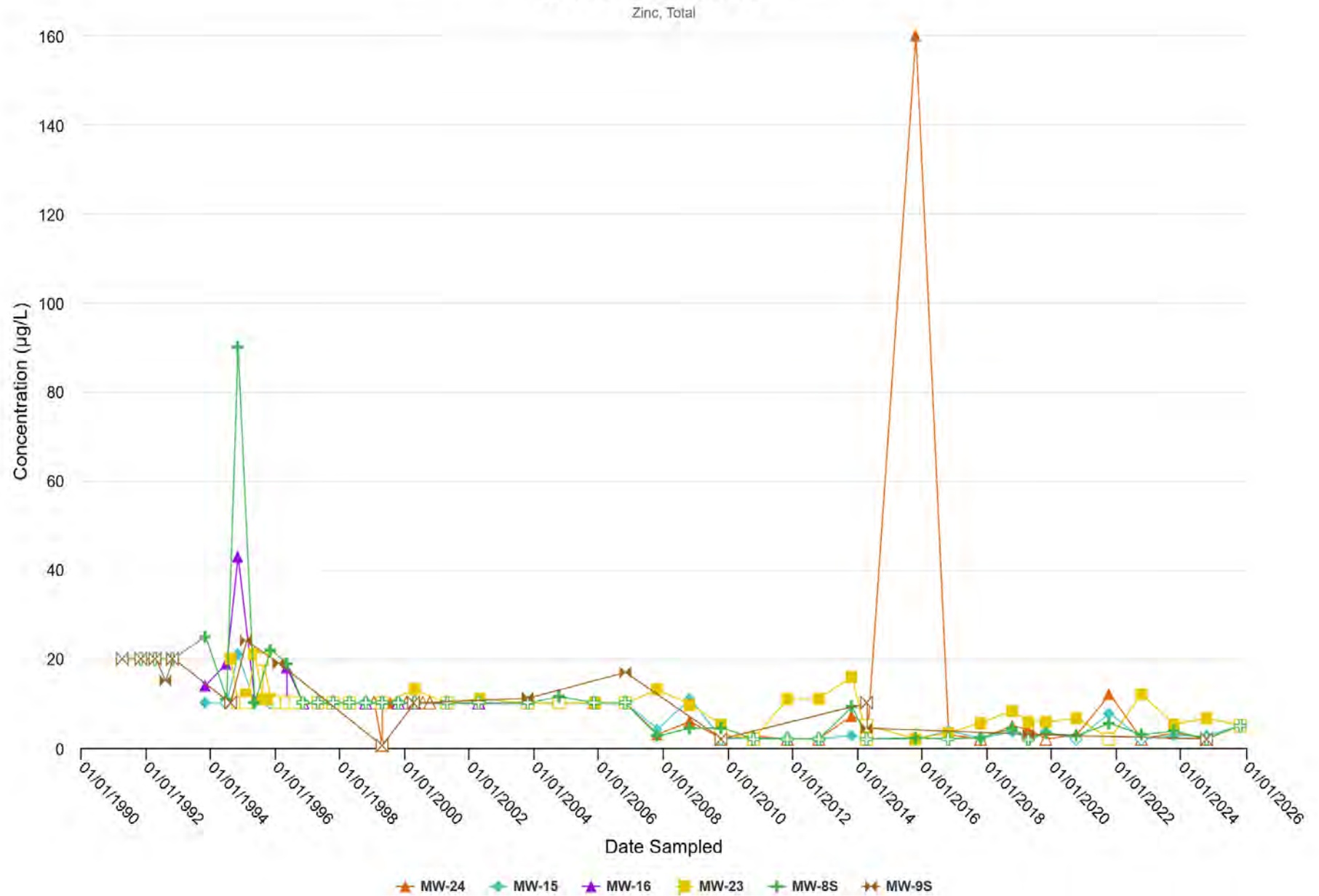


Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

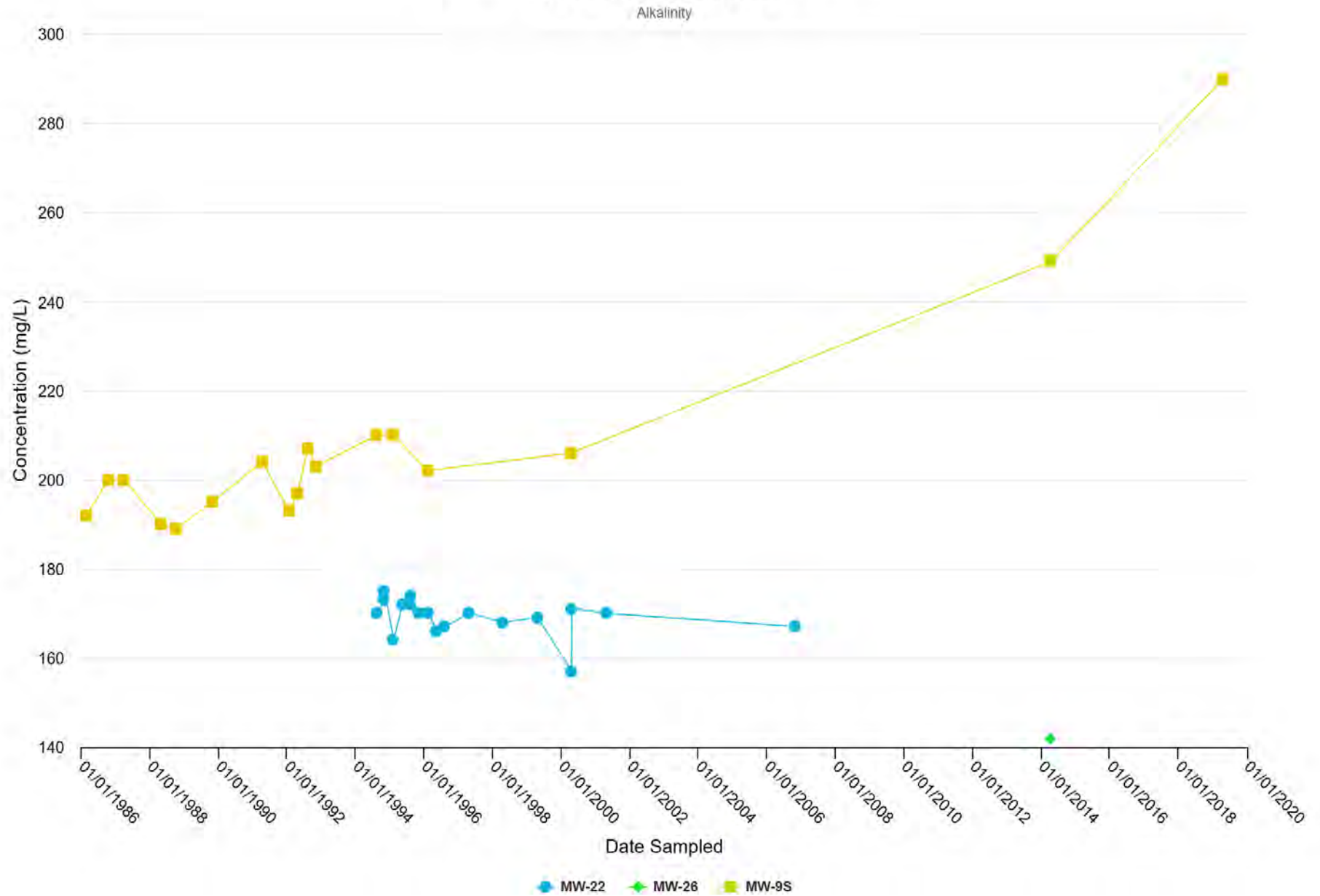
Vanadium, Total



Cells 2 & 3 - Time Series (MW-8D/S, MW-15, MW-16, MW-23, MW-24)
COFFIN BUTTE LANDFILL

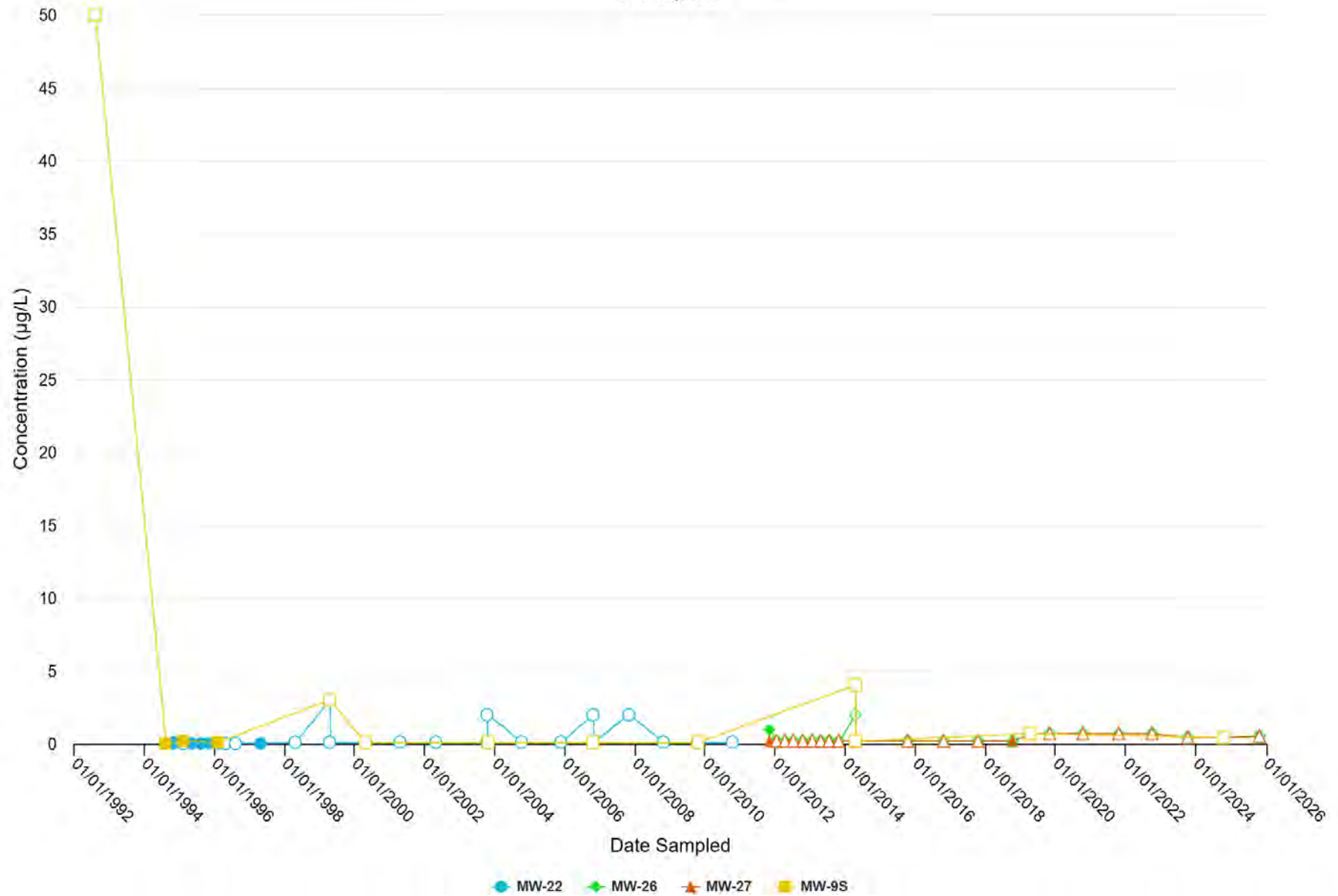


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

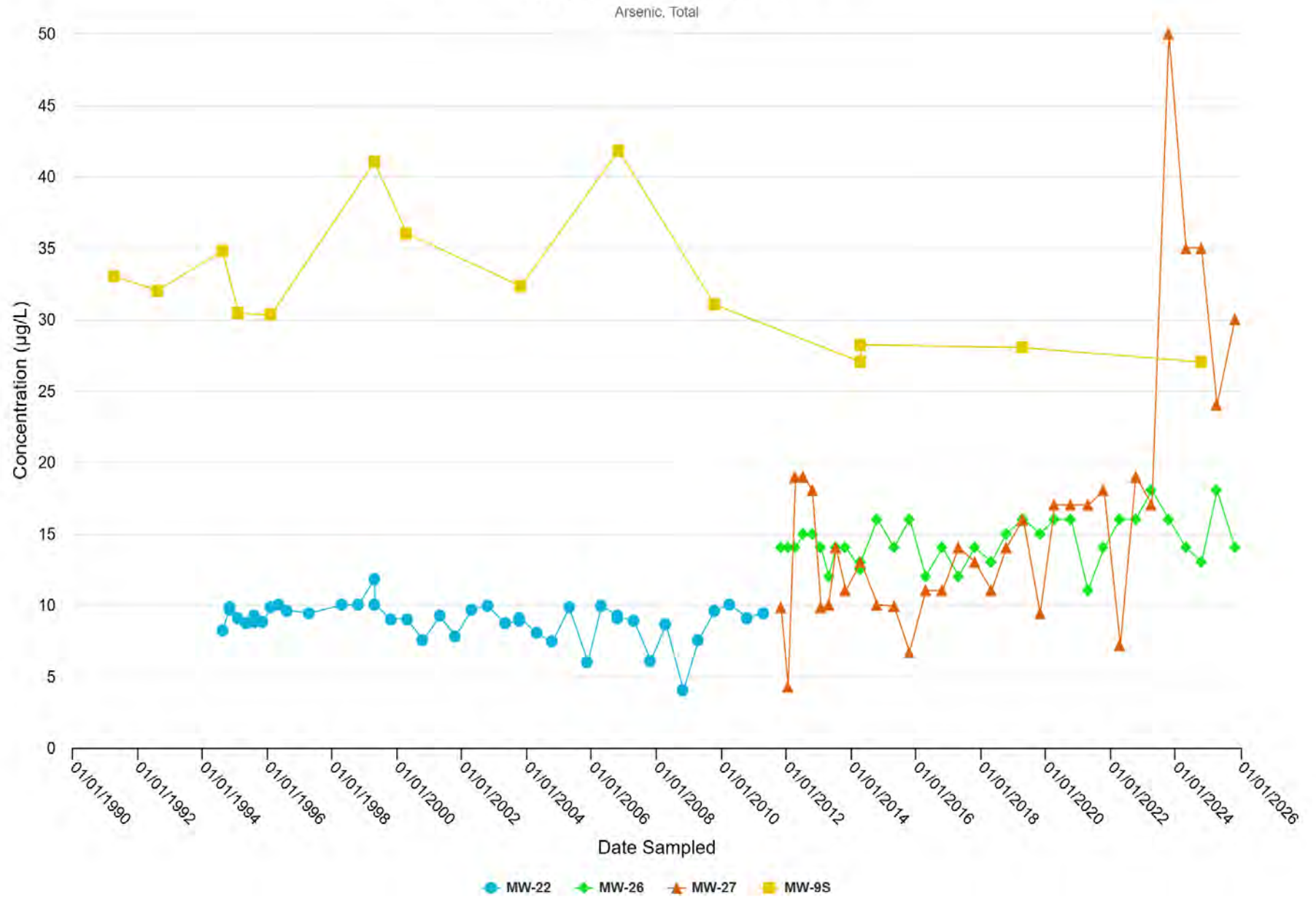


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

Antimony, Total

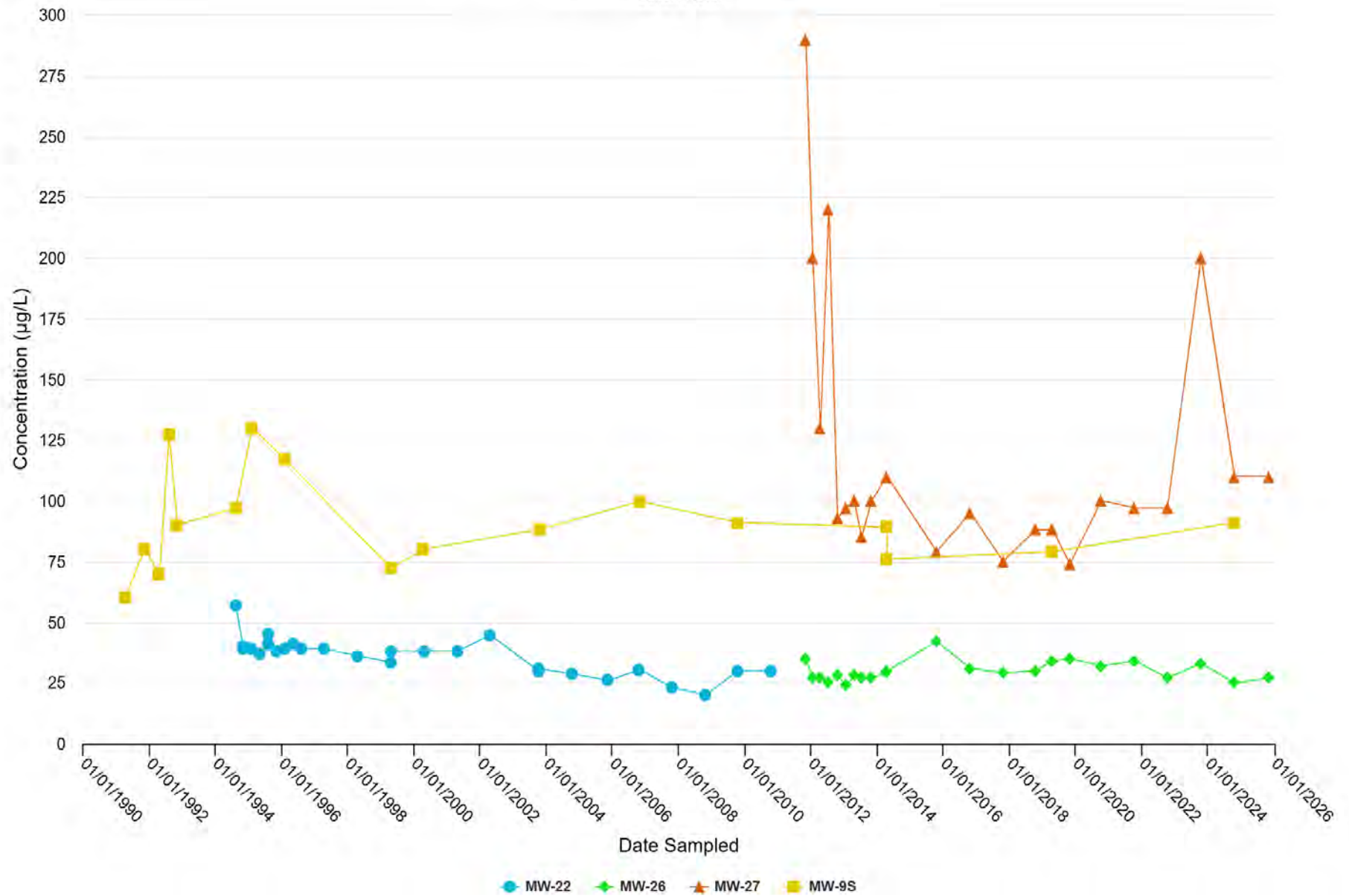


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

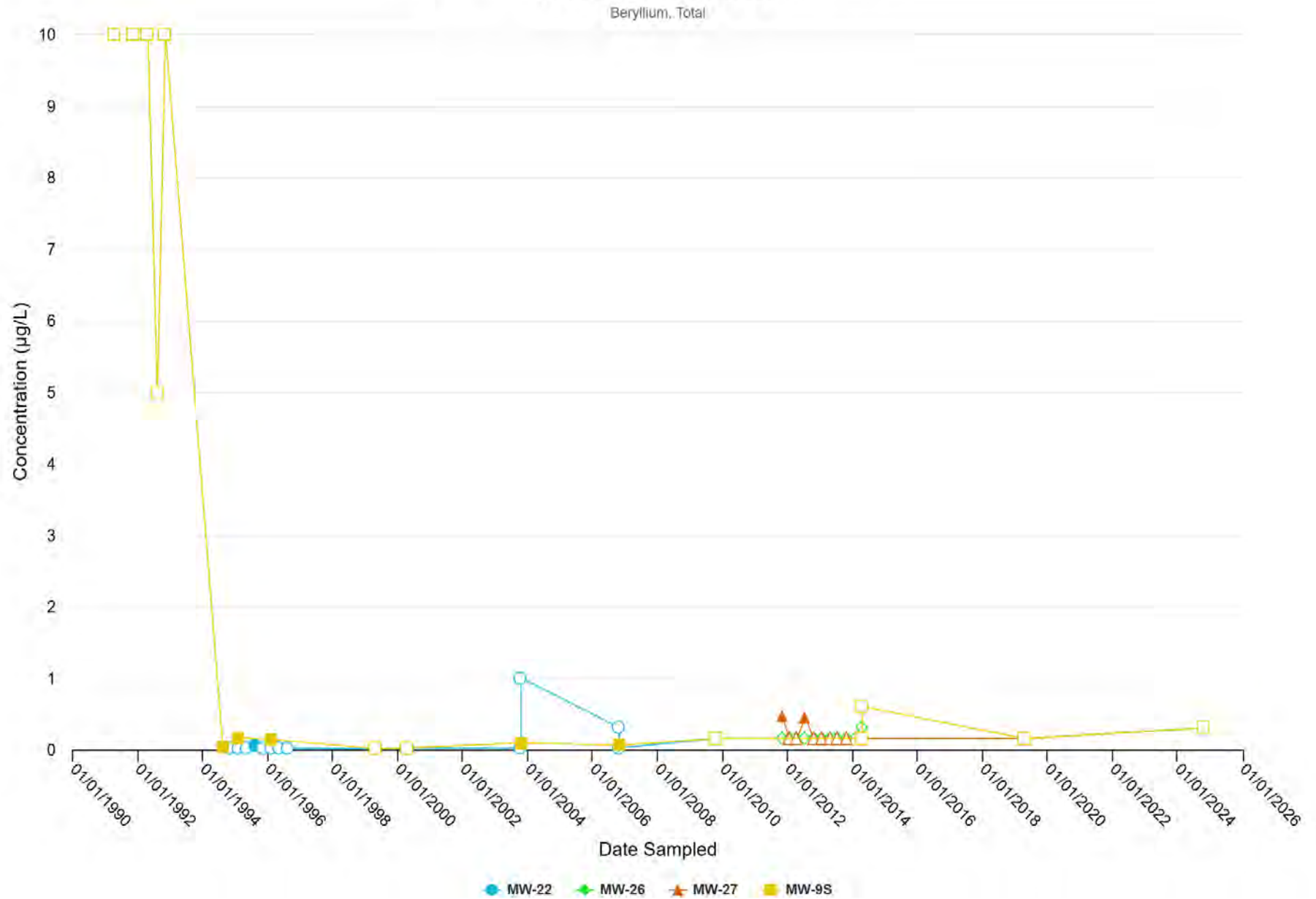


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

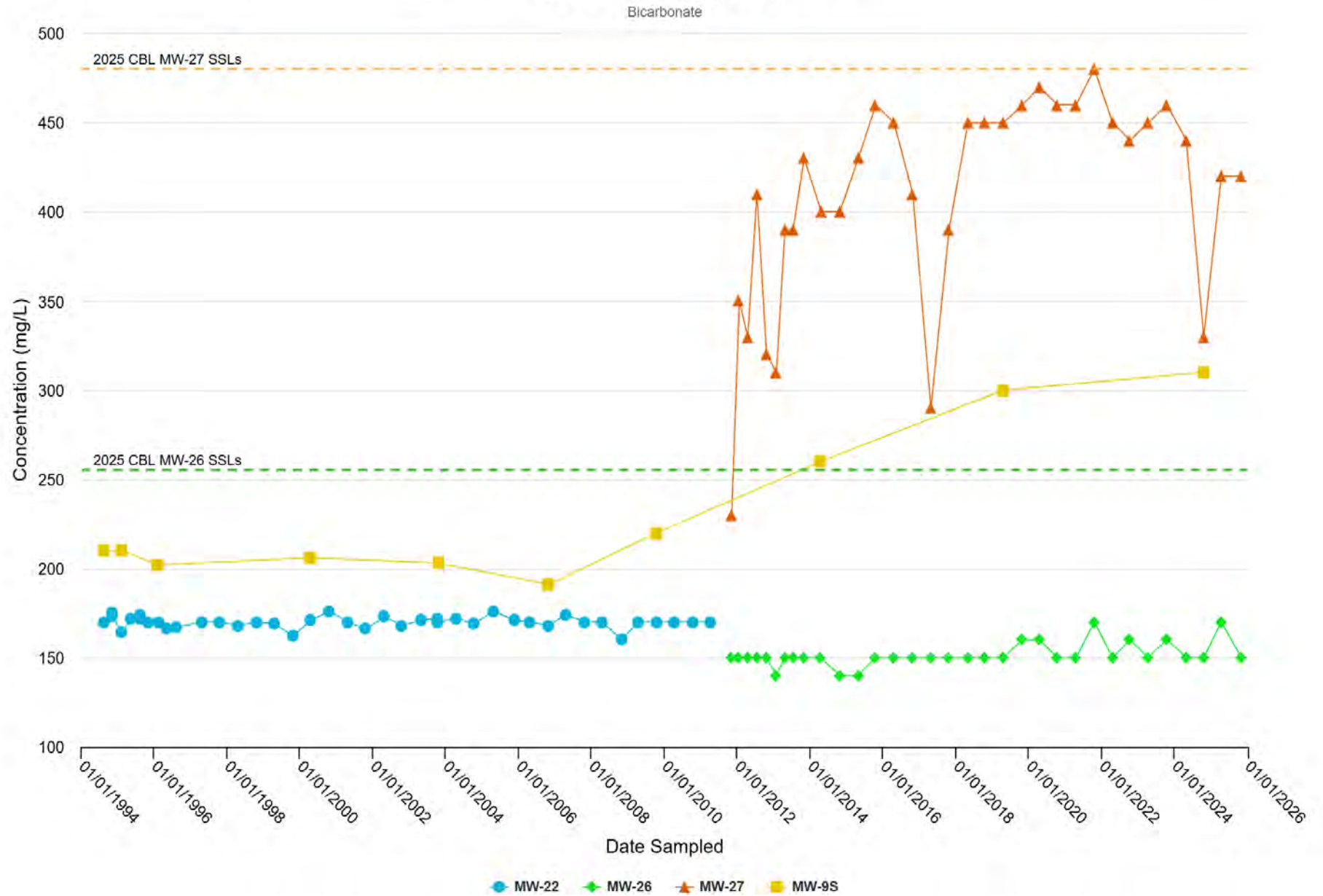
Barium, Total



East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

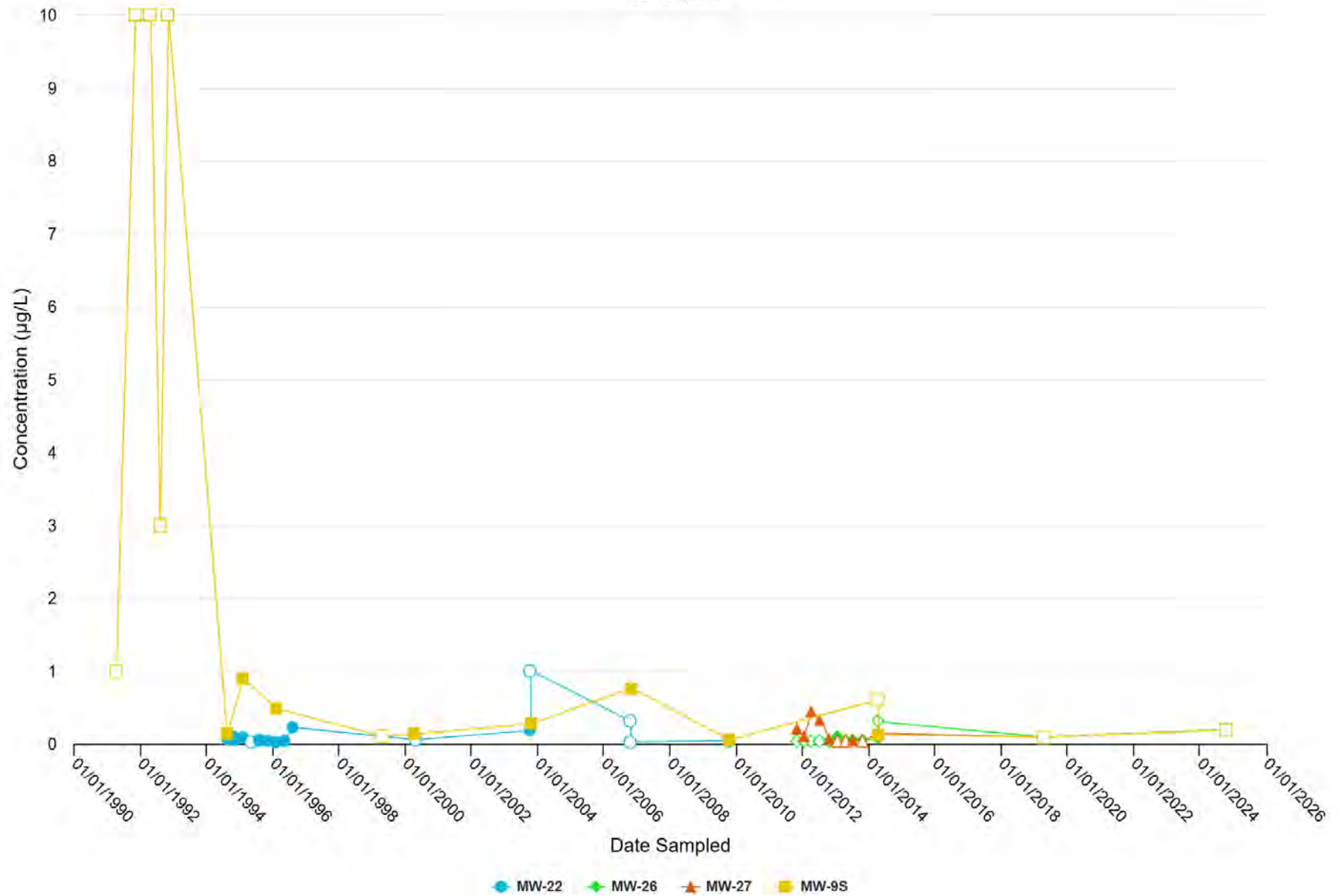


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

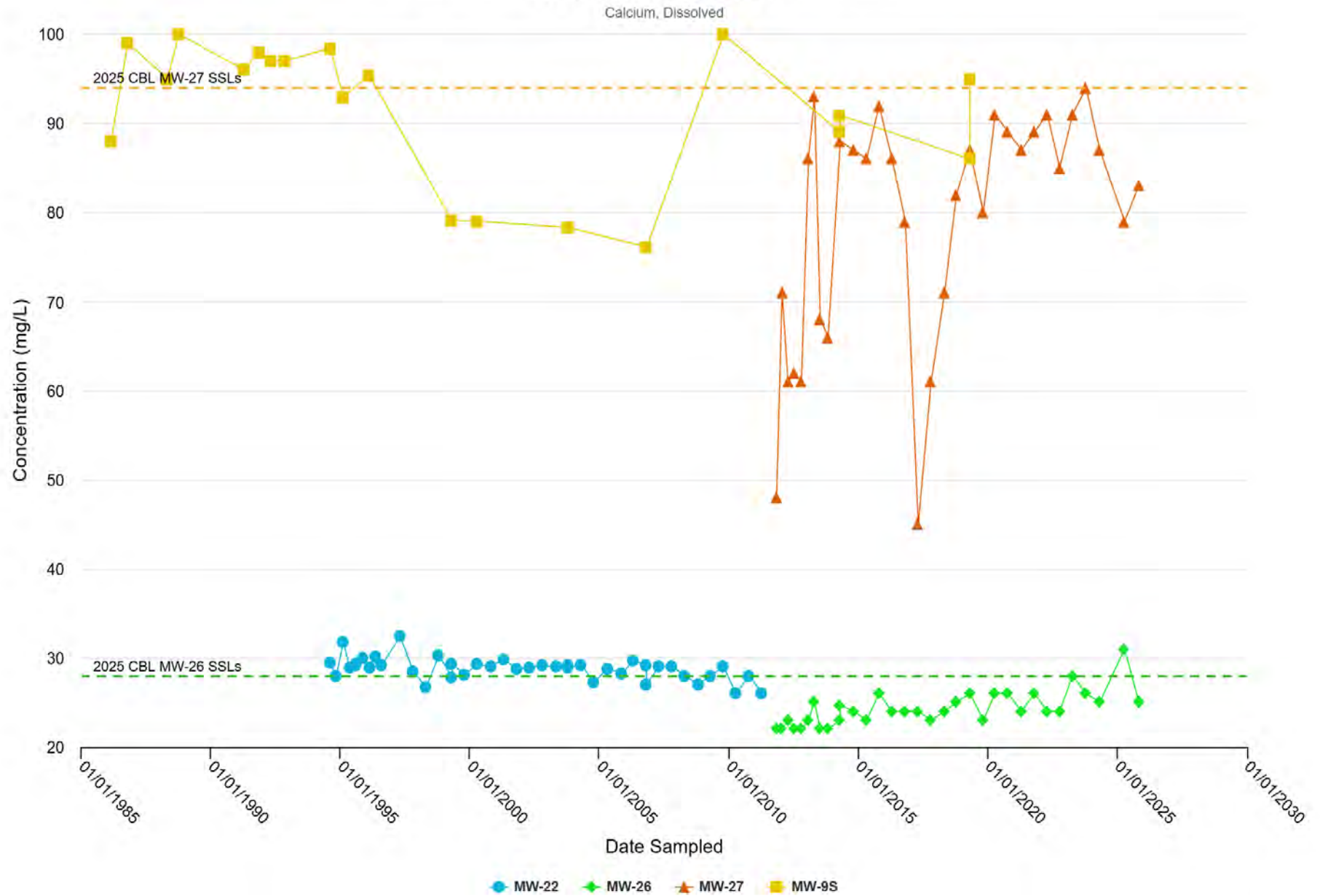


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

Cadmium, Total

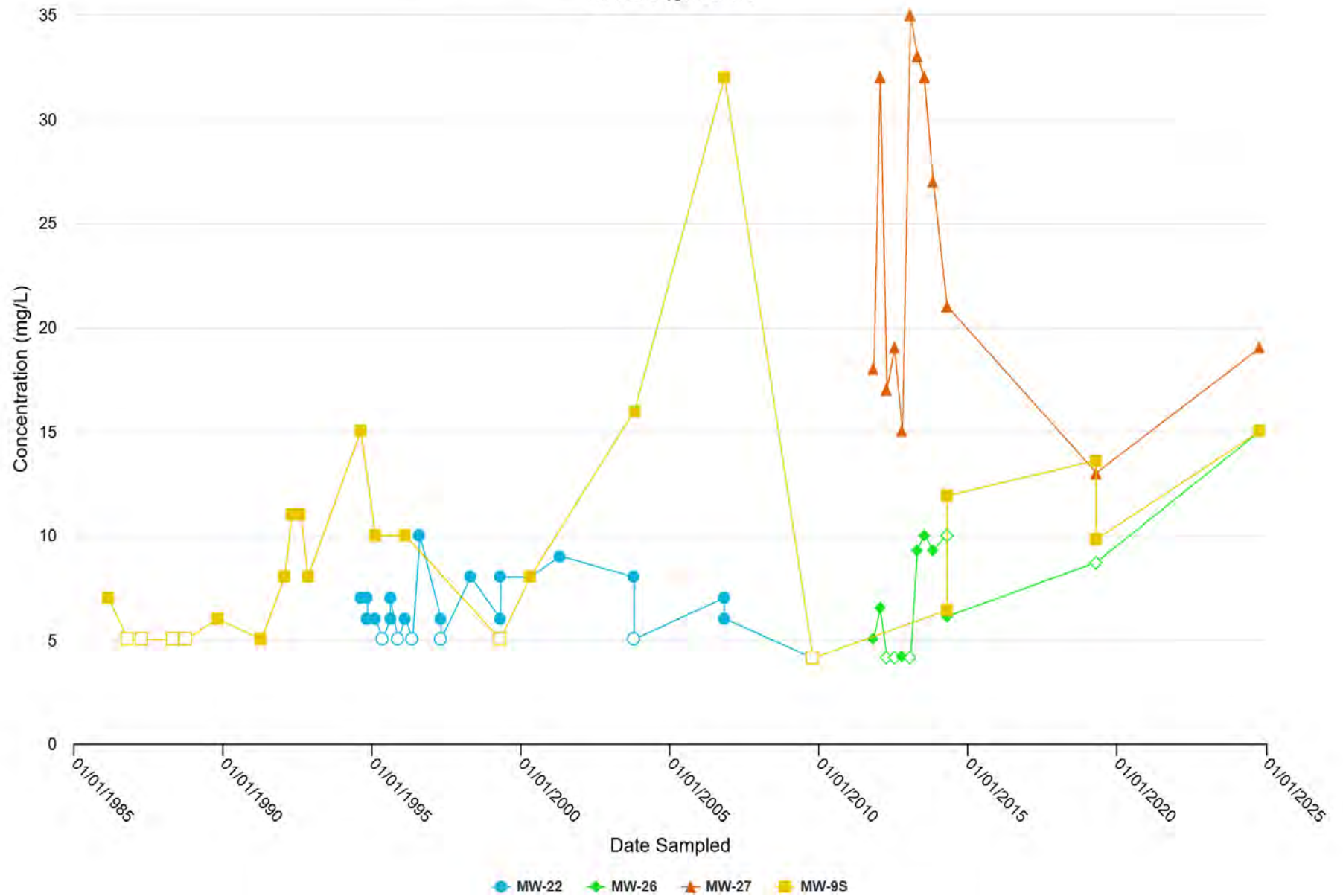


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL



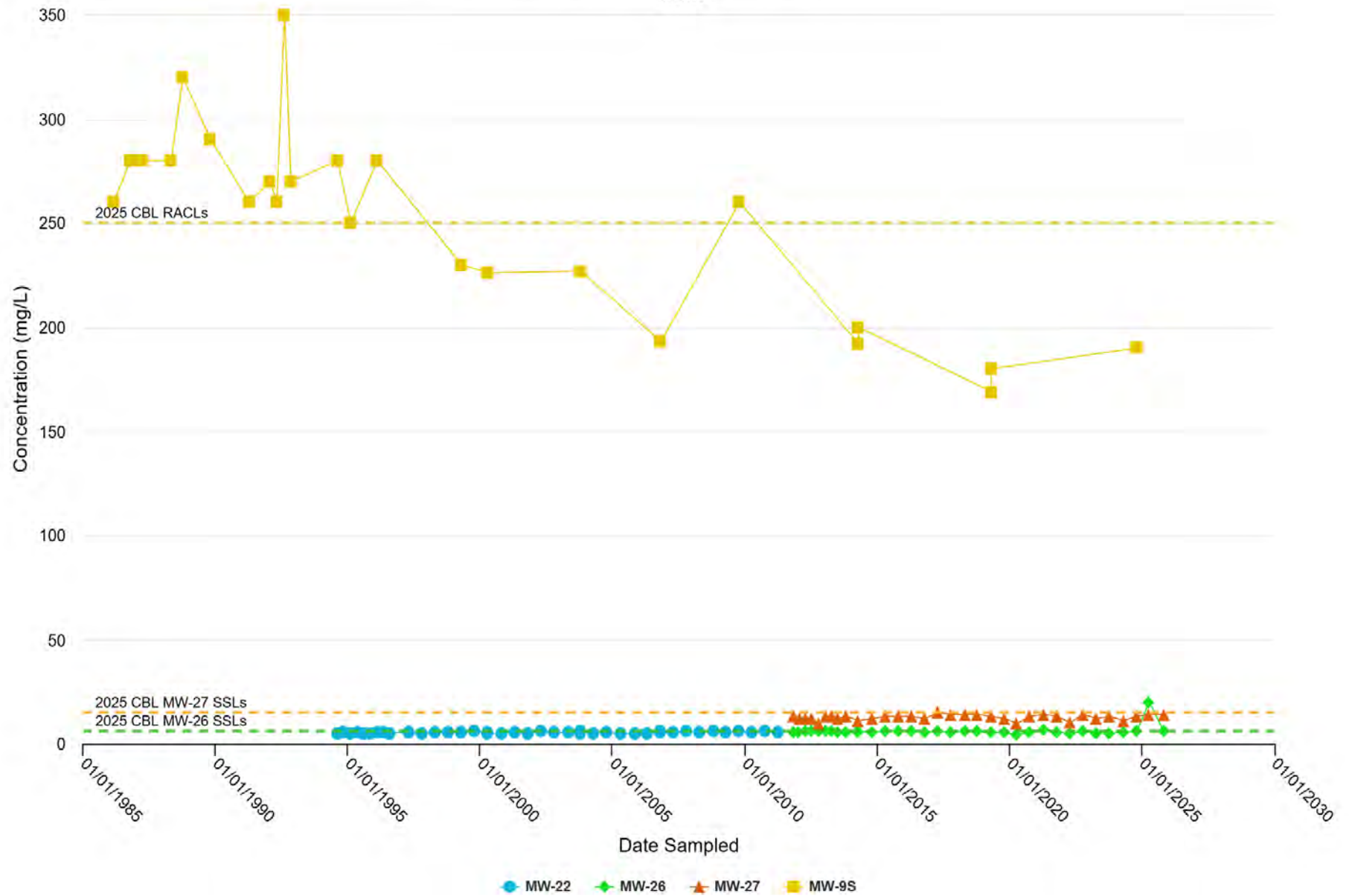
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Chemical Oxygen Demand



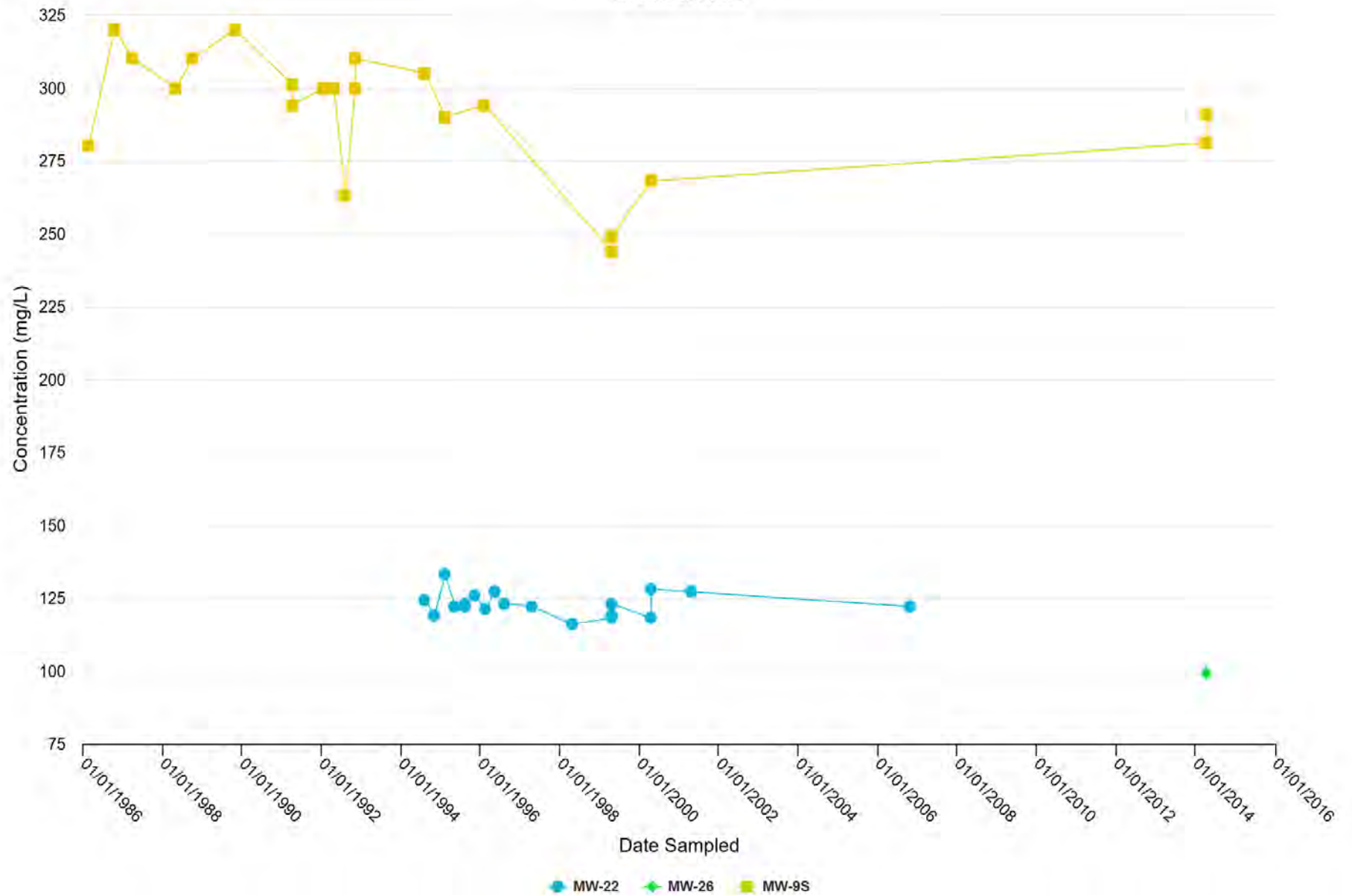
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Chloride

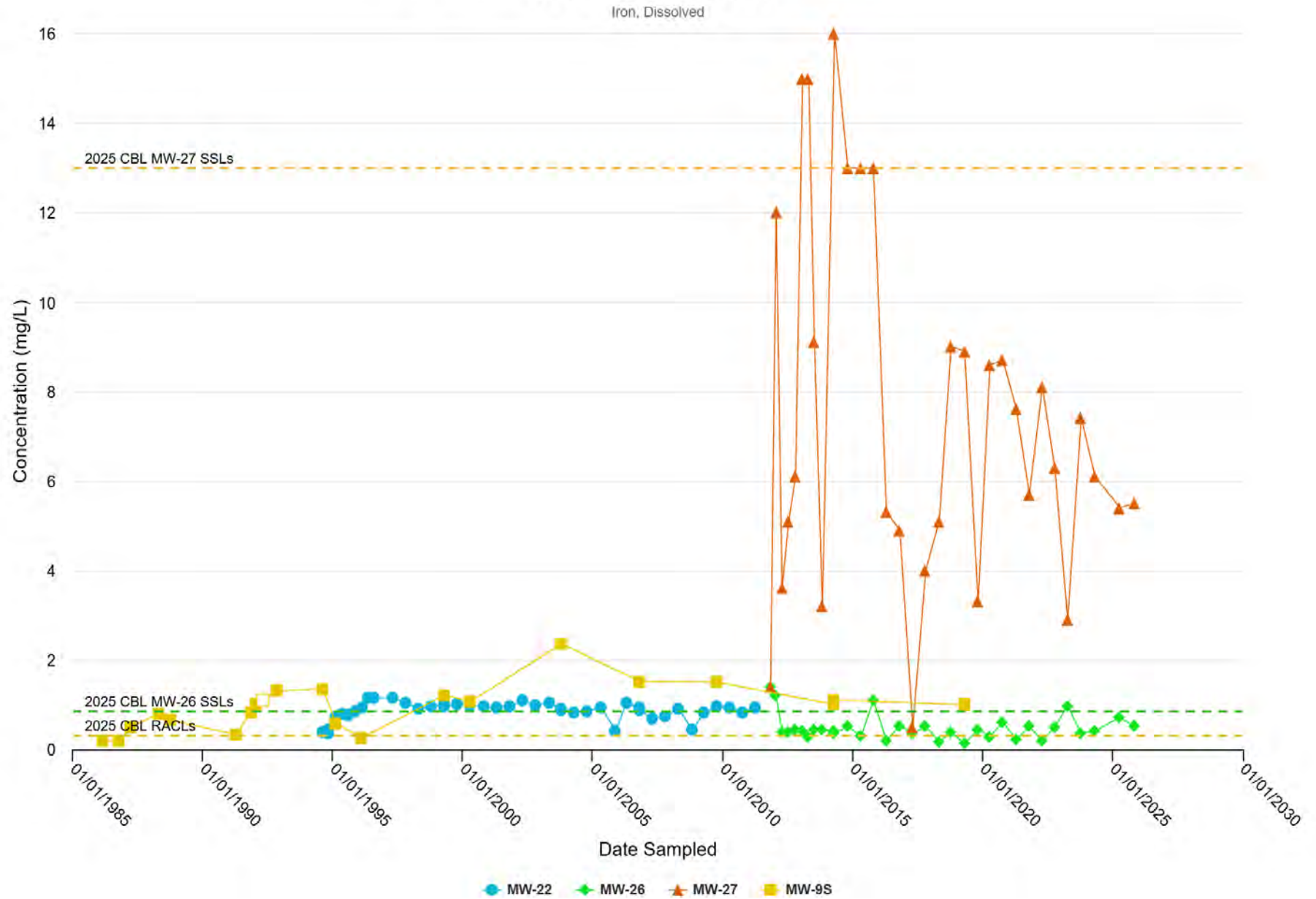


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

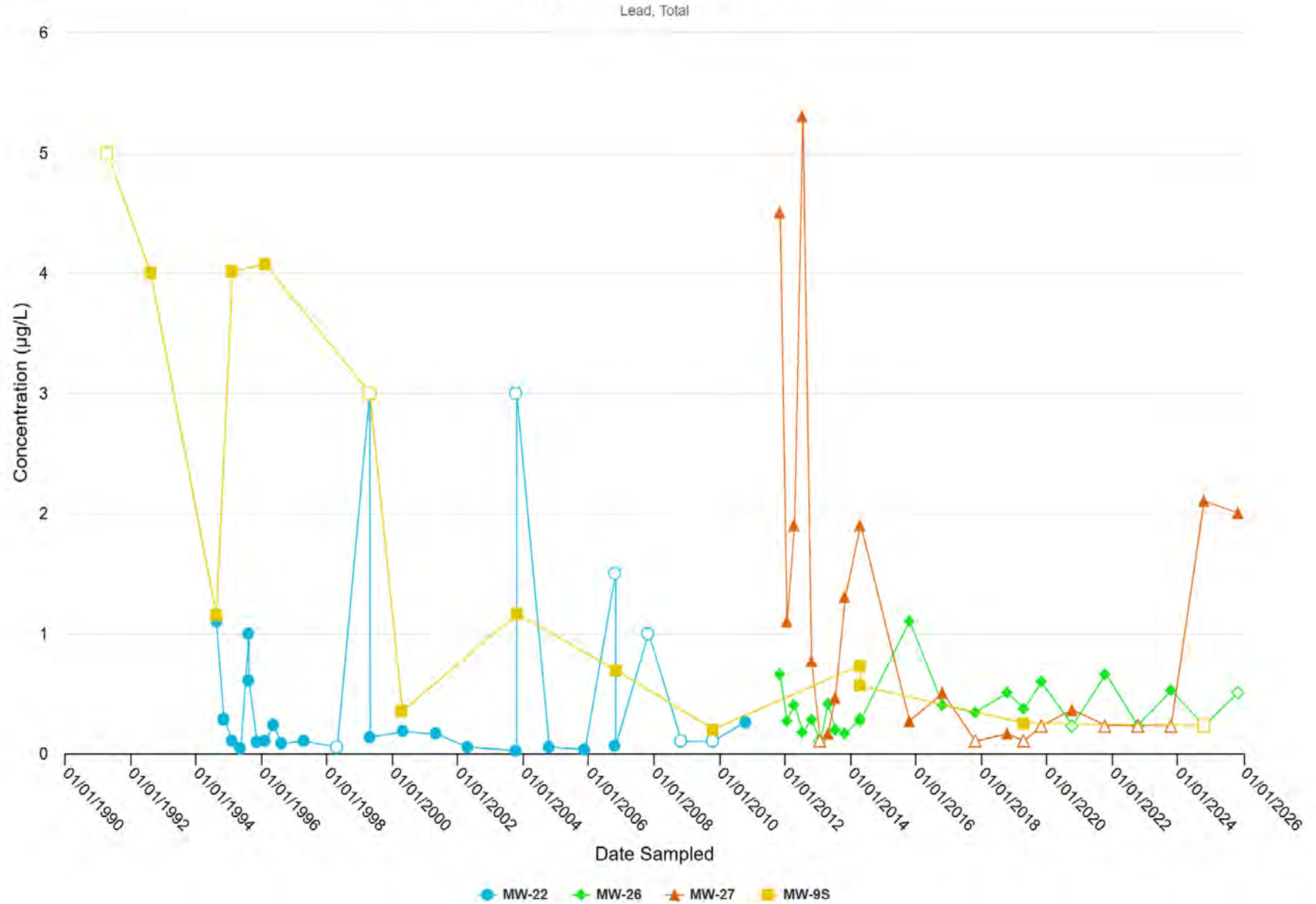
Hardness as CaCO3



East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

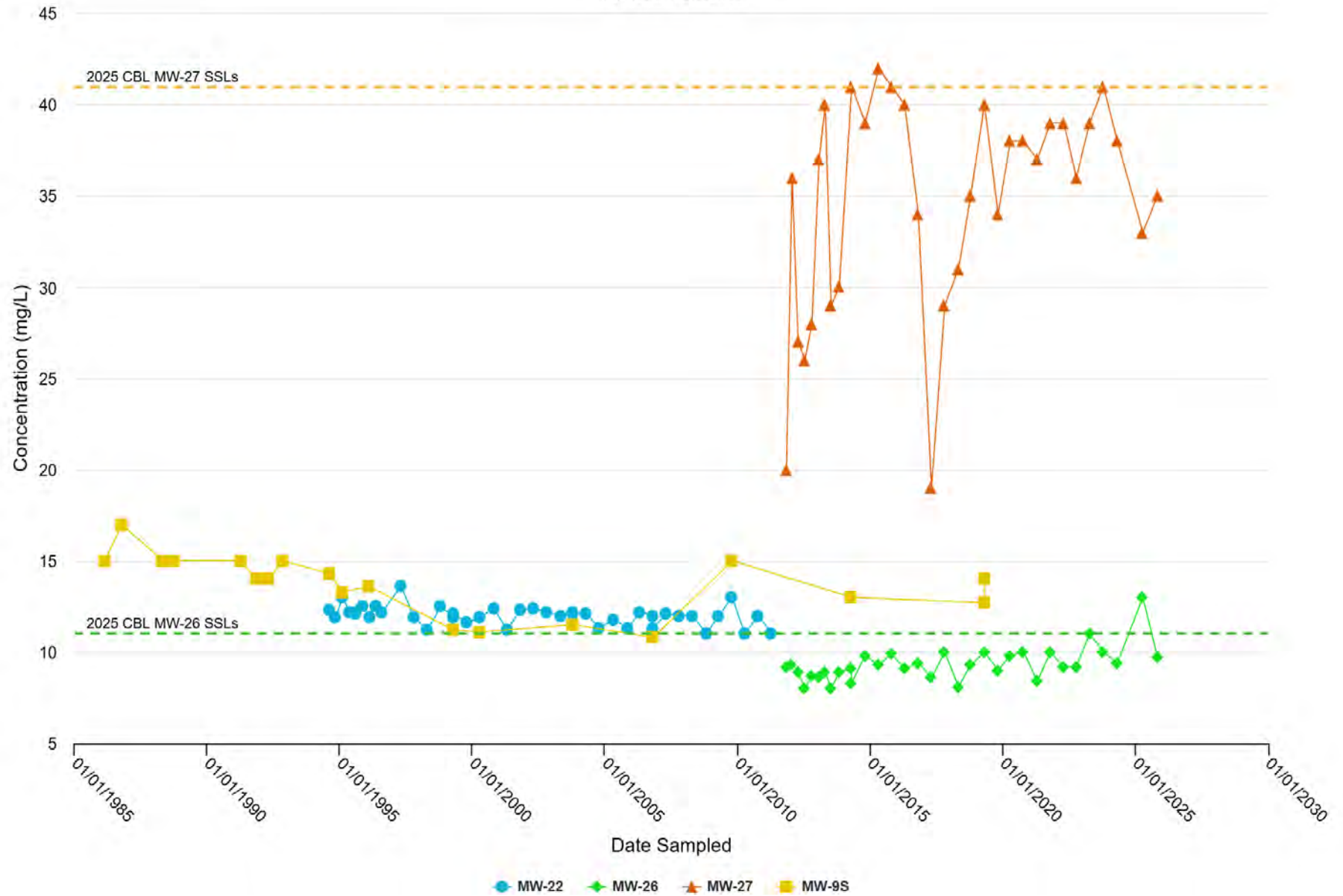


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

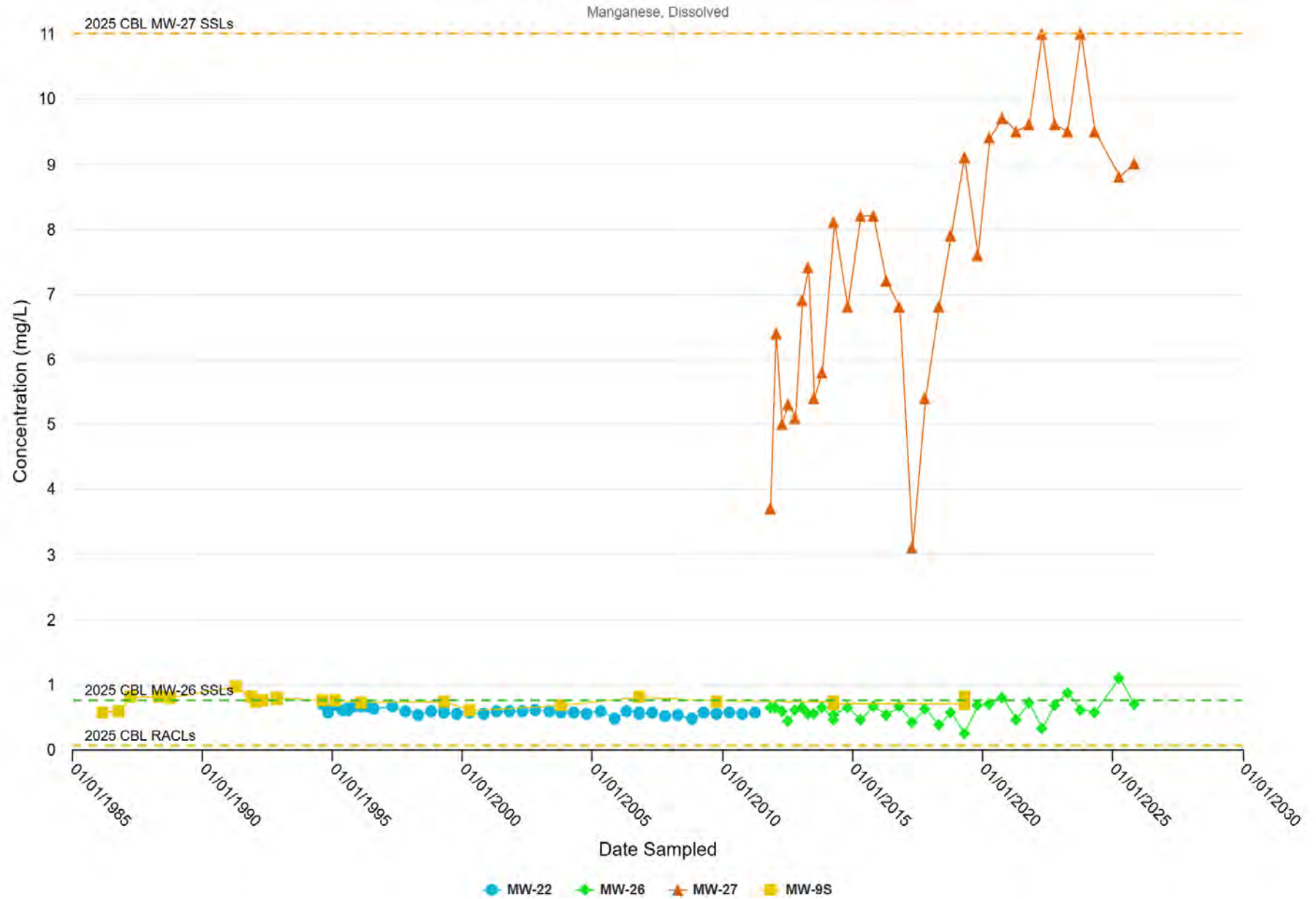


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

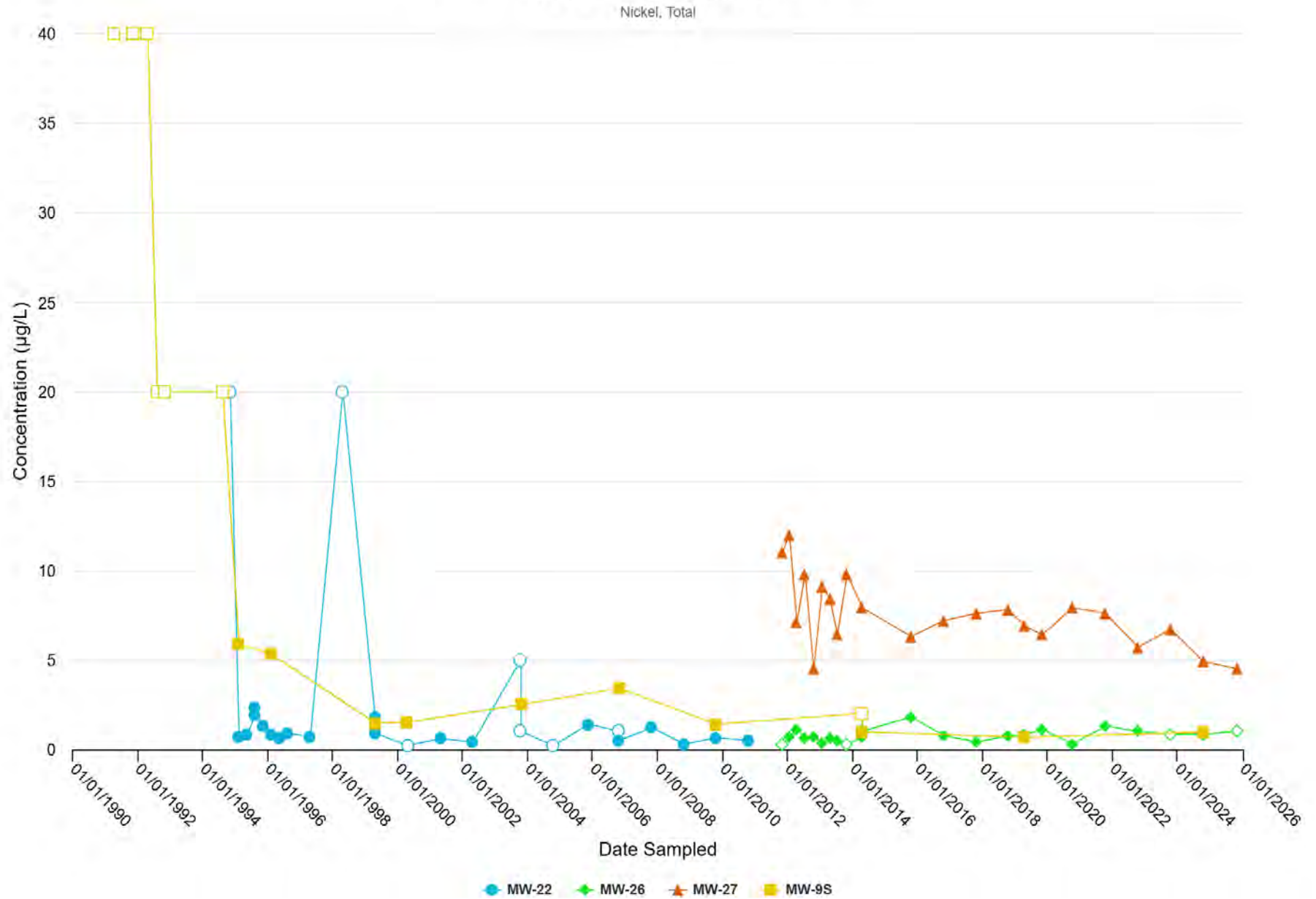
Magnesium, Dissolved



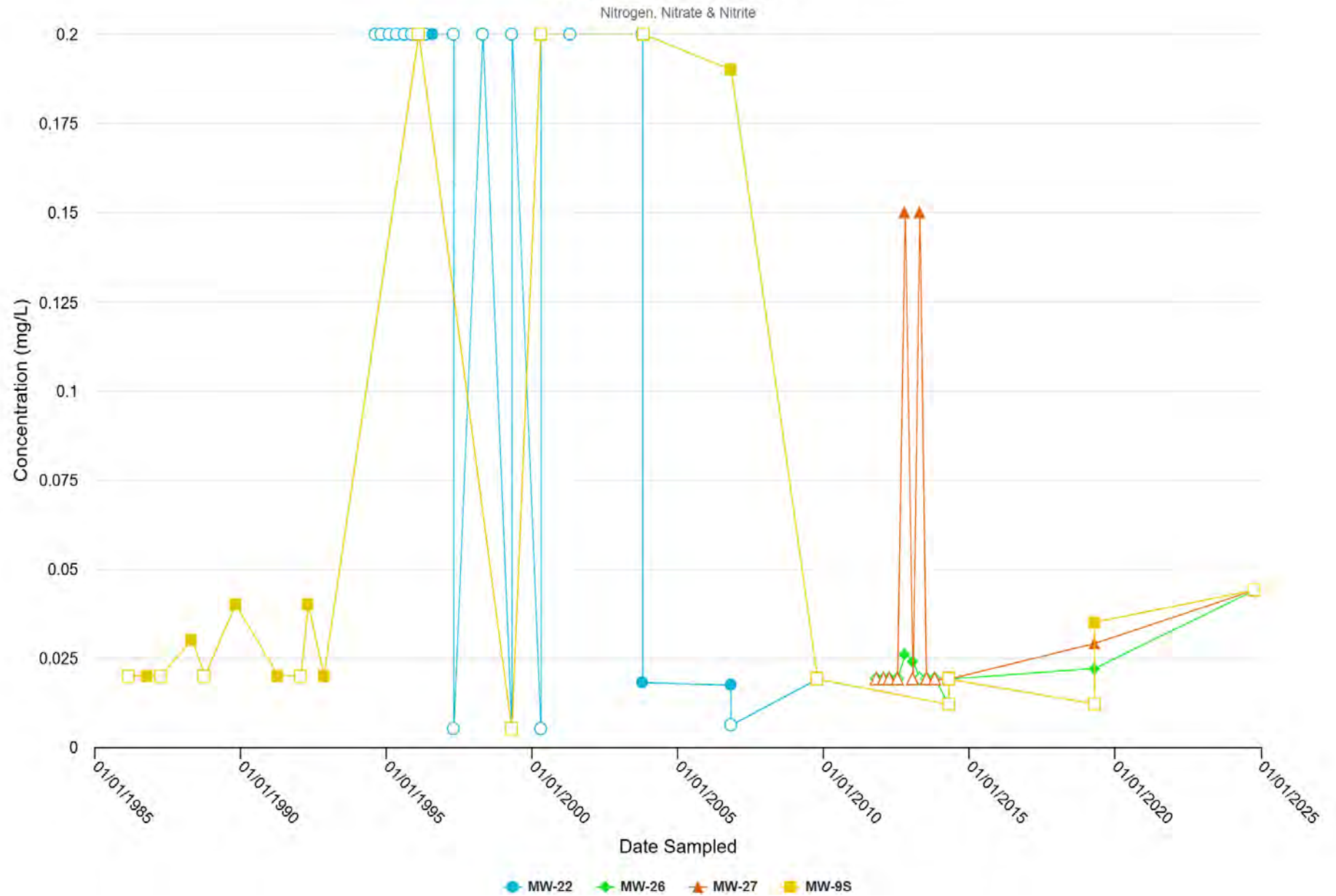
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL



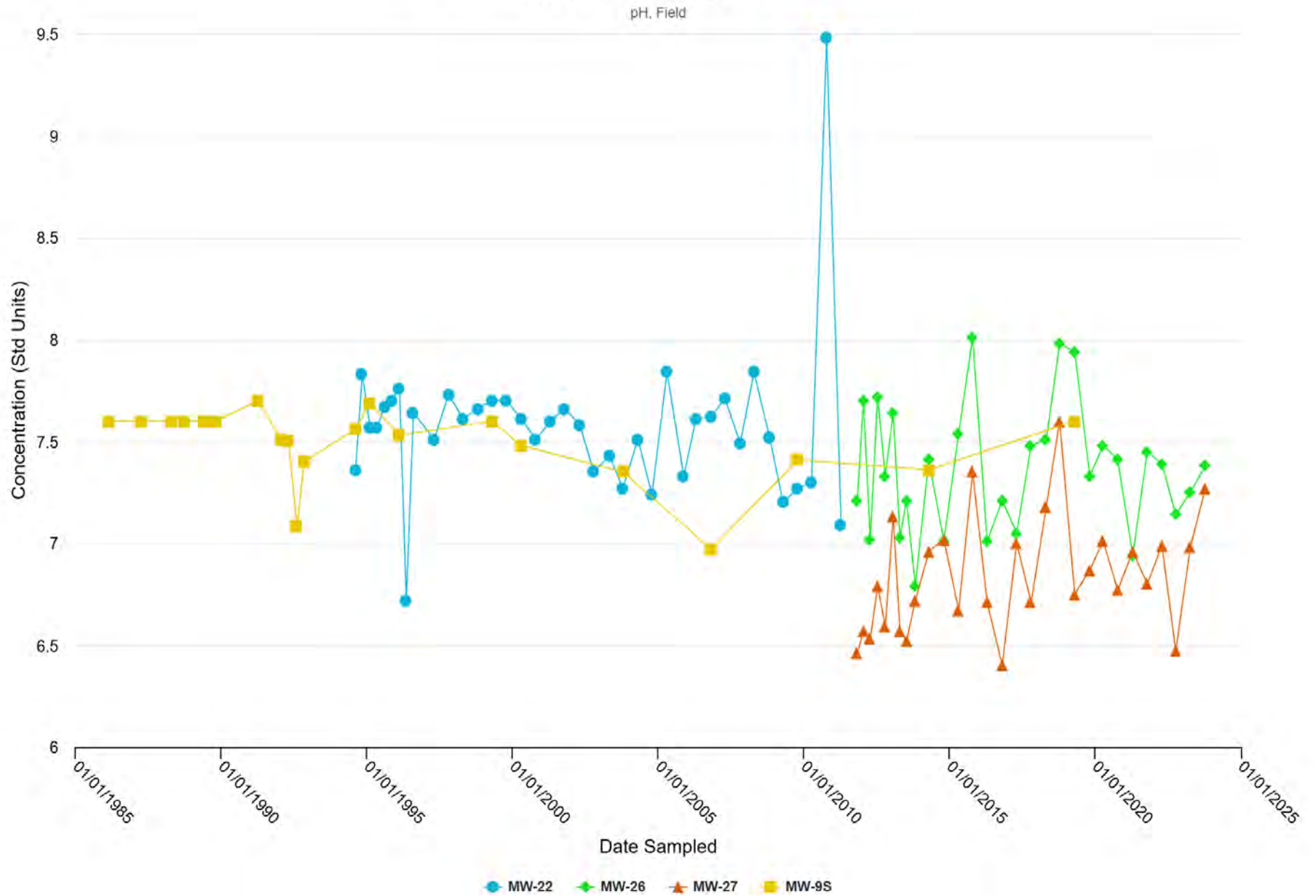
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL



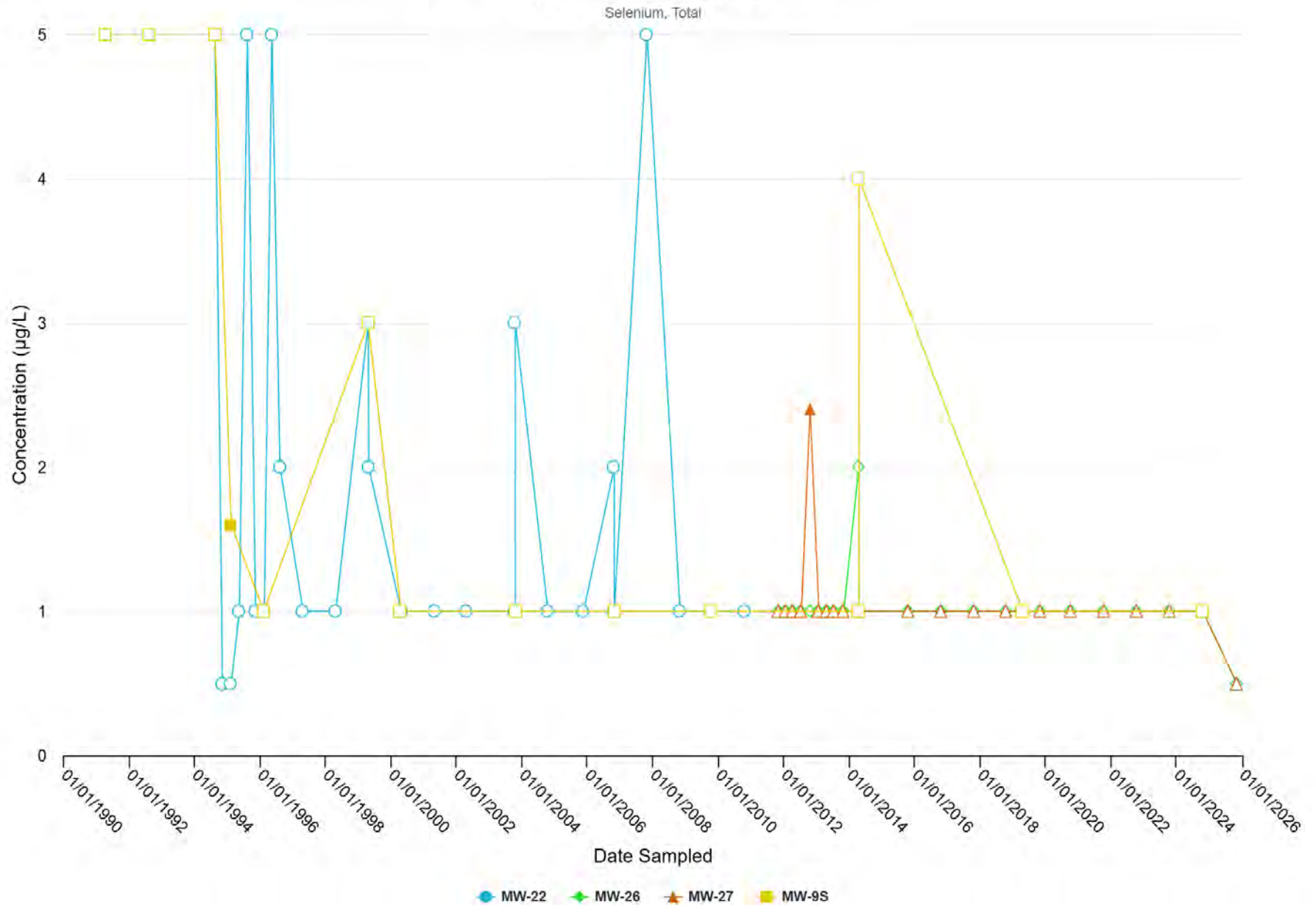
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL



East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

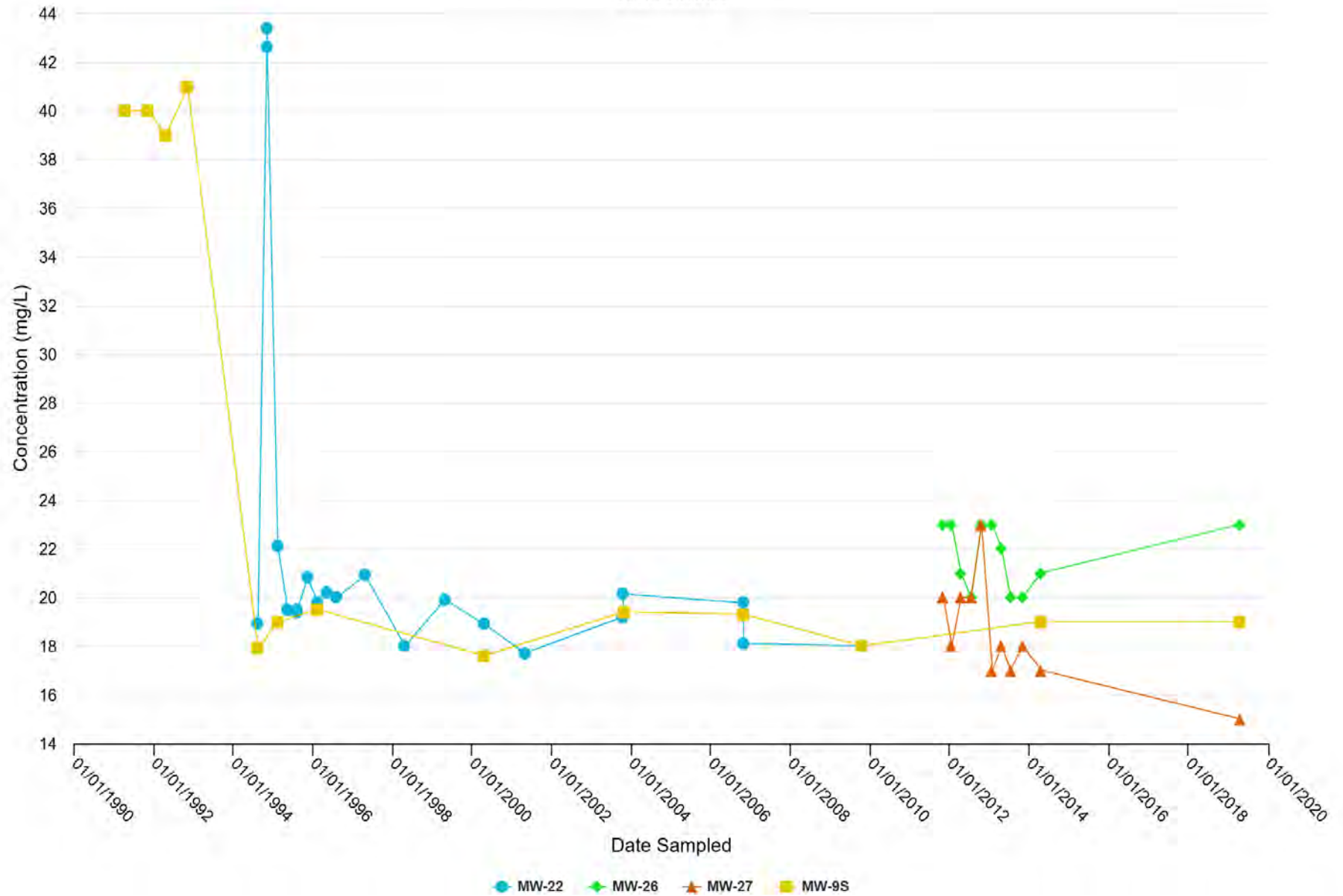


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

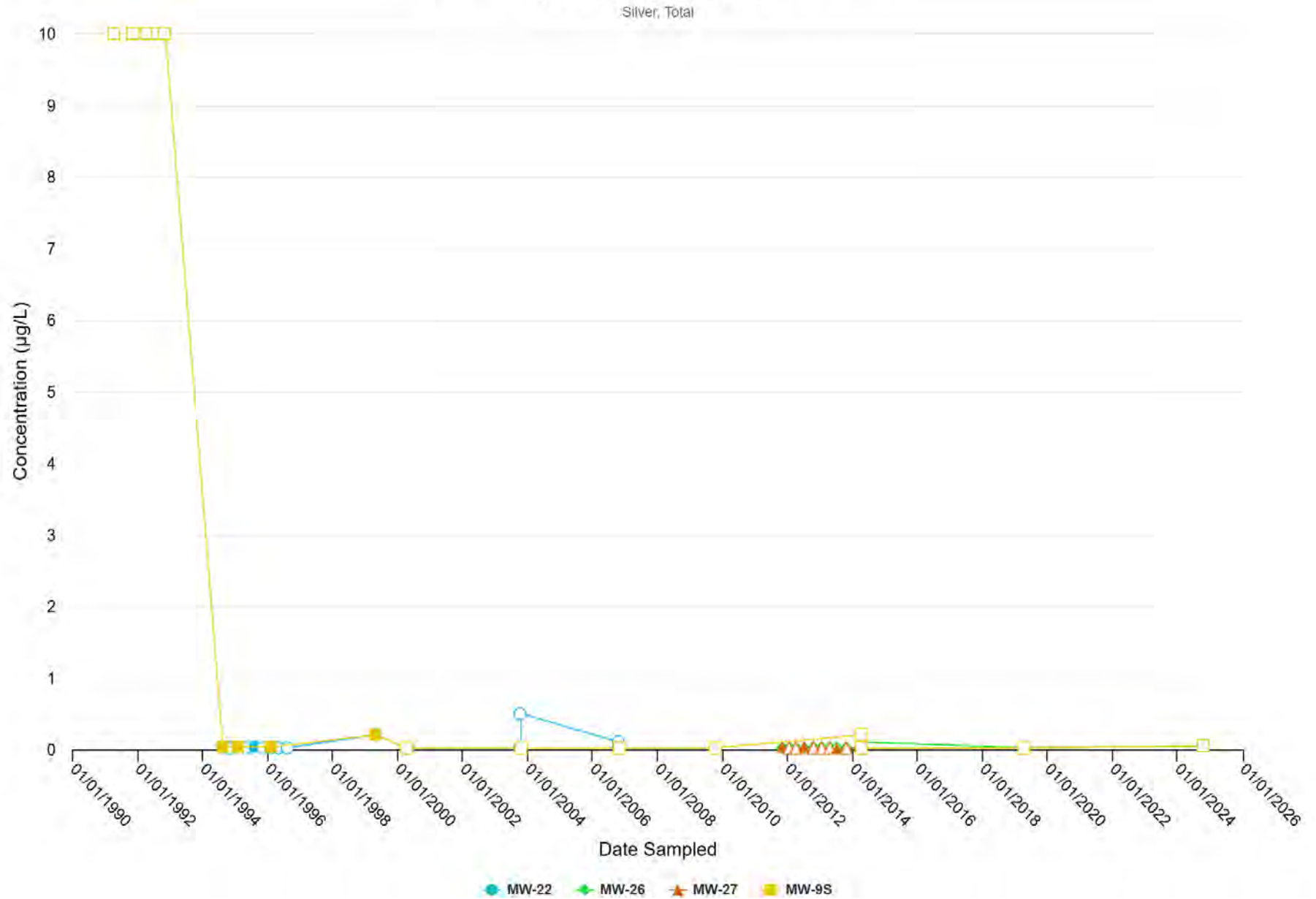


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

Silicon, Dissolved

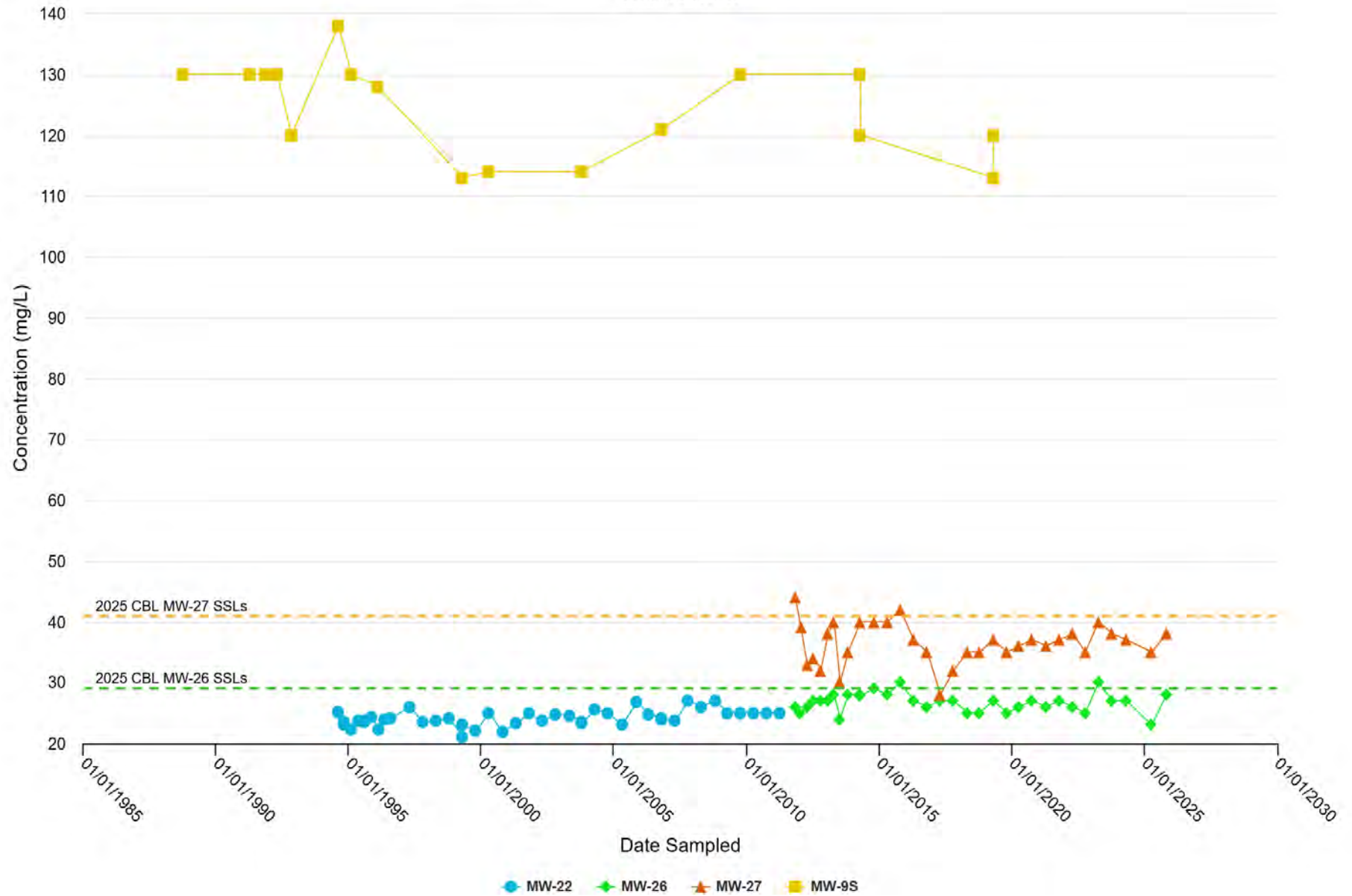


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL



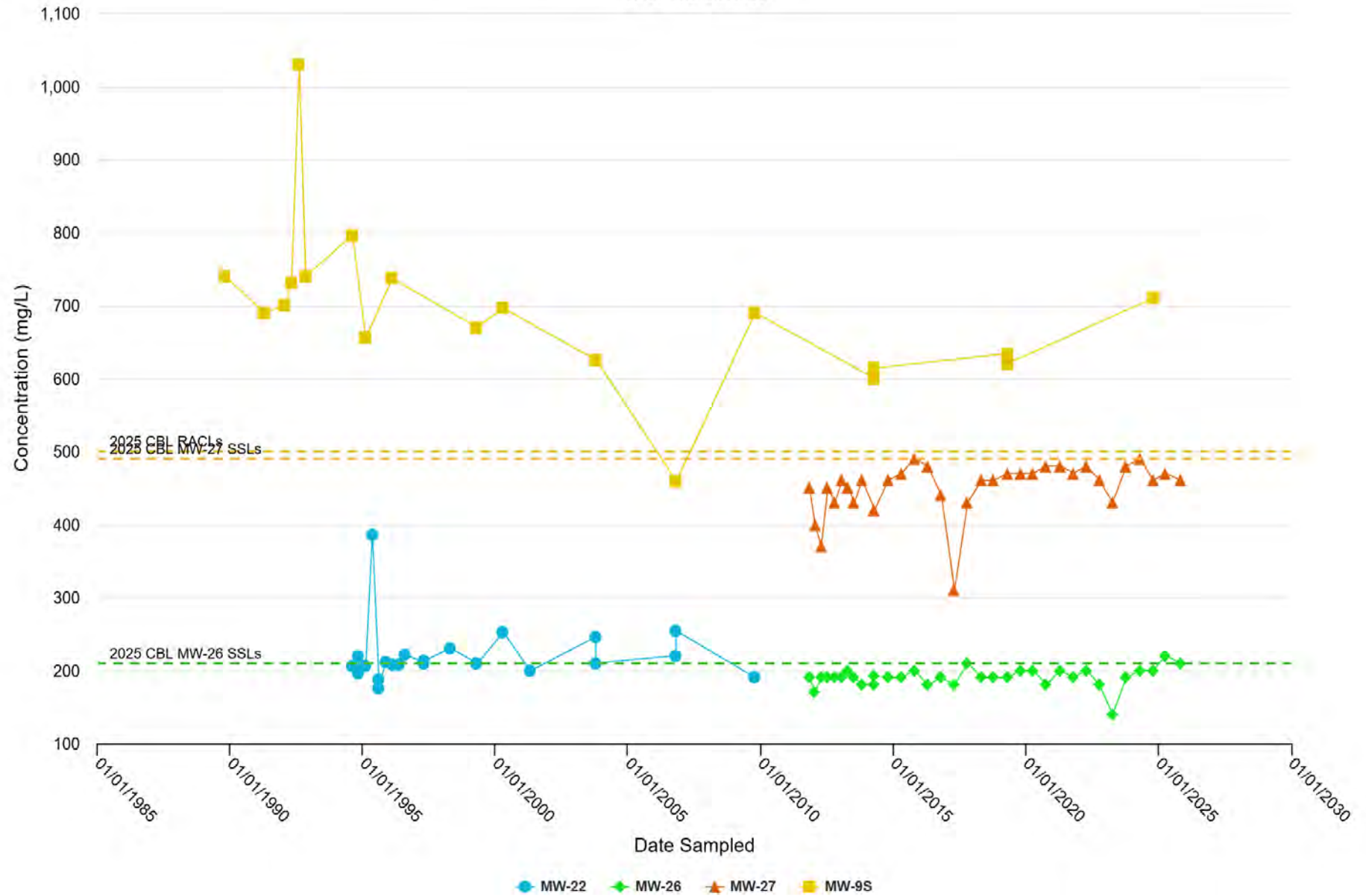
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Sodium, Dissolved



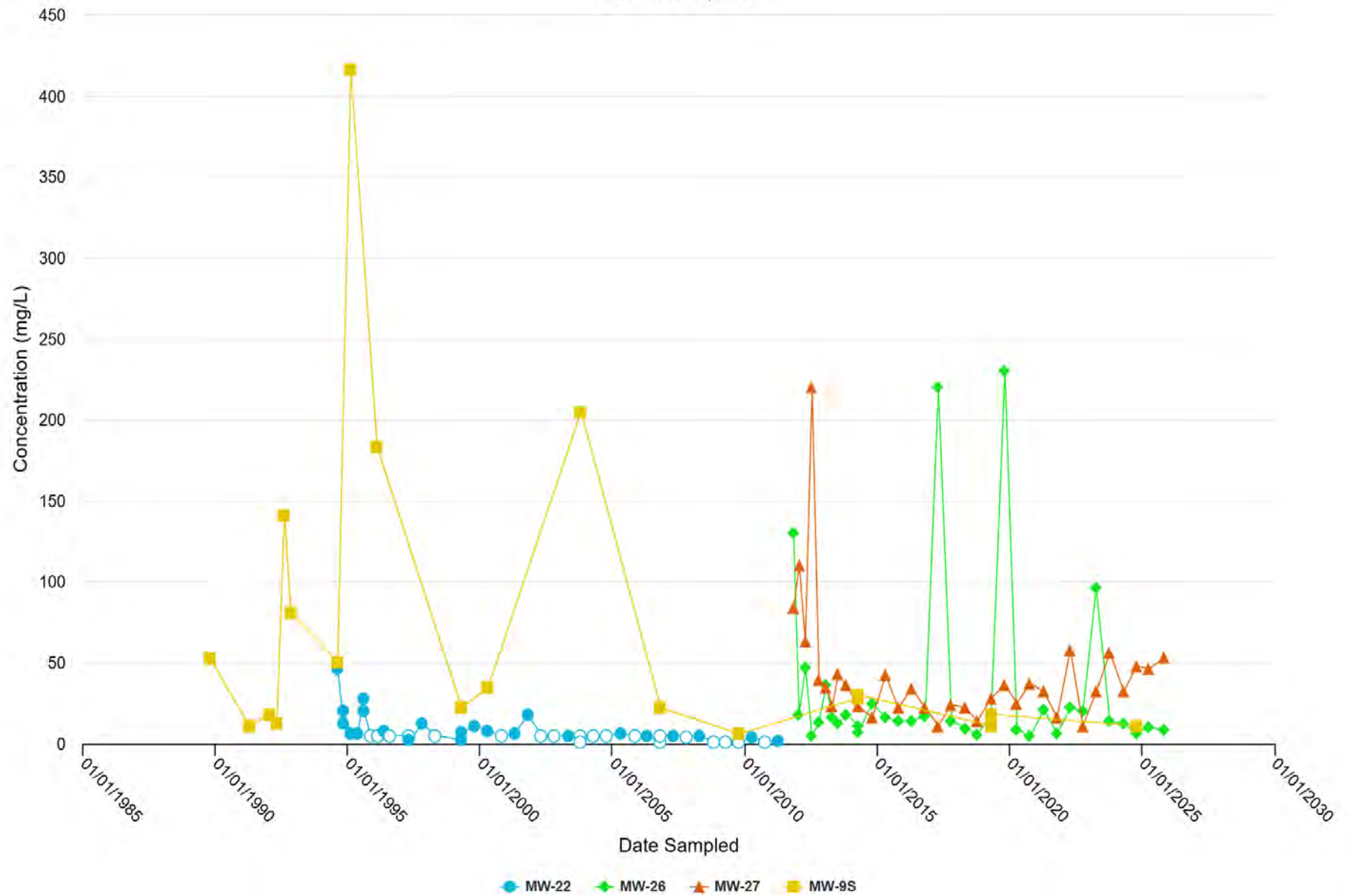
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Solids, Total Dissolved

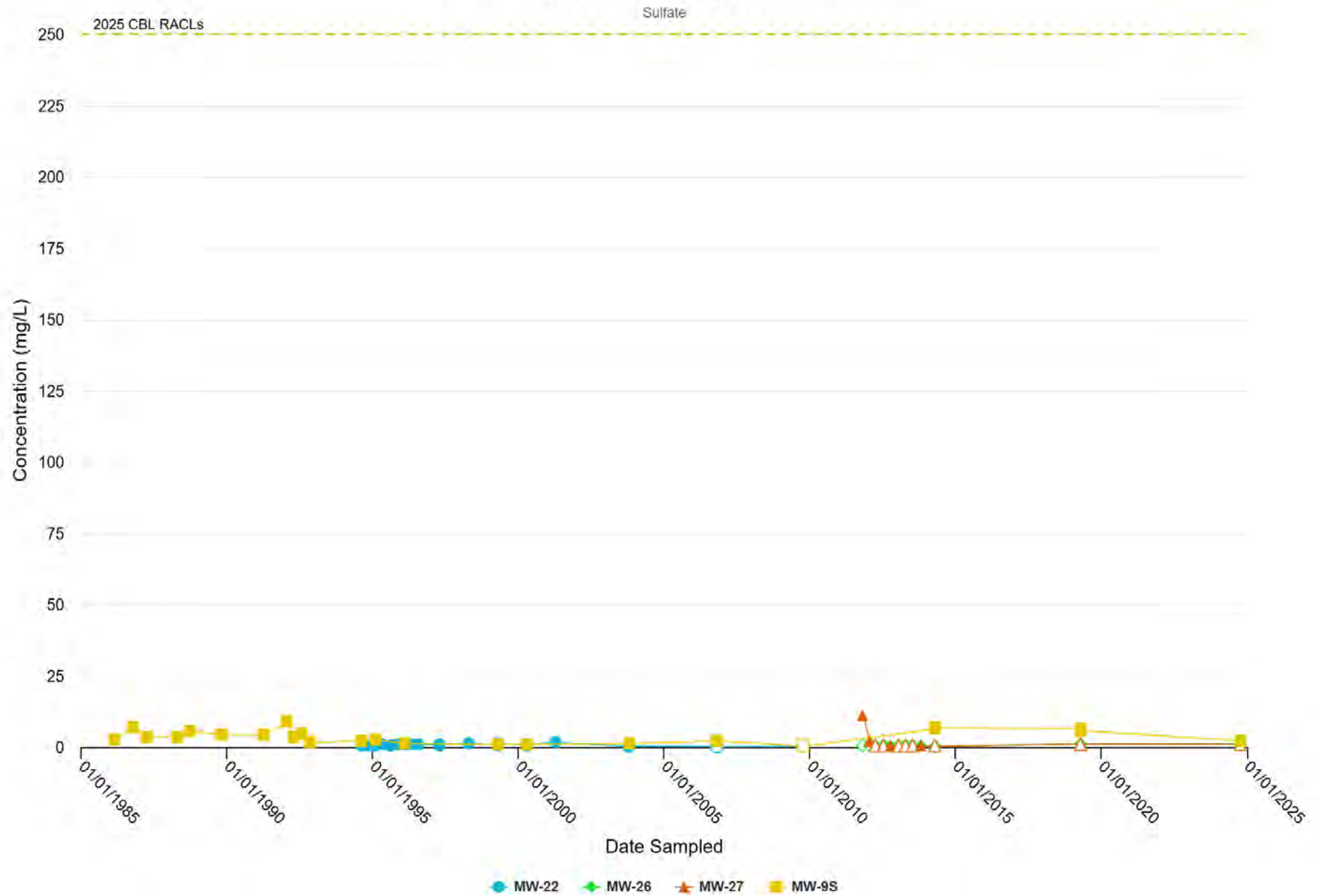


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Solids, Total Suspended

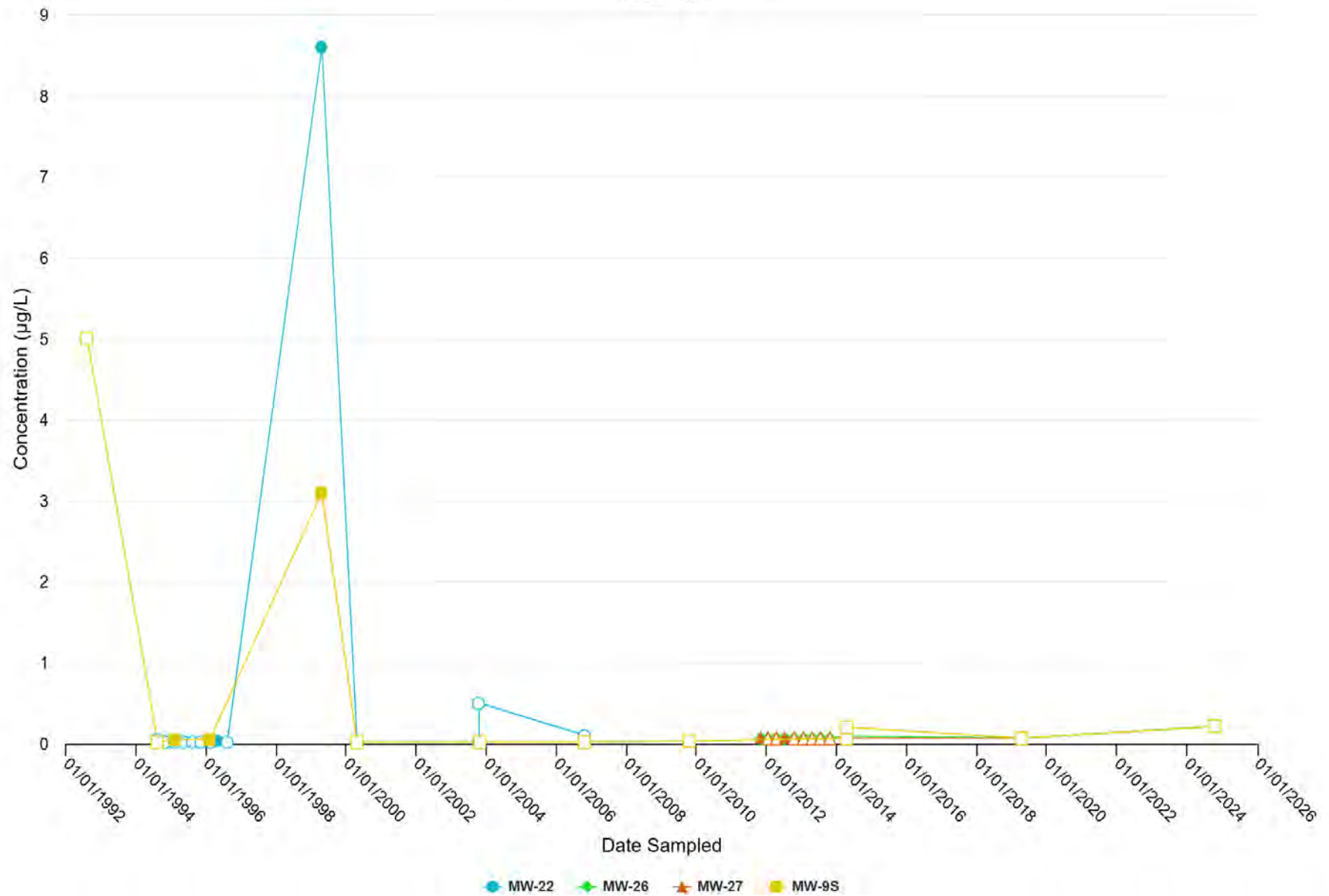


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

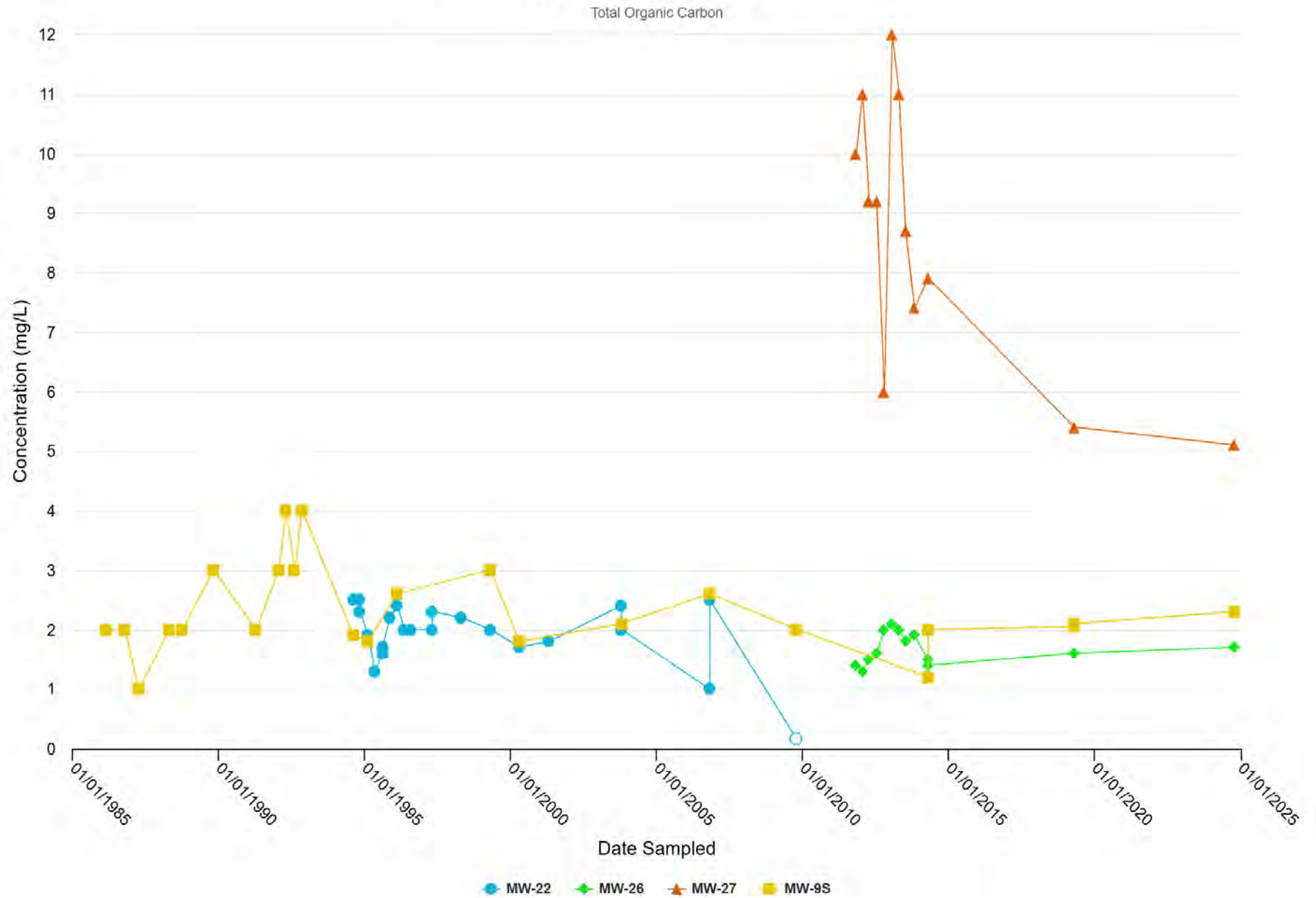


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

Thallium, Total

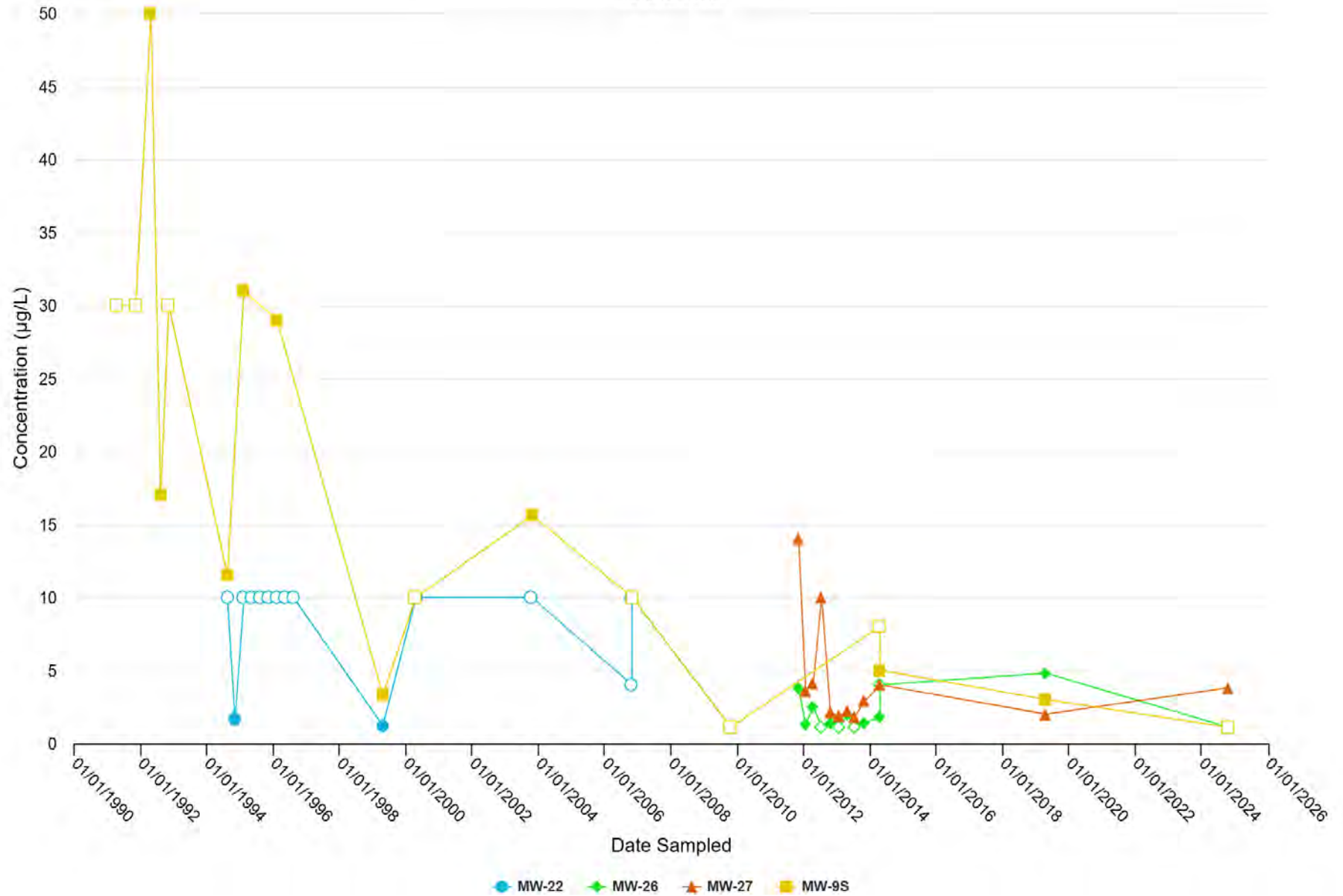


East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL



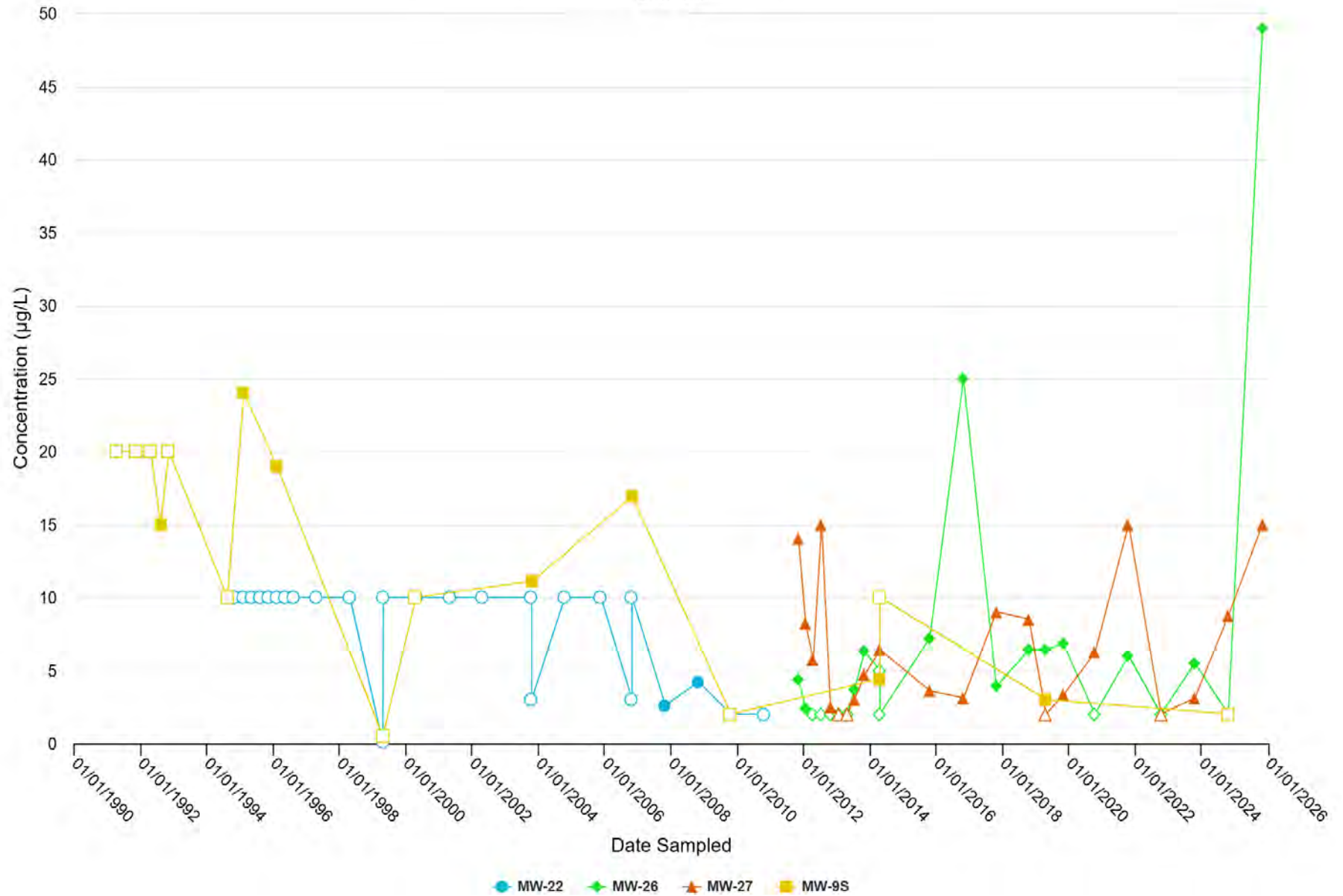
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27) COFFIN BUTTE LANDFILL

Vanadium, Total



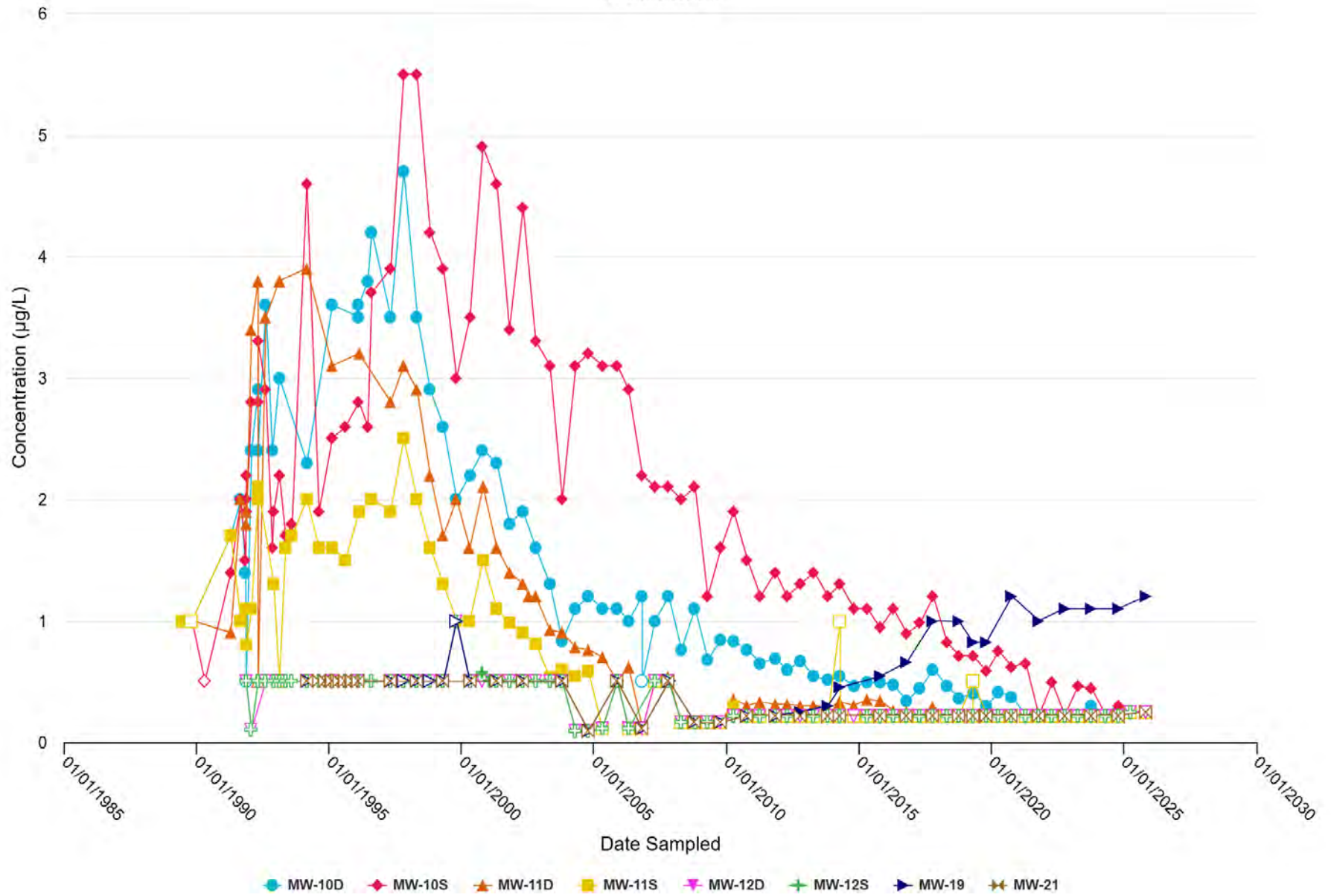
East Side - Time Series (MW-9S, MW-22, MW-26, MW-27)
COFFIN BUTTE LANDFILL

Zinc, Total



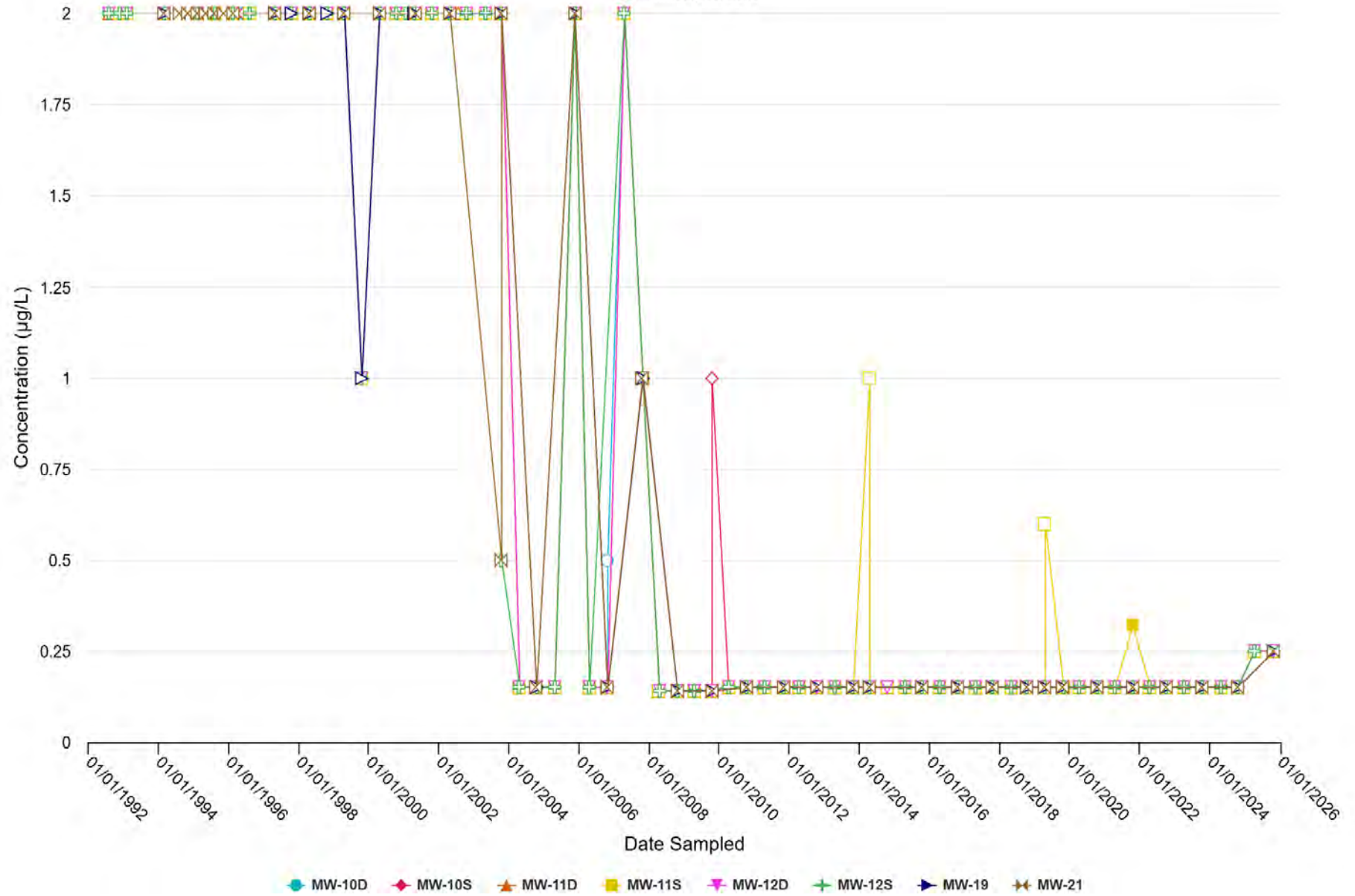
VOC Time Series Charts COFFIN BUTTE LANDFILL

1,1-Dichloroethane



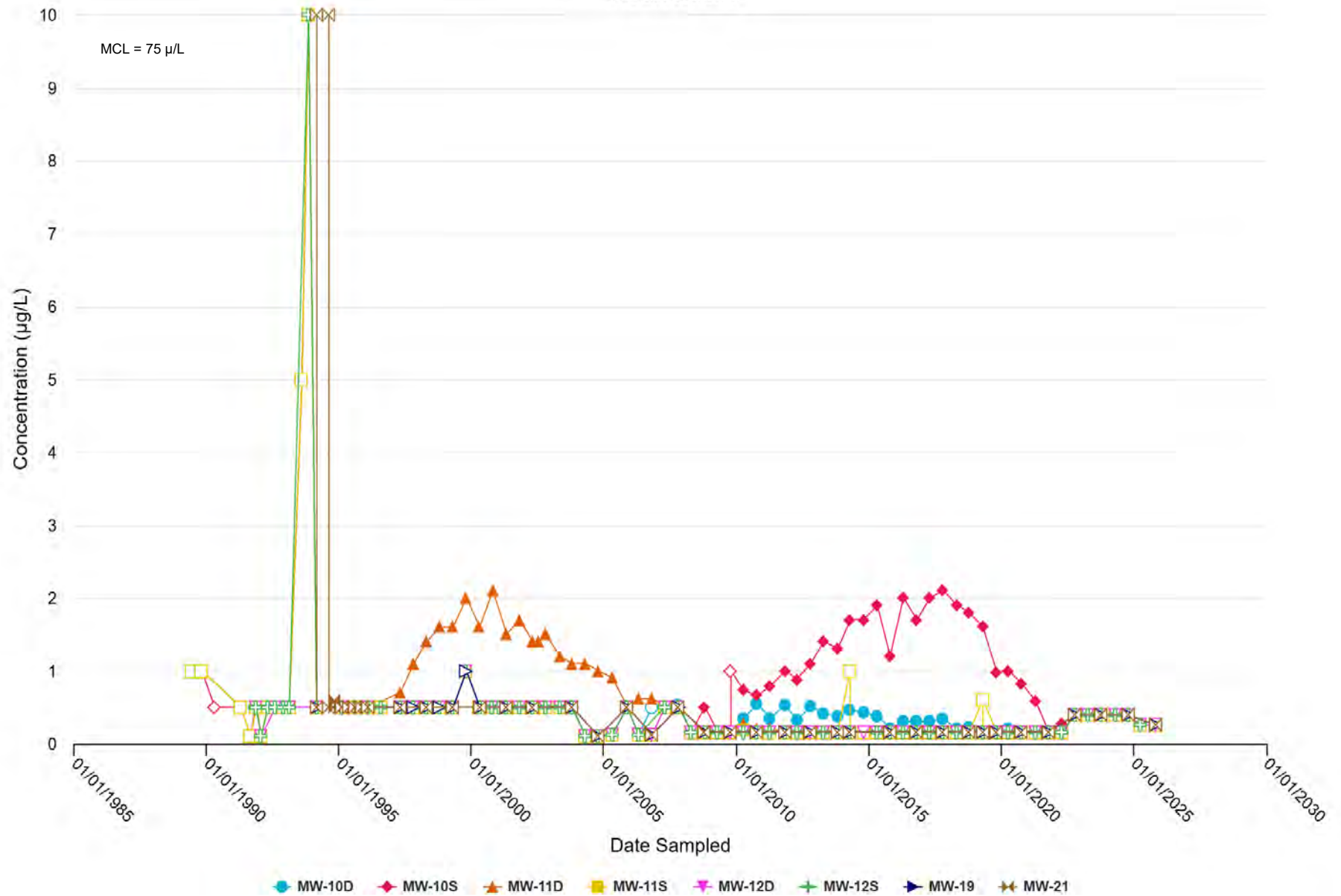
VOC Time Series Charts COFFIN BUTTE LANDFILL

1,2,4-Trimethylbenzene



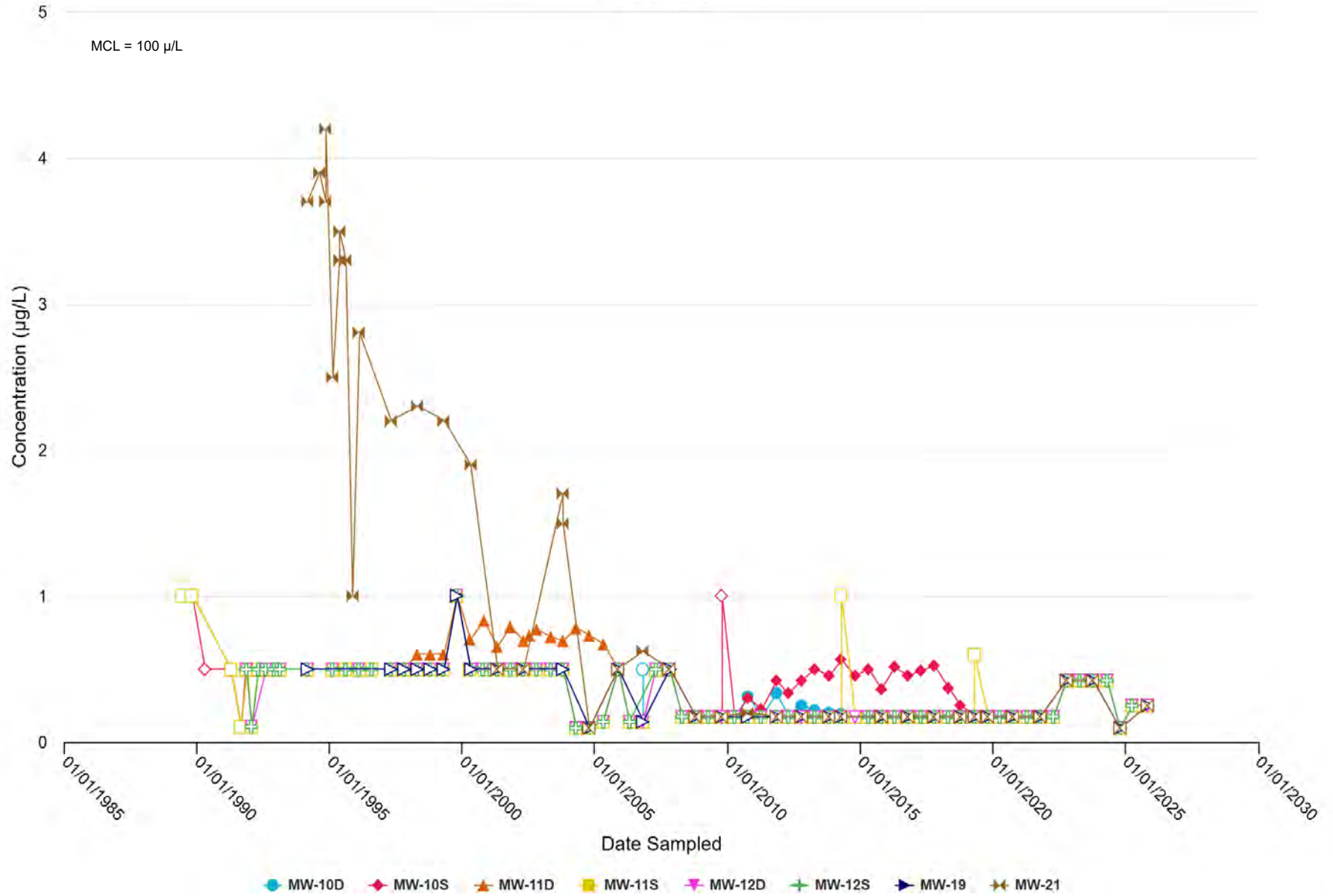
VOC Time Series Charts COFFIN BUTTE LANDFILL

1,4-Dichlorobenzene



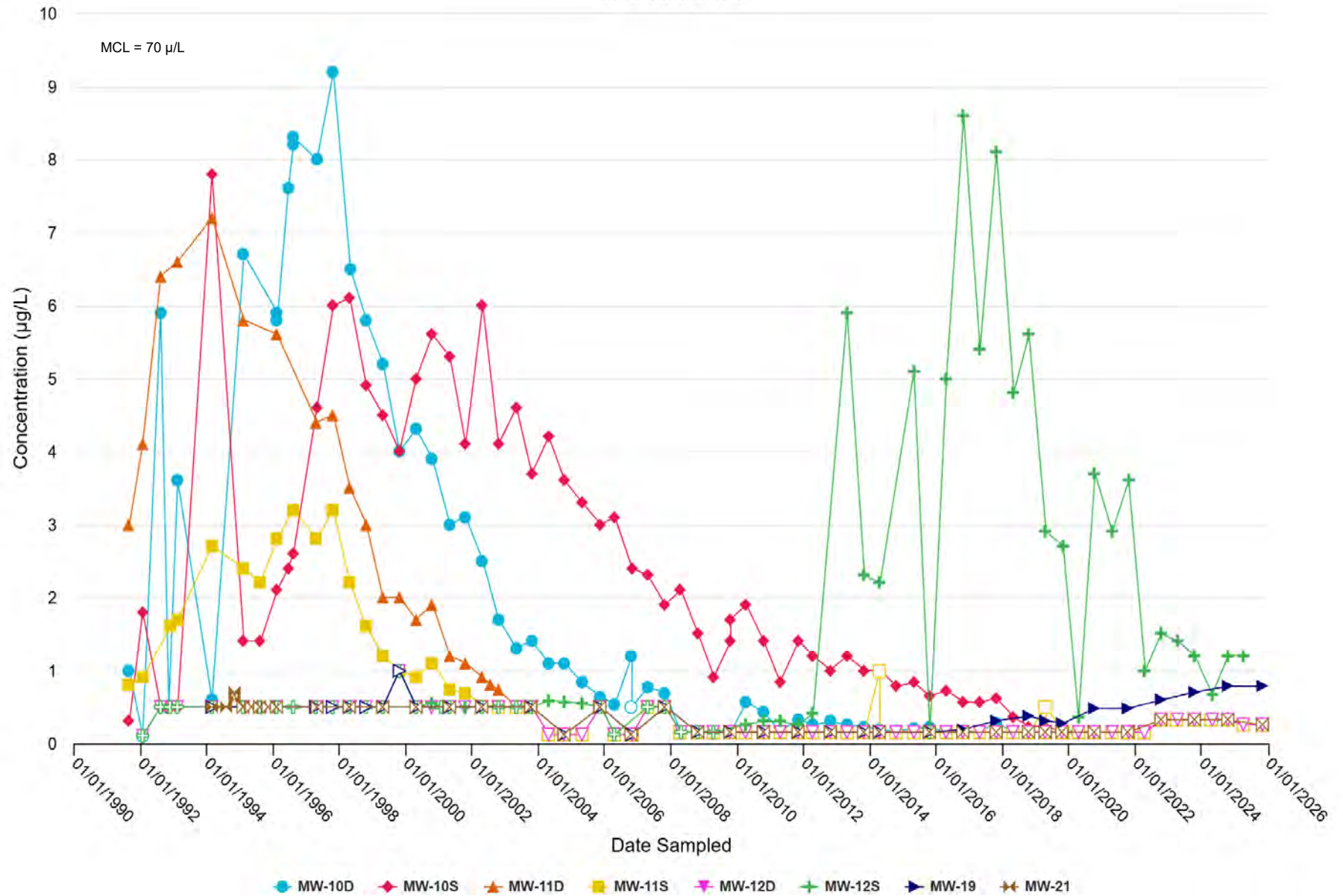
VOC Time Series Charts COFFIN BUTTE LANDFILL

Chlorobenzene



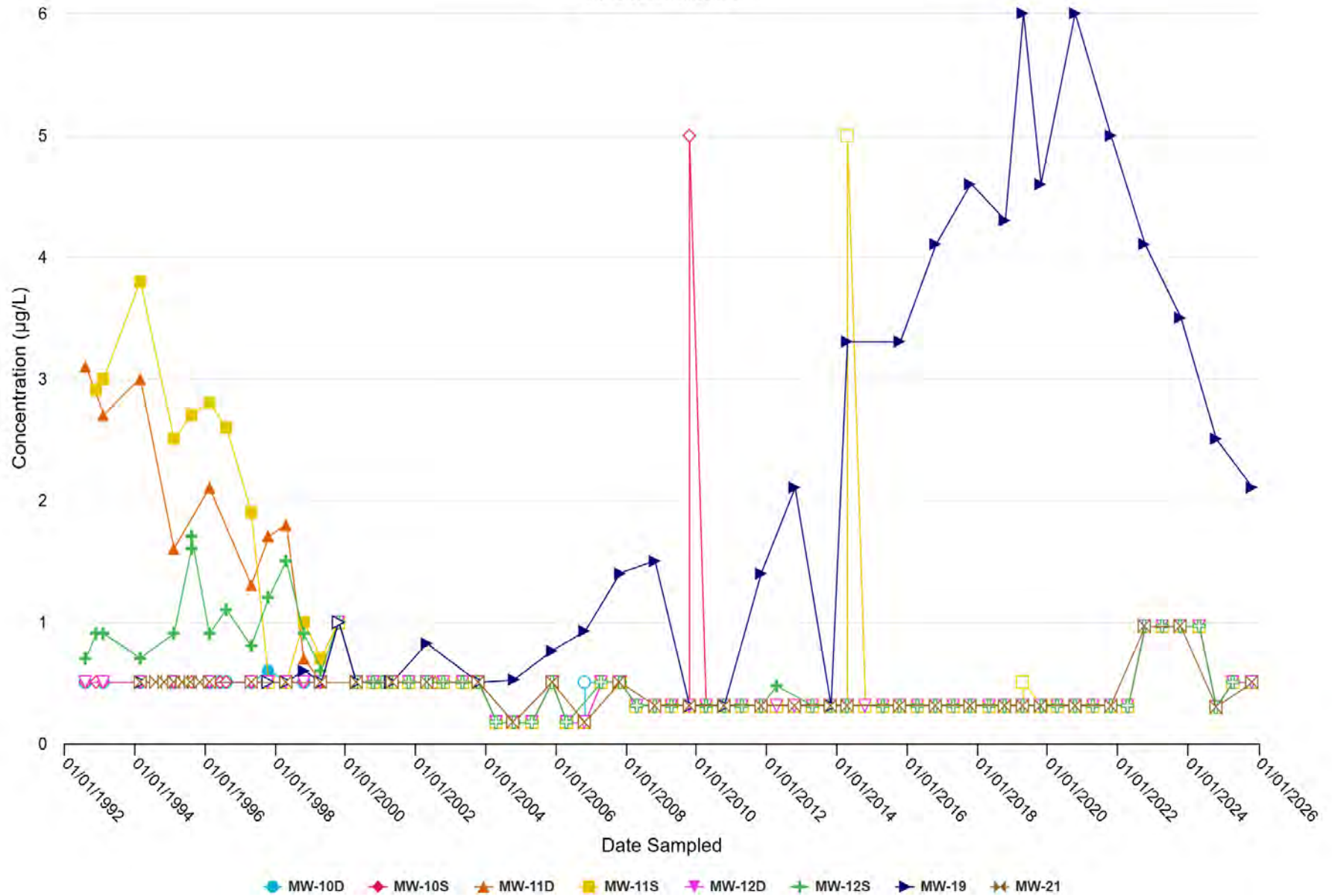
VOC Time Series Charts COFFIN BUTTE LANDFILL

cis-1,2-Dichloroethene



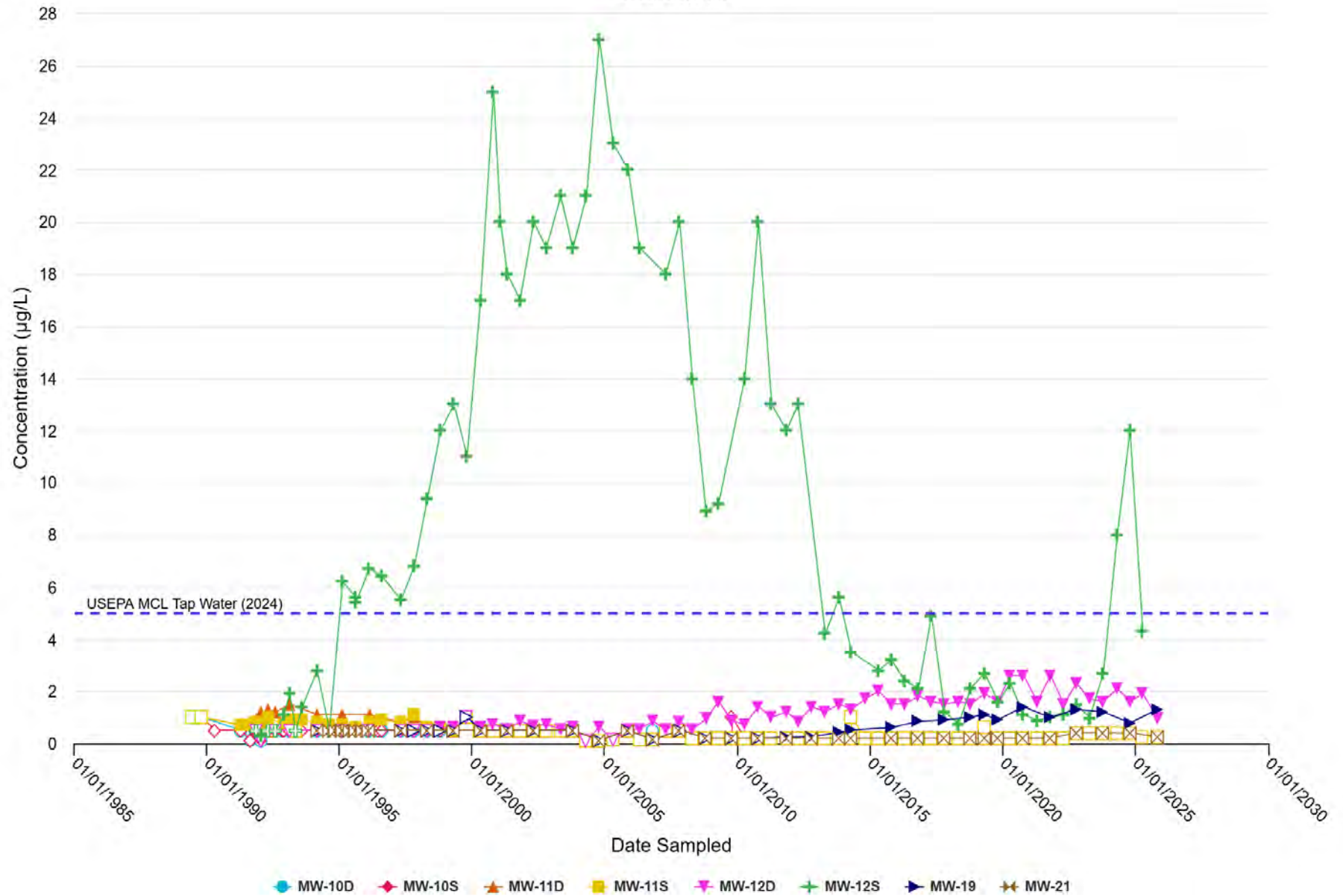
VOC Time Series Charts COFFIN BUTTE LANDFILL

Dichlorodifluoromethane



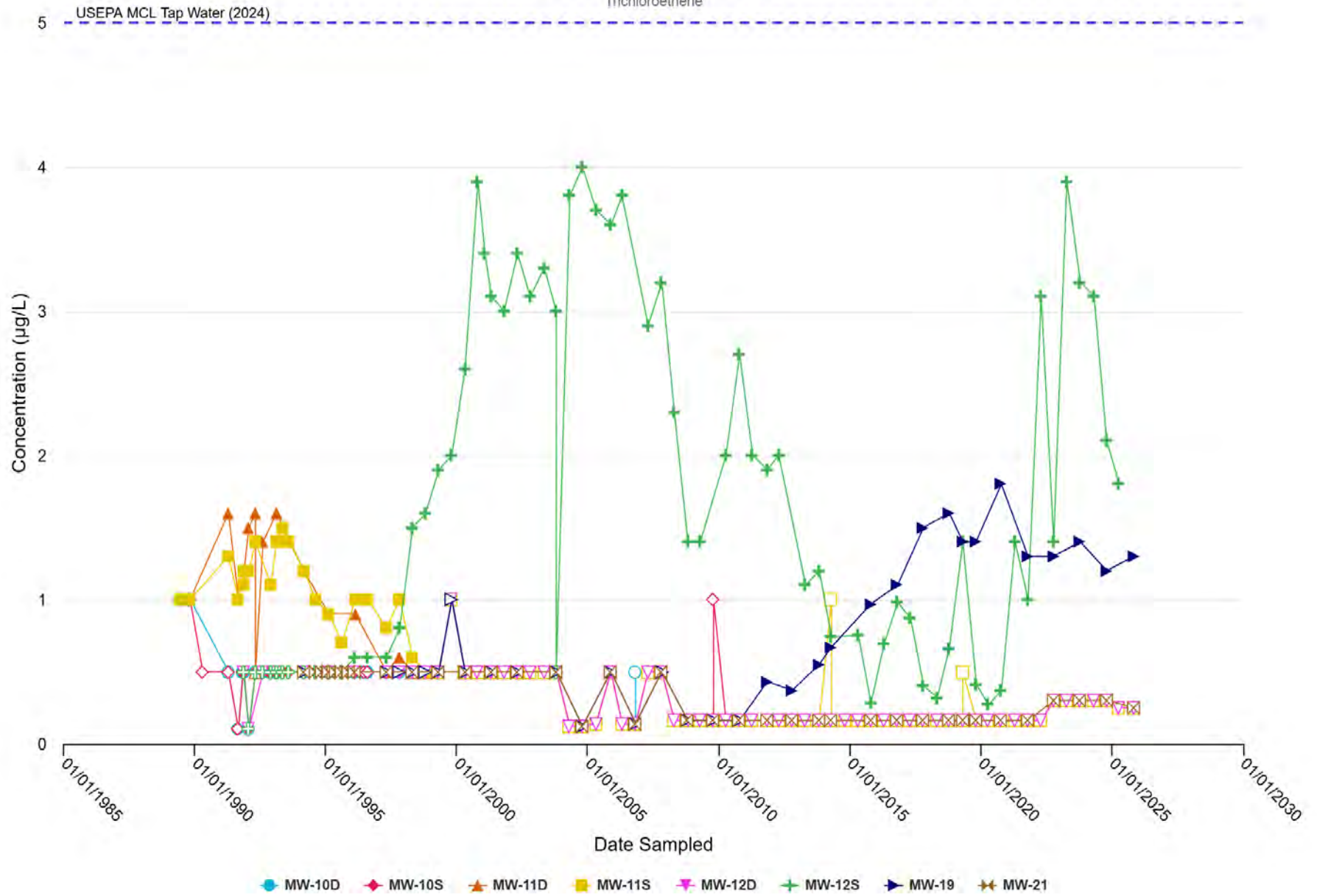
VOC Time Series Charts COFFIN BUTTE LANDFILL

Tetrachloroethene



VOC Time Series Charts COFFIN BUTTE LANDFILL

Trichloroethene



Appendix C

Facility SLCS and LCRS Data and Time-Series Plots

TABLE C-1
LEACHATE DETECTION SYSTEM LEVELS
ANNUAL 2025 MONITORING PERIOD
COFFIN BUTTE LANDFILL

Cell 2		
Date	3" Meter	Total Gallons
	8,461,140	
01/02/25	8,461,140	0
01/07/25	8,461,140	0
01/14/25	8,461,140	0
01/21/25	8,461,140	0
01/28/25	8,461,140	0
02/03/25	8,461,140	0
02/11/25	8,461,140	0
02/18/25	8,461,140	0
02/25/25	8,461,140	0
03/03/25	8,461,140	0
03/11/25	8,461,140	0
03/18/25	8,461,140	0
03/25/25	8,461,140	0
04/01/25	8,461,140	0
04/08/25	8,461,140	0
04/15/25	8,461,140	0
04/22/25	8,461,140	0
05/01/25	8,461,140	0
05/06/25	8,461,140	0
05/13/25	8,461,140	0
05/20/25	8,461,140	0
05/27/25	8,461,140	0
06/01/25	8,461,140	0
06/09/25	8,461,140	0
06/16/25	8,461,140	0
06/24/25	8,461,140	0
07/01/25	8,461,140	0
07/08/25	8,461,140	0
07/15/25	8,461,140	0
07/22/25	8,461,140	0
08/01/25	8,461,140	0
08/05/25	8,461,140	0
08/12/25	8,461,140	0
08/19/25	8,461,140	0
08/26/25	8,461,140	0
09/02/25	8,461,140	0
09/09/25	8,461,140	0
09/16/25	8,461,140	0
09/23/25	8,461,140	0
10/01/25	8,461,140	0
10/07/25	8,461,140	0
10/14/25	8,461,140	0
10/21/25	8,461,140	0
10/31/25	8,461,140	0
11/04/25	8,461,140	0
11/11/25	8,461,140	0
11/18/25	8,461,140	0
11/25/25	8,461,140	0
12/01/25	8,461,140	0
12/09/25	8,461,140	0
12/16/25	8,461,140	0
12/23/25	8,461,140	0
01/06/26	8,461,140	0
Total		0

Cell 3		
Date	Reading	Gallons
	852,256	
01/02/25	862,961	10,705
01/07/25	868,144	5,183
01/14/25	871,508	3,364
01/21/25	872,343	835
01/28/25	872,343	0
02/03/25	872,343	0
02/11/25	876,865	4,522
02/18/25	876,865	0
02/25/25	882,034	5,169
03/03/25	884,577	2,543
03/11/25	885,474	897
03/18/25	889,553	4,079
03/25/25	894,657	5,104
04/01/25	897,889	3,232
04/08/25	900,391	2,502
04/15/25	902,099	1,708
04/22/25	902,099	0
05/01/25	902,099	0
05/06/25	902,844	745
05/13/25	903,617	773
05/20/25	903,617	0
05/27/25	904,411	794
06/01/25	904,411	0
06/09/25	904,411	0
06/16/25	904,411	0
06/24/25	905,169	758
07/01/25	905,169	0
07/08/25	905,950	781
07/15/25	905,950	0
07/22/25	905,950	0
08/01/25	906,708	758
08/05/25	906,708	0
08/12/25	906,708	0
08/19/25	907,484	776
08/26/25	907,484	0
09/02/25	907,484	0
09/09/25	907,484	0
09/16/25	908,313	829
09/23/25	908,313	0
10/01/25	909,157	844
10/07/25	910,018	861
10/14/25	910,018	0
10/21/25	911,612	1,594
10/31/25	916,799	5,187
11/04/25	920,158	3,359
11/11/25	923,021	2,863
11/18/25	925,536	2,515
11/25/25	928,080	2,544
12/01/25	932,504	4,424
12/09/25	938,468	5,964
12/16/25	944,191	5,723
12/23/25	952,285	8,094
01/06/26	960,084	7,799
Total		107,828

Cell 4		
Date	Reading	Gallons
	1,040,713	
01/02/25	1,060,108	19,395
01/07/25	1,072,325	12,217
01/14/25	1,072,325	0
01/21/25	1,079,111	6,786
01/28/25	1,079,111	0
02/03/25	1,079,111	0
02/11/25	1,085,911	6,800
02/18/25	1,085,911	0
02/25/25	1,092,822	6,911
03/03/25	1,099,580	6,758
03/11/25	1,099,580	0
03/18/25	1,112,882	13,302
03/25/25	1,112,882	0
04/01/25	1,112,882	0
04/08/25	1,119,626	6,744
04/15/25	1,119,806	180
04/22/25	1,119,806	0
05/01/25	1,119,806	0
05/06/25	1,119,806	0
05/13/25	1,119,806	0
05/20/25	1,119,806	0
05/27/25	1,119,806	0
06/01/25	1,119,806	0
06/09/25	1,119,806	0
06/16/25	1,119,806	0
06/24/25	1,119,806	0
07/01/25	1,119,806	0
07/08/25	1,119,806	0
07/15/25	1,119,814	8
07/22/25	1,119,814	0
08/01/25	1,119,814	0
08/05/25	1,119,814	0
08/12/25	1,119,814	0
08/19/25	1,119,814	0
08/26/25	1,119,814	0
09/02/25	1,119,814	0
09/09/25	1,119,814	0
09/16/25	1,119,814	0
09/23/25	1,119,814	0
10/01/25	1,119,814	0
10/07/25	1,119,814	0
10/14/25	1,119,814	0
10/21/25	1,119,814	0
10/31/25	1,124,687	4,873
11/04/25	1,129,005	4,318
11/11/25	1,138,395	9,390
11/18/25	1,138,395	0
11/25/25	1,138,395	0
12/01/25	1,146,264	7,869
12/09/25	1,152,353	6,089
12/16/25	1,152,353	0
12/23/25	1,166,185	13,832
01/06/26	1,179,434	13,249
Total		138,721

Cell 5		
Date	Reading	Gallons
	260,766	
01/02/25	260,766	0
01/07/25	260,766	0
01/14/25	260,766	0
01/21/25	260,766	0
01/28/25	260,872	106
02/03/25	260,872	0
02/11/25	260,872	0
02/18/25	260,872	0
02/25/25	260,974	102
03/03/25	260,974	0
03/11/25	260,974	0
03/18/25	261,077	103
03/25/25	261,077	0
04/01/25	261,077	0
04/08/25	261,077	0
04/15/25	261,392	315
04/22/25	261,392	0
05/01/25	261,392	0
05/06/25	261,392	0
05/13/25	261,392	0
05/20/25	261,392	0
05/27/25	261,392	0
06/01/25	261,413	21
06/09/25	261,413	0
06/16/25	261,413	0
06/24/25	261,413	0
07/01/25	261,413	0
07/08/25	261,413	0
07/15/25	261,413	0
07/22/25	261,537	124
08/01/25	261,537	0
08/05/25	261,537	0
08/12/25	261,648	111
08/19/25	261,648	0
08/26/25	261,648	0
09/02/25	261,648	0
09/09/25	261,648	0
09/16/25	261,796	148
09/23/25	261,796	0
10/01/25	261,796	0
10/07/25	261,796	0
10/14/25	261,884	88
10/21/25	261,884	0
10/31/25	261,884	0
11/04/25	261,884	0
11/11/25	263,581	1,697
11/18/25	263,581	0
11/25/25	263,581	0
12/01/25	263,581	0
12/09/25	263,581	0
12/16/25	263,581	0
12/23/25	263,581	0
01/06/26	263,834	253
Total		3,068

East Pond		
Date	Reading	Gallons
	460	
01/02/25	460	0
01/07/25	460	0
01/14/25	460	0
01/21/25	460	0
01/28/25	460	0
02/03/25	460	0
02/11/25	460	0
02/18/25	460	0
02/25/25	460	0
03/03/25	460	0
03/11/25	460	0
03/18/25	460	0
03/25/25	460	0
04/01/25	460	0
04/08/25	460	0
04/15/25	460	0
04/22/25	460	0
05/01/25	460	0
05/06/25	460	0
05/13/25	630	170
05/20/25	630	0
05/27/25	630	0
06/01/25	630	0
06/09/25	630	0
06/16/25	630	0
06/24/25	630	0
07/01/25	630	0
07/08/25	630	0
07/15/25	630	0
07/22/25	630	0
08/01/25	630	0
08/05/25	630	0
08/12/25	630	0
08/19/25	630	0
08/26/25	630	0
09/02/25	630	0
09/09/25	630	0
09/16/25	630	0
09/23/25	630	0
10/01/25	630	0
10/07/25	630	0
10/14/25	630	0
10/21/25	630	0
10/31/25	630	0
11/04/25	630	0
11/11/25	630	0
11/18/25	630	0
11/25/25	630	0
12/01/25	630	0
12/09/25	630	0
12/16/25	630	0
12/23/25	630	0
01/06/26	630	0
Total		170

West Pond		
Date	Reading	Gallons
	1,170	
01/02/25	1,170	0
01/07/25	1,170	0
01/14/25	1,170	0
01/21/25	1,170	0
01/28/25	1,170	0
02/03/25	1,170	0
02/11/25	1,170	0
02/18/25	1,170	0
02/25/25	1,170	0
03/03/25	1,170	0
03/11/25	1,170	0
03/18/25	1,170	0
03/25/25	1,170	0
04/01/25	1,170	0
04/08/25	1,170	0
04/15/25	1,170	0
04/22/25	1,170	0
05/01/25	1,170	0
05/06/25	1,170	0
05/13/25	1,170	0
05/20/25	1,170	0
05/27/25	1,170	0
06/01/25	1,170	0
06/09/25	1,170	0
06/16/25	1,170	0
06/24/25	1,170	0
07/01/25	1,170	0
07/08/25	1,170	0
07/15/25	1,170	0
07/22/25	1,170	0
08/01/25	1,170	0
08/05/25	1,170	0
08/12/25	1,170	0
08/19/25	1,170	0
08/26/25	1,170	0
09/02/25	1,170	0
09/09/25	1,170	0
09/16/25	1,170	0
09/23/25	1,170	0
10/01/25	1,170	0
10/07/25	1,170	0
10/14/25	1,170	0
10/21/25	1,170	0
10/31/25	1,170	0
11/04/25	1,170	0
11/11/25	1,170	0
11/18/25	1,170	0
11/25/25	1,170	0
12/01/25	1,170	0
12/09/25	1,170	0
12/16/25	1,170	0
12/23/25	1,170	0
01/06/26	1,170	0
Total		0

Table C-2
Leachate Volumes through 2025
Coffin Butte Landfill

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	Cell 6 Sump	Total Sump Gallons
2007	AVG/Total	2.3	2.4	4.7	32.0	28,415,135	0	0	####	4,310,900	2,479,579	10,985,319	9,686,040	0	0		23,150,938
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
2009	AVG/Total	1.6	0.6	2.2	36.0	24,565,492	0	0	####	17,966,500	2,716,138	6,576,974	7,741,578	0	0		17,034,690
2010	AVG/Total	2.1	2.1	4.2	53.7	29,012,559	0	-2,903,063	####	28,651,600	2,708,505	7,224,093	13,531,681	0	0		23,464,279
2011	AVG/Total	2.1	1.7	3.9	40.5	24,755,950	0	-1,315,429	####	25,015,000	2,010,768	6,670,318	7,037,997	0	0		15,719,083
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Table C-2
Leachate Volumes through 2025
Coffin Butte Landfill

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	Cell 6 Sump	Total Sump Gallons
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Table C-2
Leachate Volumes through 2025
Coffin Butte Landfill

Year	Month	Cell 2 Horizontal/Condensate Sump	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		2,982,939	0	0	0	4,937,059	0		28,087,997			
2008	AVG/Total		3,003,110	1,180,765	0	0	7,727,354	0		25,751,789			
2009	AVG/Total		4,141,513	2,477,945	0	0	8,102,079	0		25,136,769			
2010	AVG/Total		6,207,719	3,557,740	0	239,370	11,637,680	0		35,101,959			
2011	AVG/Total		2,591,554	2,938,550	0	3,254,360	9,687,586	0		25,406,669			
2012	AVG/Total		1,868,110	1,310,590	0	1,704,493	5,114,190	0		30,221,785			
2013	AVG/Total		1,073,908	711,620	31,787	550,218	2,487,344	9,630		14,470,427			
2014	AVG/Total		1,018,857	613,427	165,602	250,775	2,174,646	28,777	270,600	19,217,035			
2015	AVG/Total		1,518,039	601,525	269,557	141,489	2,667,352	42,969	572,500	19,084,663			
2016	January		217,391	39,822	29,599	14,394	301,206	8,450	142,000	3,164,343		2016	
2016	February		181,275	38,093	25,366	13,127	257,861	2,810	94,500	2,232,301			
2016	March		226,357	36,500	45,037	9,330	327,963	7,490	120,000	2,894,319		Q1	8,290,963
2016	April		155,634	38,827	47,812	12,417	254,690	3,263	24,500	1,823,177			
2016	May		230,905	42,272	11,925	13,076	298,178	277	31,000	1,475,631			
2016	June		134,387	52,234	38,457	11,145	236,223	260	11,500	1,175,014		Q2	4,473,822
2016	July		154,722	29,386	41,722	10,656	237,927	160	19,000	1,187,616			
2016	August		122,112	29,312	72,537	9,337	233,297	0	0	1,165,971			
2016	September		165,072	25,561	63,256	8,277	270,461	720	0	1,059,897		Q3	3,413,484
2016	October		226,316	24,380	60,720	9,251	370,137	14,740	56,500	2,140,822			
2016	November		236,049	26,304	52,089	10,164	358,830	27,810	91,500	2,319,940			
2016	December		277,522	27,351	34,340	9,681	376,562	16,920	60,000	2,766,420		Q4	7,227,182
2016	AVG/Total		2,327,742	410,042	522,860	130,855	3,523,334	82,900	650,500	23,405,451			
2017	January		230,730	28,320	29,642	10,096	339,962	6,000	75,500	2,836,755			
2017	February		318,429	26,568	34,652	11,814	472,535	118,960	169,000	3,524,656			
2017	March		284,183	36,763	38,523	13,023	382,012	2,950	132,000	2,851,446			
2017	April		232,165	28,229	38,940	12,845	325,620	0	70,500	2,929,871			
2017	May		213,292	30,330	44,355	14,233	308,896	0	28,000	2,356,881			
2017	June		178,218	29,736	46,417	12,114	266,486	0	21,000	2,225,559			
2017	July		160,903	30,973	33,213	11,815	269,740	0	0	1,876,196			
2017	August		370,934	158,010	39,437	11,664	793,357	0	0	1,951,729			
2017	September		630,494	32,988	36,363	11,777	739,027	0	7,000	2,345,339			
2017	October		549,760	34,240	46,295	12,417	770,660	0	27,500	4,247,687			
2017	November		594,434	33,149	57,641	12,993	895,206	0	122,000	4,093,275			
2017	December		511,638	30,795	66,604	14,278	799,690	0	59,000	2,736,147			
2017	AVG/Total		4,275,181	500,101	512,082	149,069	6,363,191	127,910	711,500	33,975,541			
2018	January		536,893	55,649	55,726	15,256	932,859	0	122,000	3,297,544			
2018	February		570,380	38,257	59,683	15,433	700,378	0	34,000	2,367,322			
2018	March		482,528	15,657	57,808	46,058	602,051	3,865	49,000	2,859,249			
2018	April		540,320	16,102	49,317	34,925	644,635	6,435	45500	3621915			
2018	May		247,078	9,555	44,410	38,344	339,715	132	6,500	1,878,263			
2018	June		311,853	7,907	33,562	21,291	378,513	6,665	6,800	1,395,553			
2018	July		327,693	8,031	30,657	7,428	373,809	80	0	1,407,875			
2018	August		712,271	8,383	25,720	2	746,376	0	7,000	1,774,237			
2018	September		635,163	7,565	21,355	0	667,098	1,120	0	1,551,872			
2018	October		460,595	8,038	25,654	0	517,252	1,750	7,000	1,517,762			
2018	November		456,200	6,901	28,062	0	519,962	4,857	14,000	2,020,936			
2018	December		652,486	8,258	28,131	0	738,346	9,648	19,300	3,499,130			
2018	AVG/Total		5,933,460	190,303	460,084	178,737	7,160,995	34,552	311,100	27,191,659			
2019	January		522,757	7,889	25,655	0	582,211	5,405	34,700	2,982,788			
2019	February		519,139	6,884	21,851	1	561,200	8,220	34,500	3,298,939			
2019	March		585,041	3,673	29,930	0	618,644	1,170	19,500	2,273,537			
2019	April		631,138	37,729	53,108	0	721,975	7,770	99,500	2,662,991			

Table C-2
Leachate Volumes through 2025
Coffin Butte Landfill

Year	Month	Cell 2 Horizontal/Condensate Sump	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	
2019	May		561,439	37,126	31,099	0	629,664	866	47,000	2,058,478			
2019	June		395,989	34,412	31,584	5,375	467,359	234	19,000	1,691,983			
2019	July		391,390	34,267	21,570	0	447,227	400	56,000	1,662,376			
2019	August		272,900	36,488	22,294	2	331,694	180	28,000	1,381,807			
2019	September		264,617	36,595	41,795	0	373,920	2,000	84,000	1,569,691			
2019	October		320,561	39,850	29,078	23,884	450,177	1,740	35,000	1,933,807			
2019	November		260,853	39,415	22,624	49,695	405,211	630	21,000	1,572,891			
2019	December		321,262	39,765	24,277	42,413	480,396	17,933	28,000	2,467,553			
2019	AVG/Total		5,047,087	354,093	354,865	121,370	6,069,678	46,548	506,200	25,556,840			
2020	January		397,275	42,173	39,991	40,768	593,041	46,989	40,500	3,616,521			
2020	February		360,051	42,928	28,956	37,701	490,573	2,358	13,000	2,086,284			
2020	March		370,839	47,915	42,339	39,256	527,568	2,400	21,000	2,154,595			
2020	April		383,301	59,224	50,080	47,096	560,486	1,720	39,000	1,975,156			
2020	May		372,695	72,671	42,032	49,484	552,613	3,230	83,000	2,188,922			
2020	June		241,779	70,086	42,244	47,001	447,602	1,210	42,000	2,160,421			
2020	July		347,300	62,250	30,988	37,970	600,780	7	32,500	2,210,226			
2020	August		304,425	64,127	33,019	35,601	472,458	3	28,000	1,820,022			
2020	September		249,628	60,798	30,118	32,560	395,486	0	33,500	1,691,891			
2020	October		221,308	61,646	41,295	31,189	355,957	0	27,500	1,798,836			
2020	November		365,005	69,827	40,836	28,868	509,163	53,130	40,000	3,172,737			
2020	December		385,181	74,624	70,043	28,629	567,576	72,517	21,000	3,689,128			
2020	AVG/Total		3,998,788	728,269	491,940	456,123	6,073,303	183,564	421,000	28,564,739			
2021	January		481,988	73,783	82,980	30,361	672,417	64,463	42,000	4,896,081			
2021	February		384,586	60,270	92,378	27,942	601,984	73,010	28,000	3,955,649			
2021	March		327,186	64,307	69,859	32,407	499,888	31,880	14,000	2,545,262			
2021	April		277,238	57,008	69,870	30,488	453,514	120	14,000	1,874,173			
2021	May		270,706	56,320	84,414	15,682	438,228	0	21,000	1,959,010			
2021	June		281,896	54,219	84,743	171	447,858	0	23,000	2,265,702			
2021	July		329,056	52,316	73,986	170	486,497	0	18,000	2,001,456			
2021	August		457,689	54,621	60,594	8,953	631,359	0	7,000	2,067,457			
2021	September		439,706	58,430	82,420	36,972	659,567	0	21,000	2,232,109			
2021	October		334,022	74,742	49,218	32,273	521,178	0	28,000	2,428,118			
2021	November		273,796	83,727	60,844	34,646	460,493	0	21,000	2,375,408			
2021	December		240,805	89,449	68,603	39,827	455,465	0	11,000	3,216,626			
2021	AVG/Total		4,098,674	779,192	879,908	289,892	6,328,448	169,473	248,000	31,817,051			
2022	January		252,708	93,317	64,892	40,554	471,833	0	53,500	2,847,347			
2022	February		204,084	80,385	50,093	35,540	395,638	0	14,000	1,951,899			
2022	March		336,126	89,039	66,754	36,746	557,076	0	35,000	2,724,583			
2022	April		353,768	85,093	93,816	35,340	597,681	0	21,000	2,677,139			
2022	May		337,145	91,835	136,831	37,280	625,697	730	27,000	2,679,299			
2022	June		308,656	93,166	135,278	39,495	581,981	0	19,500	2,240,027			
2022	July		250,841	95,614	124,876	42,496	526,097	0	0	1,908,625			
2022	August		453,244	82,452	81,863	37,564	658,607	0	0	2,274,366			
2022	September		405,963	73,613	49,786	33,392	562,784	0	35,000	2,015,135			
2022	October		258,881	71,657	51,596	31,326	423,035	1,120	19,500	1,925,838			
2022	November		344,742	68,083	56,300	27,178	498,426	1,840	14,000	2,782,990			
2022	December		342,932	80,122	81,285	23,426	528,861	660	14,000	3,120,462			
2022	AVG/Total		3,849,089	1,004,376	993,368	420,337	6,427,716	4,350	252,500	29,147,710			
2023	January		364,620	94,445	98,487	5,942	563,494	0	14,000	2,986,026			
2023	February		254,490	96,989	86,795	5	438,279	0	7,000	2,203,867			
2023	March		279,823	133,024	96,814	3	509,664	0	21,000	2,737,259			
2023	April		255,636	116,141	111,608	13,247	496,632	0	14,000	3,153,912			

Appendix C1

Volumes/Levels Plots

Figure C-1
LDS-2 Annual Water Production - Water Year (Oct to Sep)

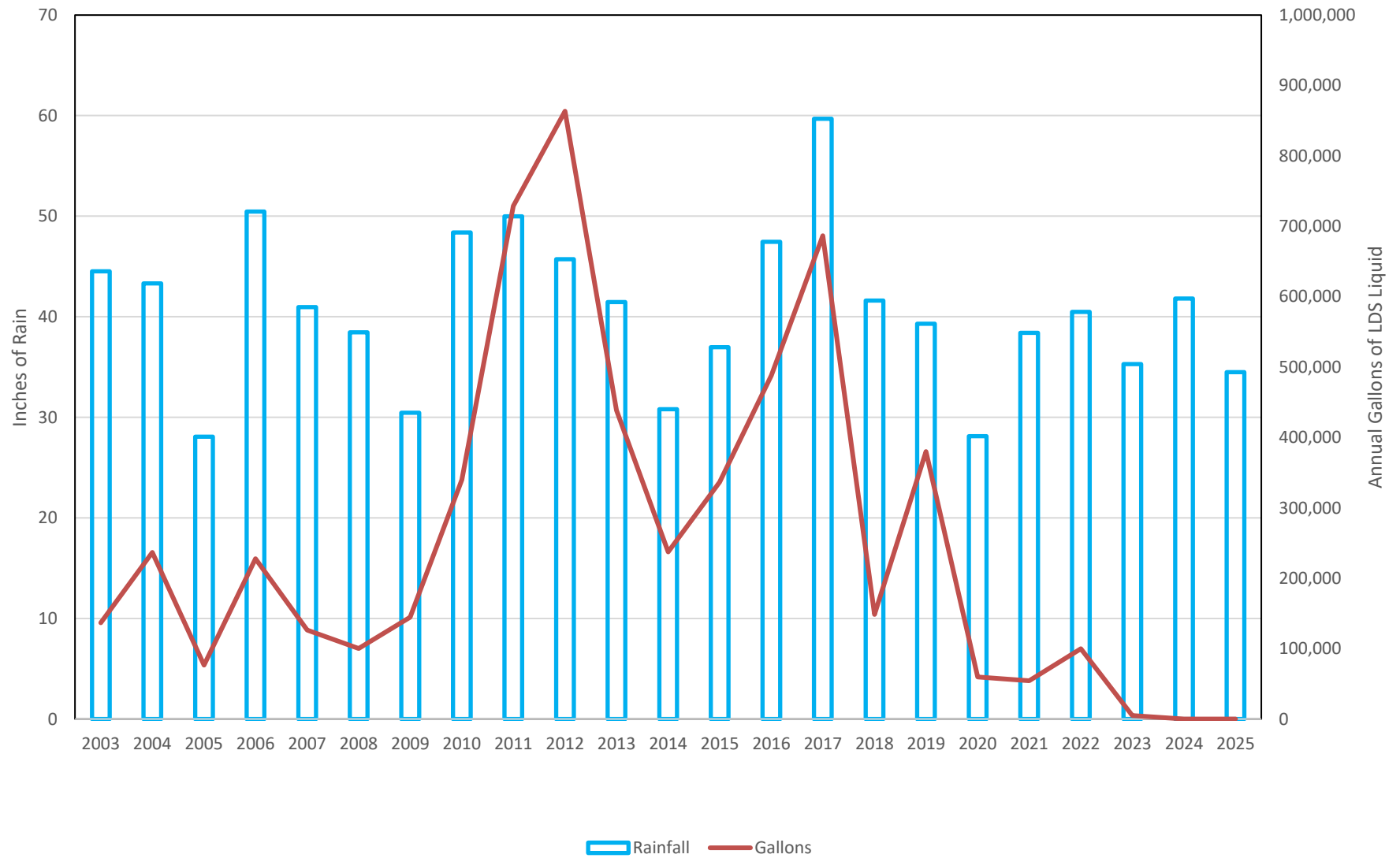


Figure C-2
Cumulative Water Purged from Leak Detection System - Cell 2 (LDS-2B)
Coffin Butte Landfill

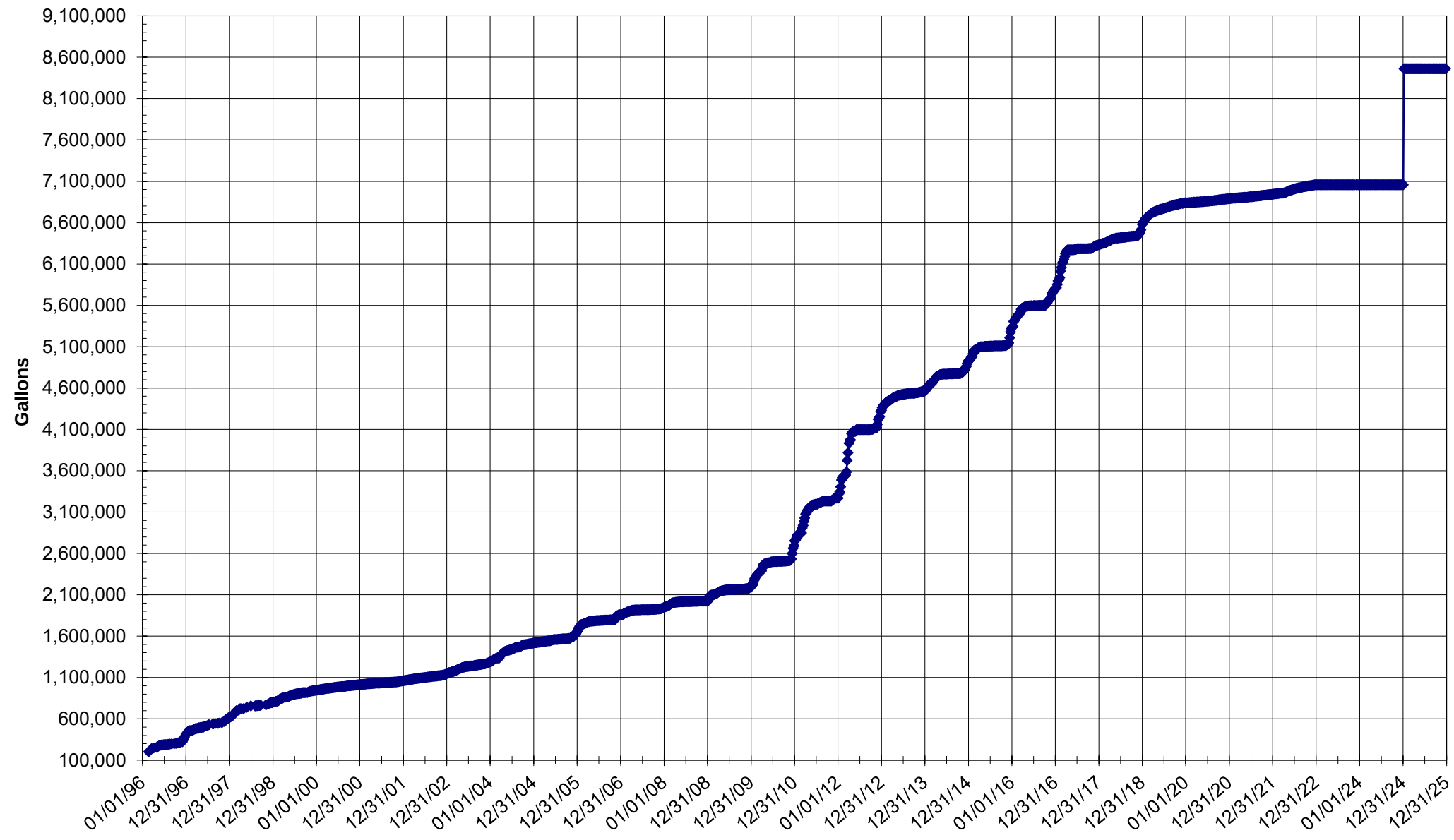


Figure C-3
90-Day Running Average Infiltration Rate to Leak Detection System Cell 2
Coffin Butte Landfill

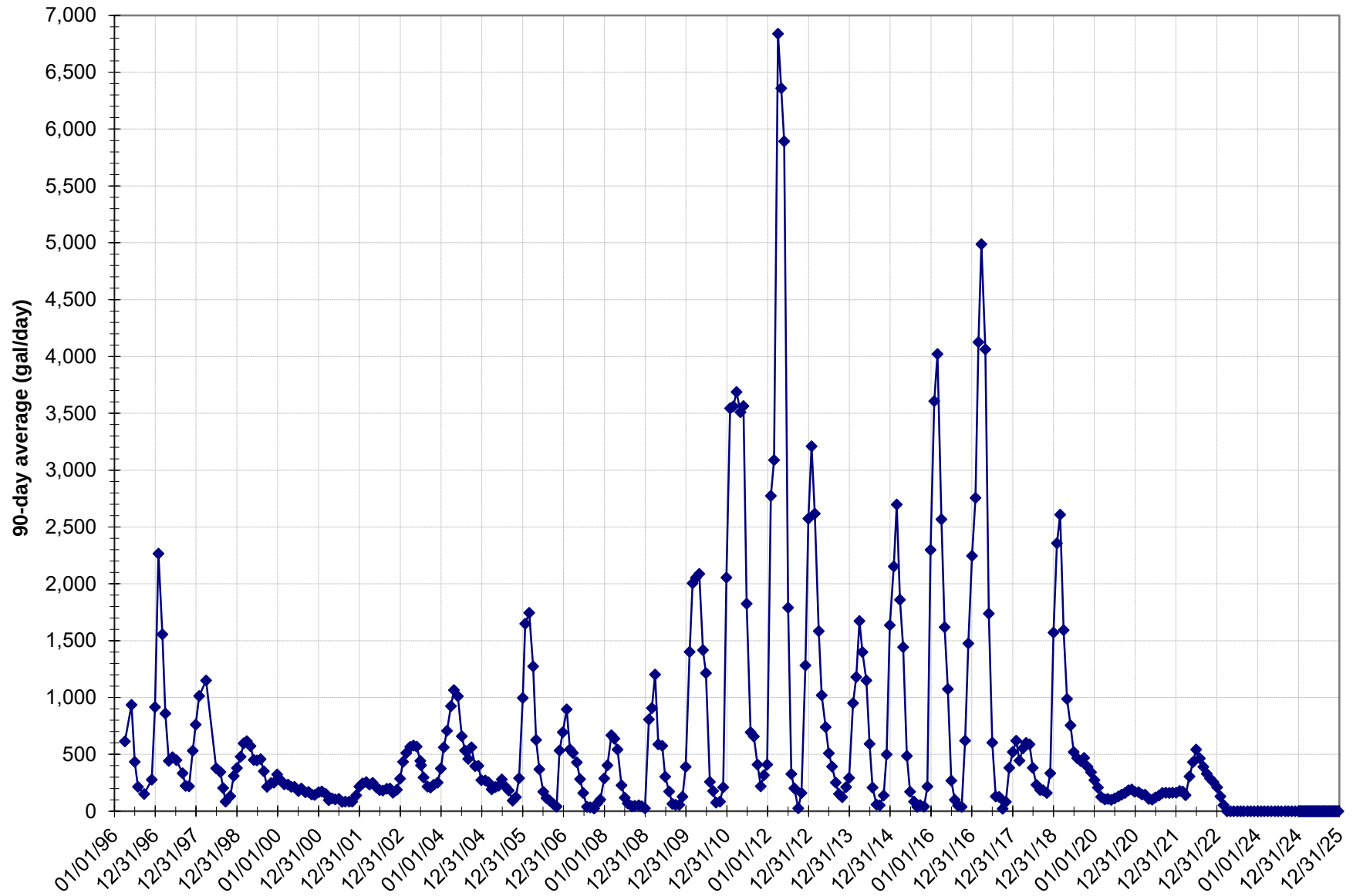


Figure C-4
Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-3

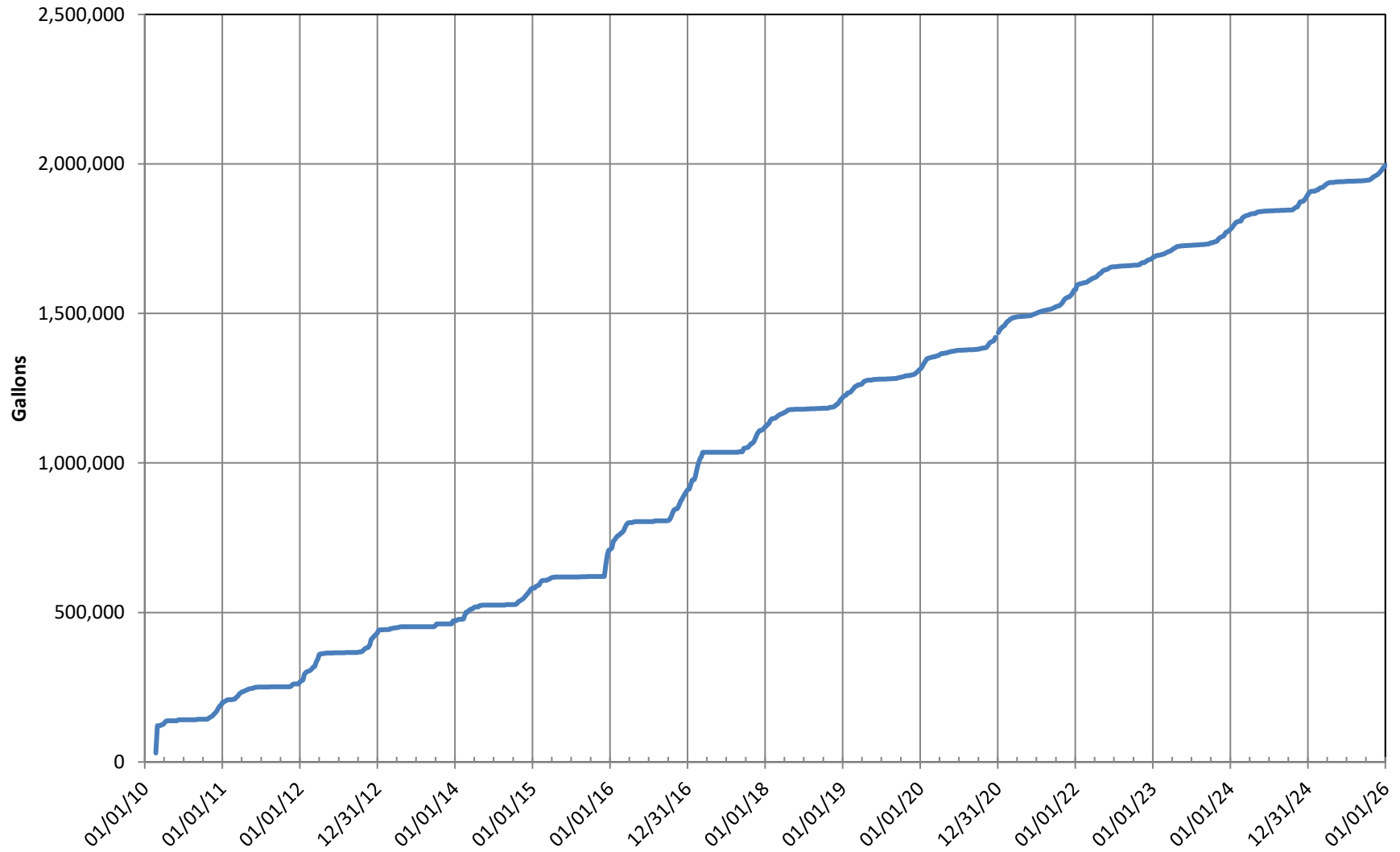


Figure C-5
Cell 3 LDS - Gallons per Day (Weekly Reading)

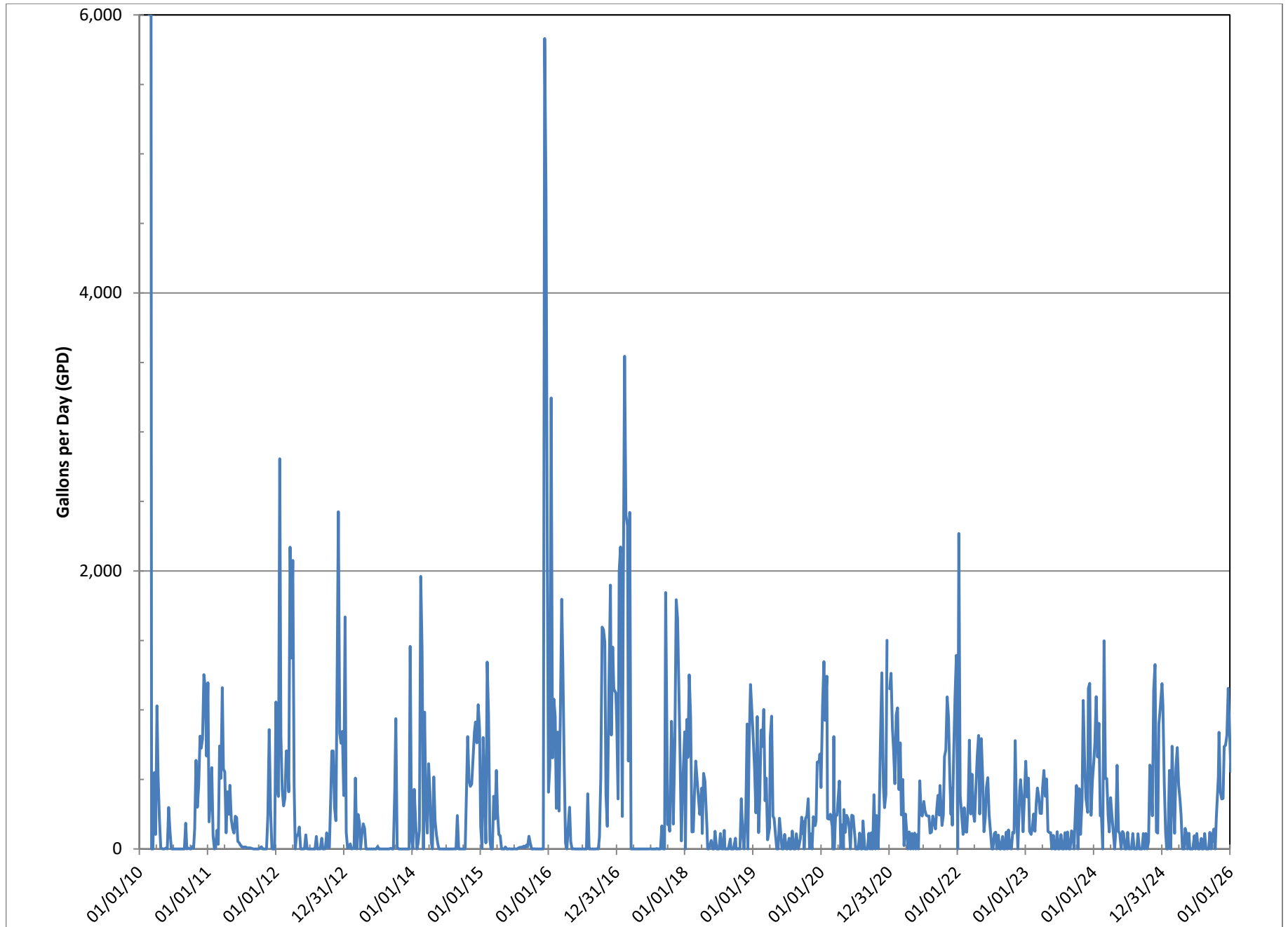


Figure C-6
Cell 3 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill

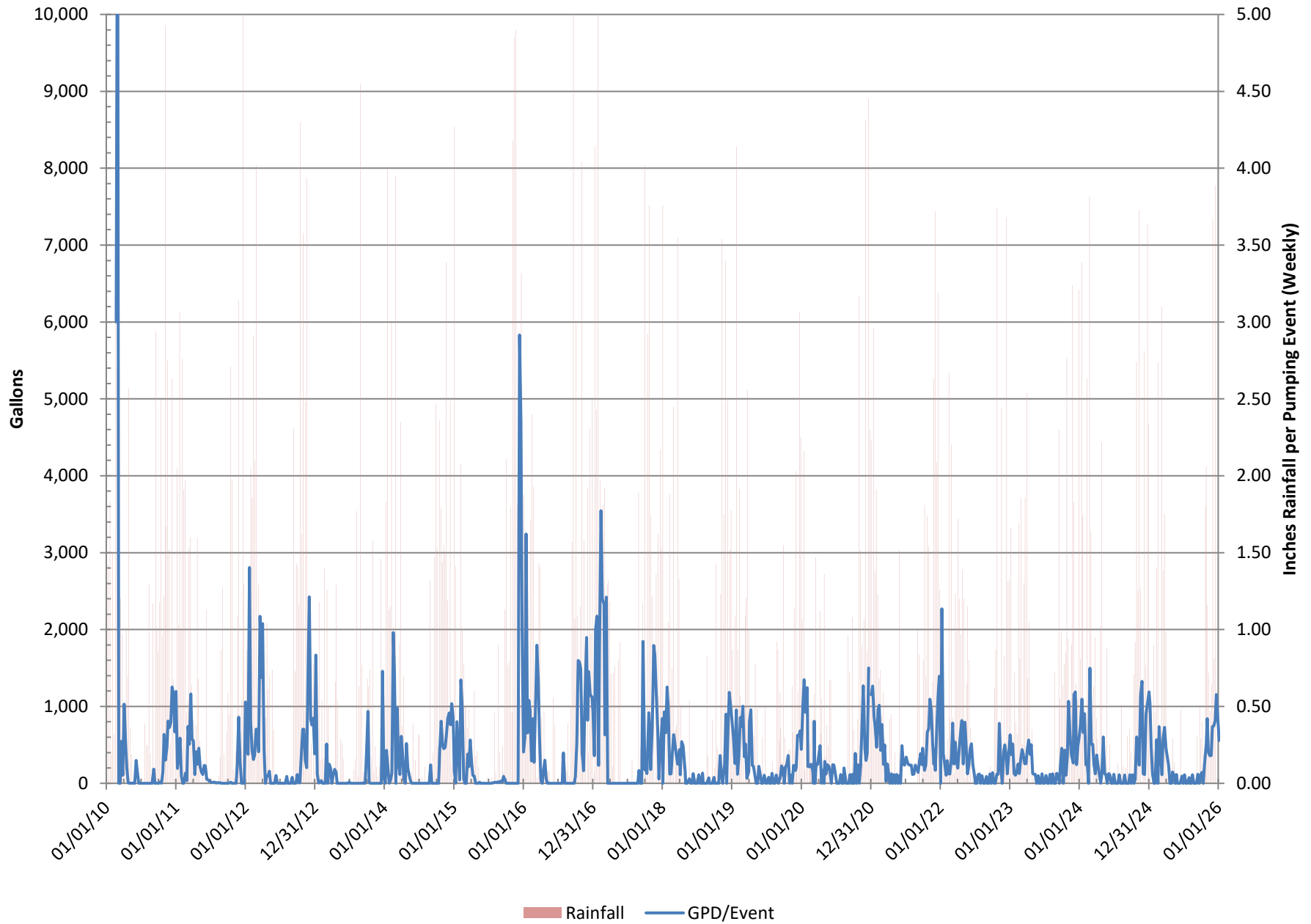


Figure C-7
Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-4

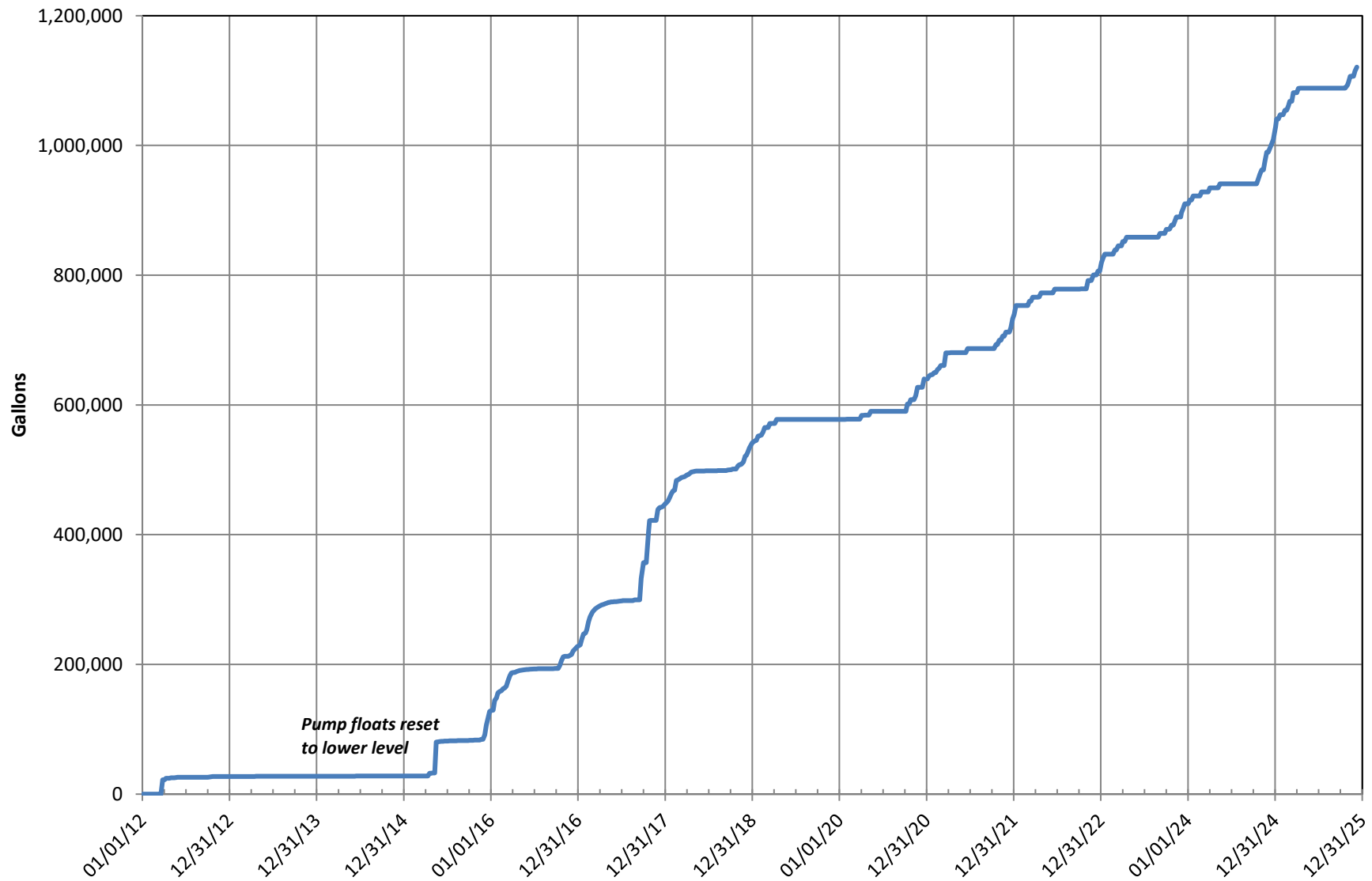


Figure C-8
Cell 4 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill

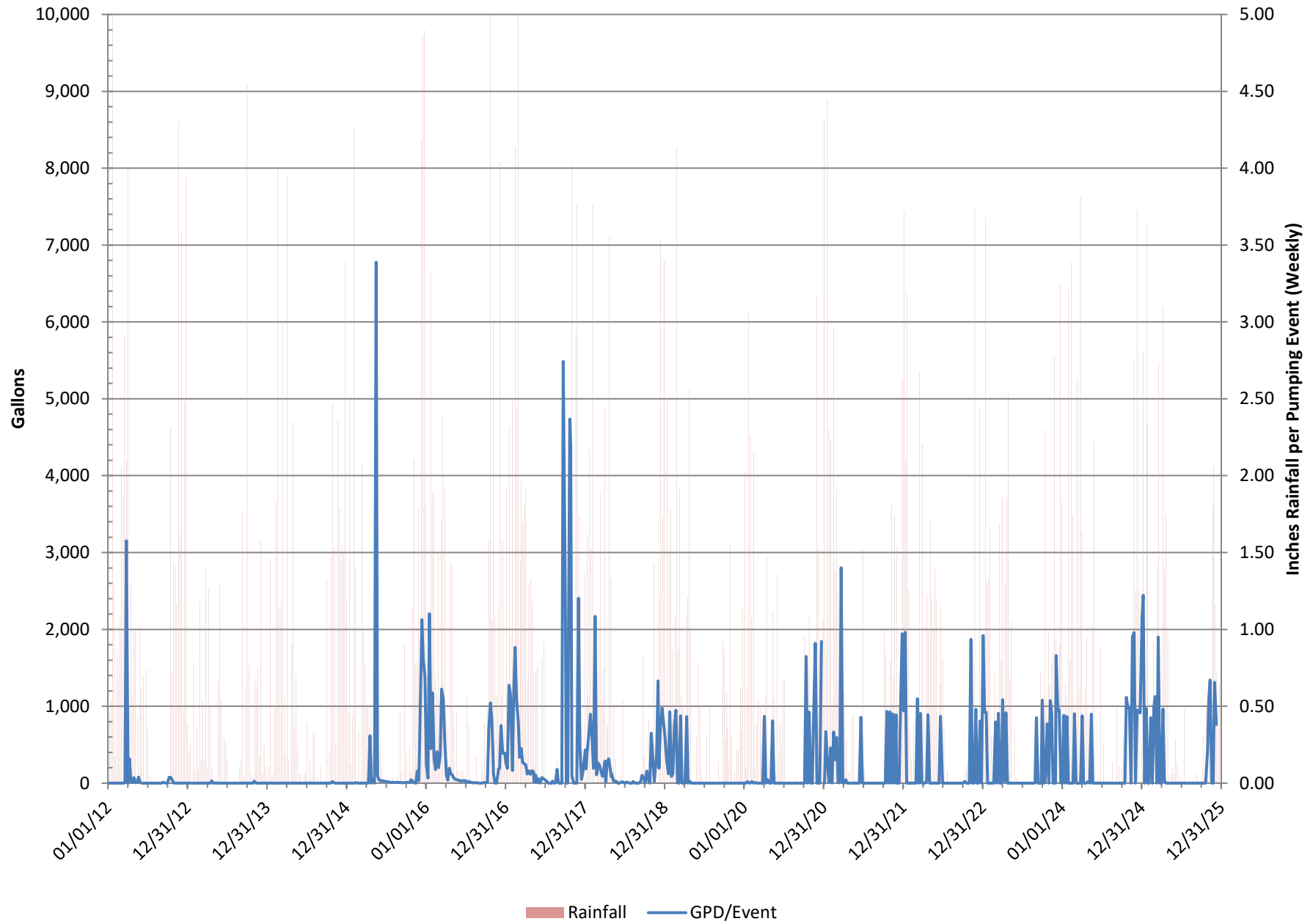


Figure C-9
Cell 4 LDS - Gallons per Day (Weekly Reading)

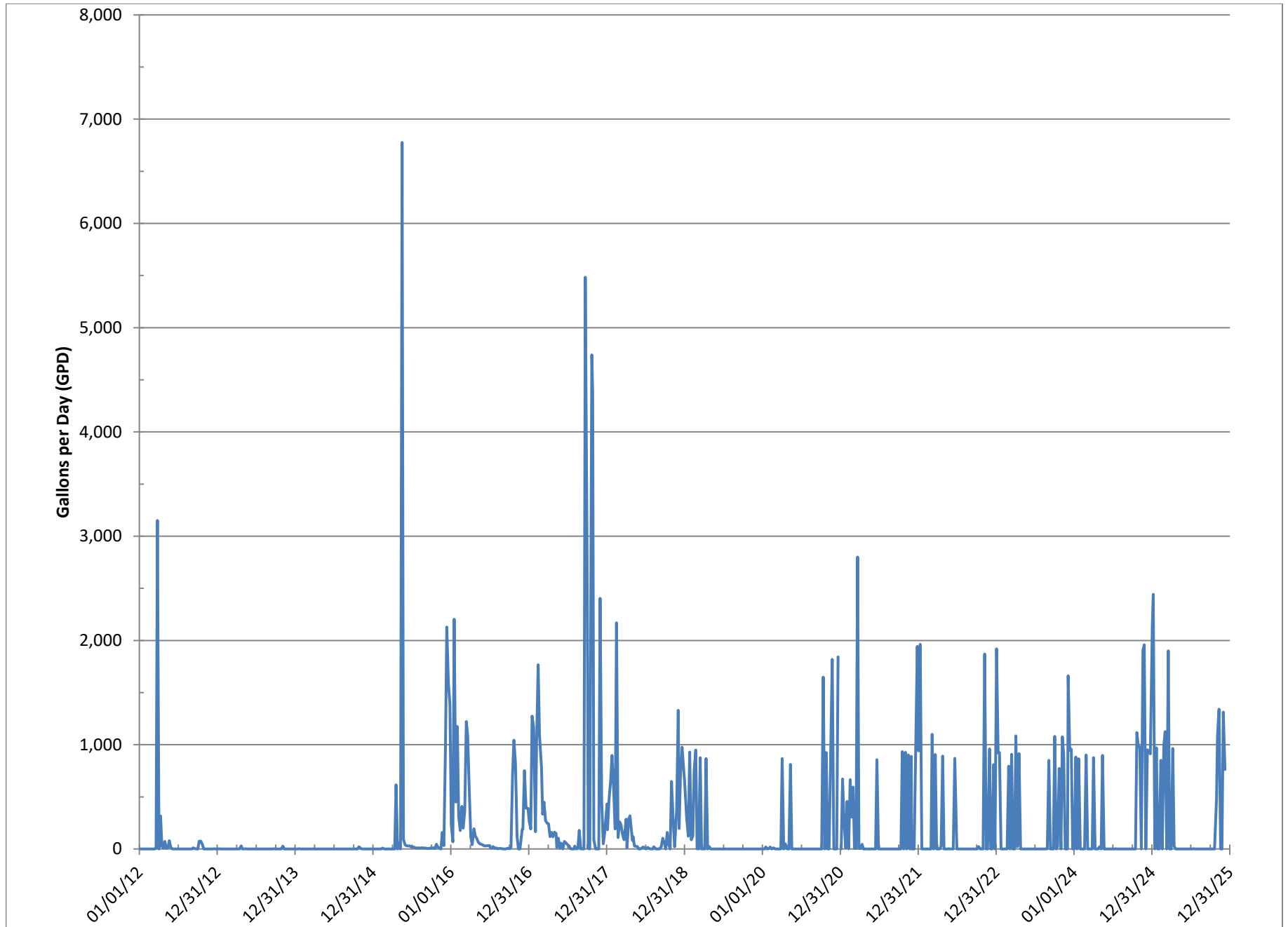


Figure C-10
Coffin Butte Landfill
Cumulative Water Purged from Leak Detection System LDS-5

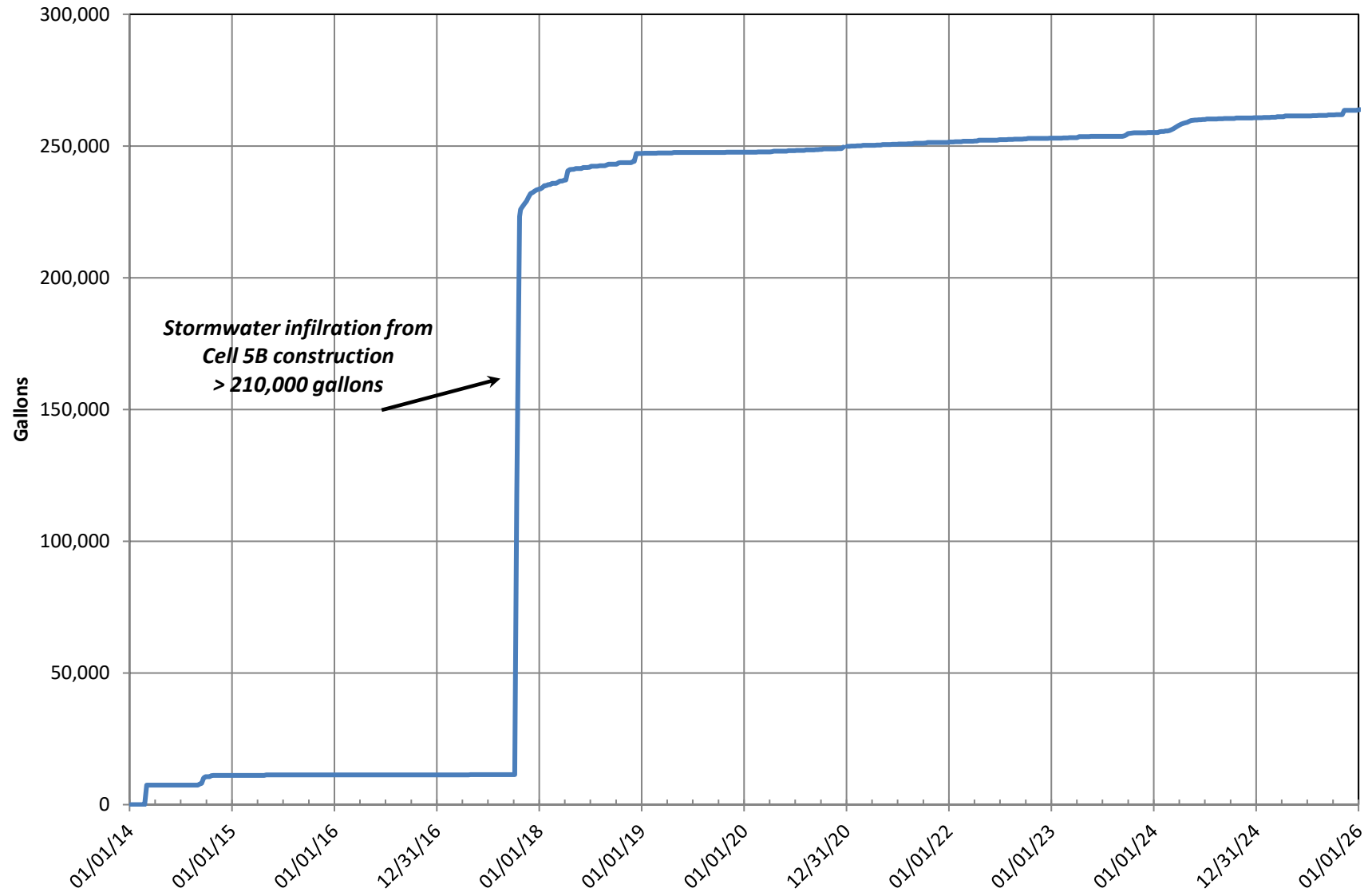


Figure C-11
Cell 4 LDS - Gallons per Day (Weekly Reading)

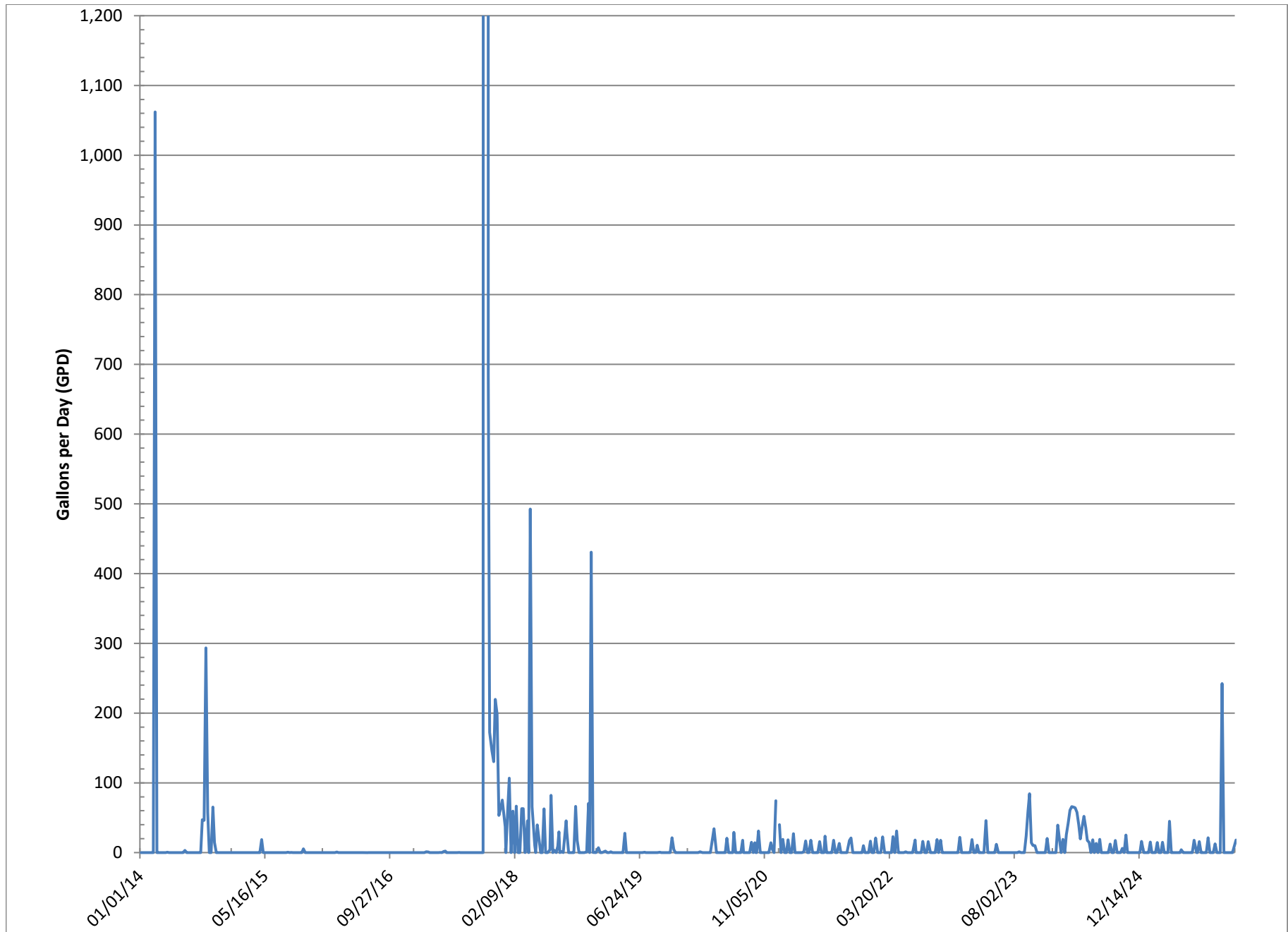


Figure C-12
Cell 4 LDS - Gallons per Day (Weekly Reading)
Coffin Butte Landfill

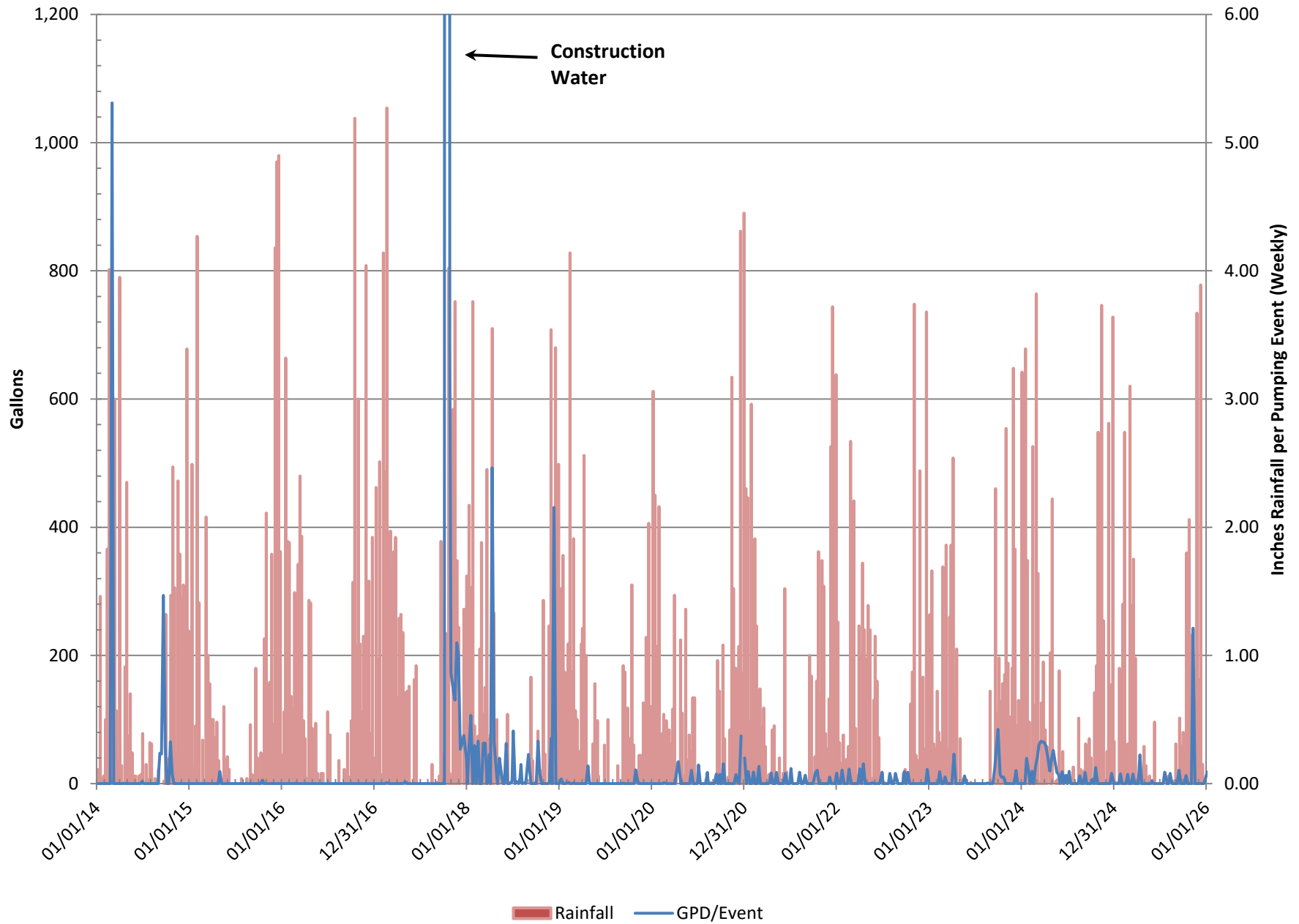


Figure C-13
Total Annual Gallons of Leachate Produced
Coffin Butte Landfill

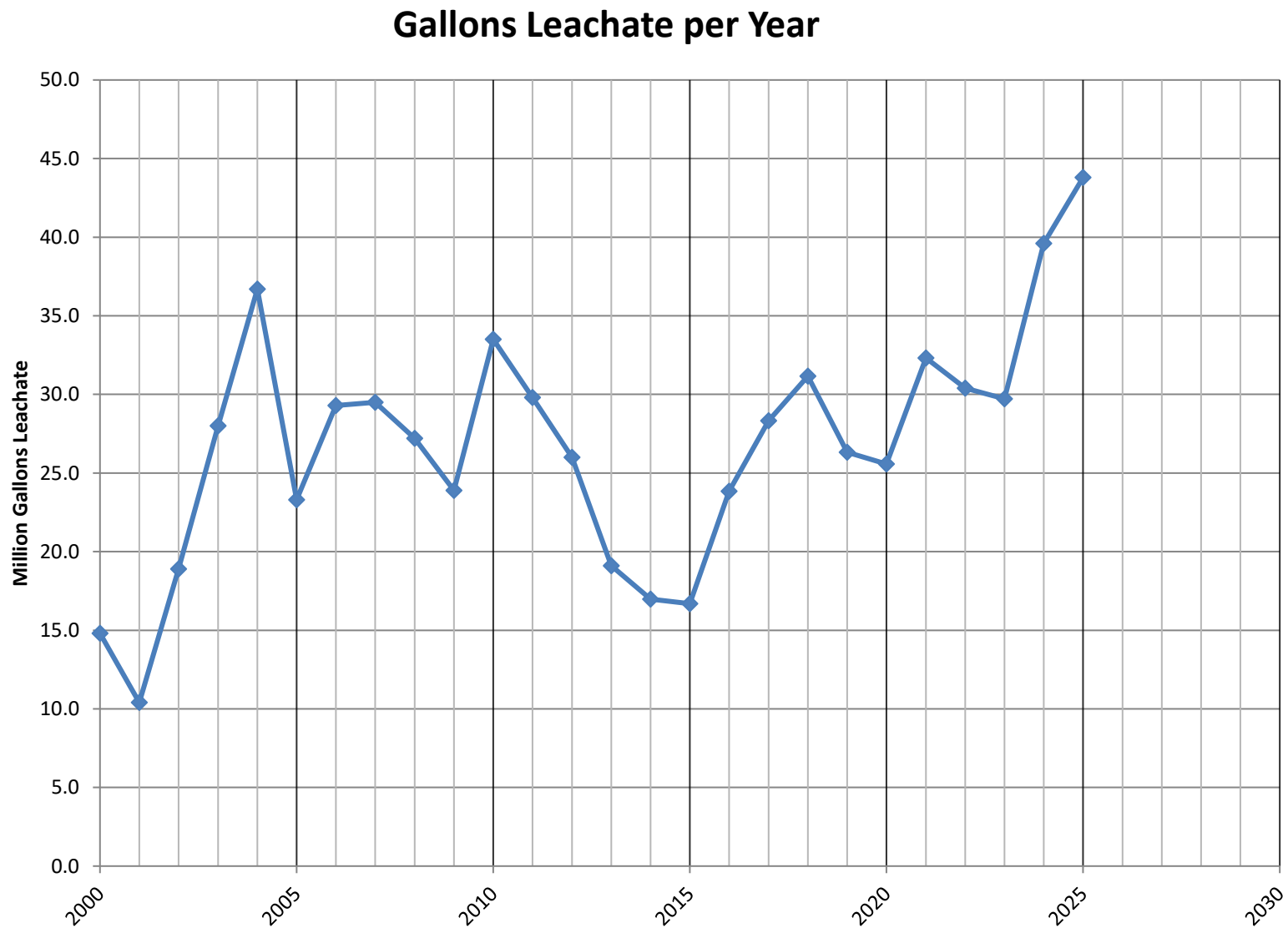


Figure C-14
Cell 2 Sump Levels - 2024
Coffin Butte Landfill

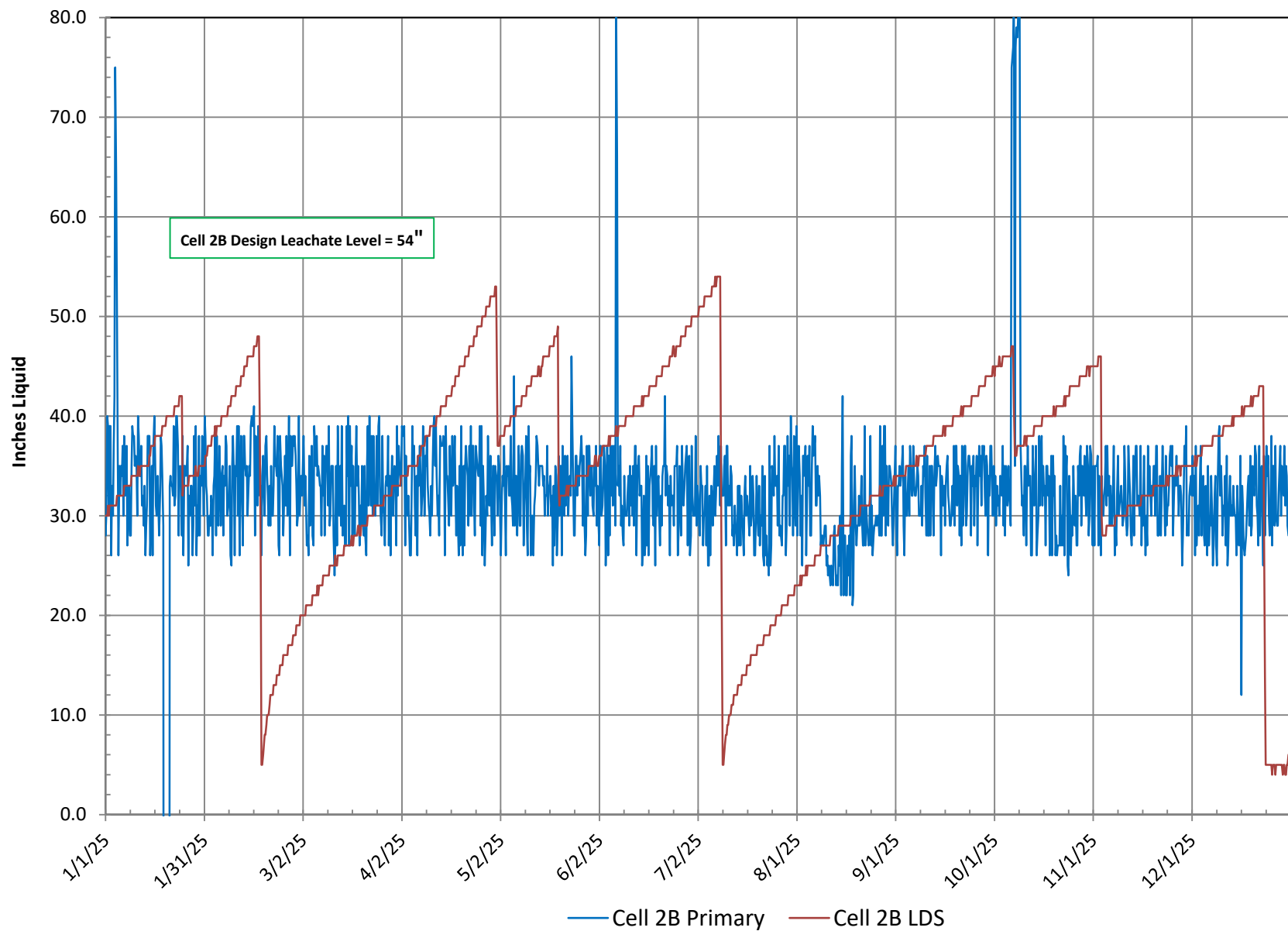


Figure C-15
Cell 3 Sump Levels - 2024
Coffin Butte Landfill

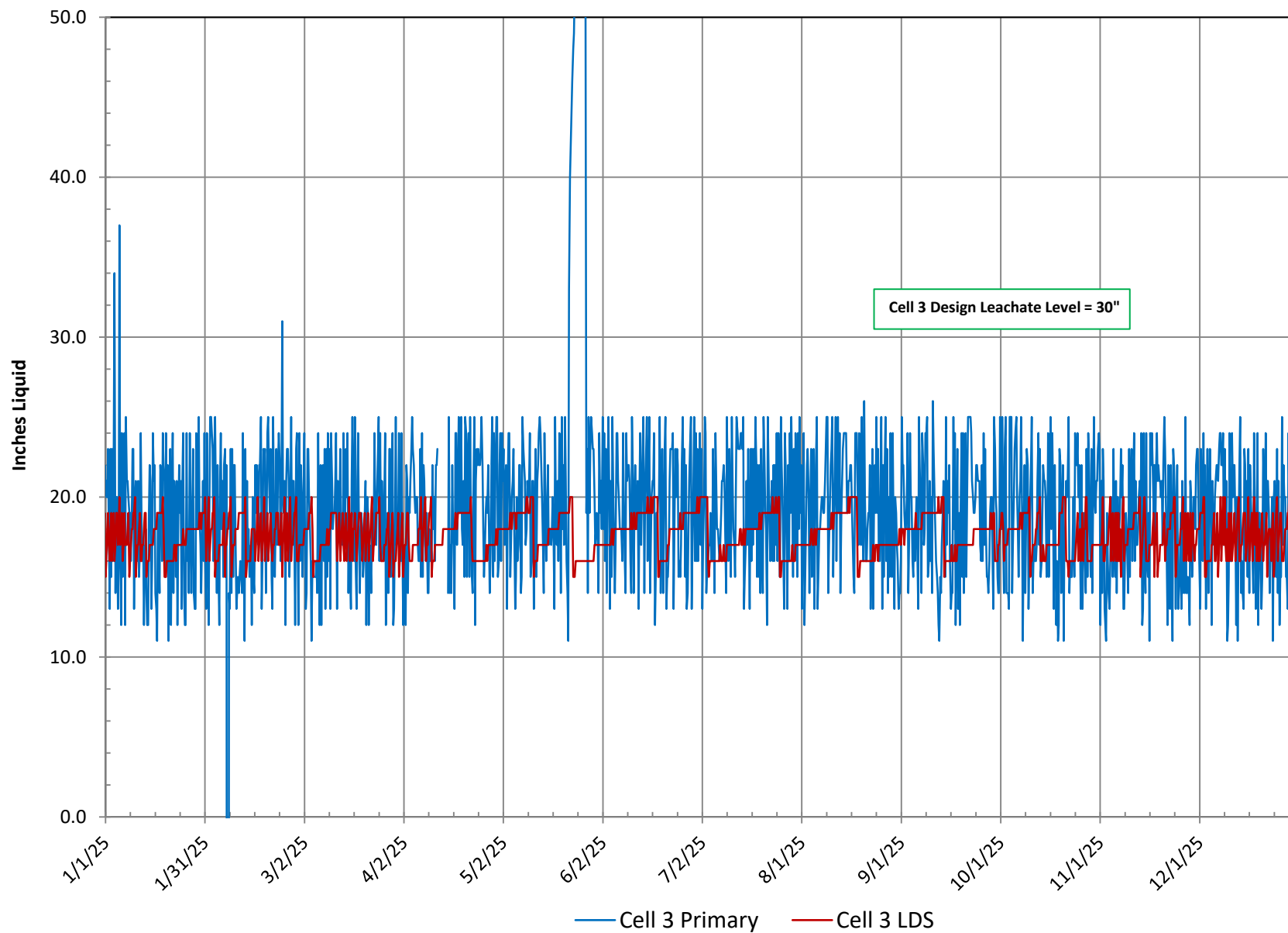


Figure C-16
Cell 4 Sump Levels - 2024
Coffin Butte Landfill

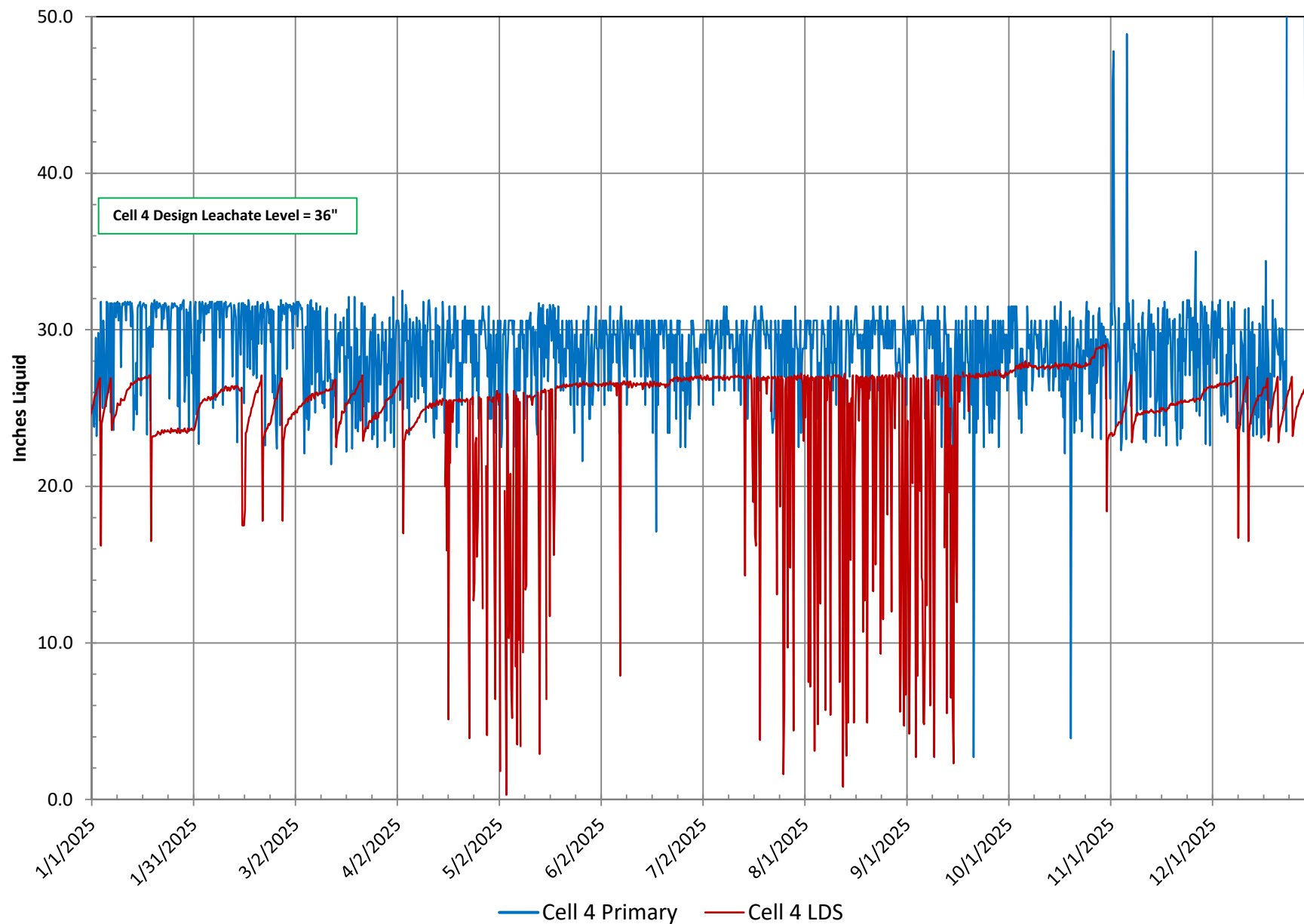
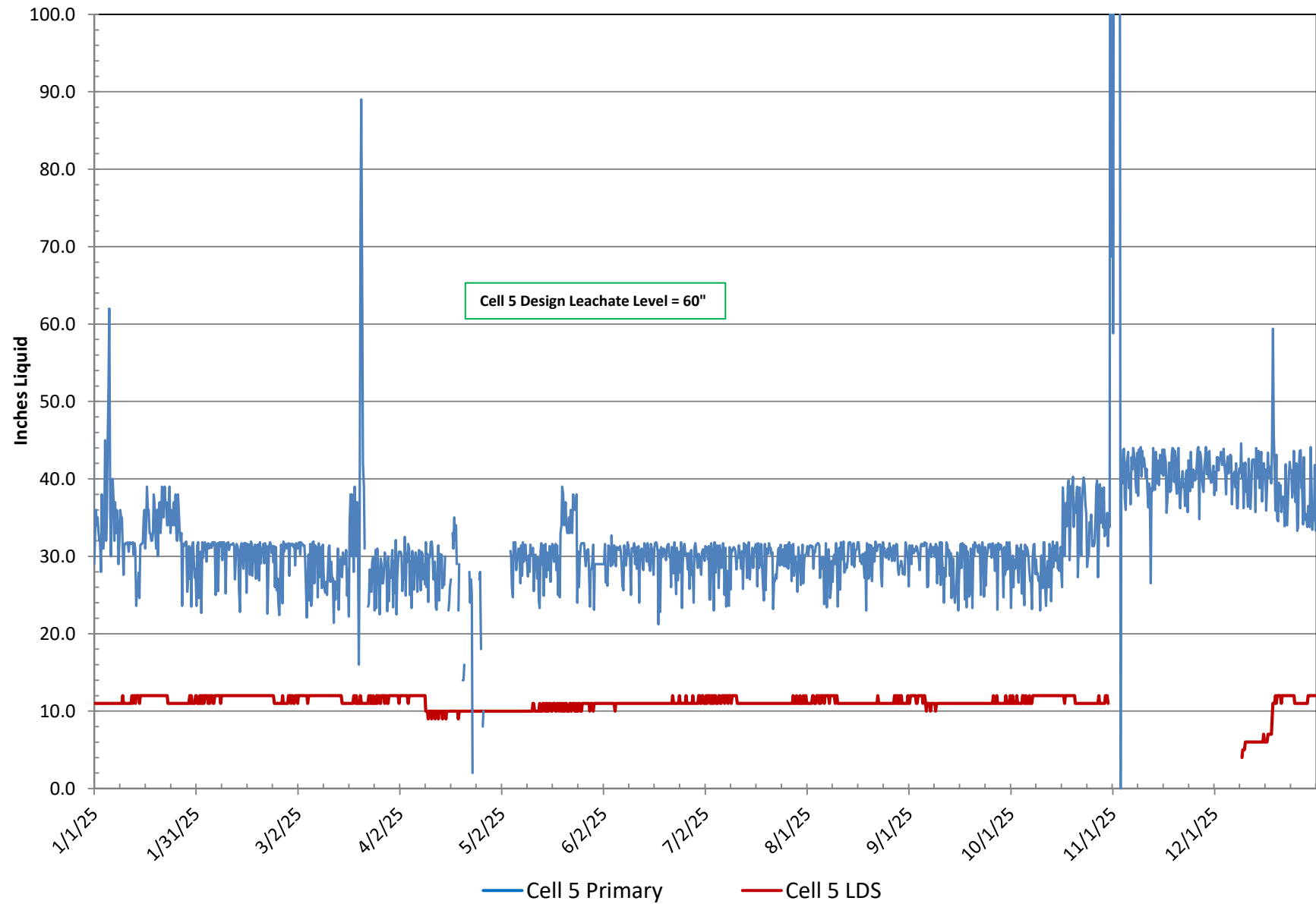


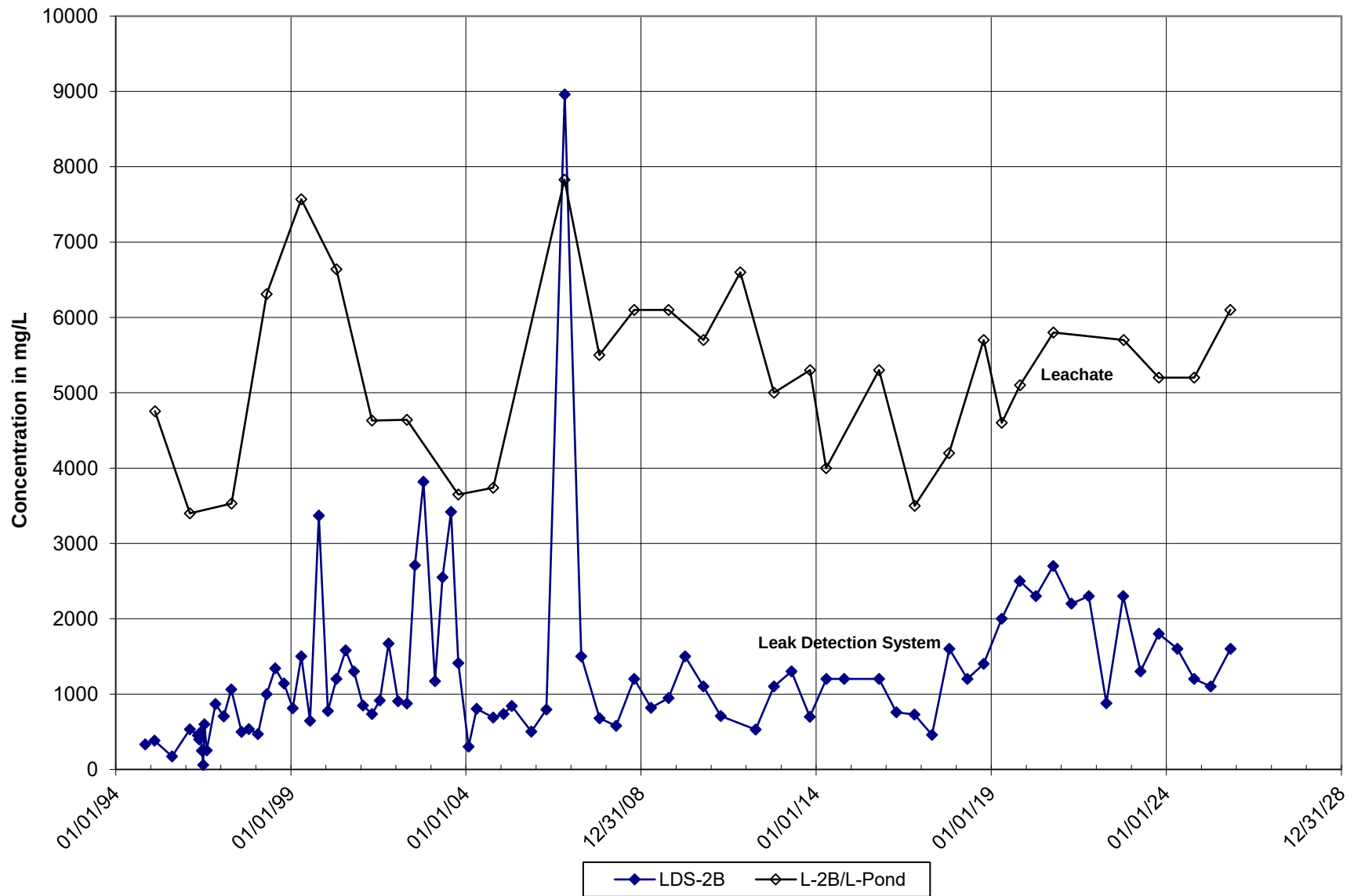
Figure C-17
Cell 5 Sump Levels - 2024
Coffin Butte Landfill



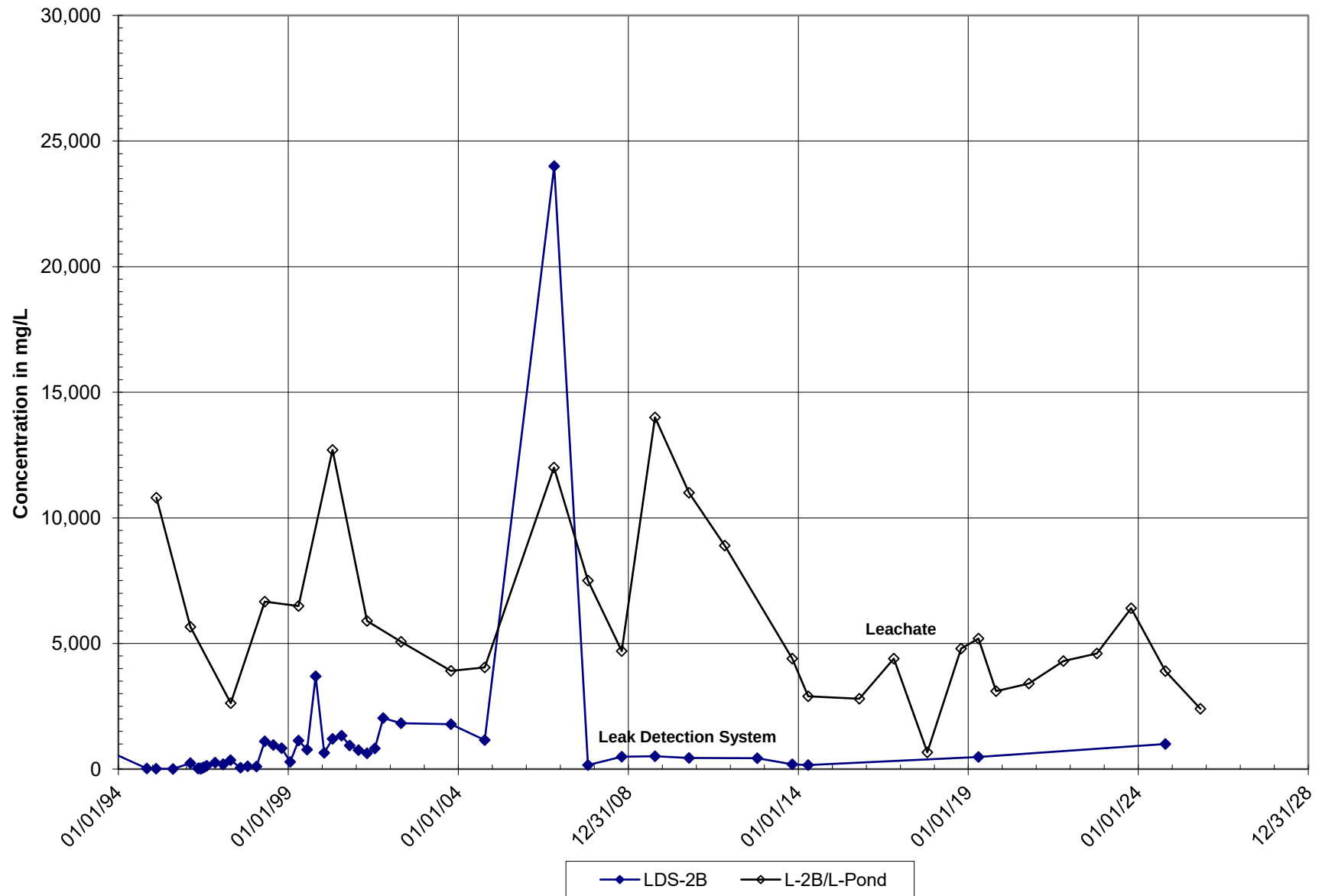
Appendix C2

Water Quality Plots

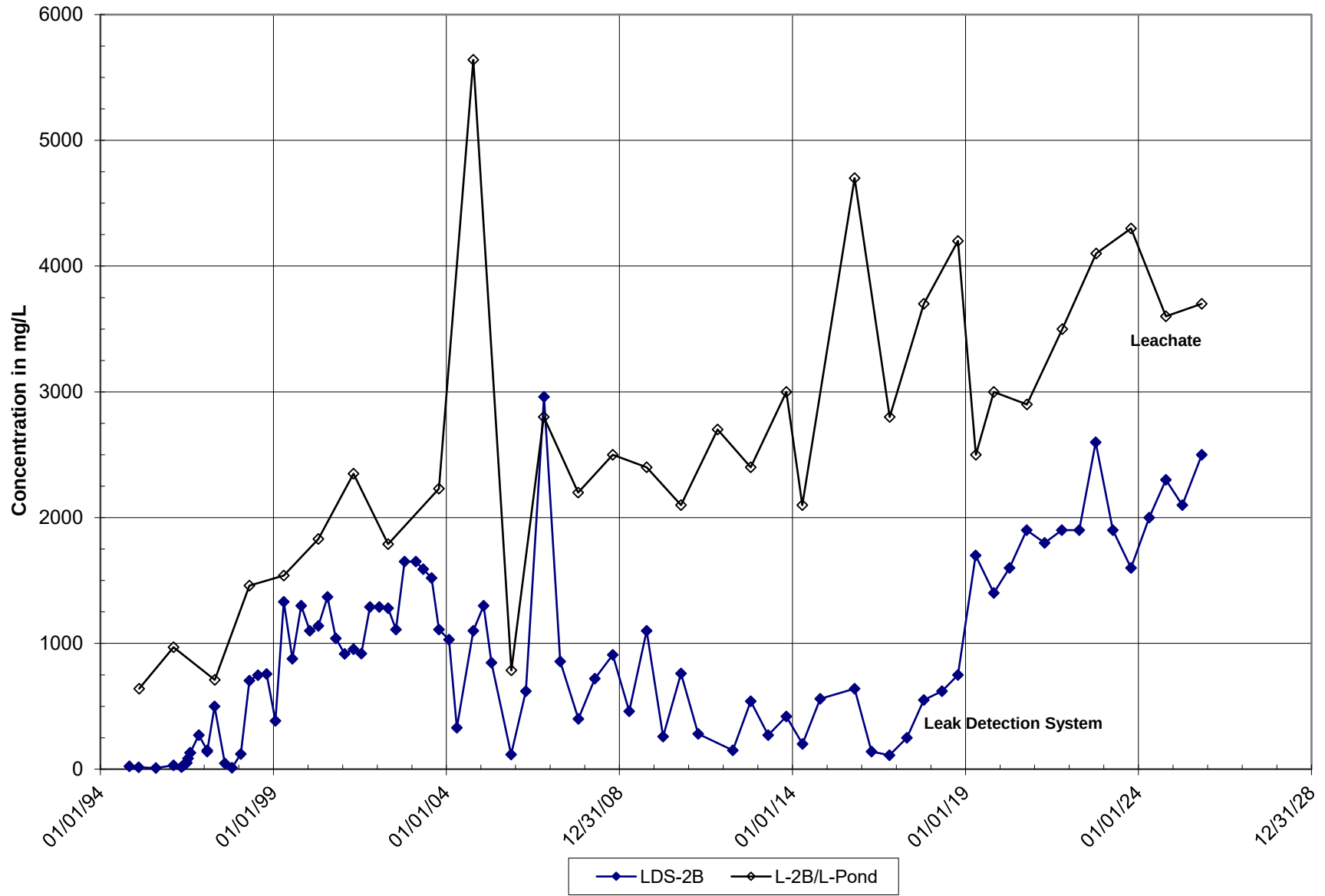
Cell 2 Leak Detection System (LDS-2B)
Bicarbonate
Coffin Butte Landfill



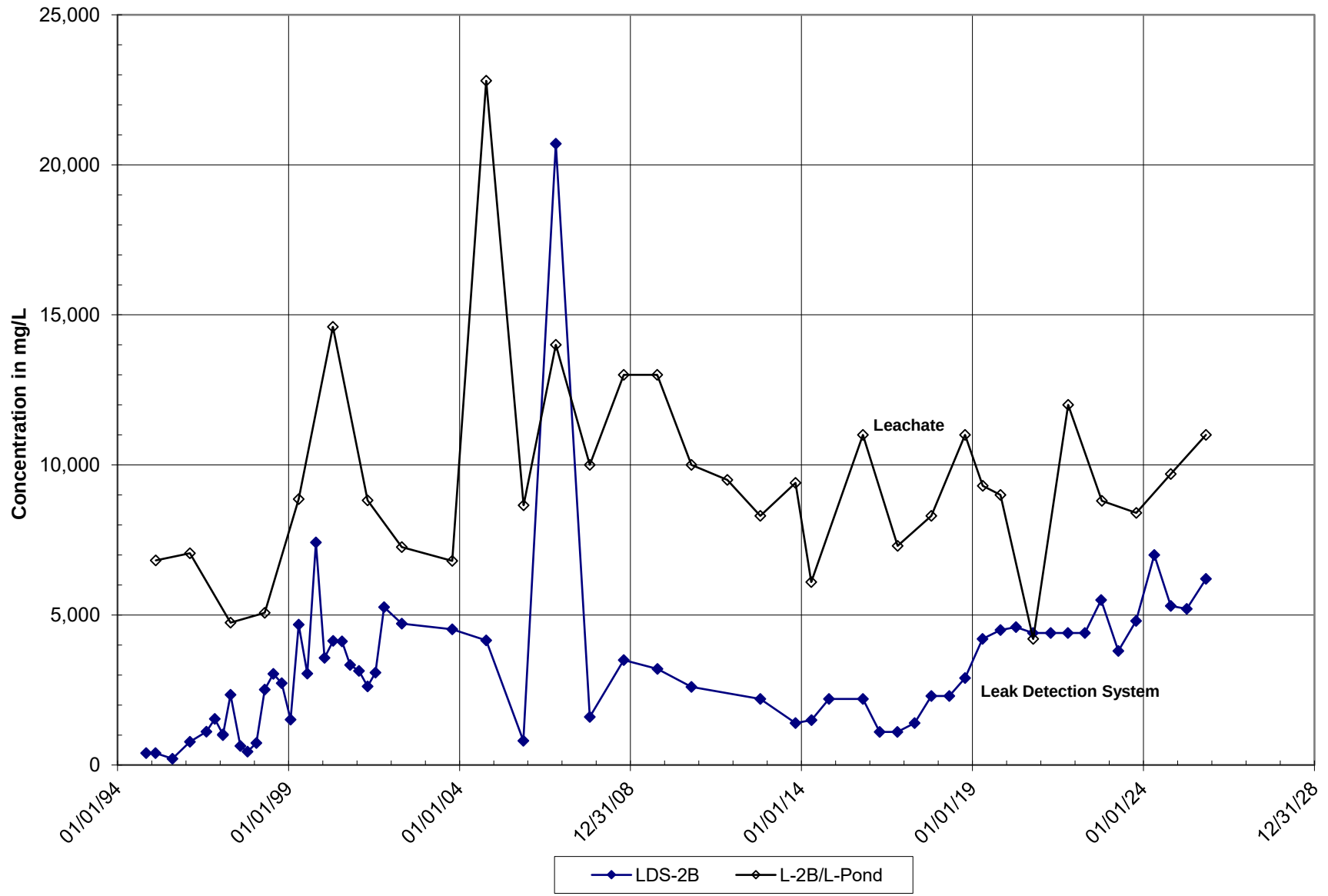
Cell 2 Leak Detection System (LDS-2B)
Chemical Oxygen Demand
Coffin Butte Landfill



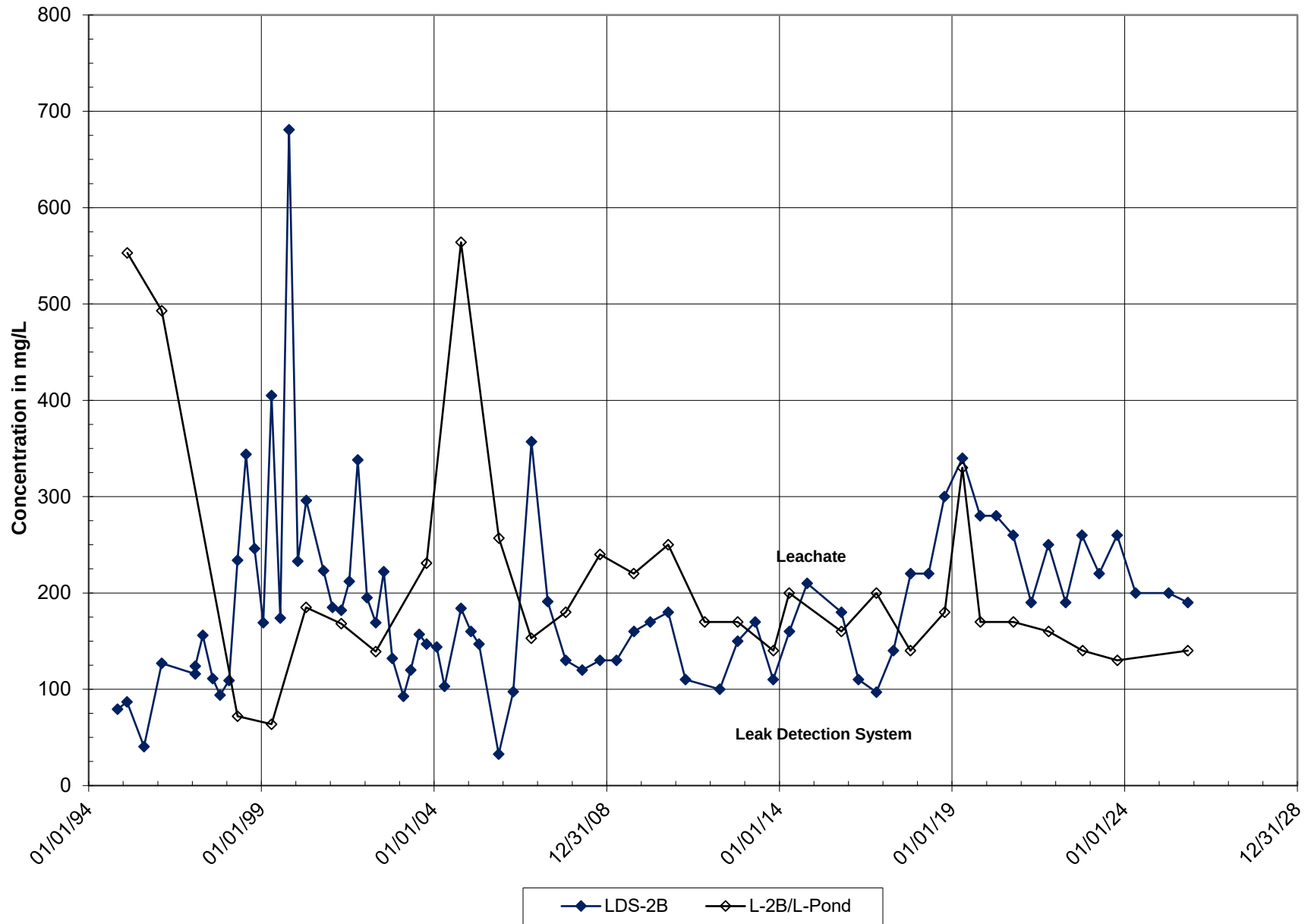
Cell 2 Leak Detection System (LDS-2B)
Chloride
Coffin Butte Landfill



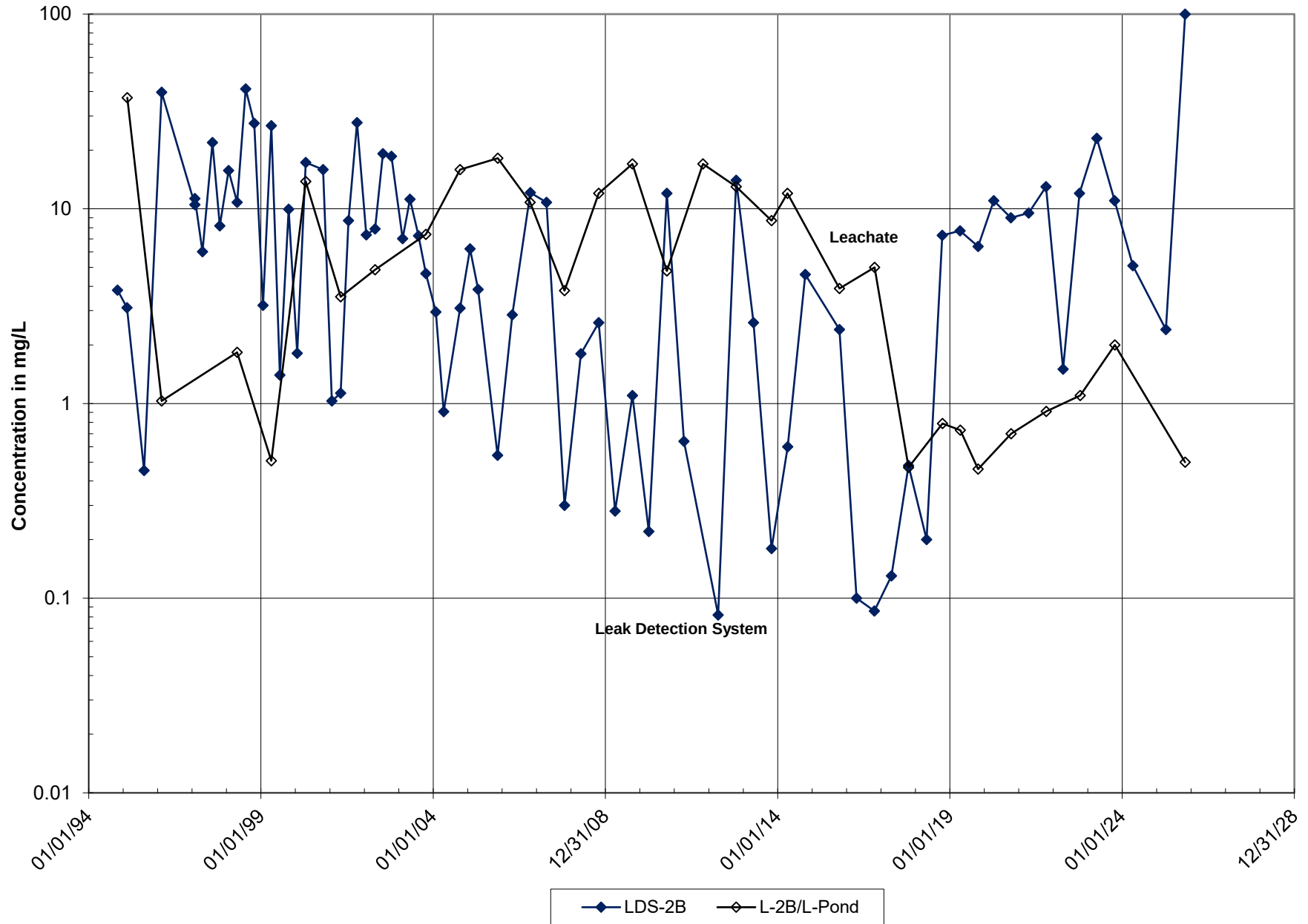
Cell 2 Leak Detection System (LDS-2B)
Total Dissolved Solids
Coffin Butte Landfill



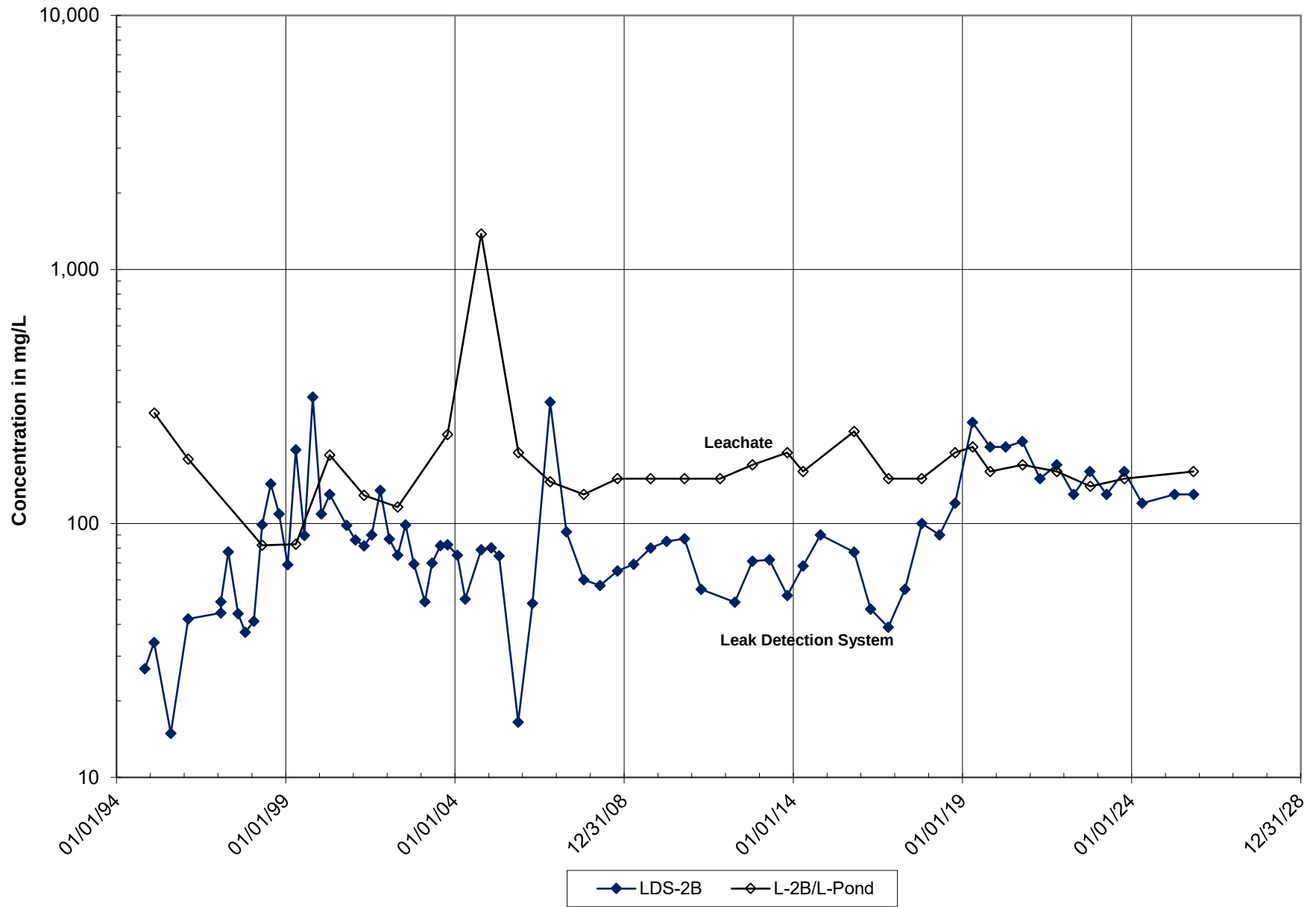
Cell 2 Leak Detection System (LDS-2B)
Calcium
Coffin Butte Landfill



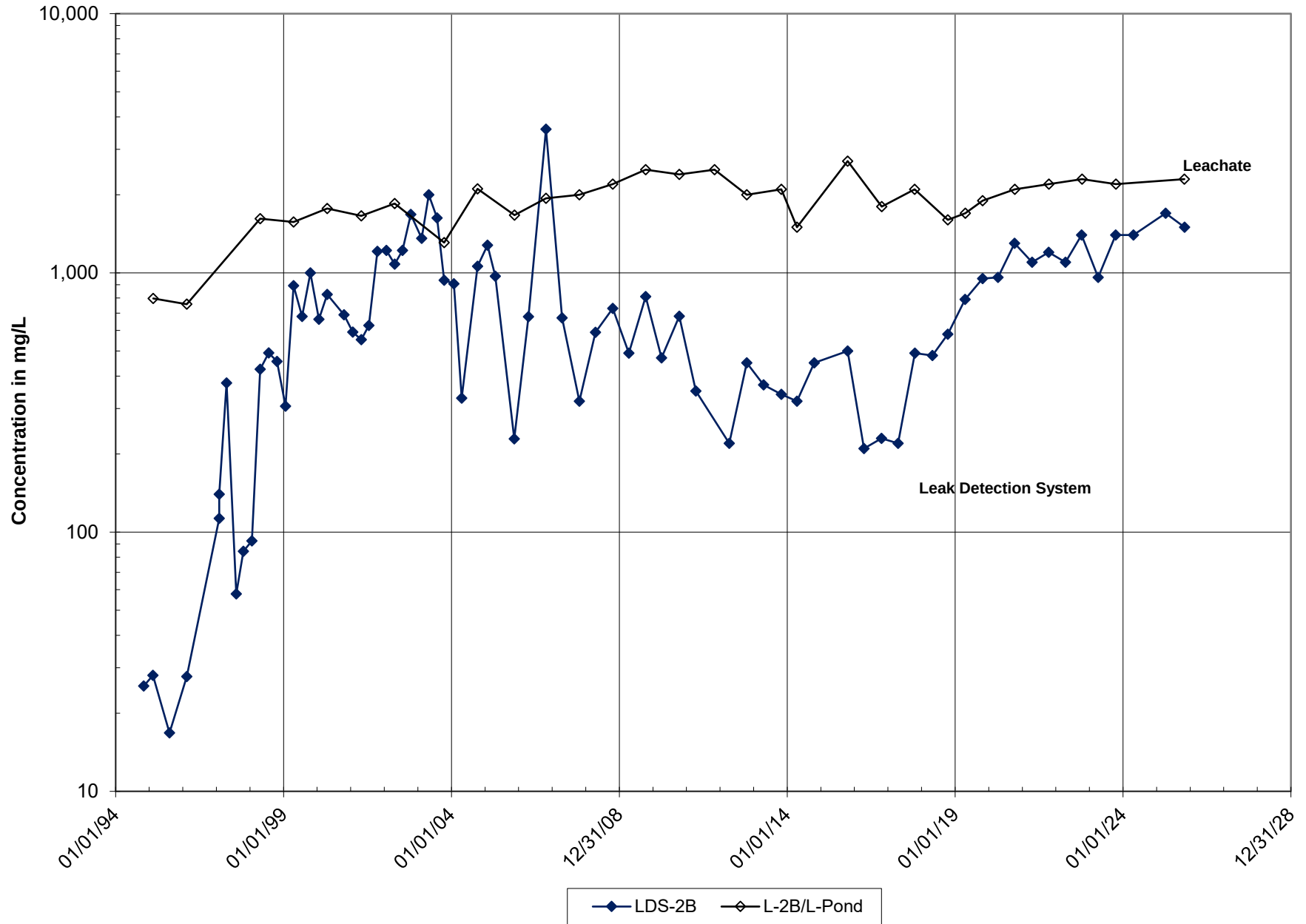
Cell 2 Leak Detection System (LDS-2B)
Iron
Coffin Butte Landfill



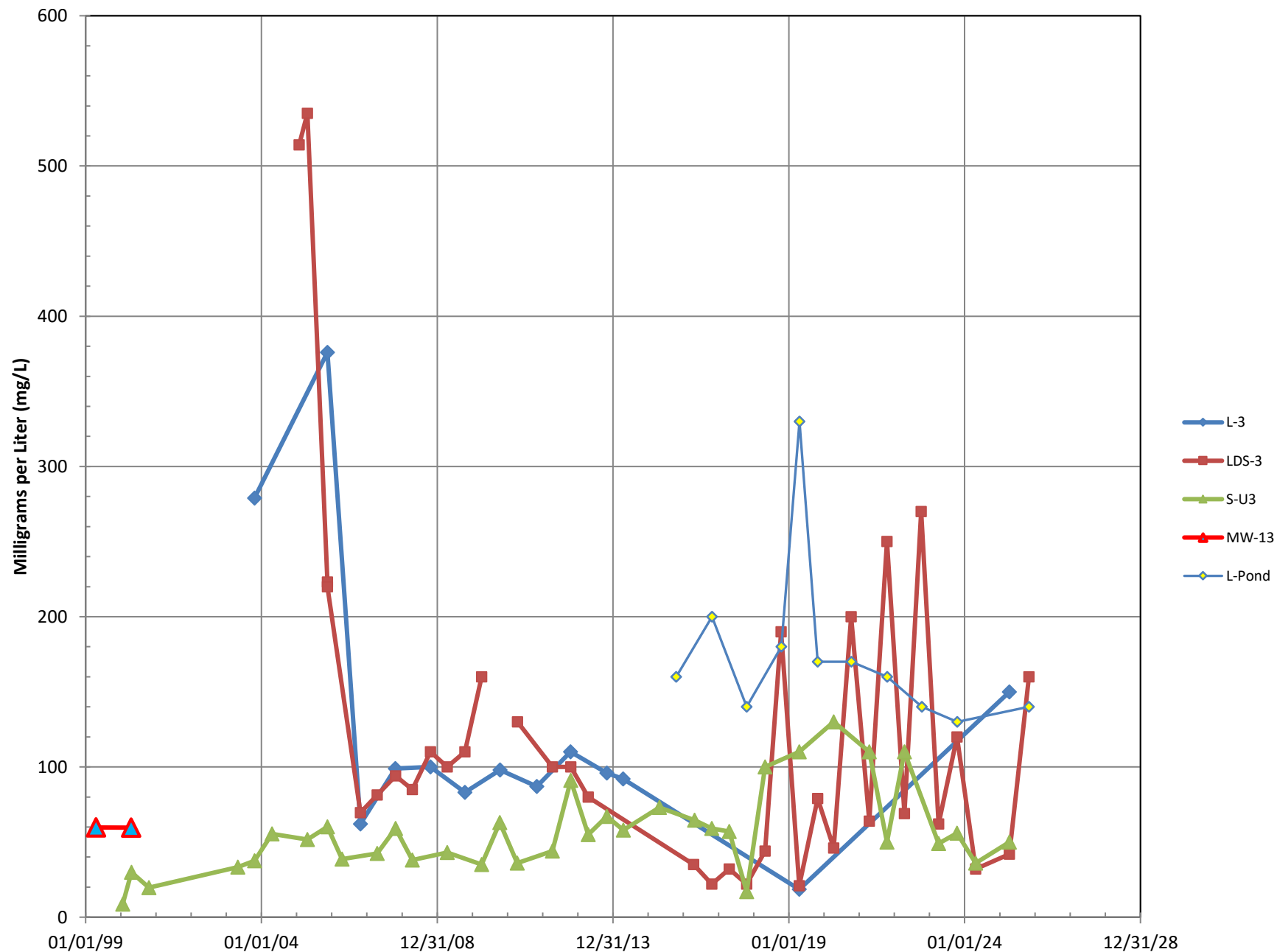
Cell 2 Leak Detection System (LDS-2B)
Magnesium
Coffin Butte Landfill



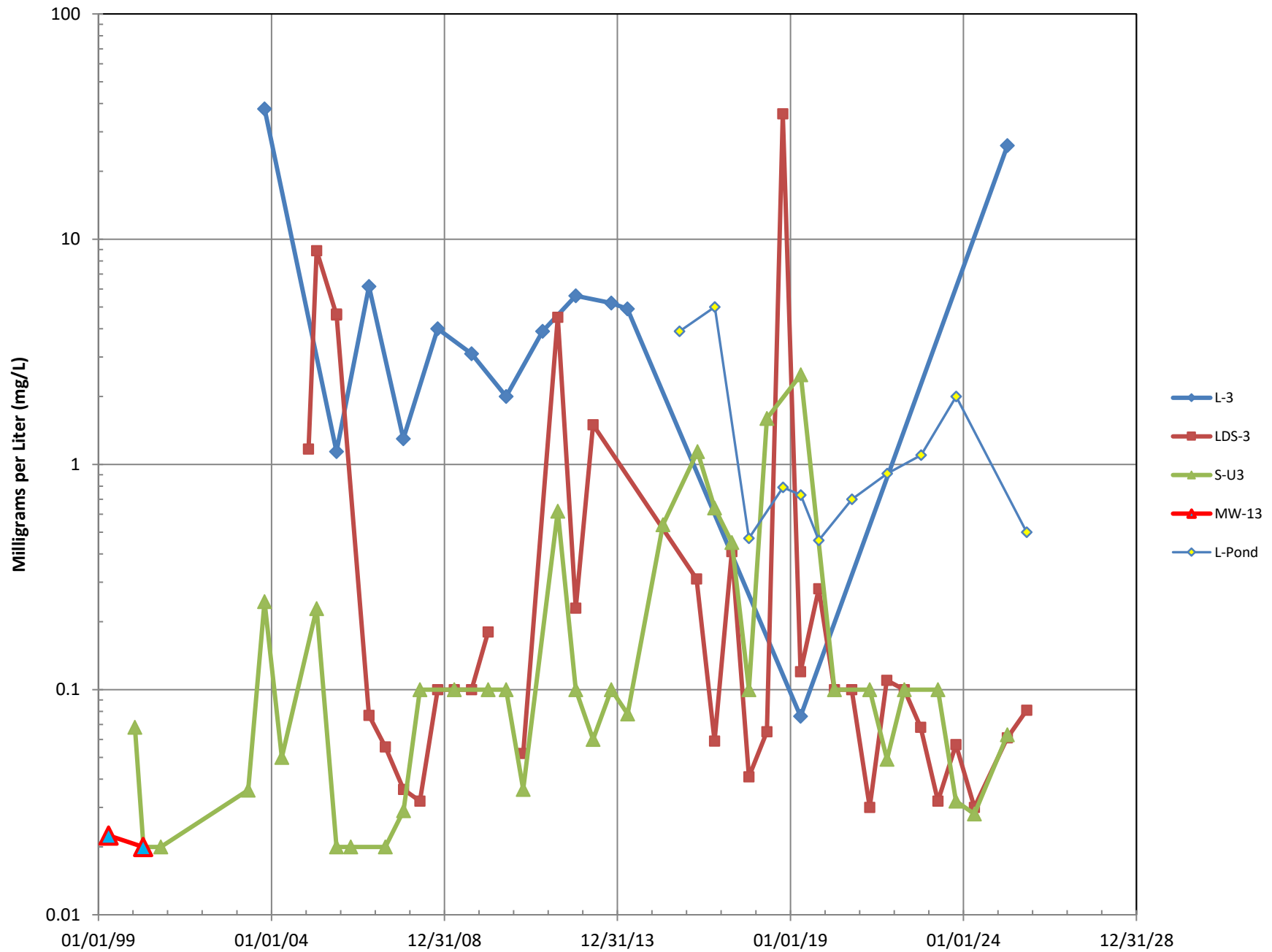
Cell 2 Leak Detection System (LDS-2B)
Sodium
Coffin Butte Landfill



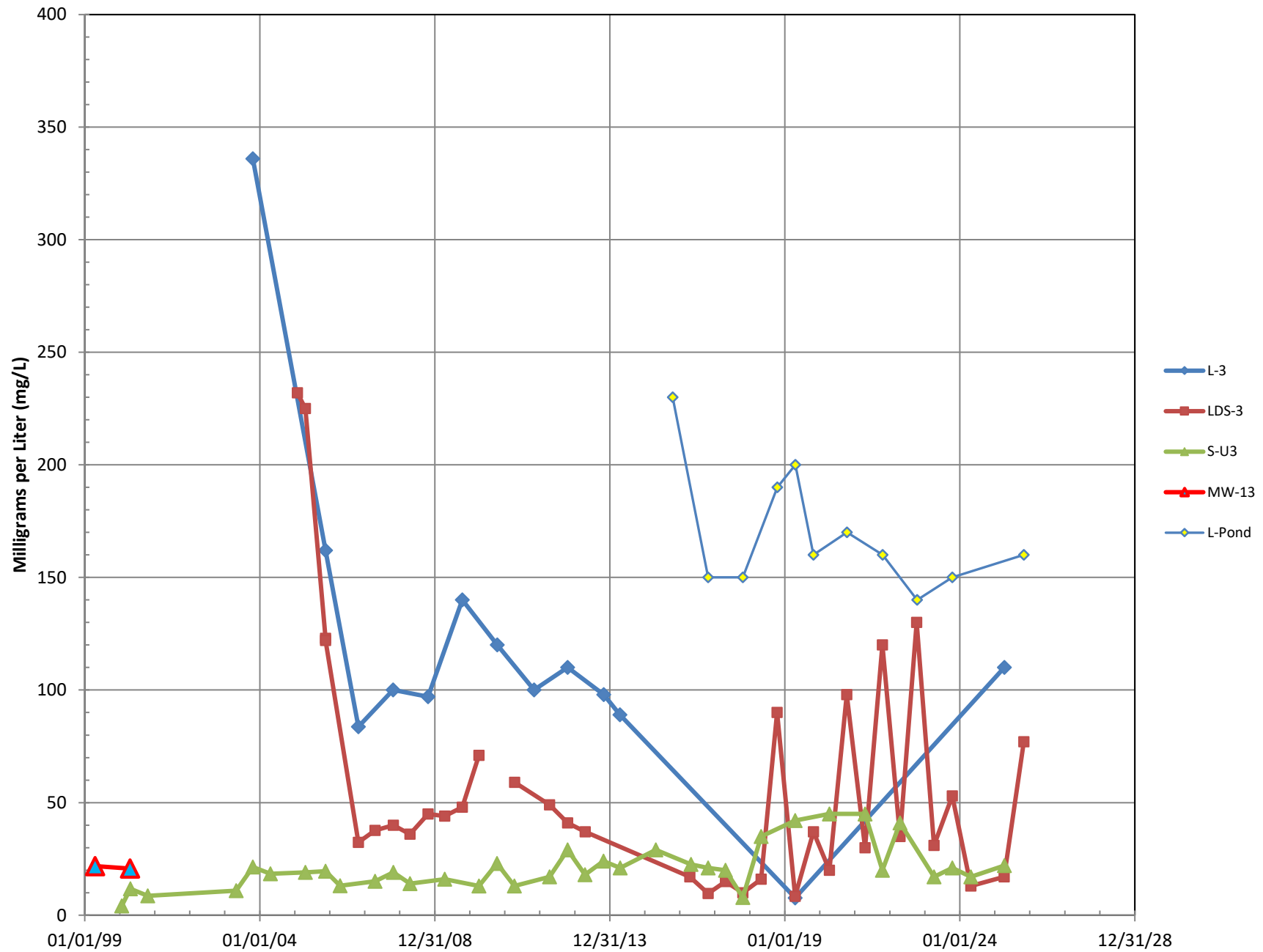
Cell 3 Underdrain Water Quality
Calcium
Coffin Butte Landfill



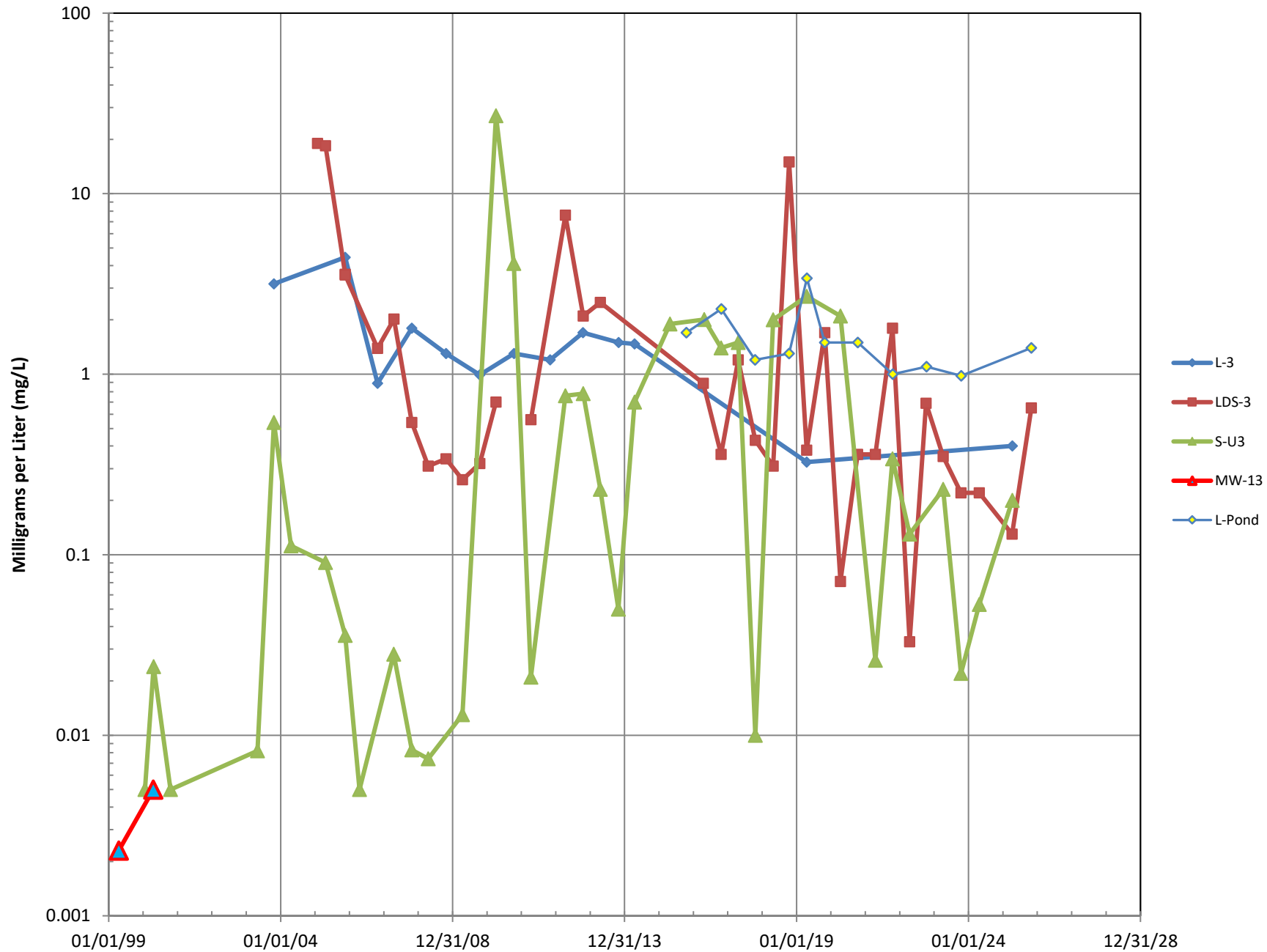
Cell 3 Underdrain Water Quality
Iron
Coffin Butte Landfill



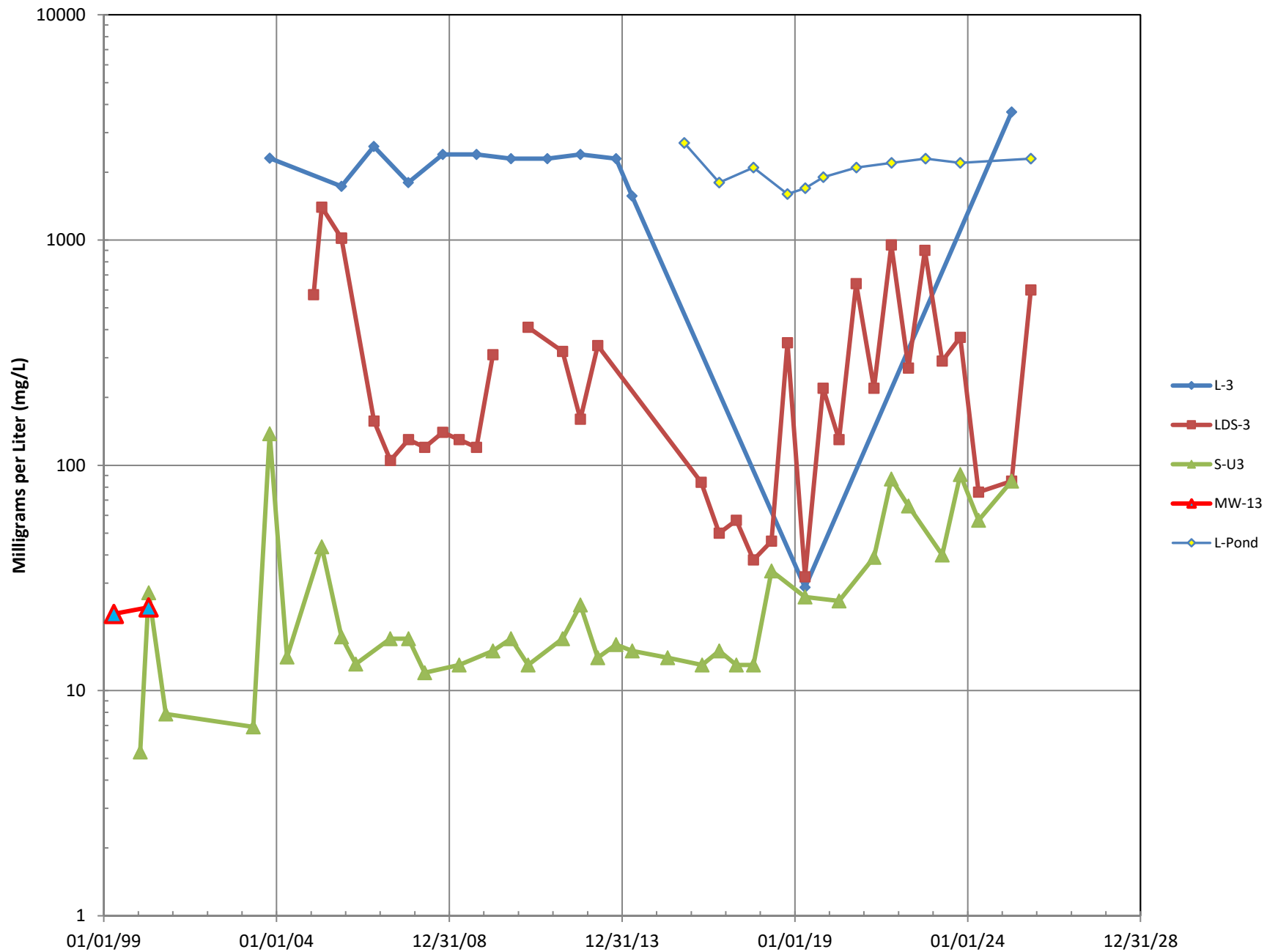
Cell 3 Underdrain Water Quality
Magnesium
Coffin Butte Landfill



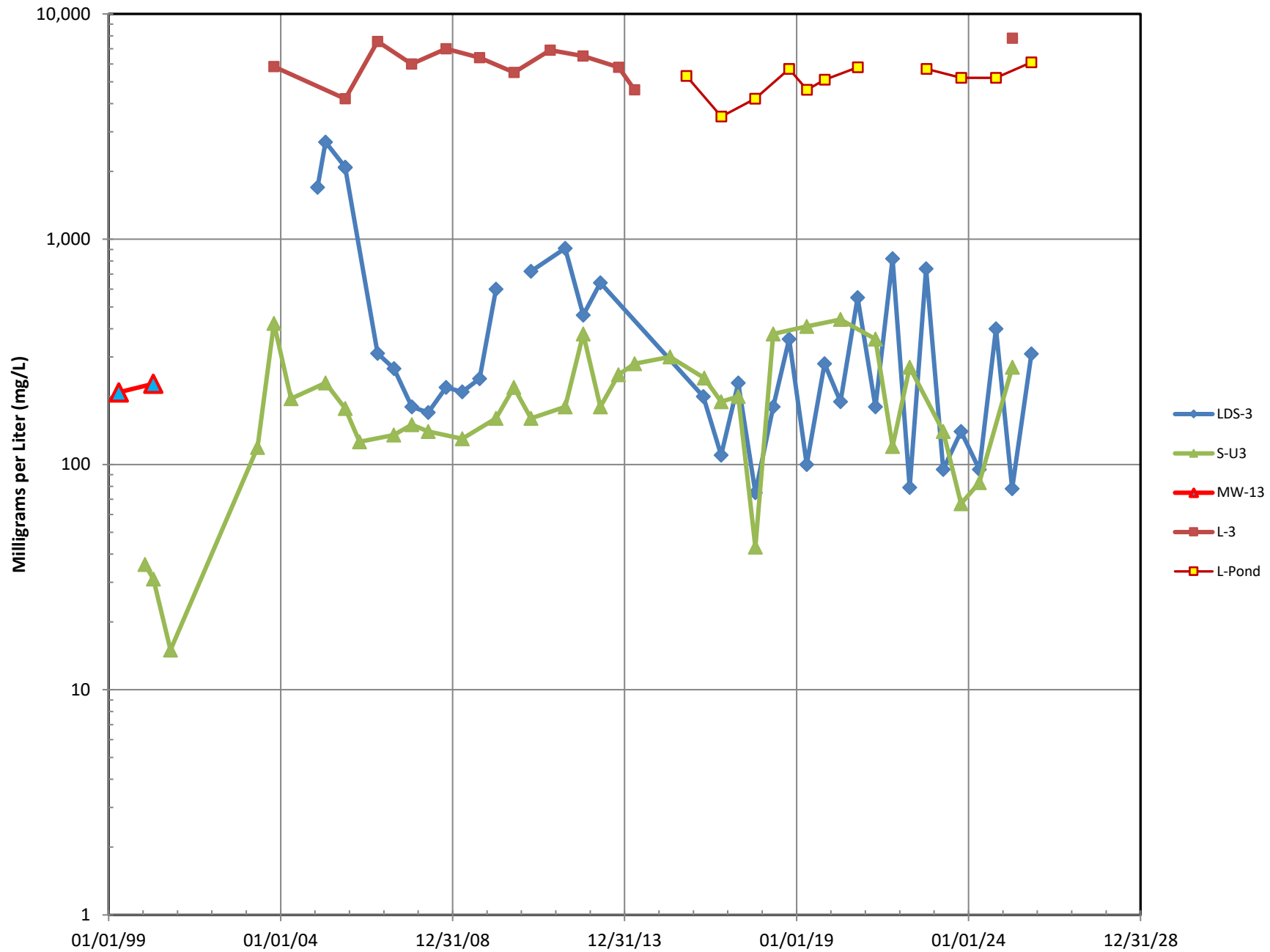
Cell 3 Underdrain Water Quality
Manganese
Coffin Butte Landfill



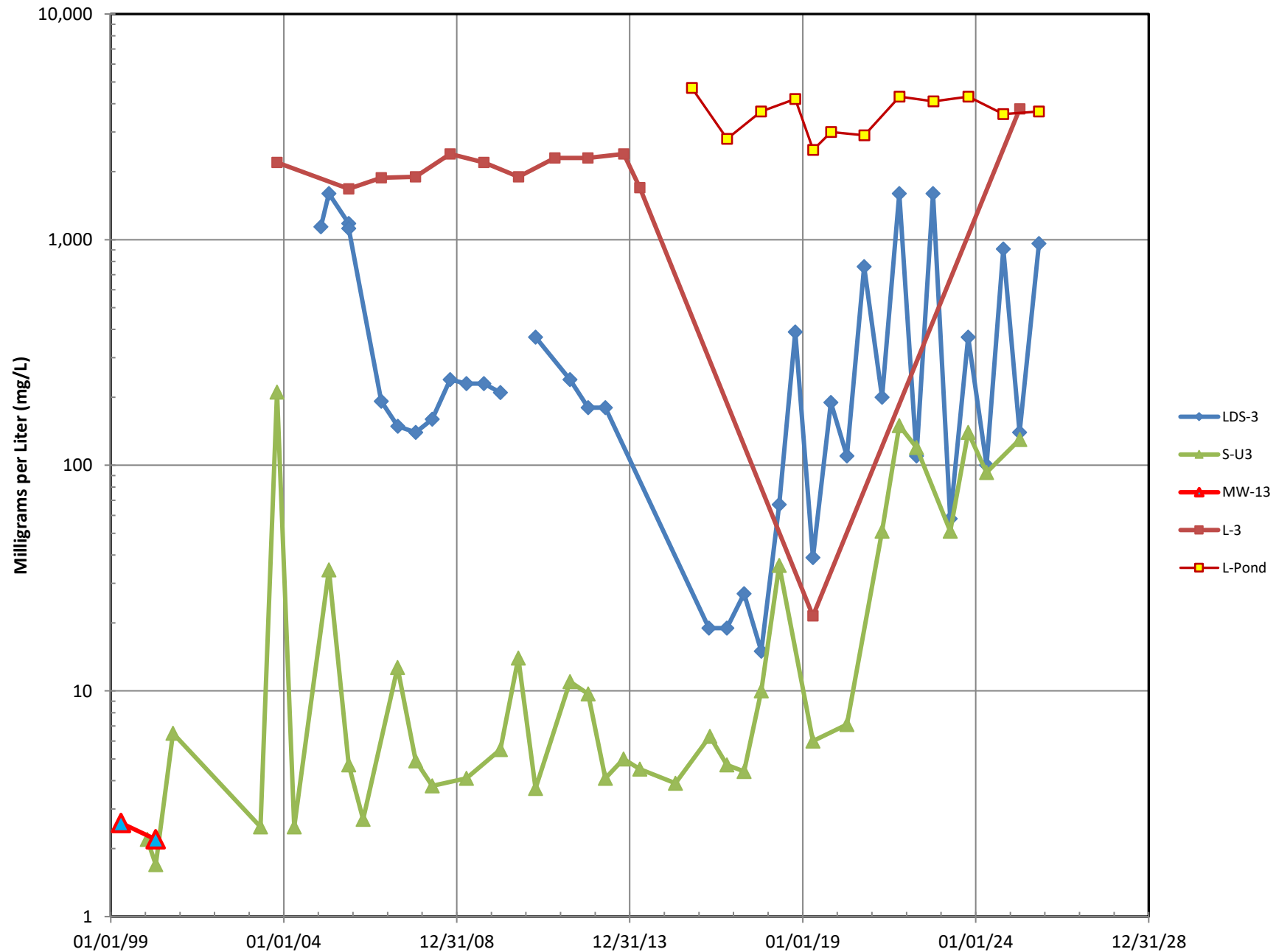
Cell 3 Underdrain Water Quality
Sodium
Coffin Butte Landfill



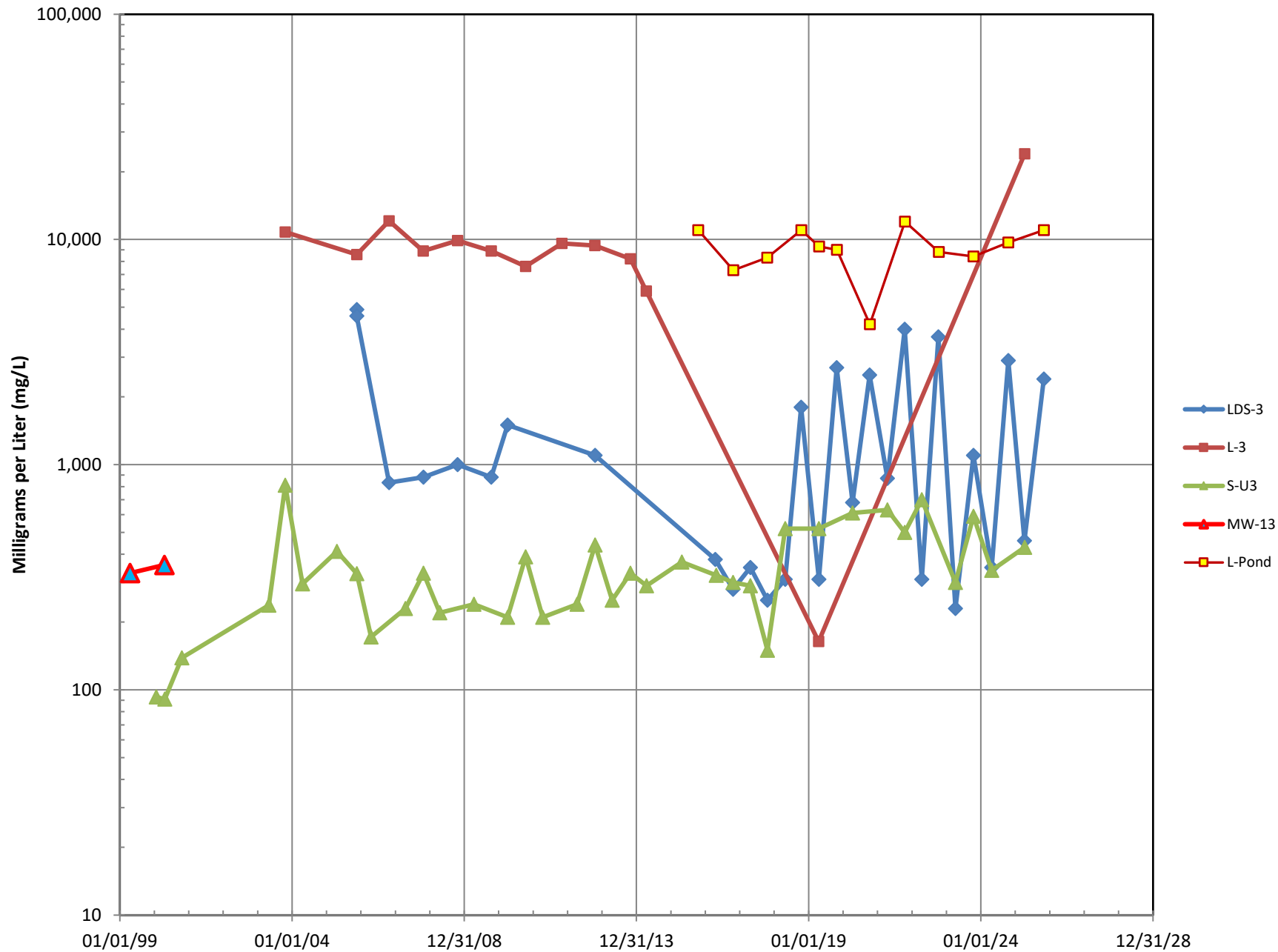
Cell 3 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



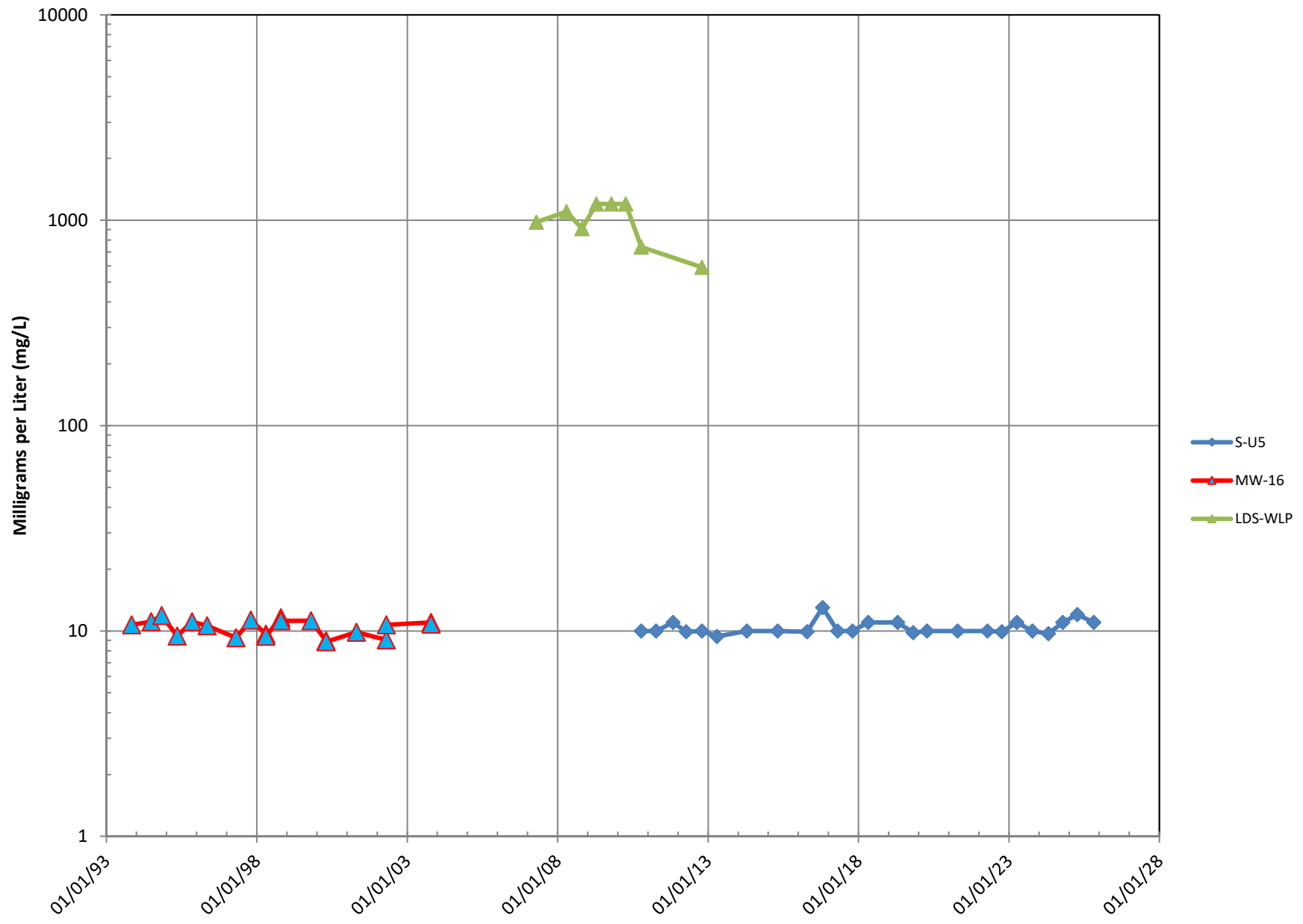
Cell 3 Underdrain Water Quality
Chloride
Coffin Butte Landfill



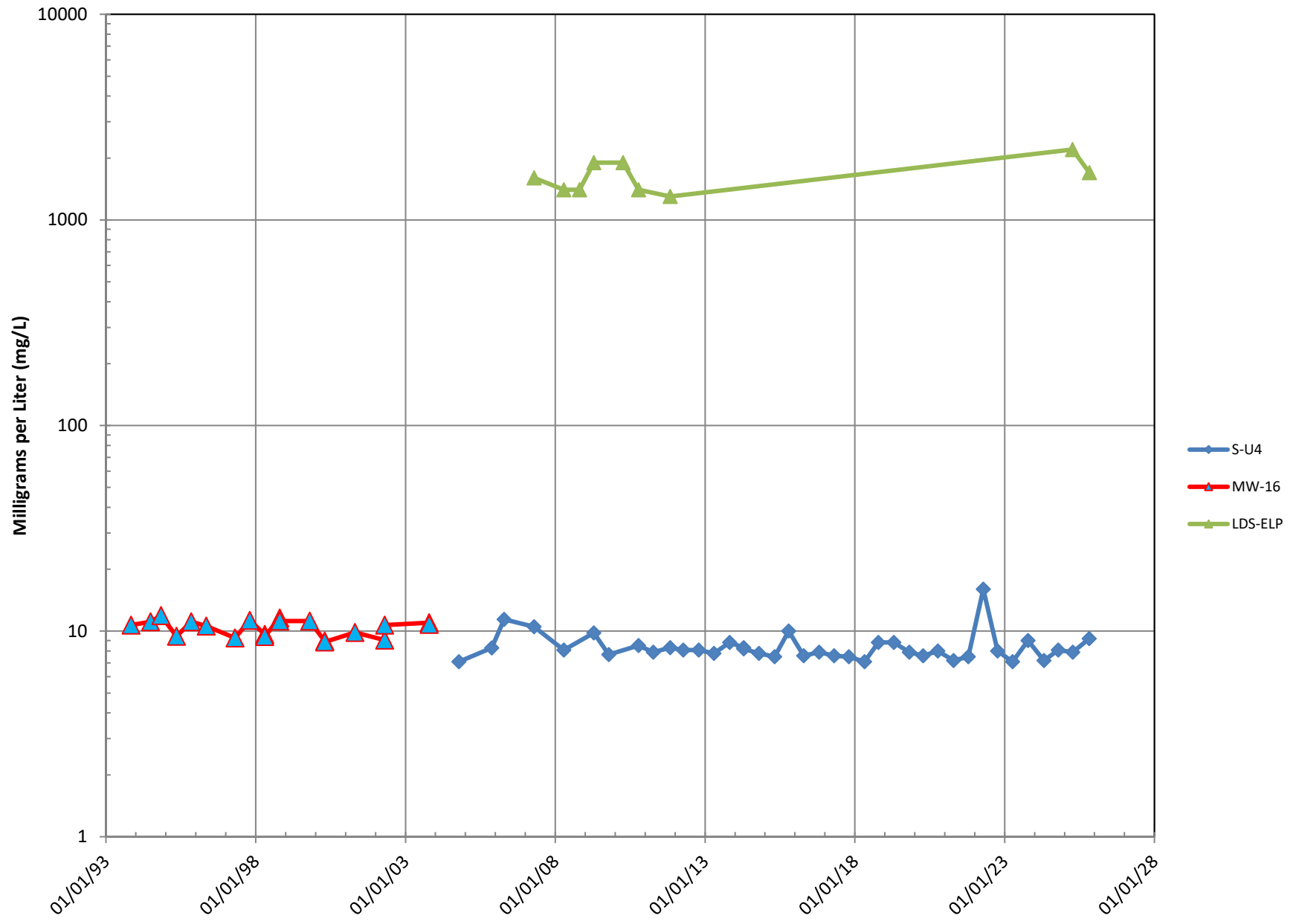
Cell 3 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



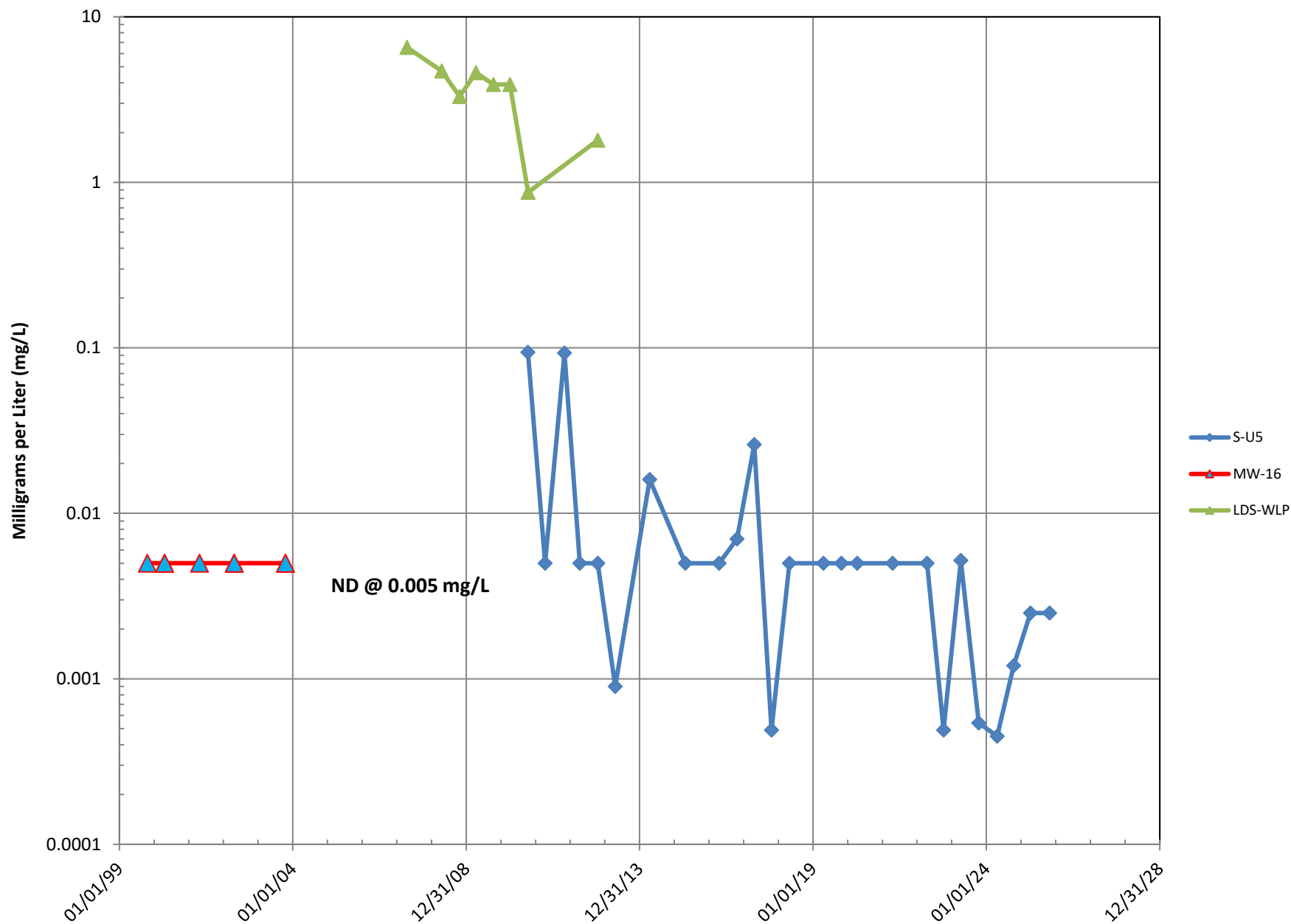
Underdrain - West Leachate Pond Area
Sodium
Coffin Butte Landfill



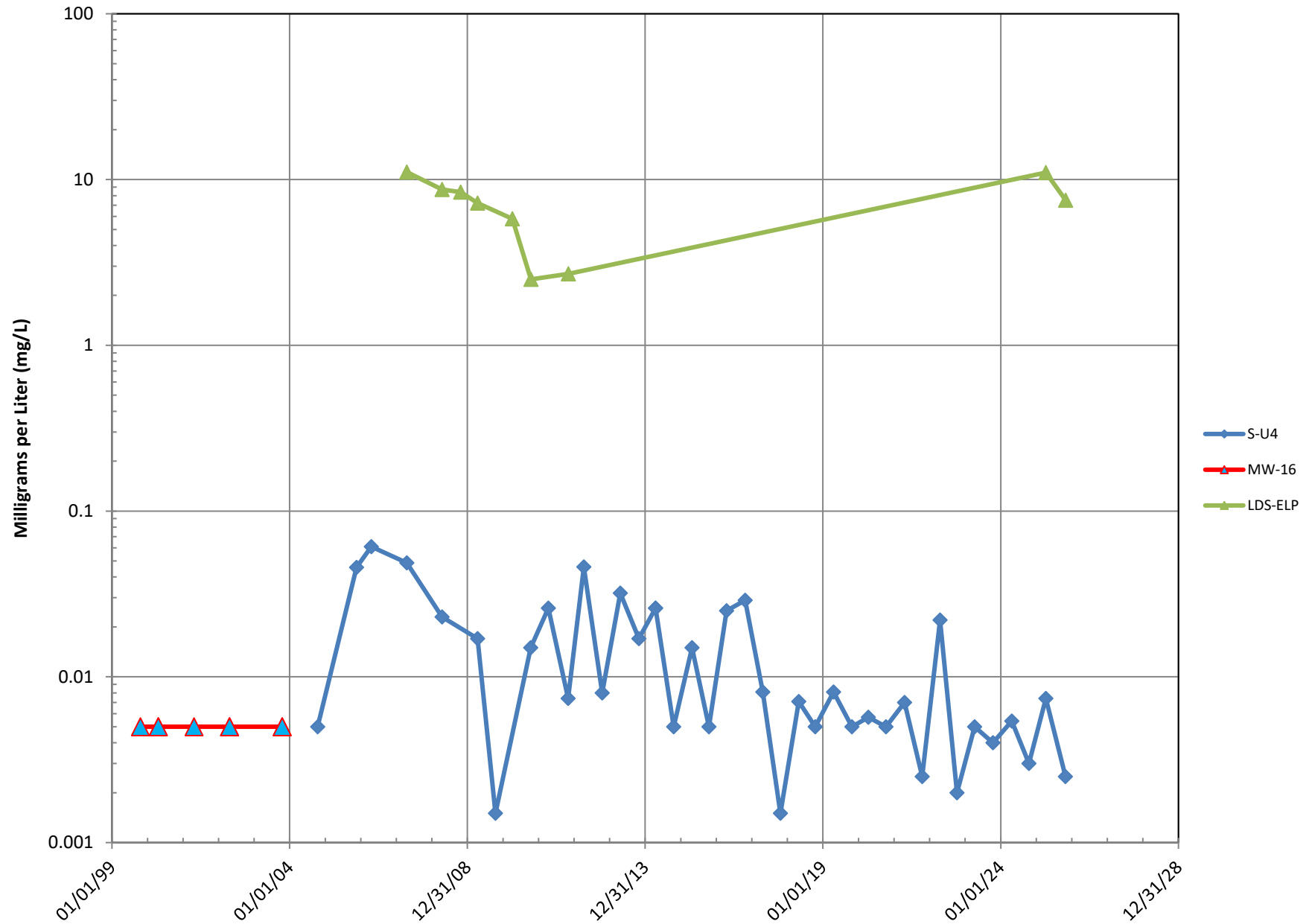
Underdrain - East Leachate Pond Area
Sodium
Coffin Butte Landfill



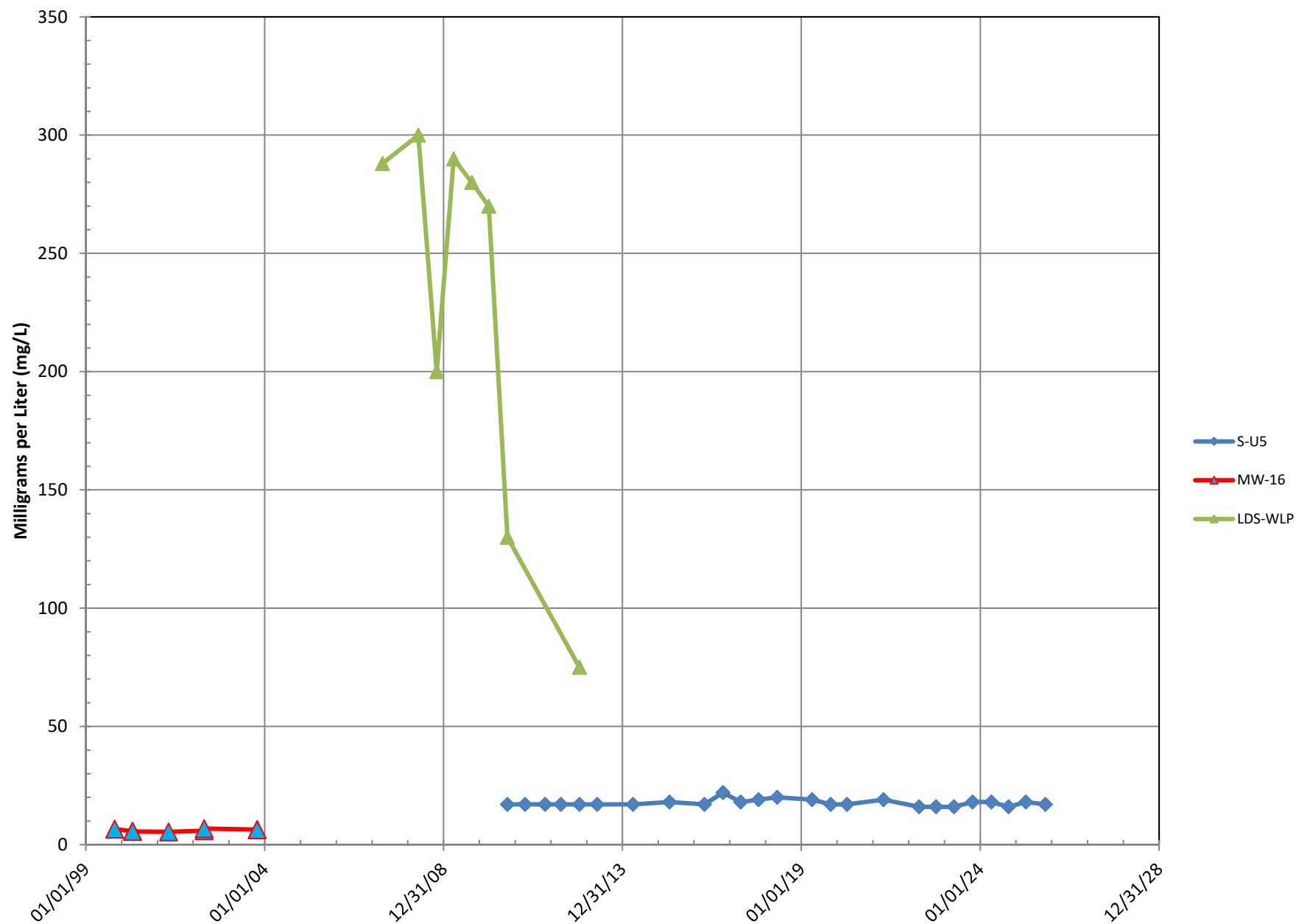
Underdrain - West Leachate Pond Area
Manganese
Coffin Butte Landfill



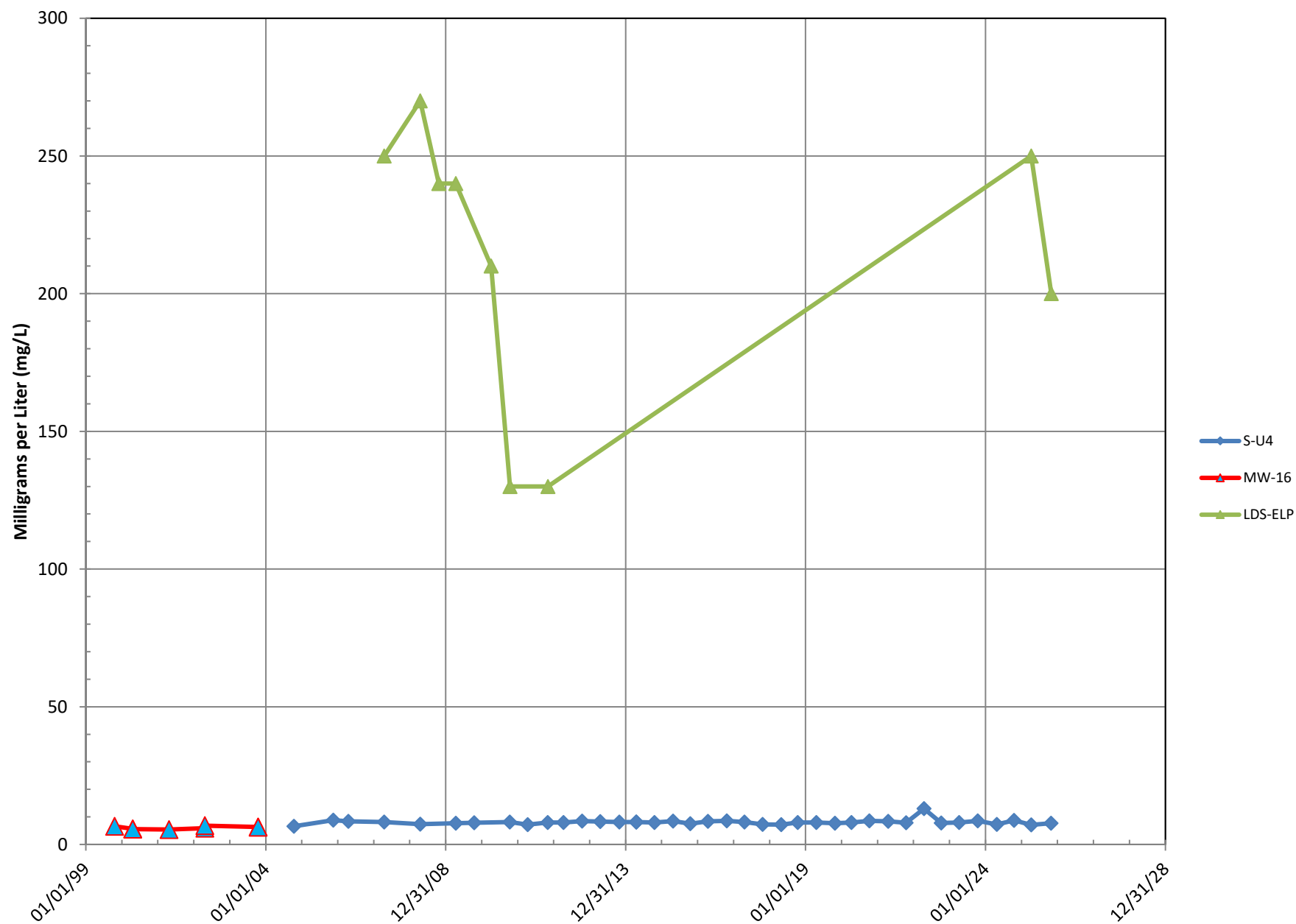
Underdrain - East Leachate Pond Area
Manganese
Coffin Butte Landfill



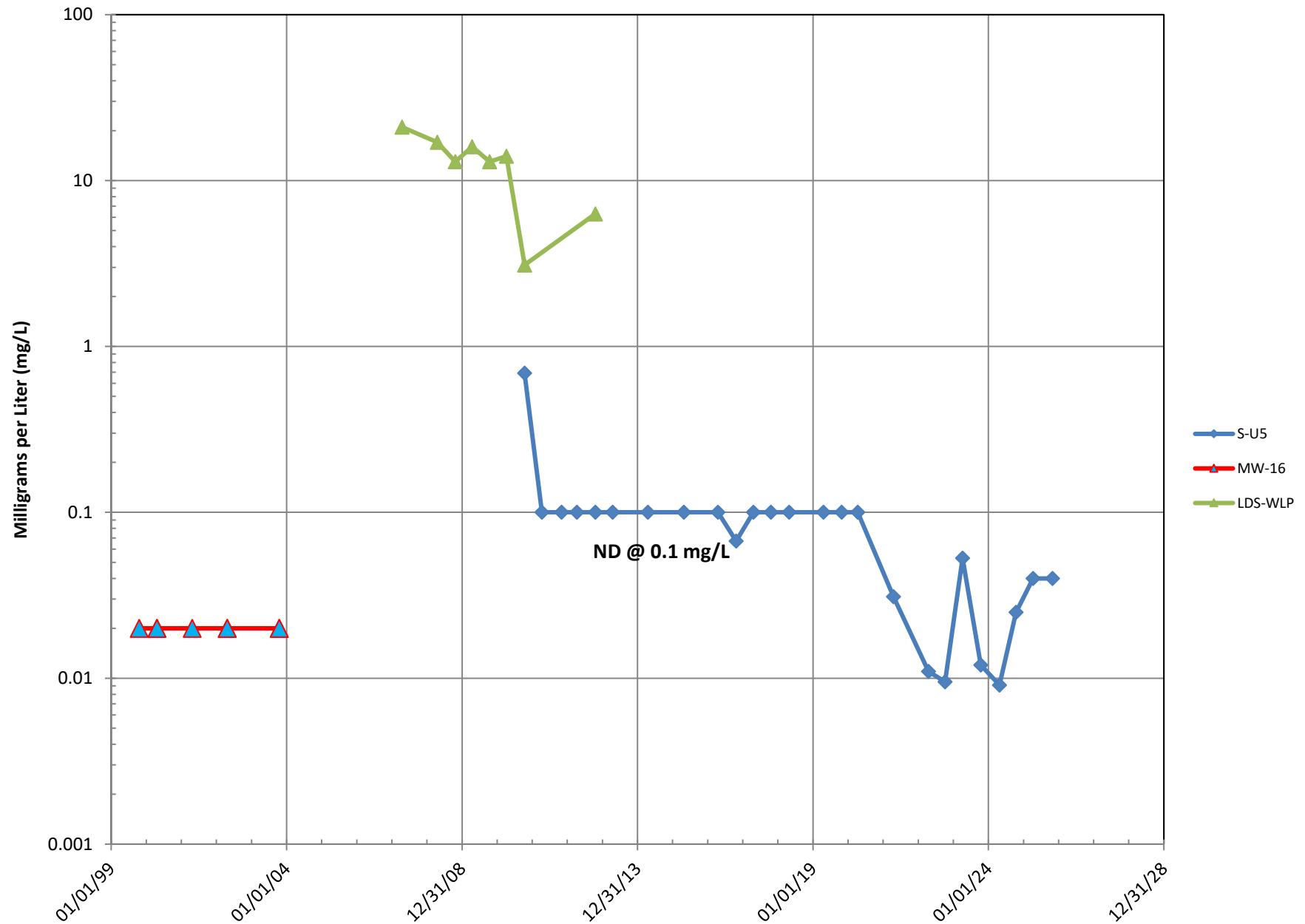
Underdrain - West Leachate Pond Area
Magnesium
Coffin Butte Landfill



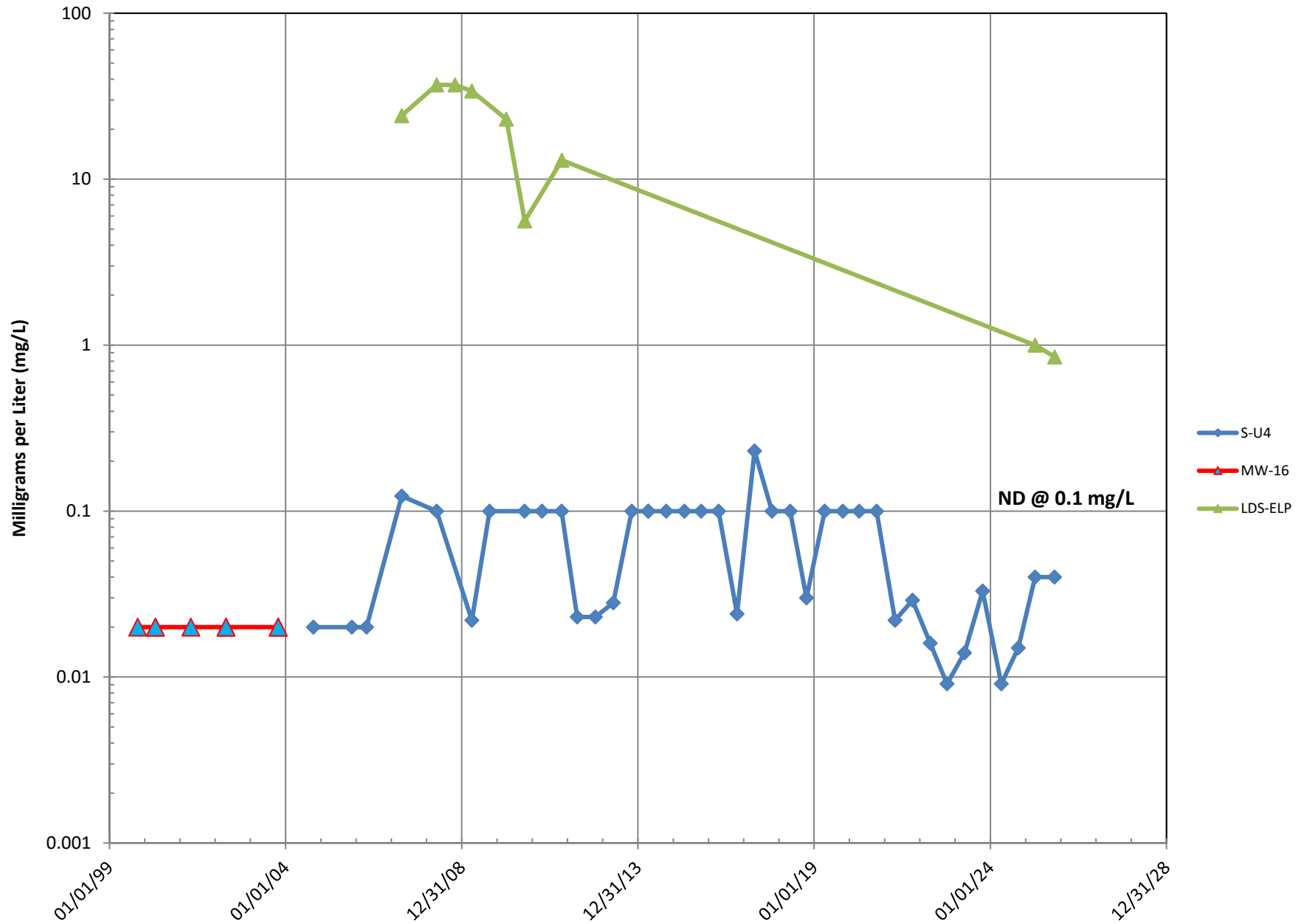
Underdrain - East Leachate Pond Area
Magnesium
Coffin Butte Landfill



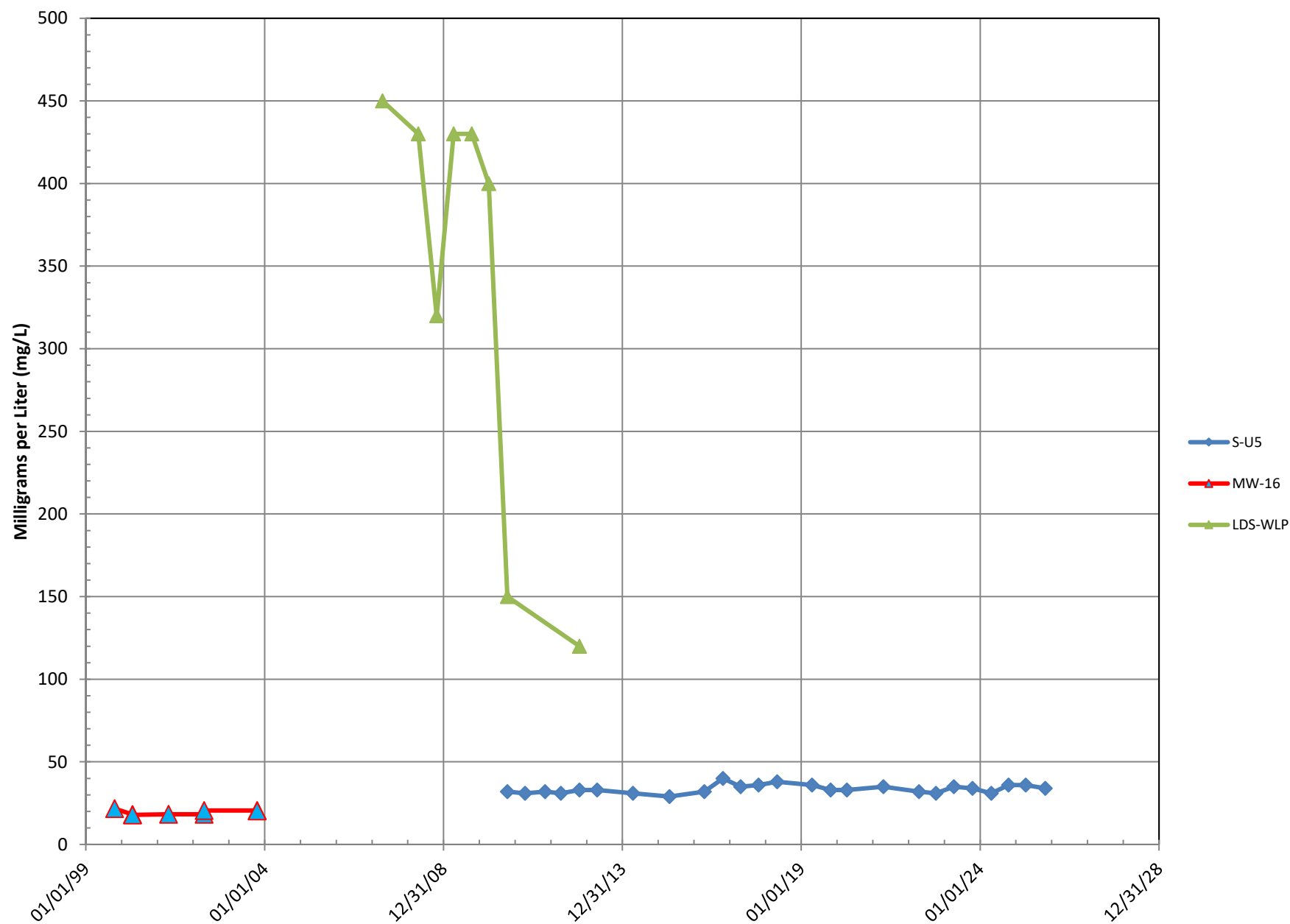
Underdrain - West Leachate Pond Area
Iron
Coffin Butte Landfill



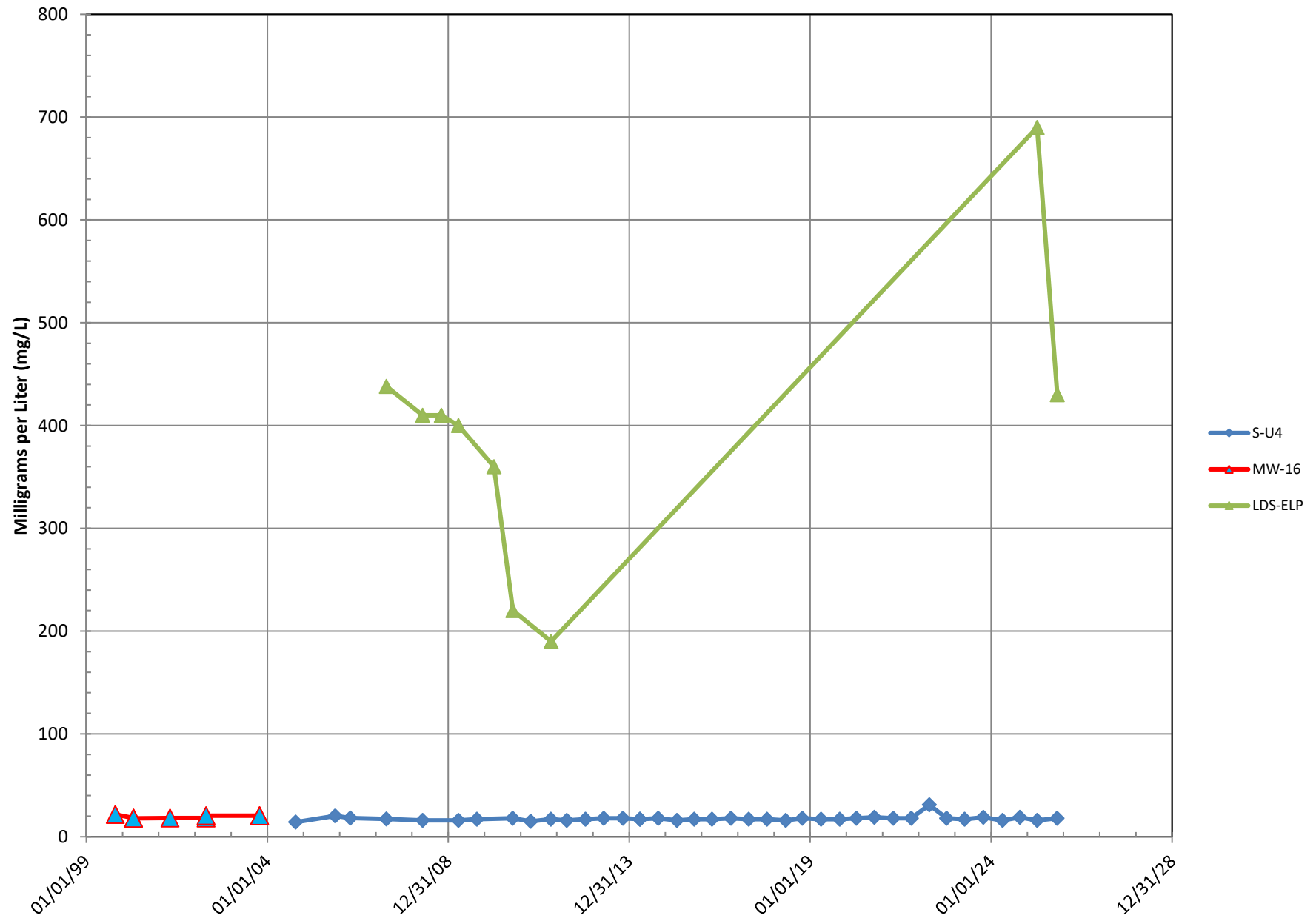
Underdrain - East Leachate Pond Area
Iron
Coffin Butte Landfill



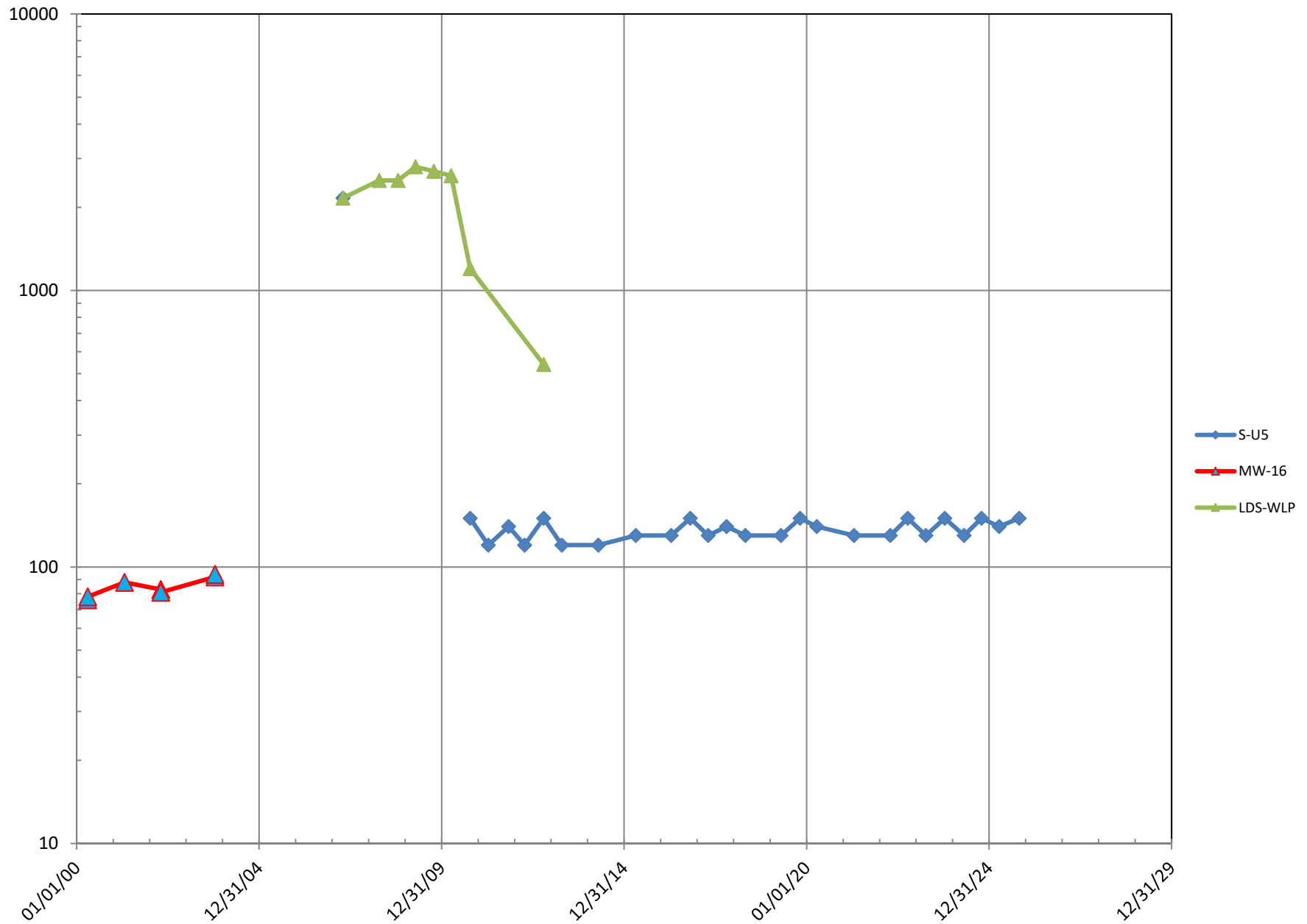
Underdrain - West Leachate Pond Area
Calcium
Coffin Butte Landfill



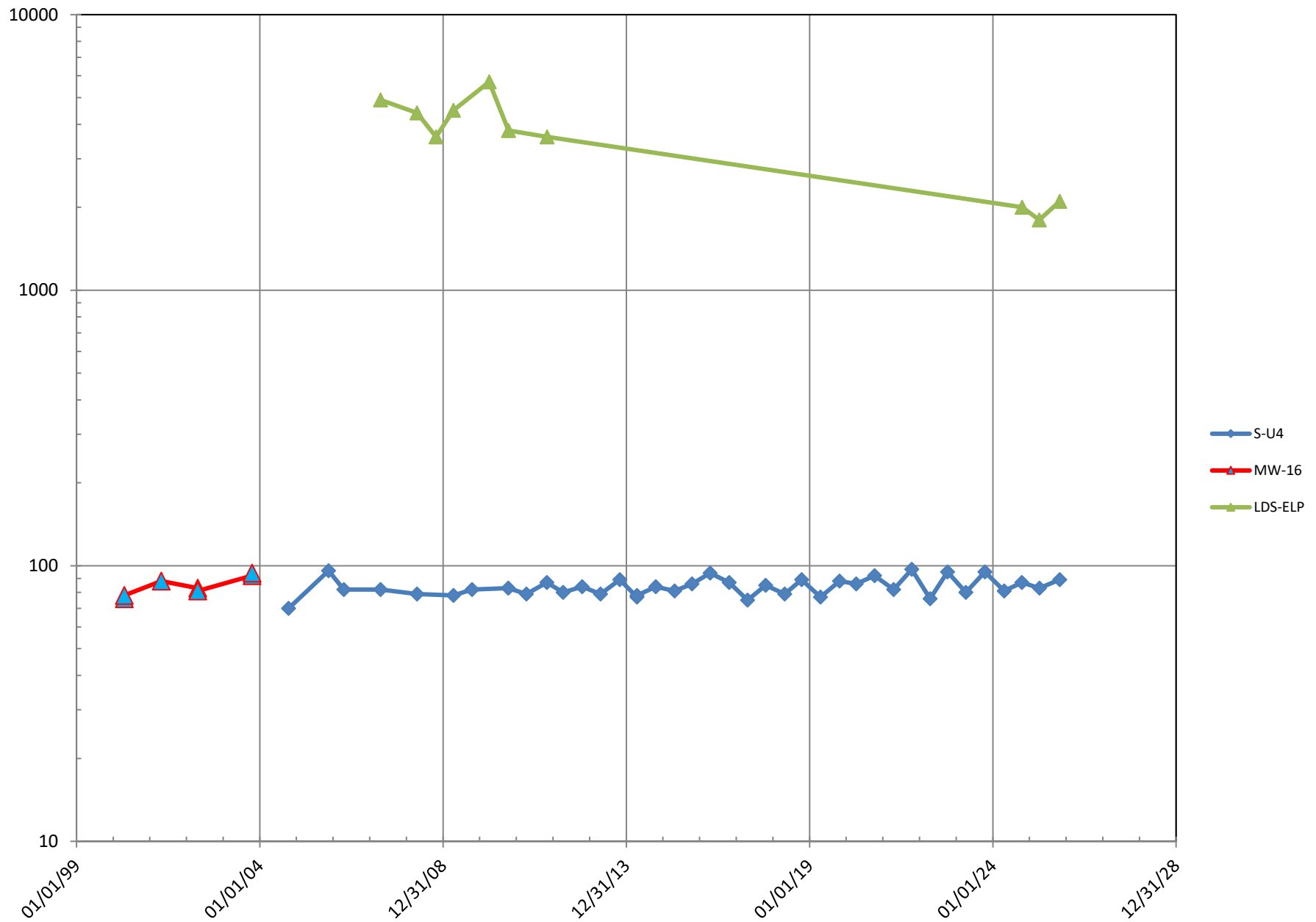
Underdrain - East Leachate Pond Area
Calcium
Coffin Butte Landfill



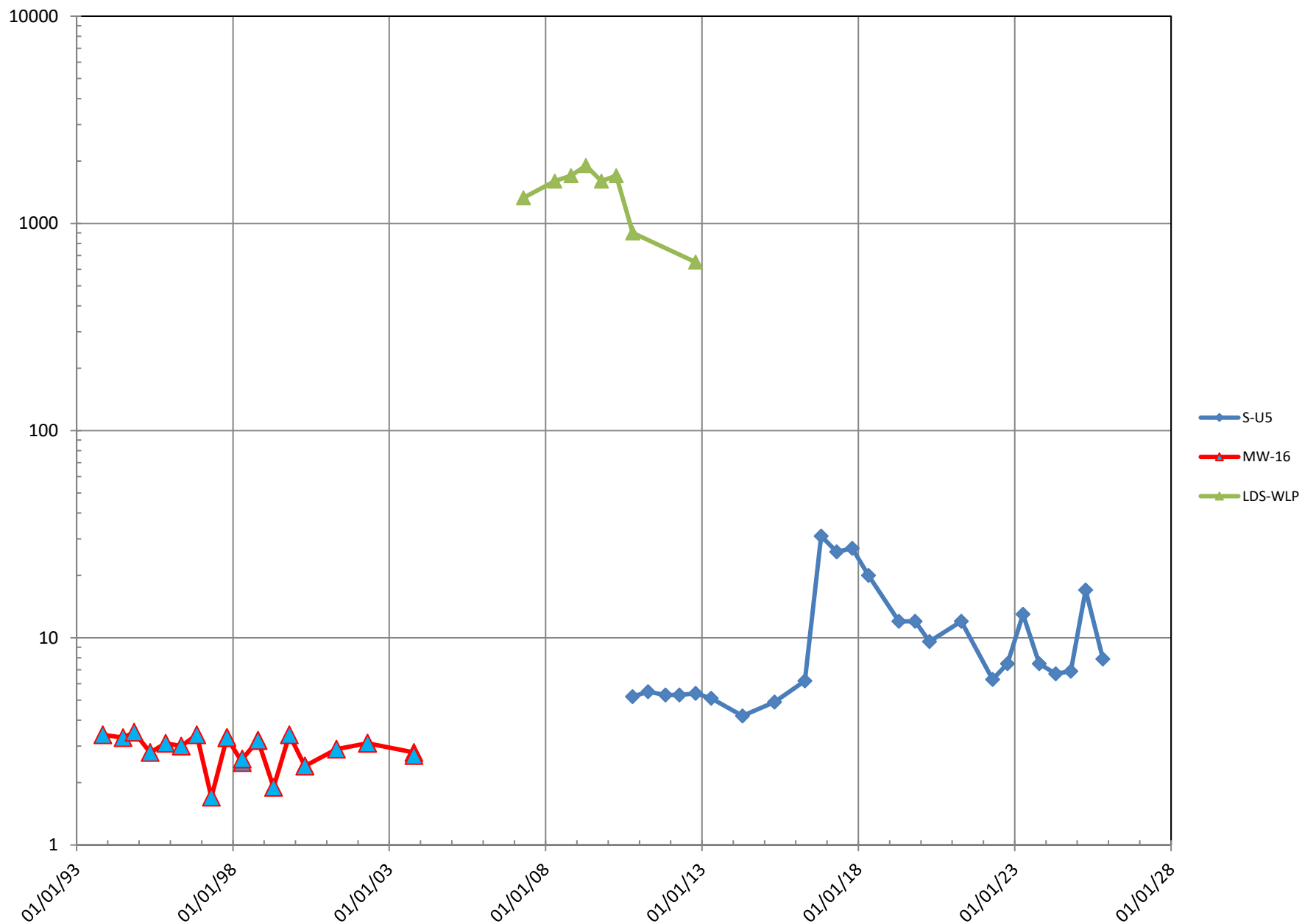
Underdrain - West Leachate Pond Area
Bicarbonate
Coffin Butte Landfill



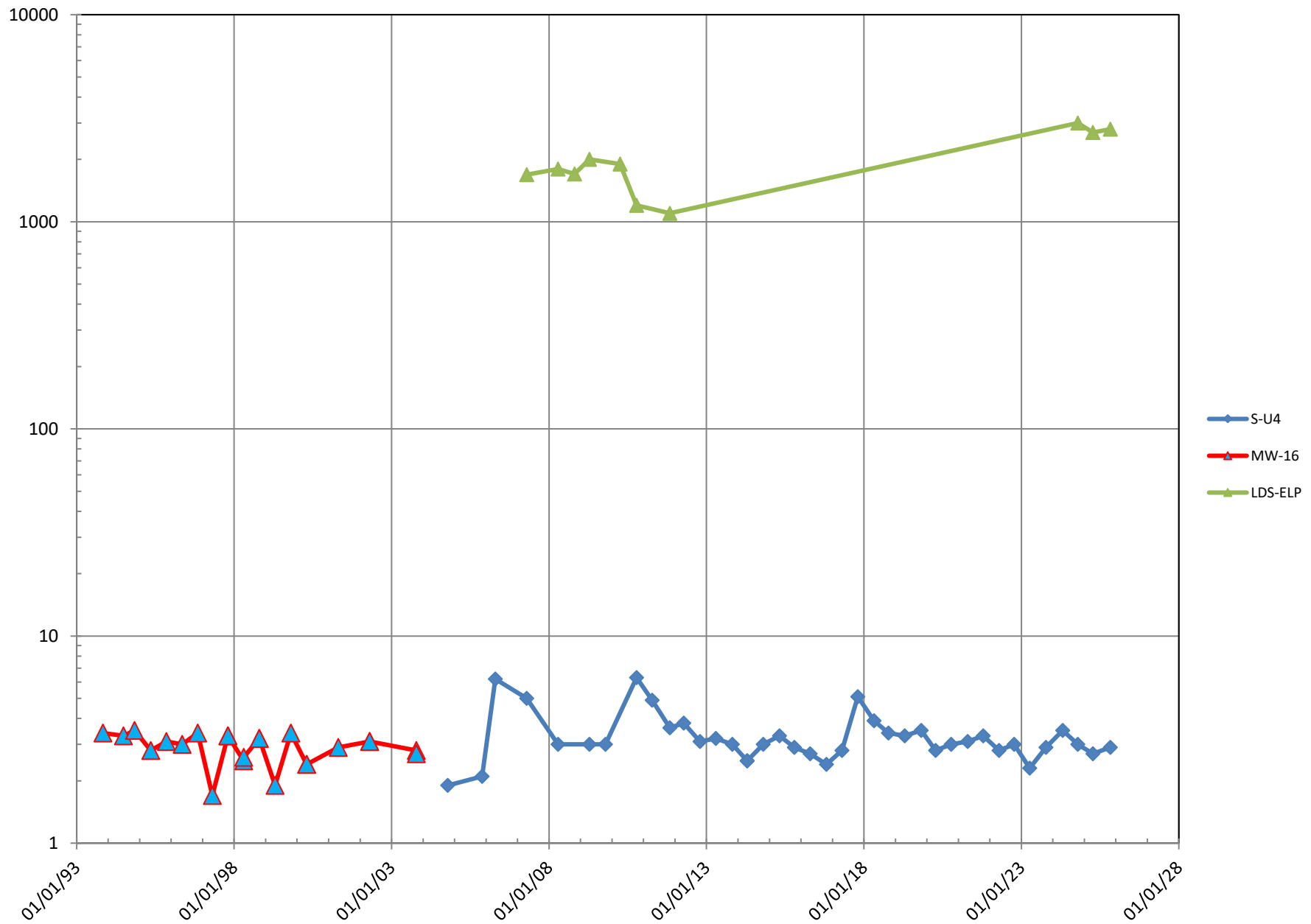
Underdrain - East Leachate Pond Area
Bicarbonate
Coffin Butte Landfill



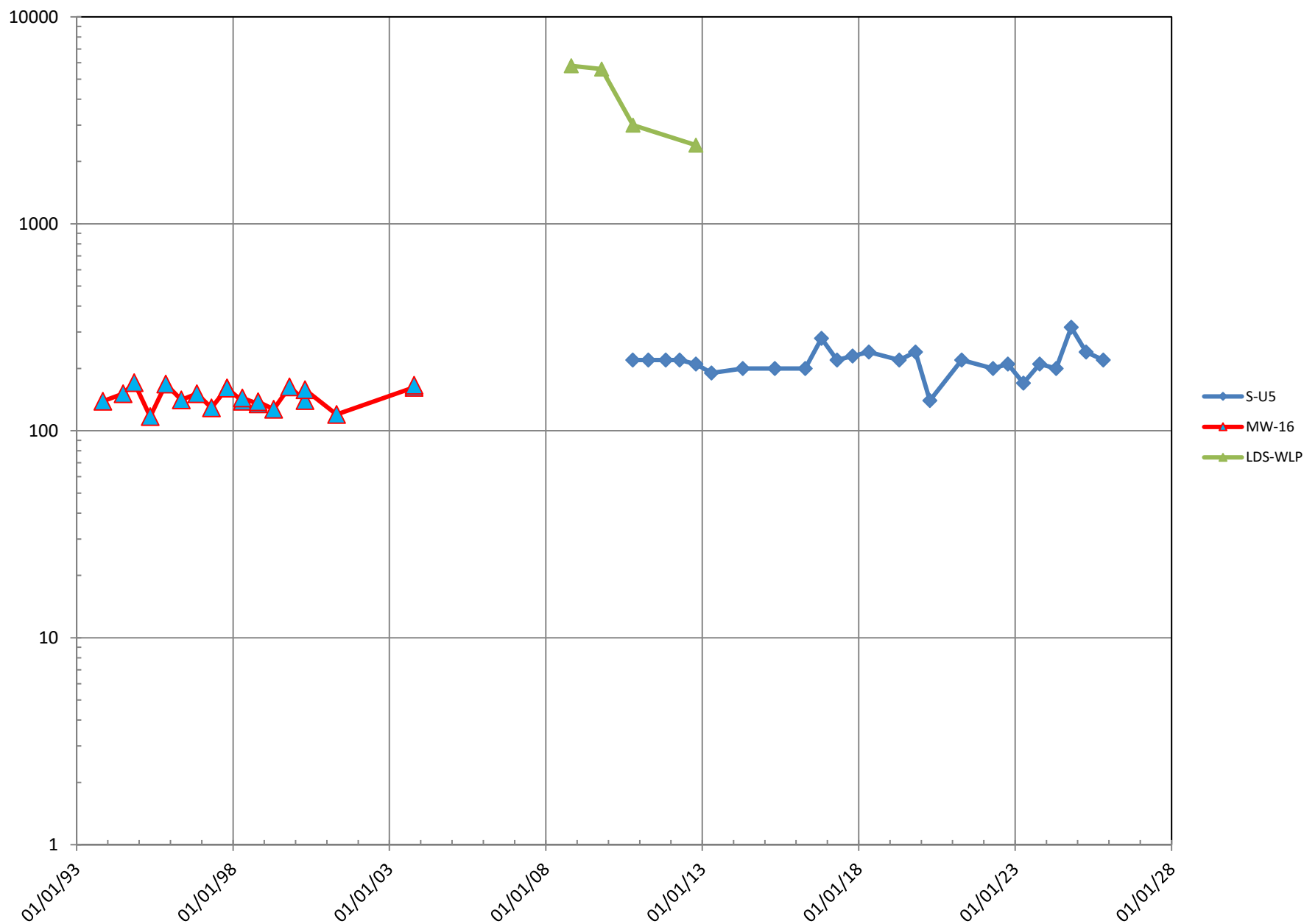
Underdrain - West Leachate Pond Area
Chloride
Coffin Butte Landfill



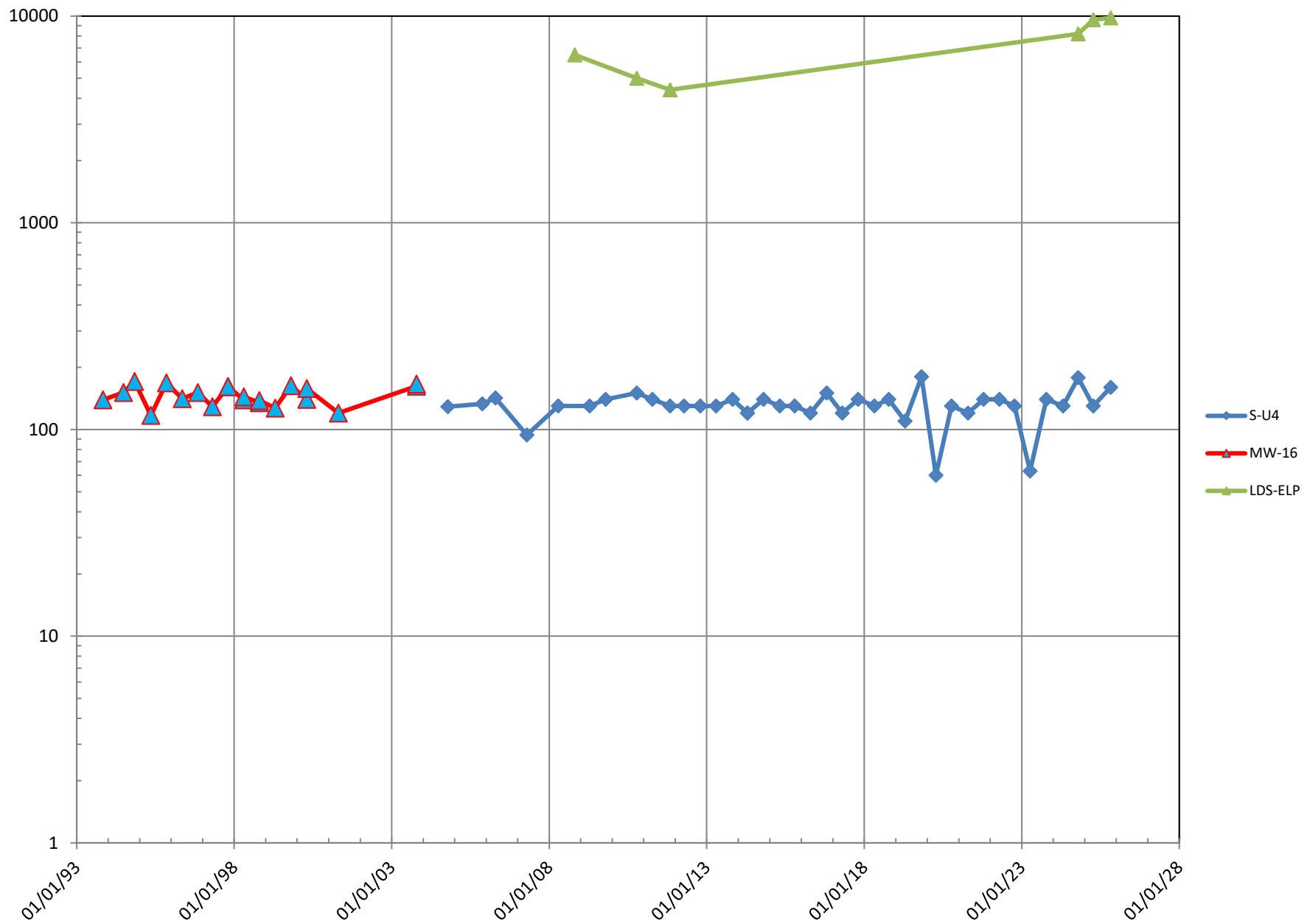
Underdrain - East Leachate Pond Area
Chloride
Coffin Butte Landfill



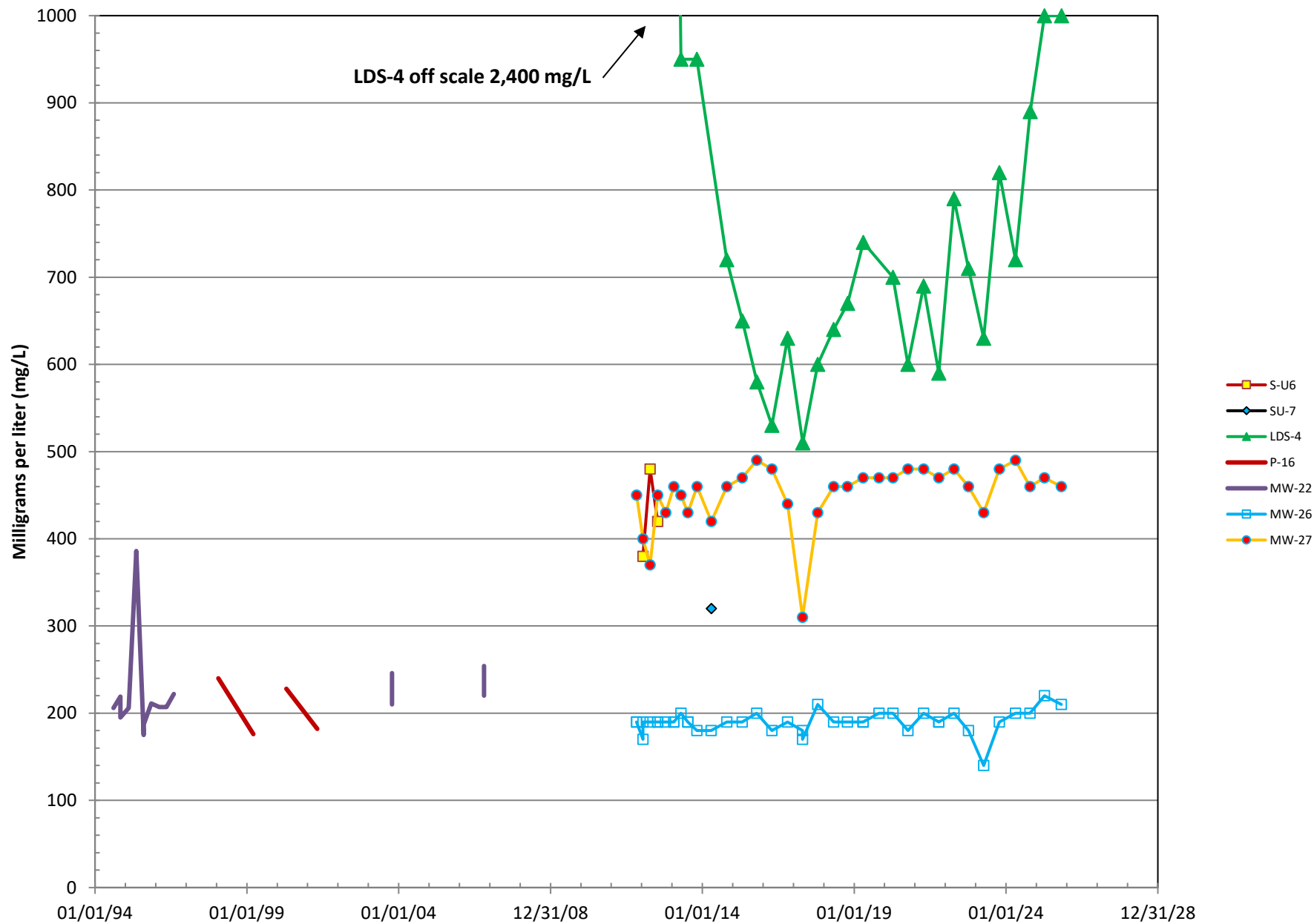
Underdrain - West Leachate Pond Area
Total Dissolved Solids
Coffin Butte Landfill



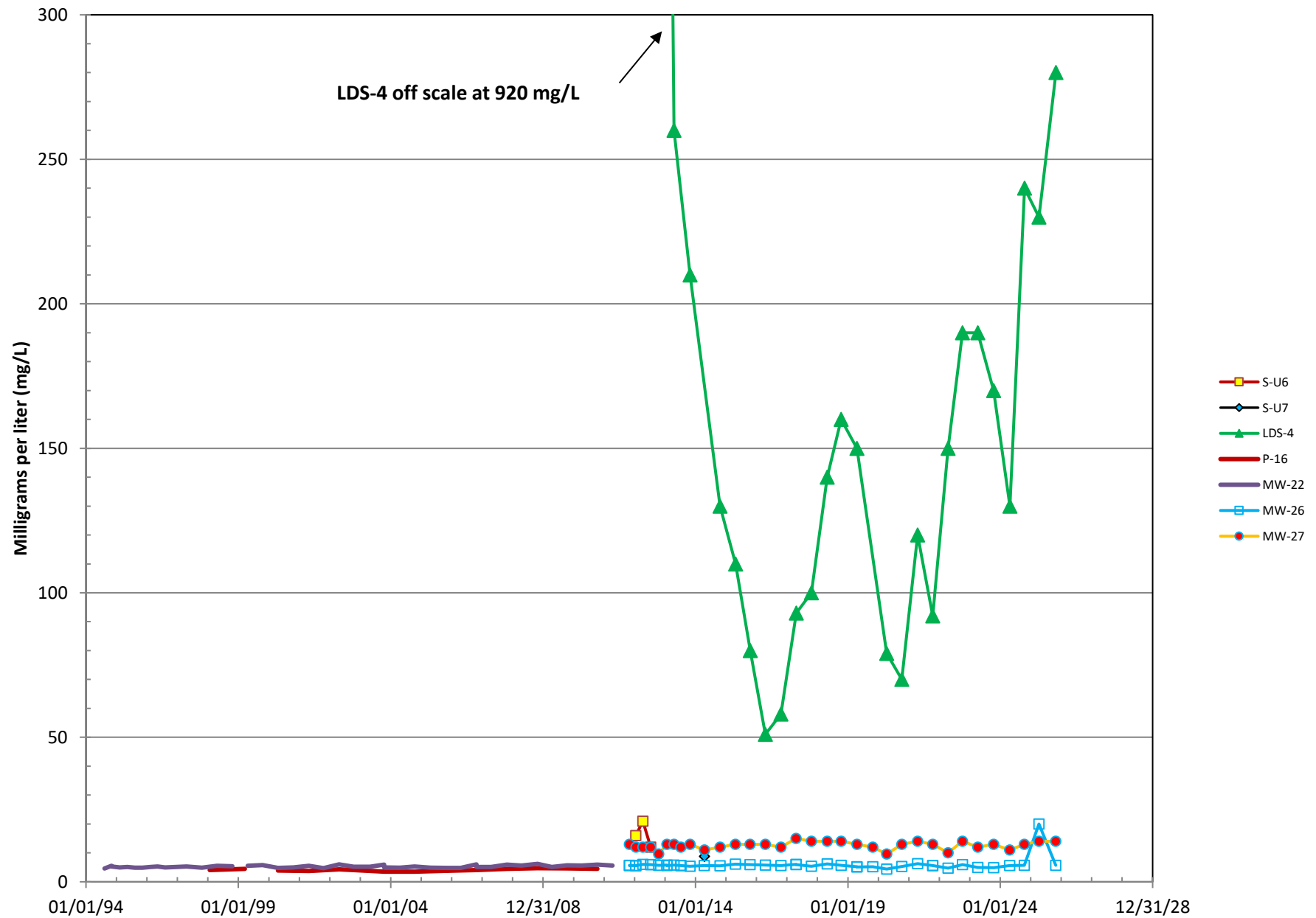
Underdrain - East Leachate Pond Area
Total Dissolved Solids
Coffin Butte Landfill



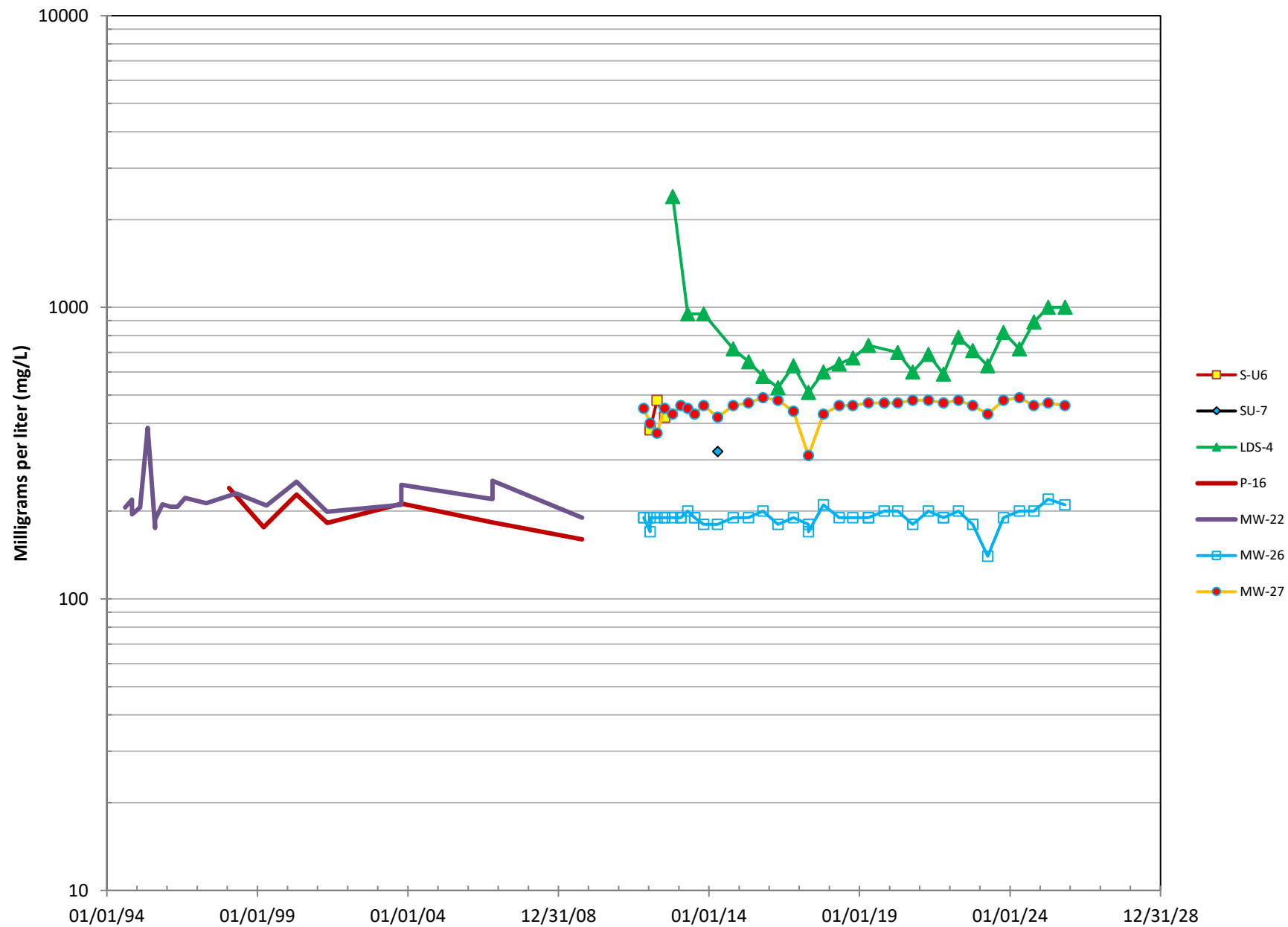
Cell 4 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



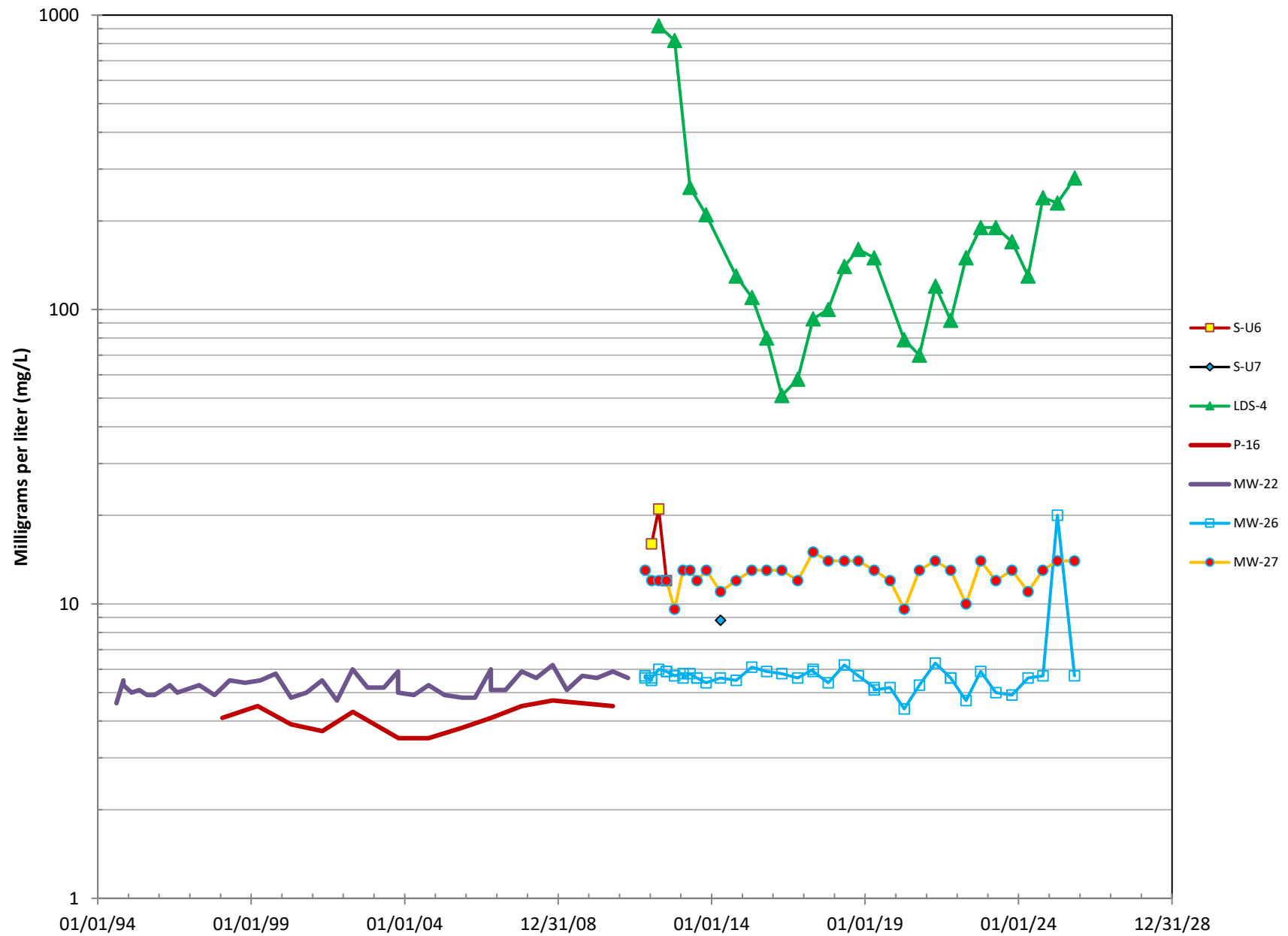
Cell 4 Underdrain Water Quality
Chloride
Coffin Butte Landfill



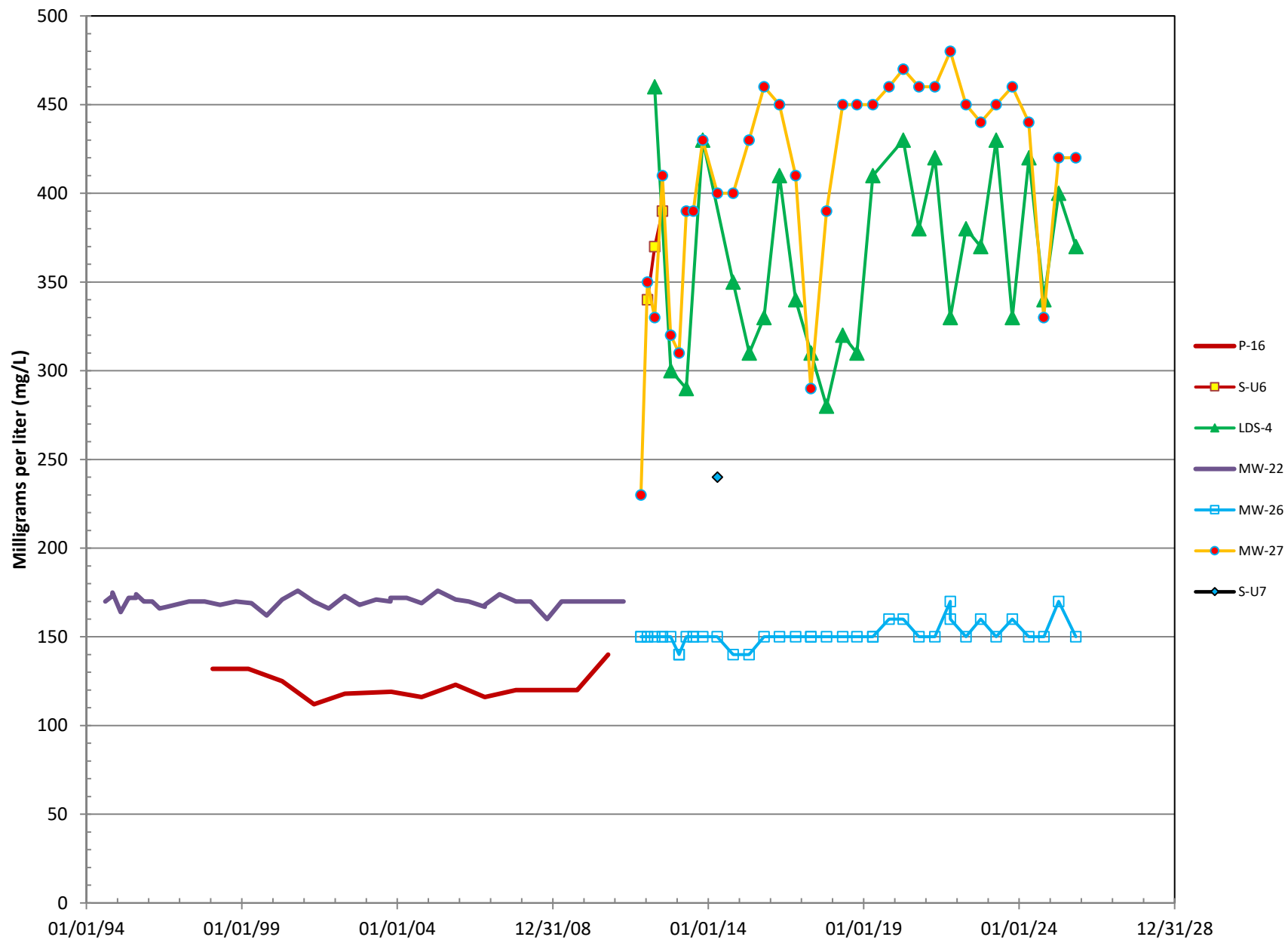
Cell 4 Underdrain Water Quality
Total Dissolved Solids
Coffin Butte Landfill



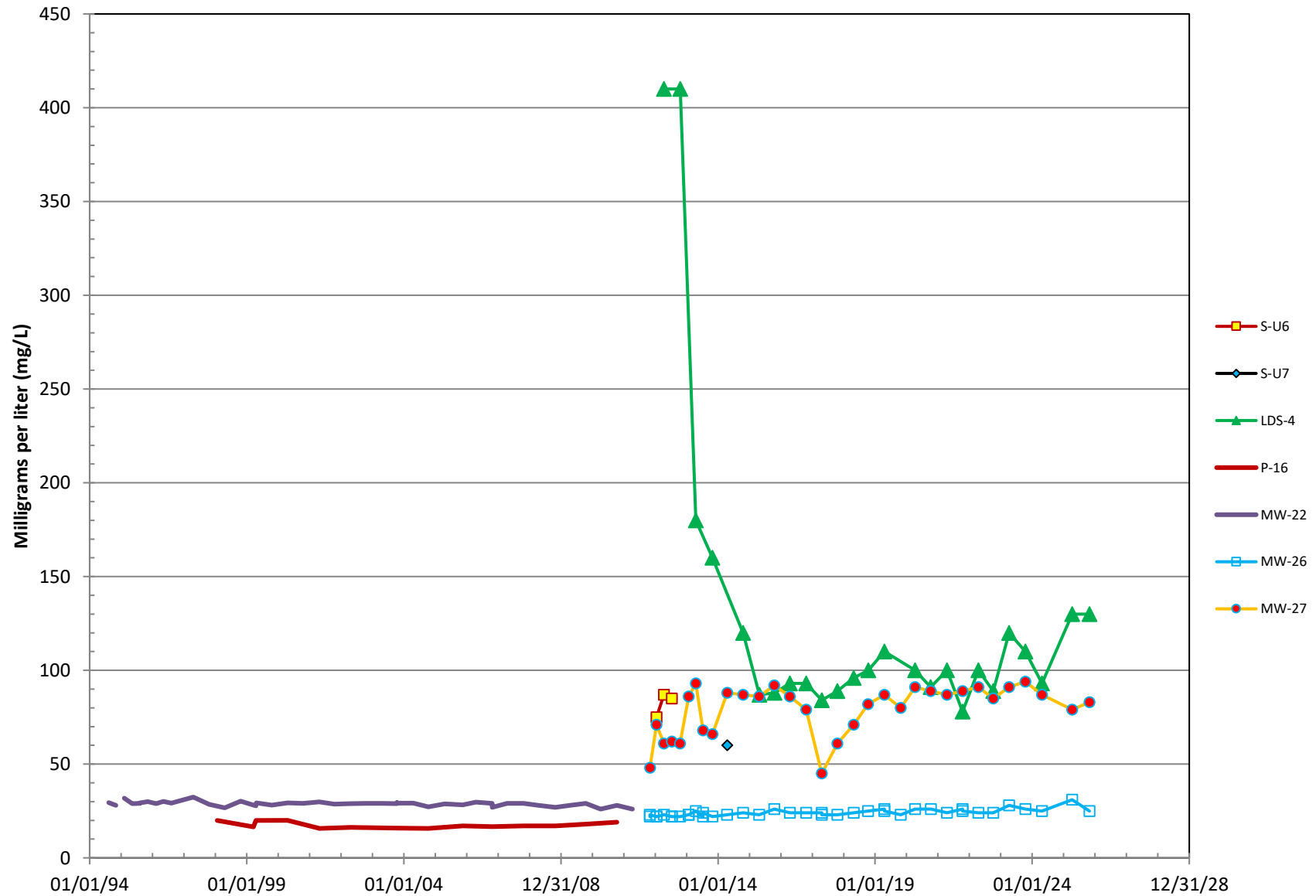
Cell 4 Underdrain Water Quality
Chloride
Coffin Butte Landfill



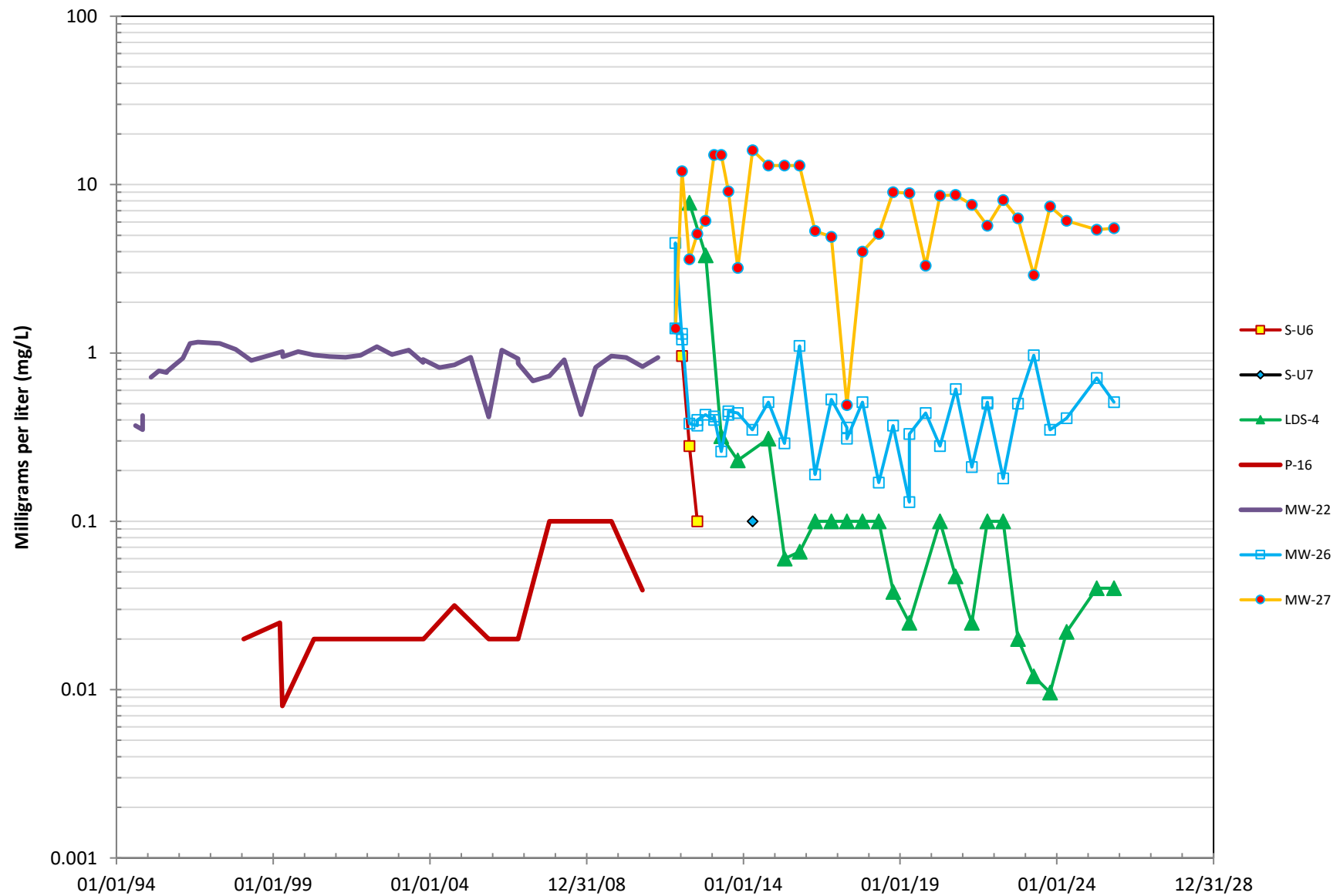
Cell 4 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



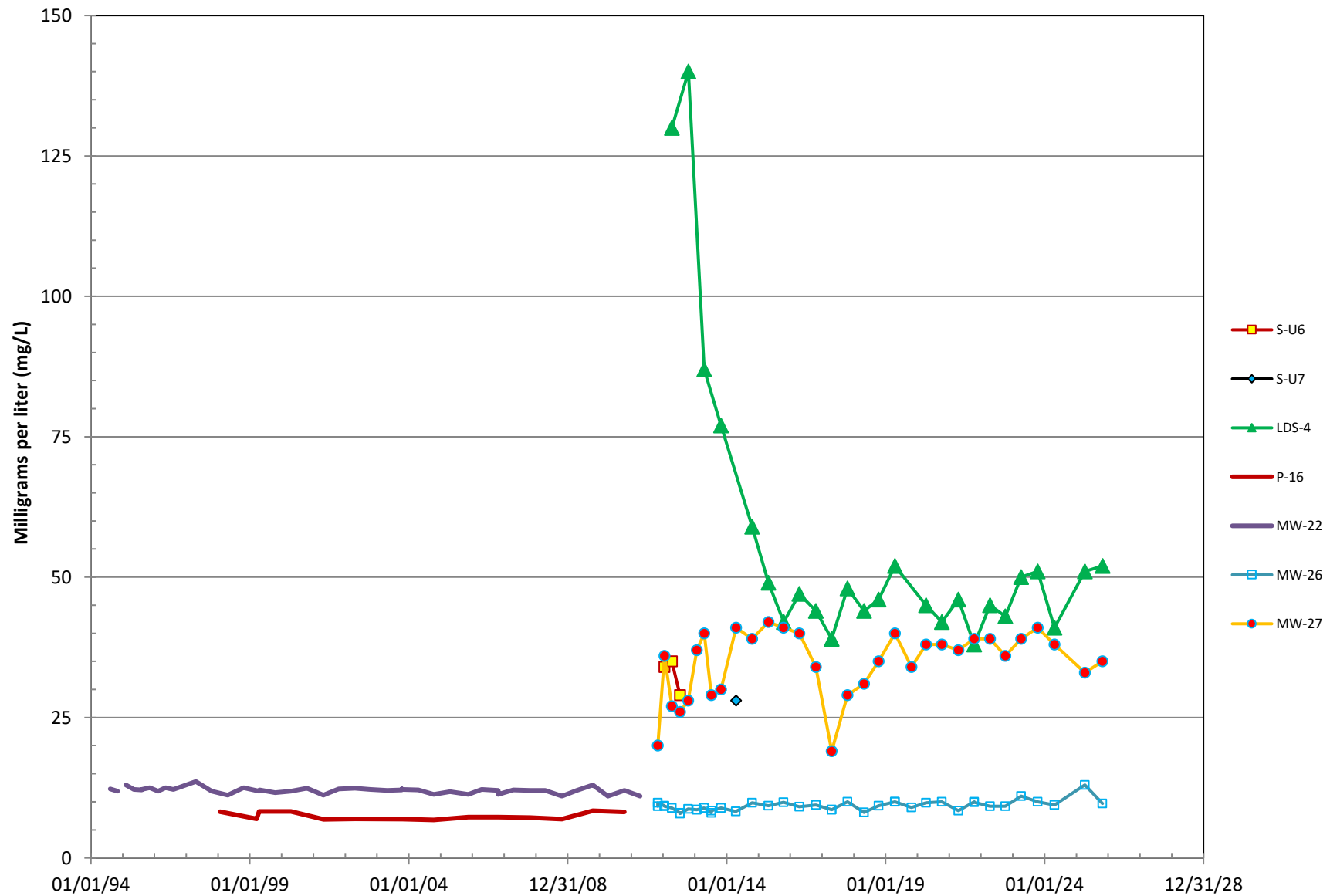
Cell 4 Underdrain Water Quality
Calcium
Coffin Butte Landfill



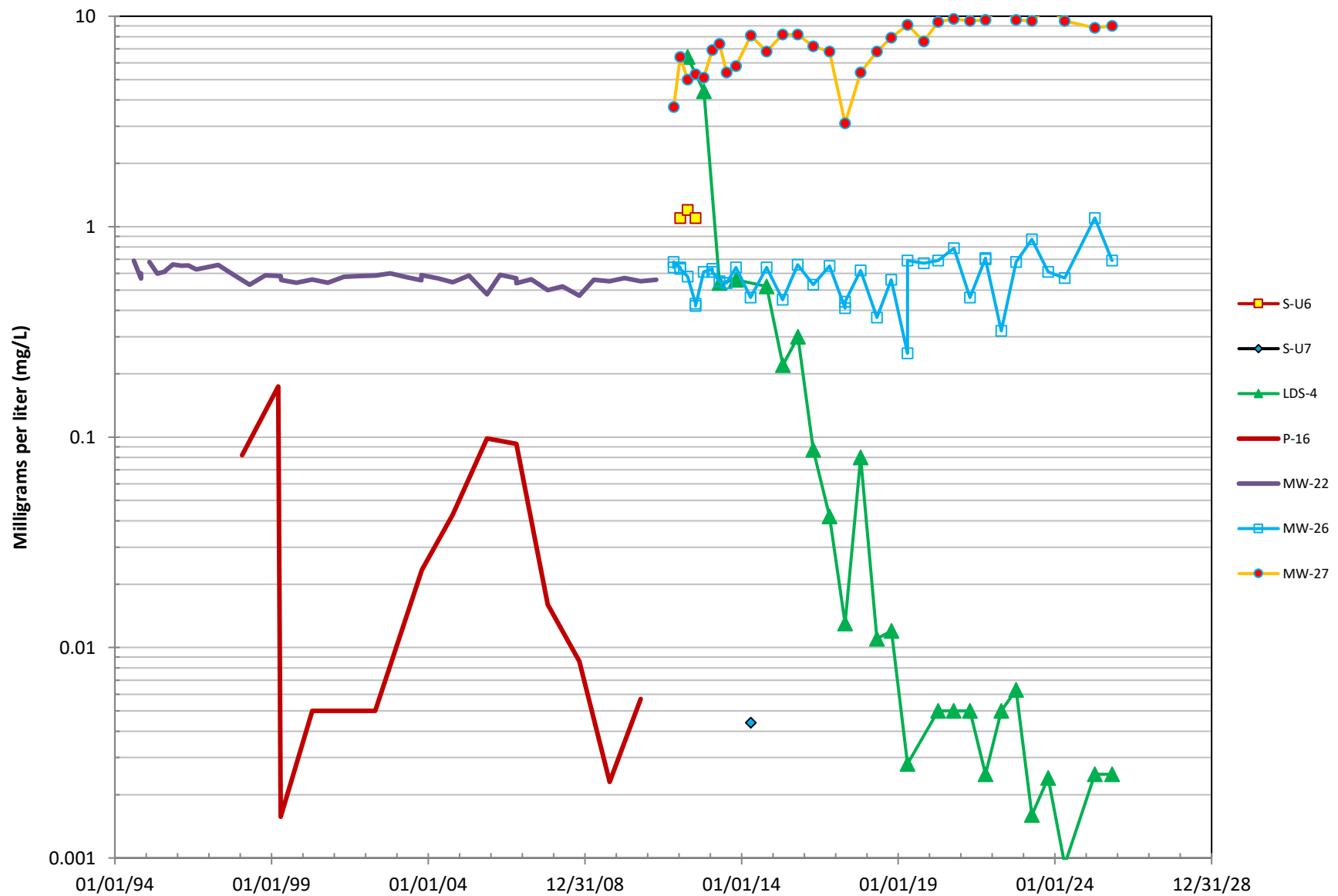
Cell 4 Underdrain Water Quality
Iron
Coffin Butte Landfill



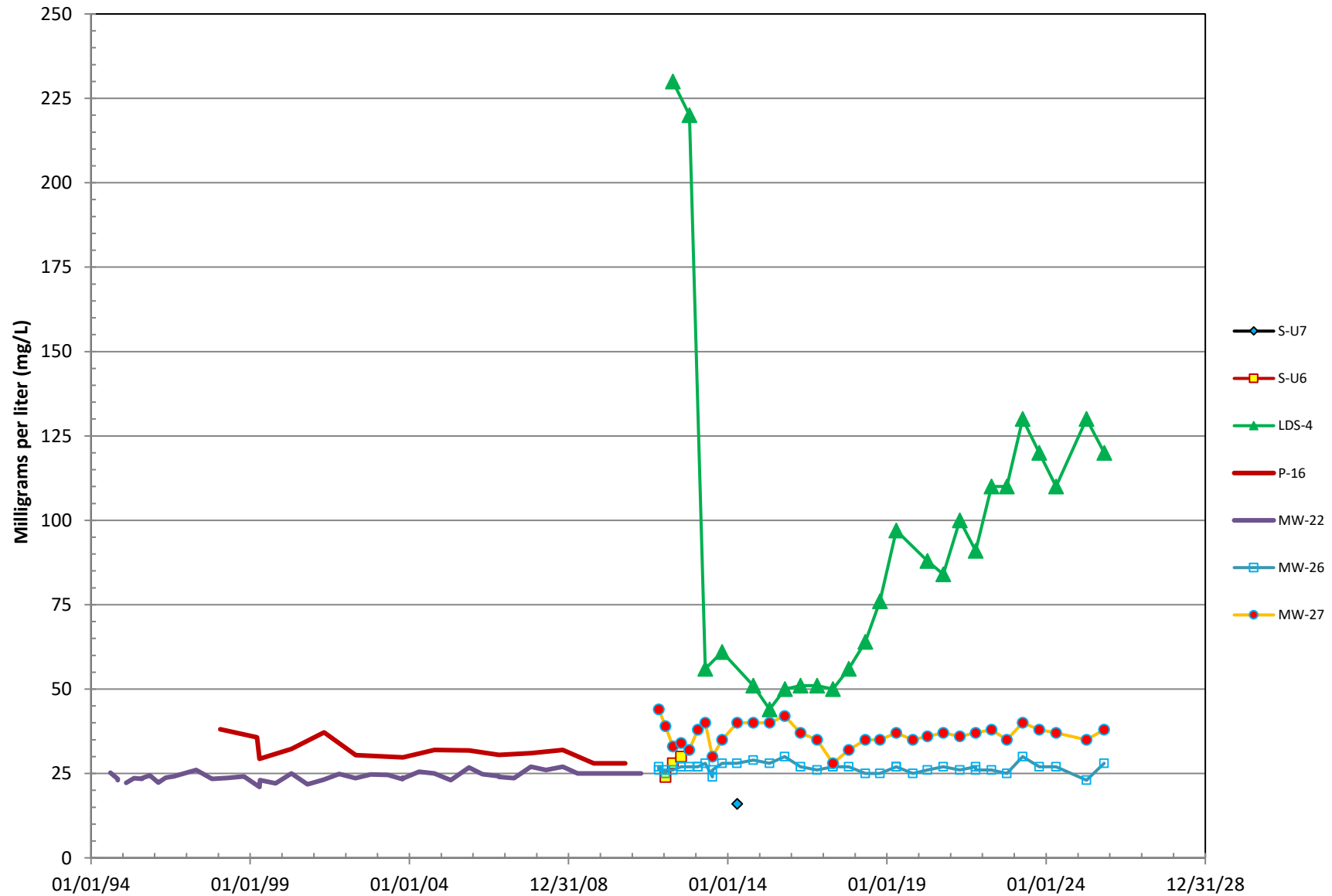
Cell 4 Underdrain Water Quality
Magnesium
Coffin Butte Landfill



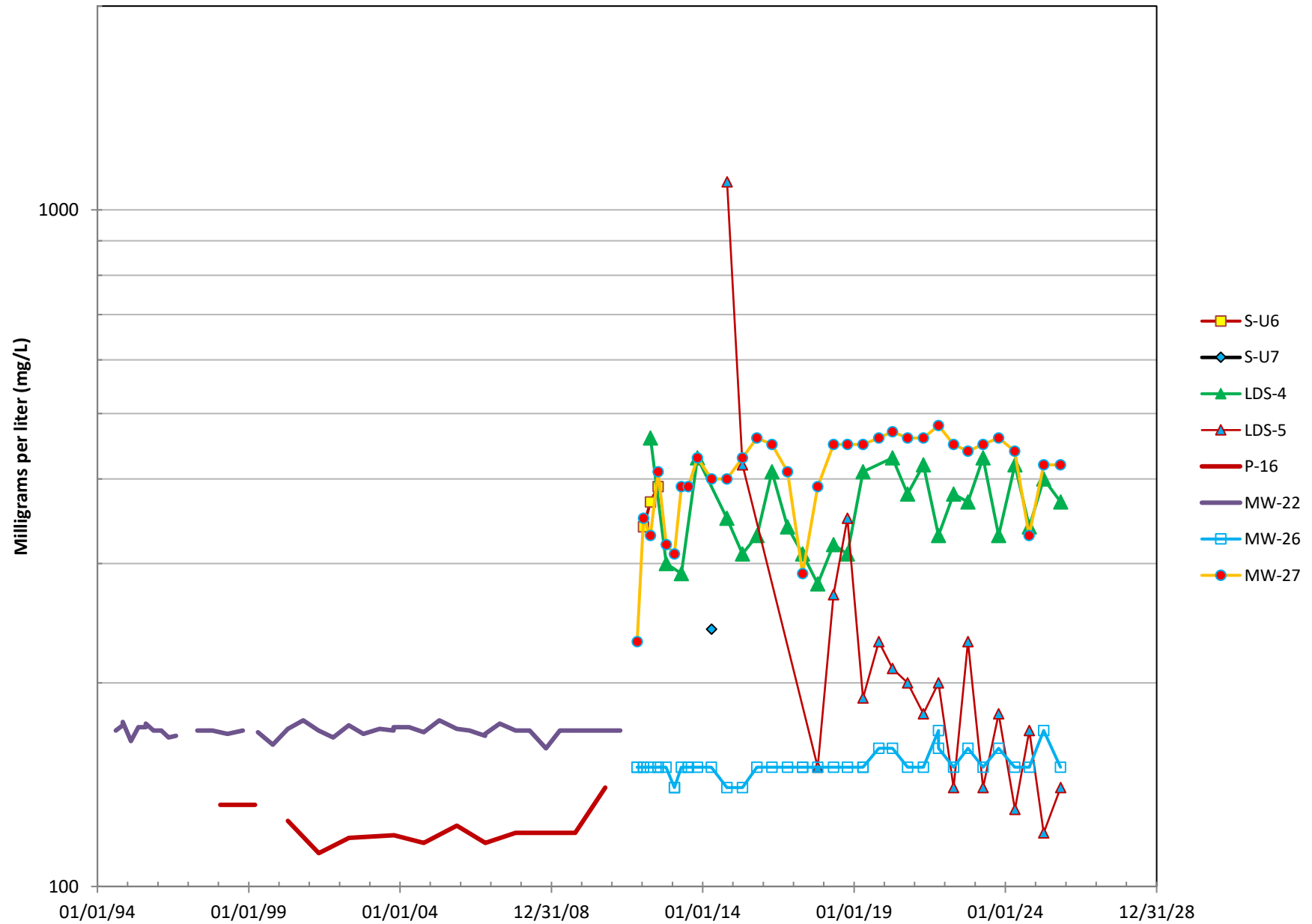
Cell 4 Underdrain Water Quality
Manganese
Coffin Butte Landfill



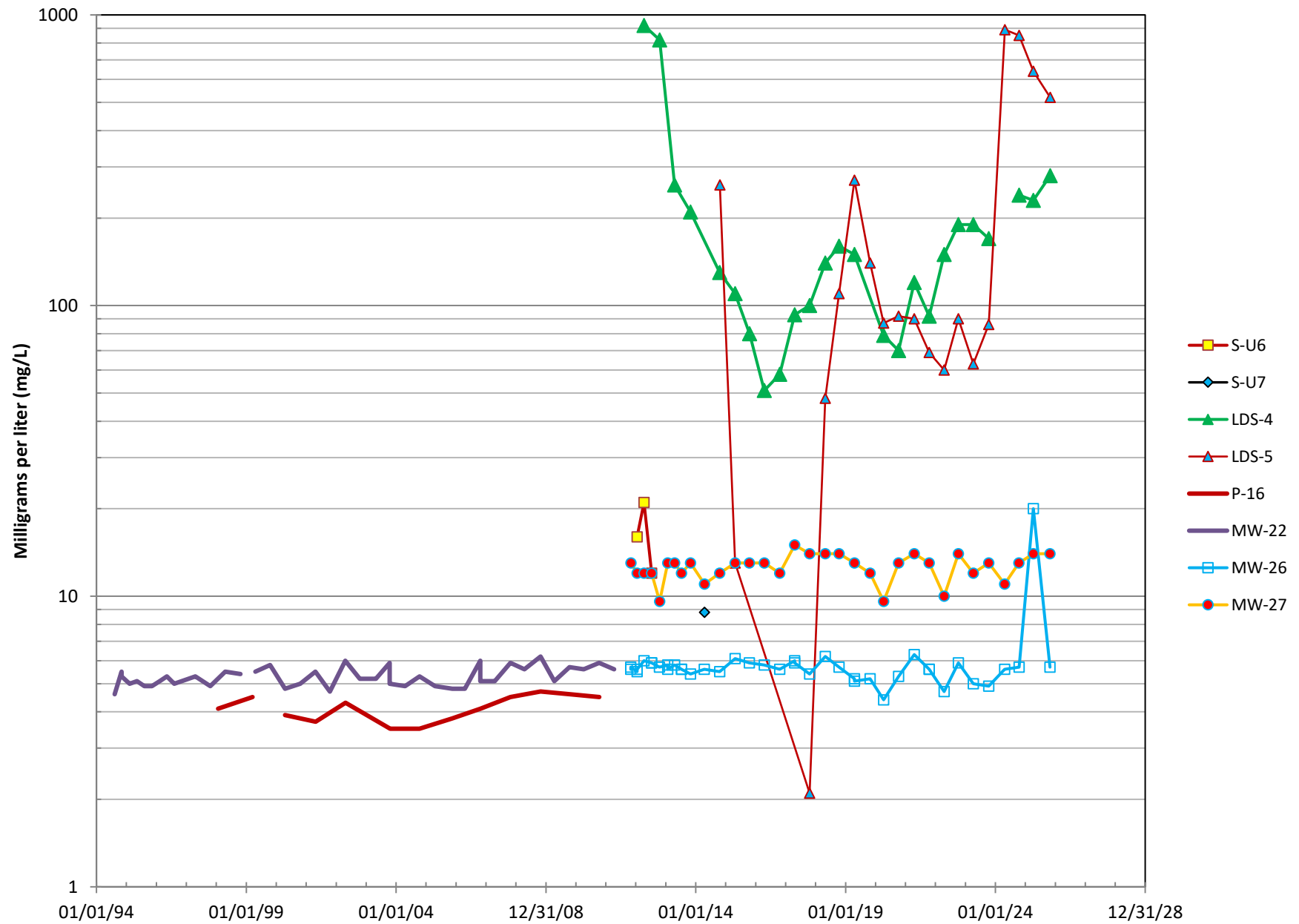
Cell 4 Underdrain Water Quality
Sodium
Coffin Butte Landfill



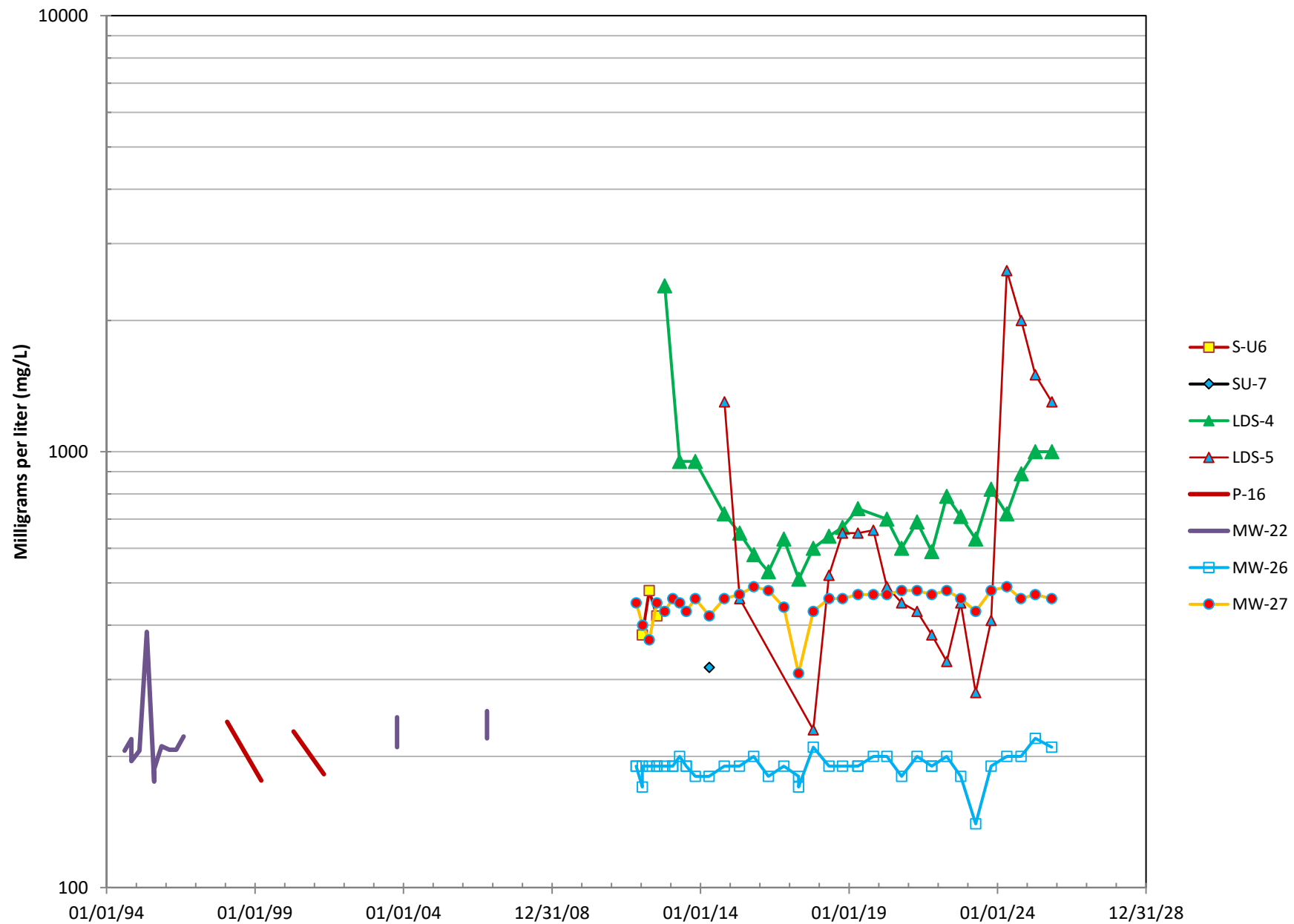
Cell 5 Underdrain Water Quality
Bicarbonate
Coffin Butte Landfill



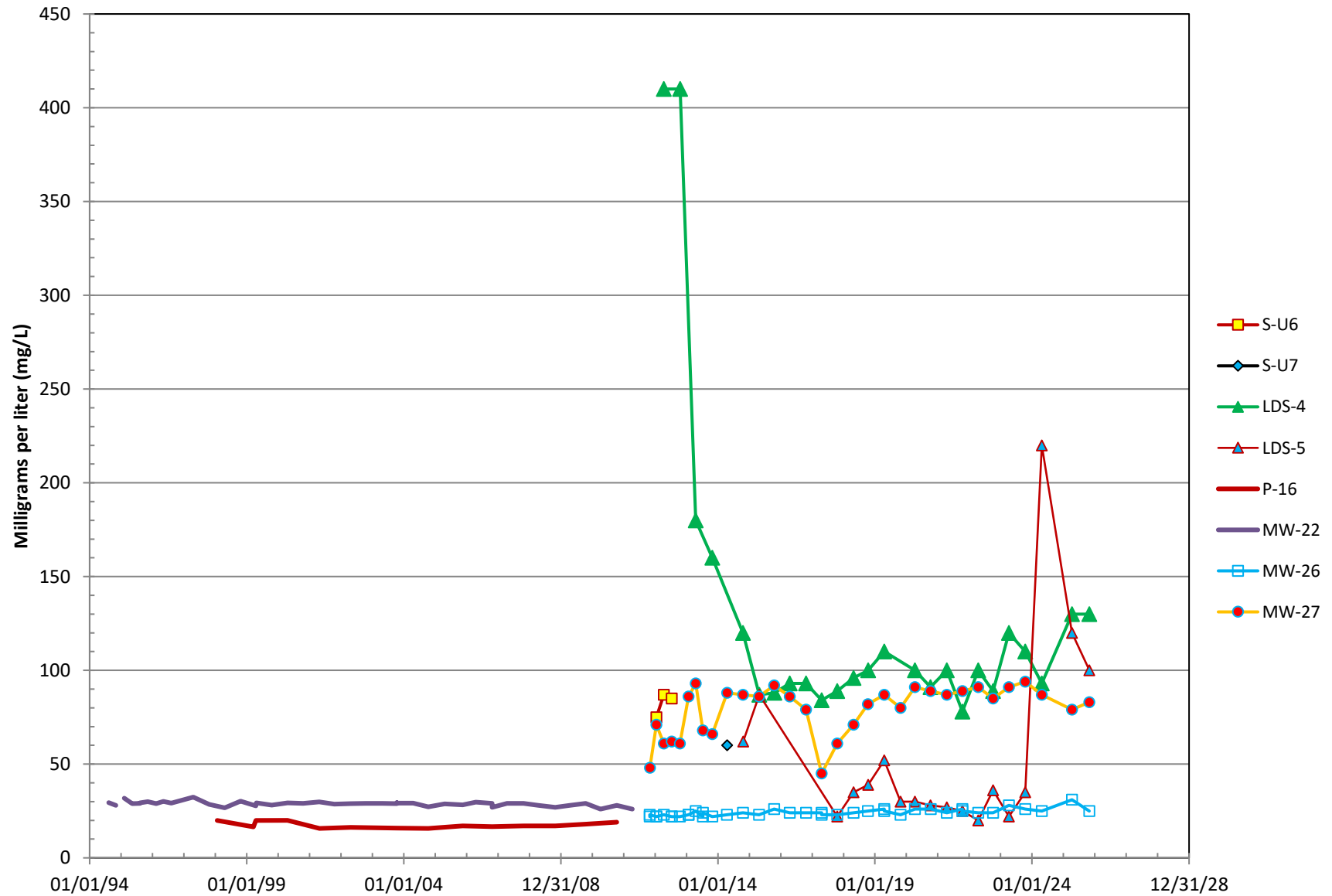
Cell 5 Underdrain Water Quality Chloride Coffin Butte Landfill



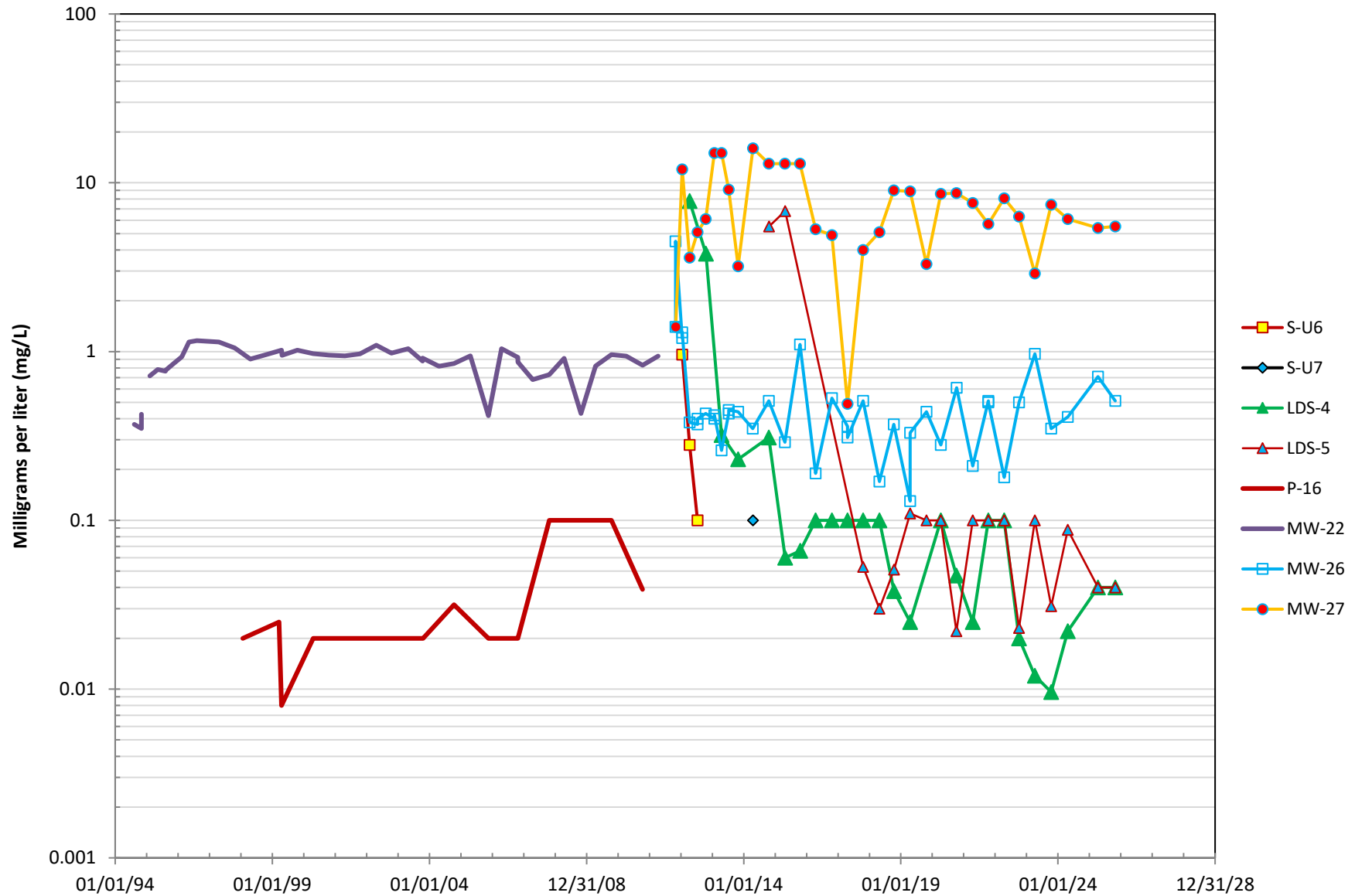
Cell 5 Underdrain Water Quality Total Dissolved Solids Coffin Butte Landfill



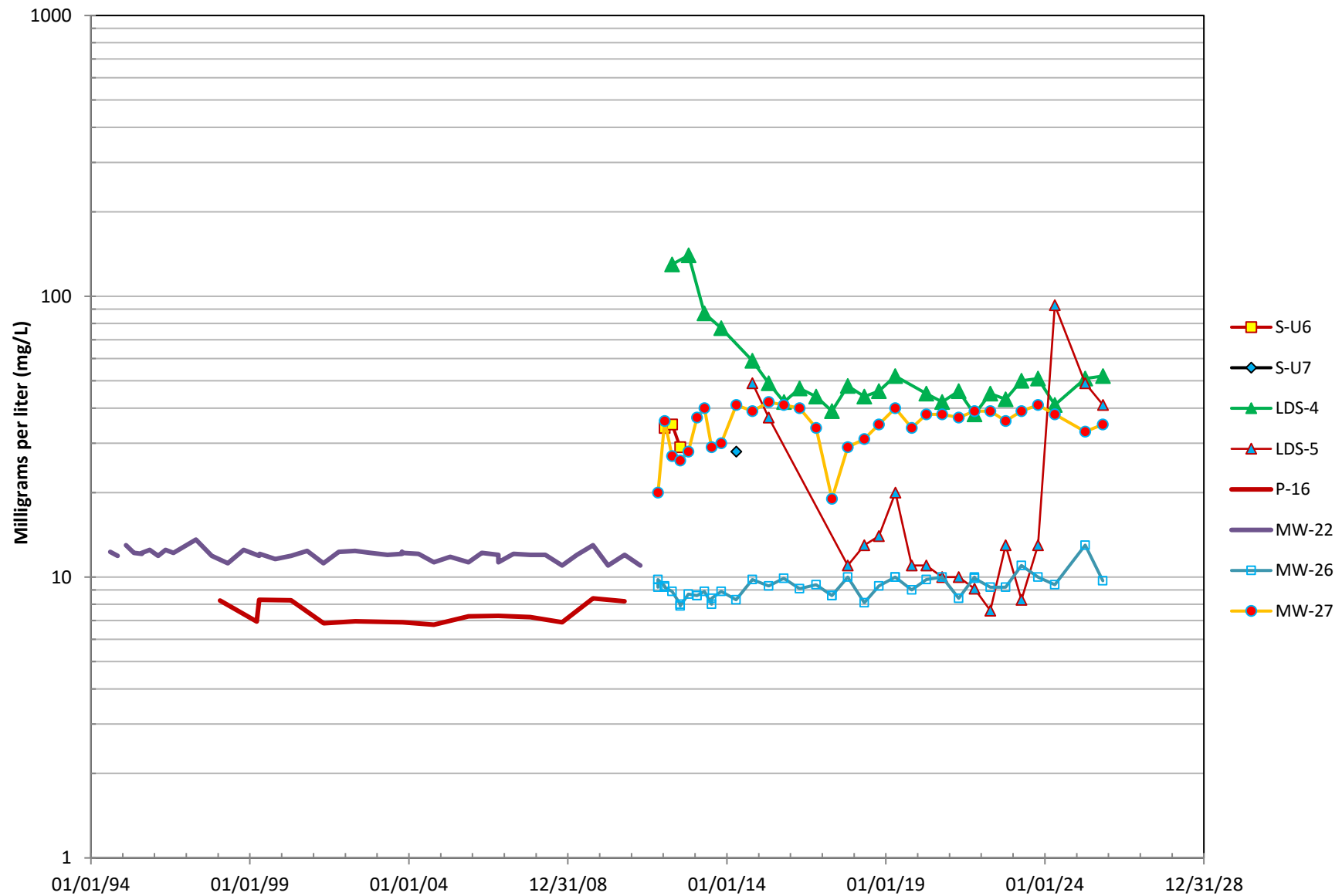
Cell 5 Underdrain Water Quality
Calcium
Coffin Butte Landfill



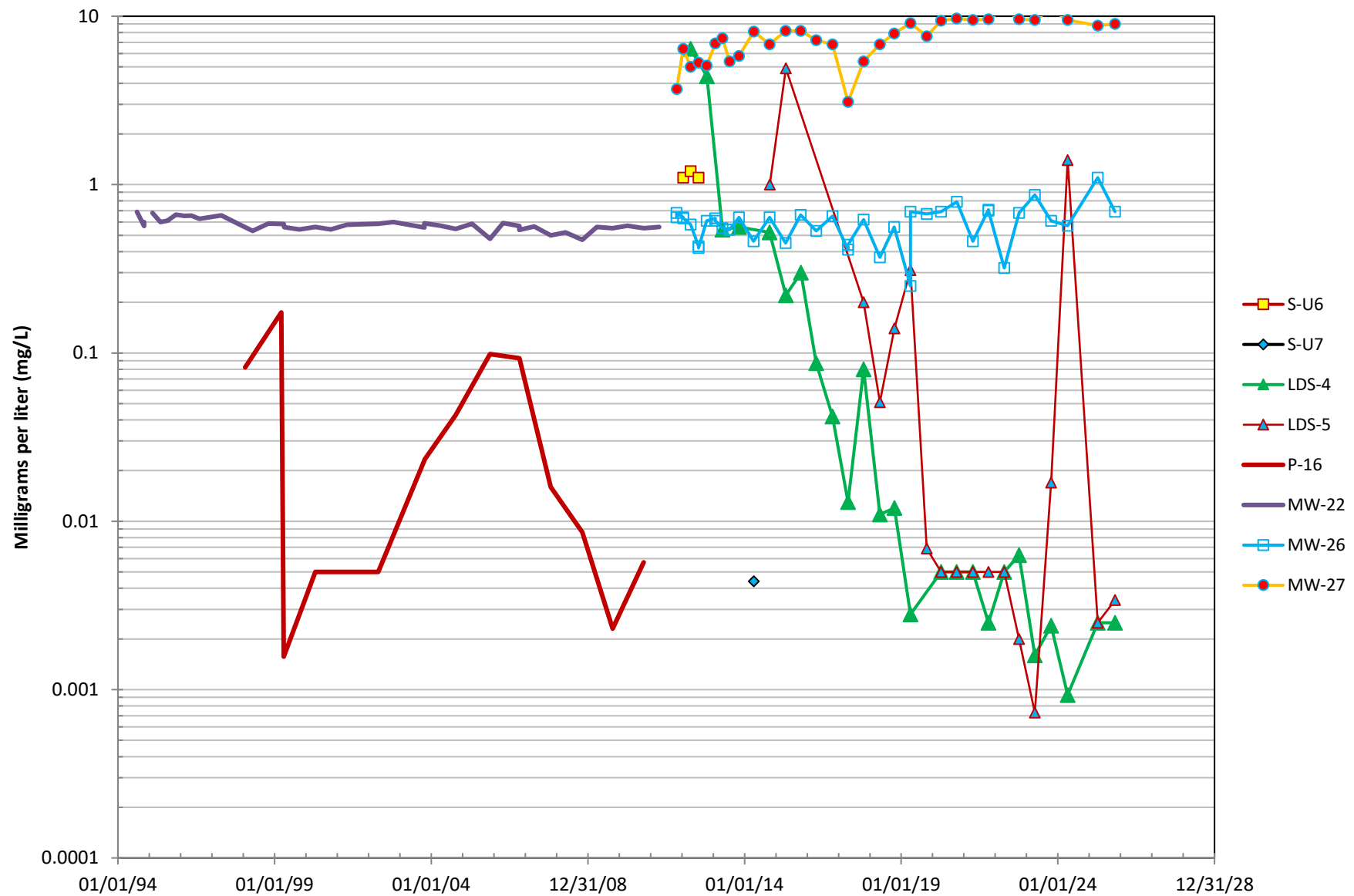
Cell 5 Underdrain Water Quality
Iron
Coffin Butte Landfill



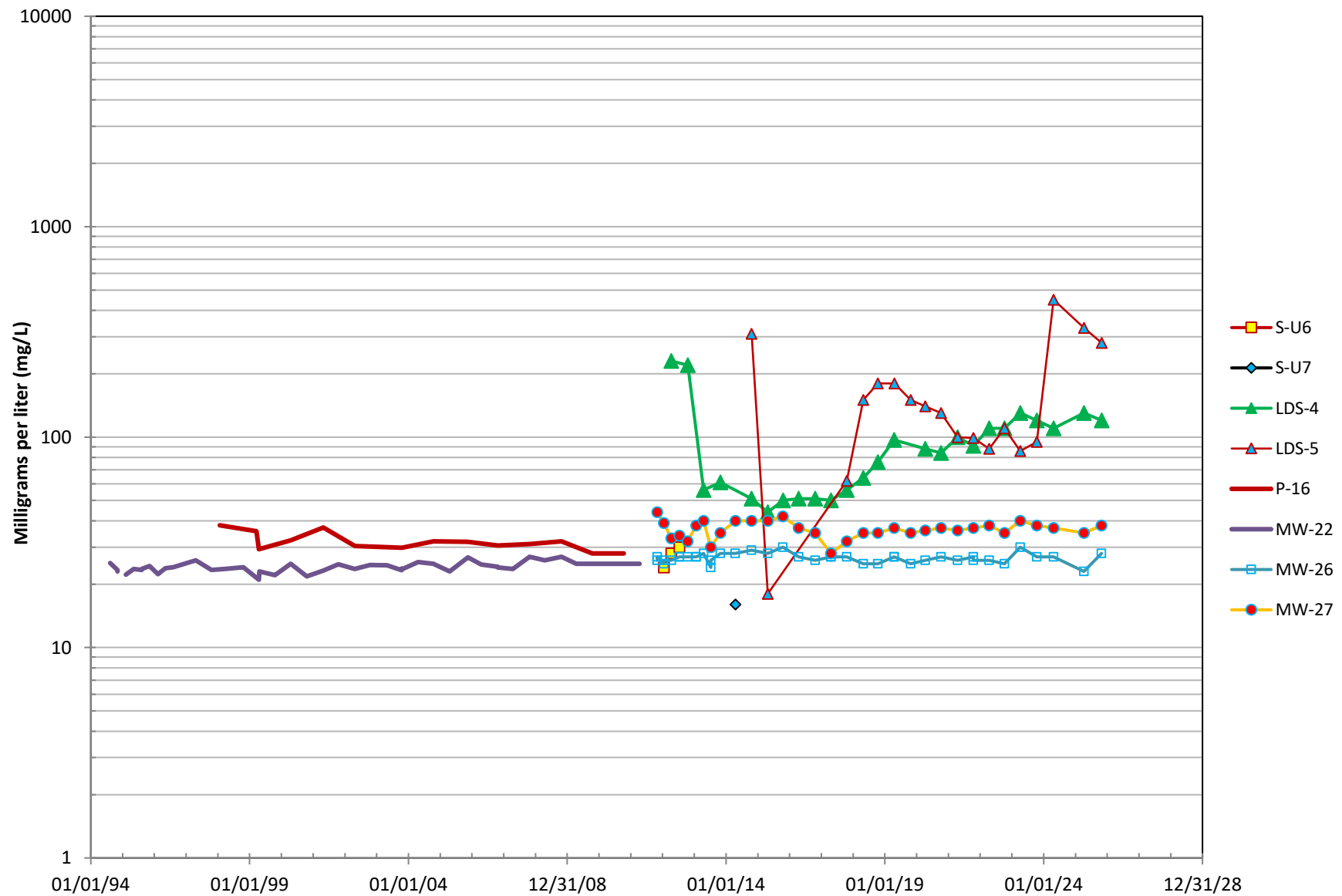
Cell 5 Underdrain Water Quality
Magnesium
Coffin Butte Landfill



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

GROUNDWATER MONITORING PROGRAM Water Level Survey Record Sheet

Site Name: Coffin Butte

Date: 4/7/25

Project Number: AV25.1012

Water Level Make/Model: Solinst 101

Field Personnel: Nick Rudolph

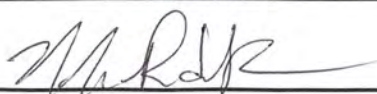
Well ID	Constuction Total Depth (TD)	Actual Total Depth (TD)	Depth To Water (DTW)	Comments
MW-15			0.32	
MW-8D			2.44	Ants on casing & water surface
MW-8S			2.44	
MW-27			20.74	Ants in casing
MW-26			7.25	Casing buried in sed. see photo
MW-23			1.12	
MW-24			17.95	
MW-14S			13.98	
MW-14D			23.86	
MW-15			24.37	
MW-1D			25.59	
MW-12S			20.94	
MW-12D			20.78	
Duplex			13.21	
MW-3S			18.51	
MW-3D			21.19	
MW-10S			26.01	
MW-10D			28.99	
MW-19			3.87	
WPI			3.41	
MW-11S			4.71	
MW-11D			10.05	
MW-18			6.14	
MW-17			14.55	
WP-3			4.12	Casing found open no lock
P-8			17.85	
WP-6			5.26	No Lock
WP-5			5.80	No Lock
S1			13.50	
WP-9			3.96	
WP-8			2.98	No Lock
S4			15.15	
P10			0.0	Surface
S-2			13.71	
QP-3S			305.85	Casing full of water
QP-4S			108.68	

Remarks:

Pg. of 2

Signature

Nick Rudolph



Site Name: Coffin Beetle

Date: 4/7/25

Project Number: AV25.1012

Water Level Make/Model: Solinist 101

Field Personnel: Nick Rudolph

Remarks: Pg. 2 of 2

Signature: Nick Rudolph *Nick Rudolph*

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-1D

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 25.71

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: Horiba U-52

Project No.: AU25.1012

Sampling Date: 4/8/25

Purge start Time: 1358

Purge Stop time: 1408

Sampling (Well Recovery) Time: 1420

Ending Water Level (feet): 25.91

Total Purged (gallons): 2

Duplicate Sample: YES ~~NO~~

Duplicate 1

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1358	0	25.71	7.15	0.165	5.4	6.40	14.12	102
1401	.5	25.91	7.12	0.188	1.6	5.94	13.97	60
1403	1	25.91	7.23	0.163	3.2	8.73	13.95	59
1406	1.5	25.91	7.32	0.186	0.6	5.71	13.93	54
1408	2	25.91	7.39	0.185	0.0	6.01	13.93	49

Purge Sampling Rates: 30 psi CPMH

Well condition: OK

Additional Info/Comments: Raining

Name: Nicholas Rudolph

Signature: NR

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-3D

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 21.24

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: Horiba U-52

Project No.: AU25.1012

Sampling Date: 4/8/25

Purge start Time: 15:06

Purge Stop time: 1516

Sampling (Well Recovery) Time: 1525

Ending Water Level (feet): 22.09

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1506	0	22.1	7.43	0.283	1.0	6.63	14.18	154
1510	.5	22.01	7.31	0.281	0.2	5.41	14.20	156
1512	1	22.08	7.23	0.281	0.0	6.48	14.19	158
1514	1.5	22.09	7.28	0.283	0.0	5.31	14.18	147
1516	2	22.09	7.27	0.283	0.0	6.41	14.16	140

Purge Sampling Rates: 48 psi CPM 4

Well condition: OK

Additional Info/Comments: Raining

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-100

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 25.12

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: Hariba U-52

Project No.: AU25.1012

Sampling Date: 4/8/25

Purge start Time: 1702

Purge Stop time: 1714

Sampling (Well Recovery) Time: 1725

Ending Water Level (feet): 30.99

Total Purged (gallons): 1.25

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1702	0	25.12	7.98	0.488	0.0	8.95	13.67	184
1708	.5	30.22	7.48	0.592	0.9	3.36	14.27	194
1711	1	30.92	7.28	0.594	0.0	3.09	14.49	186
1714	1.25	30.99	7.32	0.591	0.0	2.99	14.32	180

Purge Sampling Rates: 40 psi CPM-4

Well condition: OK

Additional Info/Comments: Rainy/overcast

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: MW-105
Collected By: NR
Casing Diameter (inches): _____
Starting Water Level: 26.15
Total Depth (feet): _____
Water column (feet): _____
Screen Length (feet): _____
Sample Method: Micro Purge Low Flow
Horiba Model S/N: Horiba U-52

Project No.: AU25.1012
Sampling Date: 4/8/25
Purge start Time: 1623
Purge Stop time: 1637
Sampling (Well Recovery) Time: 1645
Ending Water Level (feet): 26.82
Total Purged (gallons): _____
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1623	0	26.15	7.10	2.46	0.5	9.20	14.90	168
1627	.5	26.52	7.13	2.54	0.0	3.77	15.02	155
1630	1	26.82	7.20	2.55	0.0	2.60	14.89	153
1634	1.5	26.82	7.24	2.55	0.0	2.62	14.93	152
1637	2	26.82	7.24	2.54	0.0	2.45	14.83	153

Purge Sampling Rates: 20 psi CPM 4

Well condition: OK

Additional Info/Comments: Dry / overcast

Name: Nicholas Rudolph

Signature: NR

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-115

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 9.92

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: Horiba U-52

Project No.: AU25.1012

Sampling Date: 4/8/25

Purge start Time: 1152

Purge Stop time: 1206

Sampling (Well Recovery) Time: 1215

Ending Water Level (feet): 11.80

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1152	0	11.10	7.82	0.195	146	8.09	14.87	121
11:56	.5	11.39	7.71	0.136	143	8.68	14.64	143
1159	1	11.99	7.42	0.144	50.1	8.34	14.64	153
12:03	1.5	11.80	7.22	0.186	21.6	8.31	14.56	164
12:06	2.0	11.80	7.19	0.196	21.0	8.33	14.55	165

Purge Sampling Rates: 15 psi CPM 4

Well condition: GOOD

Additional Info/Comments: Windy / Rainy

Name: Nicholas Rudolph

Signature: Nh Rud

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: N.W.-11D
Collected By: NR
Casing Diameter (inches): _____
Starting Water Level: _____
Total Depth (feet): _____
Water column (feet): _____
Screen Length (feet): _____

Project No.: AU25.1012
Sampling Date: 4/8/25
Purge start Time: 1044
Purge Stop time: 1108
Sampling (Well Recovery) Time: _____
Ending Water Level (feet): _____
Total Purged (gallons): _____
Duplicate Sample: YES ☐ NO ☒

Sample Method: Micro Purge ☒ Low Flow ☐
Horiba Model S/N: HORIBA V-52

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1044	0		6.41	1.16	2.2	2.73	13.3	200
1051	.5		6.83	1.16	0.0	3.15	13.29	76
1056	1		6.96	1.15	0.0	1.43	13.77	32
1058	1.25		6.96	1.15	0.0	1.44	13.86	3
1101	1.5		7.01	1.14	0.0	1.53	13.95	8
1105	1.75		7.06	1.14	0.0	1.55	13.81	10
1108	2.0		7.07	1.15	0.0	1.67	13.62	3

Purge Sampling Rates: 40 psi CPM 4

Well condition: GOOD

Additional Info/Comments: Windy/Rainy

Name: Nicholas Rudolph

Signature: N.R.

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-125

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 21.15

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: Horiba U-52

Project No.: AU25.1012

Sampling Date: 4/9/25

Purge start Time: 0805

Purge Stop time: 0818

Sampling (Well Recovery) Time: 0825

Ending Water Level (feet): Top

Total Purged (gallons): 2

Duplicate Sample: YES NO

Duplicate 2

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0805	0	21.15	5.68	0.387	1.4	7.63	12.64	29
0808	.5	Top of Pump	6.42	0.390	2.7	2.36	13.09	-83
0811	1	T.O.P.	6.65	0.387	3.0	2.56	13.26	-78
0814	1.5	T.O.P.	6.79	0.386	1.7	2.63	13.34	-46
0818	2	T.O.P.	6.87	0.387	2.4	2.29	13.36	-31

Purge Sampling Rates: 20 psi CPM 4

Well condition: OK

Additional Info/Comments: Top of Pump 23.42 BTOL
Rainy/wet

Name: Nicholas Rudolph

Signature: NR

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte Project No.: AU25.1012

Well I.D.: MW-120 Sampling Date: 4/9/25

Collected By: NR Purge start Time: 0912

Casing Diameter (inches): _____ Purge Stop time: 0927

Starting Water Level: 21.13 Sampling (Well Recovery) Time: 0935

Total Depth (feet): _____ Ending Water Level (feet): 21.15

Water column (feet): _____ Total Purged (gallons): _____

Screen Length (feet): _____ Duplicate Sample: YES ☐ NO ☒

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: Micro Horiba U-52

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0912	0	21.13	7.34	0.199	1.2	5.07	13.13	139
0917	.5	21.15	7.32	0.181	1.3	4.37	13.48	146
0921	1	21.15	7.35	0.180	0.1	4.94	13.48	151
0924	1.5	21.15	7.36	0.184	0.2	4.36	13.62	155
0927	2	21.15	7.36	0.192	0.0	4.46	13.72	158

Purge Sampling Rates: 30 psi CPM 4

Well condition: OK

Additional Info/Comments: Wet/Rainy

Name: Nicholas Rudolph Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-26

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 7.49

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: Horiba V-52

Project No.: AU25.1012

Sampling Date: 4/9/25

Purge start Time: 1055

Purge Stop time: 1104

Sampling (Well Recovery) Time: 1110

Ending Water Level (feet): 12.77

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

Field Blank

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1056	0	7.49	7.09	0.253	18.6	3.40	15.60	-8
1058	.5	9.21	7.18	0.198	8.8	3.46	14.90	-67
1100	1	11.98	7.39	0.191	4.8	3.28	14.99	-105
1102	1.5	12.77	7.51	0.191	7.0	3.23	14.93	-116
1104	2	12.77	7.57	0.191	9.3	3.25	14.96	-120

Purge Sampling Rates: 25 psi CPM4

Well condition: ok large sediment build-up by casing
~2 ft of sediment

Additional Info/Comments: Dry / overcast

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-27

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 20.45

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: Horiba U-52

Project No.: AU25.1012

Sampling Date: 4/9/25

Purge start Time: 1011

Purge Stop time: ~~1018~~ 1021

Sampling (Well Recovery) Time: 1025

Ending Water Level (feet): 31.35

Total Purged (gallons): _____

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1011	0	20.45	6.63	0.483	27.0	4.73	14.81	-5
1013	.5	29.41	6.67	0.427	17.2	3.32	15.58	-73
1016	1	29.44	6.86	0.445	11.5	3.75	15.95	-43
1018	1.5	30.56	6.85	0.460	23.1	3.32	15.98	-35
1021	2	30.98	6.88	0.523	63.6	3.53	16.01	-48

Purge Sampling Rates: 30 psi cpm 4

Well condition: ok ants in casing and well bore

Additional Info/Comments: overcast/misting

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: P-8
Collected By: NR
Casing Diameter (inches): _____
Starting Water Level: 18.08
Total Depth (feet): _____
Water column (feet): _____
Screen Length (feet): _____
Sample Method: Micro Purge Low Flow
Horiba Model S/N: Horiba U-52

Project No.: AU25.1012
Sampling Date: 4/9/25
Purge start Time: 1253
Purge Stop time: 1307
Sampling (Well Recovery) Time: 1315
Ending Water Level (feet): 19.31
Total Purged (gallons): 1.5
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1253	0	18.08	7.03	0.215	0.0	5.82	14.39	194
1258	.5	19.28	7.14	0.224	1.6	5.41	13.68	167
1301	.75	19.31	7.33	0.233	0.0	5.71	13.44	154
1303	1	19.31	7.41	0.233	0.0	5.43	13.40	152
1305	1.25	19.31	7.45	0.234	0.0	5.49	13.38	151
1307	1.5	19.31	7.46	0.233	0.0	5.43	13.32	150

Purge Sampling Rates: 20 psi CPM 4

Well condition: ok

Additional Info/Comments: DRY/overcast

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-23

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 1.24

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: Horiba U-25

Project No.: AU25.1012

Sampling Date: 4/9/25

Purge start Time: 1158

Purge Stop time: 1207

Sampling (Well Recovery) Time: 1215

Ending Water Level (feet): 10.22

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1158	0	1.24	7.22	0.228	10.0	5.77	15.32	90
1201	.5	4.81	7.25	0.231	68.7	3.37	15.22	-8
1203	1	7.12	7.37	0.233	25.9	3.03	15.05	-82
1205	1.5	7.51	7.41	0.234	20.6	3.44	15.05	-93
1207	2	10.22	7.37	0.231	19.4	3.55	15.17	-96

Purge Sampling Rates: 15 psi CPM4

Well condition: ok - lots of ants on casing lid

Additional Info/Comments: Sunny

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-85

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 2.64

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: V-52

Project No.: AU25.1012

Sampling Date: 4/10/25

Purge start Time: 1814

Purge Stop time: 1822

Sampling (Well Recovery) Time: 1825

Ending Water Level (feet): 4.63

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1814	0	2.64	7.46	0.241	305	2.86	14.07	108
1818	0.5	4.63	7.43	0.237	285	2.33	14.65	124
1820	1.5	4.63	7.43	0.236	299	2.37	14.80	131
1822	2	4.63	7.43	0.235	301	2.41	14.84	135

Purge Sampling Rates: 20 psi, cpm 4

Well condition: OK

Additional Info/Comments: intermittent rain

Name: Nicholas Rudolph

Signature: NH Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-15

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 1.45

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: V-52

Project No.: AU25.1012

Sampling Date: 4/10/25

Purge start Time: 1745

Purge Stop time: NR 1800

Sampling (Well Recovery) Time: 1805

Ending Water Level (feet): 4.45

Total Purged (gallons): 2

Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1745	0	1.45	7.36	0.324	123	4.53	13.10	138
1751	0.5	2.80	7.22	0.283	143	4.55	12.86	147
1754	1	4.45	6.98	0.324	145	4.51	12.94	158
1758	1.5	4.45	6.93	0.331	148	4.49	12.77	162
1800	2	4.45	6.87	0.346	149	4.50	12.90	164

Purge Sampling Rates: 20 psi cpm4

Well condition: OK

Additional Info/Comments: overcast

Name: Nicholas Rudolph

Signature: N. Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-17

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 14.79

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: V-52

Project No.: AU25.1012

Sampling Date: 4/11/25

Purge start Time: 0815

Purge Stop time: 0824

Sampling (Well Recovery) Time: 0830

Ending Water Level (feet): 14.85

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0815	0	14.79	5.31	0.249	54.2	7.54	12.47	285
0818	.5	14.85	6.10	0.233	57.1	7.46	12.84	233
0820	1	14.85	6.34	0.231	62.2	7.52	12.97	220
0822	1.5	14.85	6.50	0.230	60.1	7.61	13.01	214
0824	2	14.85	6.62	0.228	65.0	7.80	13.07	211

Purge Sampling Rates: 20 PSI CPM 4

Well condition: OK

Additional Info/Comments: meter readings suspect

Name: Nicholas Rudolph

Signature: NR

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-18

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 6.24

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: V-52

Project No.: AU25.1012

Sampling Date: 4/11/25

Purge start Time: 0844

Purge Stop time: 0852

Sampling (Well Recovery) Time: 0855

Ending Water Level (feet): 6.91

Total Purged (gallons): _____

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0844	0	6.24	6.40	0.177	39.1	8.22	11.75	208
0846	.5	6.81	6.42	0.167	37.3	9.36	11.84	212
0848	1	6.91	6.45	0.168	38.5	9.39	11.85	212
0850	1.5	6.91	6.51	0.169	39.5	9.38	11.81	213
0852	2	6.91	6.54	0.169	39.2	9.37	11.82	215

Purge Sampling Rates: 20 psi cpm 4

Well condition: OK

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: Nicholas Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: MW-19
Collected By: NR
Casing Diameter (inches): _____
Starting Water Level: 4.14
Total Depth (feet): _____
Water column (feet): _____
Screen Length (feet): _____
Sample Method: Micro Purge Low Flow
Horiba Model S/N: V-52

Project No.: AU25.1012
Sampling Date: 4/11/25
Purge start Time: 0913
Purge Stop time: 0928
Sampling (Well Recovery) Time: 0935
Ending Water Level (feet): 9.58
Total Purged (gallons): 2
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0913	0	4.14	6.45	0.674	41.0	6.01	11.85	195
0915	.5	8.31	6.50	0.675	37.2	2.44	11.81	190
0918	1	8.95	6.60	0.677	38.0	2.41	11.66	185
	Replaced gas bottle							
0926	1.5	9.58	6.80	0.677	43.7	2.41	12.03	179
0928	2	9.58	6.89	0.677	40.1	2.38	12.02	180

Purge Sampling Rates: 20 psi CPM 4

Well condition: OK

Additional Info/Comments: ran out of gas half way
water stability good

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-20

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 2.69

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge ☒ Low Flow ☐

Horiba Model S/N: # U-57

Project No.: AU25.1012

Sampling Date: 4/11/25

Purge start Time: 0940

Purge Stop time: 0957

Sampling (Well Recovery) Time: 1000

Ending Water Level (feet): 12.44

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0949	0	2.69	6.9	0.591	41.9	6.02	12.10	186
0951	.5	4.91	6.95	0.586	41.2	3.27	11.69	183
0953	1	11.88	6.99	0.587	34.6	3.28	11.50	180
0955	1.5	12.22	7.11	0.585	32.5	3.41	11.39	180
0957	2	12.44	7.17	0.584	37.8	3.51	11.37	174

Purge Sampling Rates: 20 psi CPM 4

Well condition: ok

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-21

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 2.75

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Project No.: AU25.1012

Sampling Date: 4/11/25

Purge start Time: 1012

Purge Stop time: 1020

Sampling (Well Recovery) Time: 1025

Ending Water Level (feet): 12.5

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

Horiba Model S/N: _____

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1012	0	2.75	7.21	0.670	57.1	7.61	11.30	173
1014	0.5	6.93	7.31	0.649	87.4	3.00	10.84	170
1016	1	9.95	7.47	0.650	71.1	3.16	10.66	156
1018	1.5	12.5	7.48	0.643	62.3	3.17	10.73	128
1020	2	12.5	7.51	0.645	58.1	3.08	10.71	122

Purge Sampling Rates: 15 psi cpm 4

Well condition: OK

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: NH Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte

Well I.D.: MW-24

Collected By: NR

Casing Diameter (inches): _____

Starting Water Level: 18.16

Total Depth (feet): _____

Water column (feet): _____

Screen Length (feet): _____

Sample Method: Micro Purge Low Flow

Horiba Model S/N: V-52

Project No.: AU25.1012

Sampling Date: 4/11/25

Purge start Time: 1119

Purge Stop time: 1127

Sampling (Well Recovery) Time: 1130

Ending Water Level (feet): 20.43

Total Purged (gallons): 2

Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1119	0	18.16	7.71	0.237	45.9	5.63	14.26	138
1121	.5	19.7	7.55	0.241	82.7	5.61	14.82	143
1123	1	19.94	7.52	0.238	85.5	5.59	15.11	143
1125	1.5	20.43	7.49	0.238	90.4	5.60	15.19	144
1127	2	20.43	7.51	0.238	90.6	5.59	15.21	143

Purge Sampling Rates: 15 psi CPM 4

Well condition: OK

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: N. Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte Project No.: AU25.1012
 Well I.D.: Phillips Sampling Date: 4/11/25
 Collected By: NR Purge start Time: 1047
 Casing Diameter (inches): _____ Purge Stop time: _____
 Starting Water Level: 27.48 BT00 Sampling (Well Recovery) Time: 1100
 Total Depth (feet): _____ Ending Water Level (feet): -
 Water column (feet): _____ Total Purged (gallons): -
 Screen Length (feet): _____ Duplicate Sample: YES ☐ NO ☒
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: V-52

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1047	-		7.96	0.205	67.0	10.41	11.88	127

Purge Sampling Rates: from well head

Well condition: lots of trash around well head, Rat droppings

Additional Info/Comments: none

Name: Nicholas Rudolph Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte Project No.: AU25.1012
 Well I.D.: MW-95 Sampling Date: 4/11/25
 Collected By: NR Purge start Time: 1200
 Casing Diameter (inches): _____ Purge Stop time: 1203
 Starting Water Level: 3.2 Sampling (Well Recovery) Time: 1205
 Total Depth (feet): _____ Ending Water Level (feet): _____
 Water column (feet): _____ Total Purged (gallons): —
 Screen Length (feet): _____ Duplicate Sample: YES ☐ NO ☒
 Sample Method: ~~Micro-Purge~~ Low-Flow Bailed
 Horiba Model S/N: V-52

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1159	—	3.2	7.64	0.691	60.2	3.50	12.67	-7
1201	—	3.2	7.66	0.711	53.6	3.55	11.95	-63
1203	—	3.2	7.64	0.716	44.2	3.76	11.76	-90

Purge Sampling Rates: Bailed

Well condition: ok

Additional Info/Comments: none

Name: Nicholas Rudolph Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte

Project No.: AU25.1012

Station I.D.: LDS-2B

Sampling Date: 4/9/25

Collected By: NR

Sampling Time: 1730

Horiba Model S/N: U52

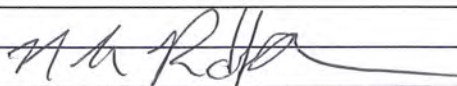
Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Dark Brown	Slight	7.18	8.89	52.3	1.59	20.08	157

Leachate sampling station conditions: OK

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: 

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte Project No.: AU25.1012

Station I.D.: LDS-3 Sampling Date: 4/9/25

Collected By: NR Sampling Time: 1830

Horiba Model S/N: U-52 Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
yellowish	none	6.90	0.620	1.9	1.88	15.89	169

Leachate sampling station conditions: OK

Additional Info/Comments: none

Name: Nicholas Rudolph Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte

Project No.: AU25.1012

Station I.D.: LDS-4

Sampling Date: 4/9/25

Collected By: NR

Sampling Time: 1730

Horiba Model S/N: J-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
clear	none	7.22	0.989	0.2	4.60	21.07	174

Leachate sampling station conditions: Ok

Additional Info/Comments: none

Name: Nicholas Rudolph Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET

Site: Coffin Butte

Project No.: AU25.1012

Station I.D.: LDS-5

Sampling Date: 4/9/25

Collected By: NR

Sampling Time: 1705

Horiba Model S/N: V-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Yellowish	Strong	6.79	2.67	25.1	2.49	22.17	161

Leachate sampling station conditions: Good

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte Project No.: AU25.1012

Station I.D.: LDS-WLP

Sampling Date: 4/9/25

Collected By: NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
_____	_____	_____	_____	_____	_____	_____	_____

Leachate sampling station conditions:

Pump not functioning

Can't collect sample

Additional Info/Comments:

Name: Nicholas Rudolph Signature: _____

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte

Project No.: AU25.1012

Station I.D.: LDS-ELP

Sampling Date: 4/9/25

Collected By: NR

Sampling Time: 1610

Horiba Model S/N: Horiba U-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Brown	slight	7.08	16.1	7.3	2.92	15.61	157

Leachate sampling station conditions:

Dry Partly Cloudy

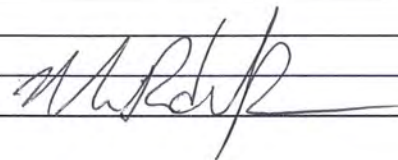
Additional Info/Comments:

none

Name:

Nicholas Rudolph

Signature:



**GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET**

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: S-1

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 0830

Horiba Model S/N: V-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Slight	none	5.84	0.111	42.2	9.90	9.85	272

Surface water conditions (including stream flow rate, stream depth): Flow-high Depth-4.5ft
25 ft to opposite bank
water is opaque semi dirty

Additional Info/Comments:

Name: Nicholas Rudolph

Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET**

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: S-2

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 0945

Horiba Model S/N: _____

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Slight	none	6.91	0.097	0.0	10.45	10.58	170

Surface water conditions (including stream flow rate, stream depth): Flow - fast Depth 8-10 inch
15 ft to opposite bank

Additional Info/Comments: none

Name: Nicholas Rudolph

Signature: N. Rudolph

**GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET**

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: S-4

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 0910

Horiba Model S/N: V-52

Duplicate Sample: YES NO

Duplicate

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
<u>Opaque</u>	<u>none</u>	<u>6.41</u>	<u>0.097</u>	<u>0.0</u>	<u>12.79</u>	<u>9.75</u>	<u>208</u>

Surface water conditions (including stream flow rate, stream depth): Flow - Fast Depth 5.5ft
~20 ft to opposite bank

Additional Info/Comments: None

Name: Nicholas Rudolph

Signature: Nicholas Rudolph

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: SV-3

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 1445

Horiba Model S/N: _____

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	7.61	0.672	298	5.85	15.91	84

Surface water conditions (including stream flow rate, stream depth): Low flow

Additional Info/Comments: Dry

Name: Nicholas Rudolph

Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET**

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: SV-4

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 1415

Horiba Model S/N: V-52

Duplicate Sample: YES ☐ NO ☒

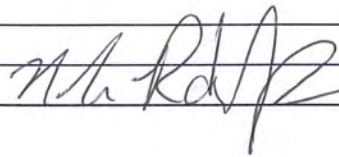
COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Clear	none	8.16	0.106	74.6	7.51	13.93	91

Surface water conditions (including stream flow rate, stream depth):

slow flow

Additional Info/Comments:

Name: Nicholas Rudolph

Signature: 

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: SU-5

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 1430

Horiba Model S/N: U-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
<u>Clear</u>	<u>none</u>	<u>6.94</u>	<u>0.239</u>	<u>3.0</u>	<u>4.86</u>	<u>15.16</u>	<u>136</u>

Surface water conditions (including stream flow rate, stream depth):

low flow

Additional Info/Comments:

Dry/no rain

Name: Nicholas Rudolph

Signature: Nicholas Rudolph

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: SU-6

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV

Surface water conditions (including stream flow rate, stream depth):

and water in accessible, Buried by sediment

Additional Info/Comments:

Name: Nicholas Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AU25.1012

Station I.D.: SU-7

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV

Surface water conditions (including stream flow rate, stream depth):

Dry

Additional Info/Comments:

Name: Nicholas Rudolph

Signature: Nh Rudolph

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte Project No.: AU25.1012

Station I.D.: LFG-1-6A Sampling Date: 4/10/25

Collected By: NR Sampling Time: 1100

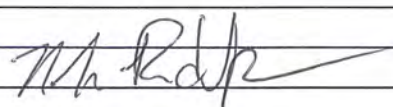
Horiba Model S/N: V-52 Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Grayish	Strong	6.24	7.14	99.4	2.30	15.00	-105

Leachate sampling station conditions: underdrain perf pipe to new
cell 6 slow flow - strong odor

Additional Info/Comments: Some Bio-build up on pipe

Name: Nicholas Rudolph

Signature: 

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte

Project No.: AU25.1012

Station I.D.: LFG-2-east

Sampling Date: 4/10/25

Collected By: NR

Sampling Time: 1125

Horiba Model S/N: V-52

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Dark Brown	Strong	8.23	36.7	137	1.72	38.11	-54

Leachate sampling station conditions: well ok high pressure lots of foam

Additional Info/Comments:

All preserved samples effervesced
Strongly

Name: Nicholas Rudolph

Signature: _____

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte Project No.: AU25.1012

Station I.D.: LFG-3-north Sampling Date: 4/10/25
 Collected By: NR Sampling Time: 1230
 Horiba Model S/N: V-52 Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Dark Brown	Strong	7.86	34.0	329	0.64	37.22	-232

Leachate sampling station conditions: well ok good flow foamy

Additional Info/Comments:

Name: Nicholas Rudolph Signature: _____

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: Coffin Butte Project No.: AU25.1012

Station I.D.: LFG-4-West Sampling Date: 4/10/25
Collected By: NR Sampling Time: 1300
Horiba Model S/N: V-52 Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Dark Brown	Strong	7.68	31.2	458	0.21	44.64	-273

Leachate sampling station conditions: well ok - Raining

Additional Info/Comments: strong effervescence w/ preserved

samples

Name: Nicholas Rudolph Signature: 

KP

Site Coffin Butte

AUG 25, 1012

LFG-5 - South

collected NR

4/10/25

Horiba U-52

1330

Duplicate: NO

Color	Odor	PH	COND. ms/cm	Turb NTU	D.O. mg/L	Temp °C	ORP mV
Dark Brown	Strong	7.82	39.0	174	0.04	55.00+	-379

maxed temp sensor out

strong effervescence on pressed samples

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte CF PROJECT (Name / Number) A025-1012

Instrument Make/Model # <u>Horiba U-52 213195</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	4.08	4.44	0.0	9.79		
Calibration	3.99	4.51	0.0	11.20		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satisfies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	<u>NR</u>
Physical Condition of Unit			<u>OK</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte LF PROJECT (Name / Number) AV25-1012

Instrument Make/Model # <u>Horiba V-52 213195</u>					<u>0757</u> <u>4/10/25</u>	
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	<u>4.00</u>	<u>4.52</u>	4.52	<u>11.97</u>		<u>Dropped Sample Device</u>
Calibration	<u>4.00</u>	<u>4.52</u>	<u>0.1</u>	<u>11.79</u>		
Calibration Successful? (Y/N)	<u>Y</u> —————→				enter YES or NO	
Satisfies Protocol?	<u>Y</u> —————→				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	<u>NR</u> —————→				Signature or initials	<u>MA Rdf</u>
Physical Condition of Unit			<u>Sample Device took several attempts to calibrate Turb</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte LE PROJECT (Name / Number) AU25.1012

Instrument Make/Model # <u>Horiba U52 213195</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	4.00	4.53	0.4	11.41		
Calibration	4.00	4.53	0.0	11.41		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satisfies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	<u>NRdlp</u>
Physical Condition of Unit			<u>Good</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte LF PROJECT (Name / Number) AUGS.1012

Instrument Make/Model # <u>U-52 213195</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	4.03	4.58	74.0	11.70		NTU wont cal Auto
Calibration	4.00	4.57	0.0	11.70		manually calibrated Turb
Calibration Successful? (Y/N)	Y	Y	N	Y	enter YES or NO	span 0.0 - 100 NTU did not work
Satisfies Protocol?	Y	Y	N	Y	Did calibration meet criteria in the sampling protocol? (Y or N)	Yes for longlist GW
Calibration by	NR	NR	NR	NR	Signature or initials	<u>21h Rdp2</u>
Physical Condition of Unit			OK			



ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/17/2025 10:58:28 AM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte-Groundwater

JOB NUMBER

280-205774-1

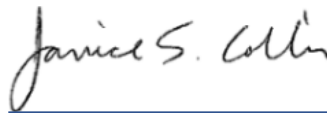
Eurofins Denver

Job Notes

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Authorization



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Authorized for release by
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(303)736-0100

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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Qualifiers

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
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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte-Groundwater

Job ID: 280-205774-1

Job ID: 280-205774-1

Eurofins Denver

Job Narrative 280-205774-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 4/10/2025 9:35 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 0.6°C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): 280-205774-8. The sample was logged per the information on the container labels.

GC/MS VOA

Method 8260D: The following compounds were outside control limits of 20%D in the continuing calibration verification (CCV) associated with batch 280-691419: Bromomethane (-21.7%D). This compound is considered a poor performer and has recovered within LCS/LCSD limits. The following samples are affected: 280-205774-1, 280-205774-2, 280-205774-3, 280-205774-4, 280-205774-5, 280-205774-6, 280-205774-7 and CCV 280-691419/2.

Method 8260D: The initial calibration verification (ICV) result for batch 280-691580 was above the upper control limit. The affected analytes are: Bromomethane. Sample results were non-detects, and have been reported as qualified data. 280-205774-8 and 280-205959-B-8

Method 8260D: The continuing calibration verification (CCV) associated with batch 280-691580 recovered outside acceptance criteria, low biased, for Bromomethane. This is considered a poor performer and the LCS and LCSD are within control limits.. 280-205774-8 and CCV 280-691580/2

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

Metals

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

General Chemistry

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

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Client Sample ID: MW-12S

Lab Sample ID: 280-205774-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.25	ug/L	1		8260D	Total/NA
Tetrachloroethene	4.3		1.0	0.25	ug/L	1		8260D	Total/NA
Trichloroethene	1.8		1.0	0.25	ug/L	1		8260D	Total/NA
Arsenic	1.0	J B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	47000		200	60	ug/L	1		6010D	Dissolved
Iron	650		100	40	ug/L	1		6010D	Dissolved
Magnesium	22000		200	50	ug/L	1		6010D	Dissolved
Manganese	600		10	2.5	ug/L	1		6010D	Dissolved
Sodium	32000		1000	450	ug/L	1		6010D	Dissolved
Chloride	38		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	240		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.6	J	4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-12D

Lab Sample ID: 280-205774-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.9		1.0	0.25	ug/L	1		8260D	Total/NA
Arsenic	0.52	J B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	25000		200	60	ug/L	1		6010D	Dissolved
Magnesium	11000		200	50	ug/L	1		6010D	Dissolved
Sodium	23000		1000	450	ug/L	1		6010D	Dissolved
Chloride	10		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10	6.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-27

Lab Sample ID: 280-205774-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	24	B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	79000		200	60	ug/L	1		6010D	Dissolved
Iron	5400		100	40	ug/L	1		6010D	Dissolved
Magnesium	33000		200	50	ug/L	1		6010D	Dissolved
Manganese	8800		10	2.5	ug/L	1		6010D	Dissolved
Sodium	35000		1000	450	ug/L	1		6010D	Dissolved
Chloride	14		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	420		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	470		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	46		4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 280-205774-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	18	B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	31000		200	60	ug/L	1		6010D	Dissolved
Iron	710		100	40	ug/L	1		6010D	Dissolved
Magnesium	13000		200	50	ug/L	1		6010D	Dissolved
Manganese	1100		10	2.5	ug/L	1		6010D	Dissolved
Sodium	23000		1000	450	ug/L	1		6010D	Dissolved
Chloride	20		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	170		10	7.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Client Sample ID: MW-26 (Continued)

Lab Sample ID: 280-205774-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	220		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	10		4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-23

Lab Sample ID: 280-205774-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	15	B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	24000		200	60	ug/L	1		6010D	Dissolved
Iron	360		100	40	ug/L	1		6010D	Dissolved
Magnesium	8700		200	50	ug/L	1		6010D	Dissolved
Manganese	540		10	2.5	ug/L	1		6010D	Dissolved
Sodium	26000		1000	450	ug/L	1		6010D	Dissolved
Chloride	5.8		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	21		4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: P-8

Lab Sample ID: 280-205774-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.65	J B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	30000		200	60	ug/L	1		6010D	Dissolved
Magnesium	14000		200	50	ug/L	1		6010D	Dissolved
Sodium	28000		1000	450	ug/L	1		6010D	Dissolved
Chloride	9.4		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	170		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	230		10	6.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Duplicate 2

Lab Sample ID: 280-205774-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.25	ug/L	1		8260D	Total/NA
Tetrachloroethene	6.7		1.0	0.25	ug/L	1		8260D	Total/NA
Trichloroethene	2.1		1.0	0.25	ug/L	1		8260D	Total/NA
Arsenic	1.1	J B	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	49000		200	60	ug/L	1		6010D	Dissolved
Iron	540		100	40	ug/L	1		6010D	Dissolved
Magnesium	23000		200	50	ug/L	1		6010D	Dissolved
Manganese	550		10	2.5	ug/L	1		6010D	Dissolved
Sodium	33000		1000	450	ug/L	1		6010D	Dissolved
Chloride	39		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	240		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	4.0		4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 280-205774-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
6010D	Metals (ICP)	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
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-205774-1	MW-12S	Water	04/09/25 08:25	04/10/25 09:35
280-205774-2	MW-12D	Water	04/09/25 09:35	04/10/25 09:35
280-205774-3	MW-27	Water	04/09/25 10:25	04/10/25 09:35
280-205774-4	MW-26	Water	04/09/25 11:10	04/10/25 09:35
280-205774-5	MW-23	Water	04/09/25 12:15	04/10/25 09:35
280-205774-6	P-8	Water	04/09/25 13:15	04/10/25 09:35
280-205774-7	Duplicate 2	Water	04/09/25 07:00	04/10/25 09:35
280-205774-8	Field Blank	Water	04/09/25 00:00	04/10/25 09:35

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-12S
Date Collected: 04/09/25 08:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 10:19	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 10:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 10:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 10:19	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 10:19	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 10:19	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 10:19	1
Acetone	ND		15	5.0	ug/L			04/14/25 10:19	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 10:19	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 10:19	1
cis-1,2-Dichloroethene	1.2		1.0	0.25	ug/L			04/14/25 10:19	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-12S
Date Collected: 04/09/25 08:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 10:19	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 10:19	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Tetrachloroethene	4.3		1.0	0.25	ug/L			04/14/25 10:19	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:19	1
Trichloroethene	1.8		1.0	0.25	ug/L			04/14/25 10:19	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:19	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 10:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/14/25 10:19	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/14/25 10:19	1
Dibromofluoromethane (Surr)	97		80 - 120		04/14/25 10:19	1
Toluene-d8 (Surr)	101		80 - 120		04/14/25 10:19	1

Client Sample ID: MW-12D
Date Collected: 04/09/25 09:35
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 10:39	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 10:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 10:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 10:39	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 10:39	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-12D
Date Collected: 04/09/25 09:35
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 10:39	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 10:39	1
Acetone	ND		15	5.0	ug/L			04/14/25 10:39	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 10:39	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 10:39	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 10:39	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 10:39	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Tetrachloroethene	1.9		1.0	0.25	ug/L			04/14/25 10:39	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:39	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:39	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 10:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/14/25 10:39	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/14/25 10:39	1
Dibromofluoromethane (Surr)	97		80 - 120		04/14/25 10:39	1
Toluene-d8 (Surr)	99		80 - 120		04/14/25 10:39	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-27
Date Collected: 04/09/25 10:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 10:59	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 10:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 10:59	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 10:59	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 10:59	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 10:59	1
Acetone	ND		15	5.0	ug/L			04/14/25 10:59	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 10:59	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-27
Date Collected: 04/09/25 10:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 10:59	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 10:59	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 10:59	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 10:59	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/14/25 10:59	1
4-Bromofluorobenzene (Surr)	100		80 - 120		04/14/25 10:59	1
Dibromofluoromethane (Surr)	94		80 - 120		04/14/25 10:59	1
Toluene-d8 (Surr)	102		80 - 120		04/14/25 10:59	1

Client Sample ID: MW-26
Date Collected: 04/09/25 11:10
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 11:18	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 11:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 11:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 11:18	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 11:18	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-26
Date Collected: 04/09/25 11:10
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 11:18	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 11:18	1
Acetone	ND		15	5.0	ug/L			04/14/25 11:18	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 11:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 11:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 11:18	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 11:18	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:18	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:18	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 11:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/14/25 11:18	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/14/25 11:18	1
Dibromofluoromethane (Surr)	96		80 - 120		04/14/25 11:18	1
Toluene-d8 (Surr)	100		80 - 120		04/14/25 11:18	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-23
Date Collected: 04/09/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 11:38	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 11:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 11:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 11:38	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 11:38	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 11:38	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 11:38	1
Acetone	ND		15	5.0	ug/L			04/14/25 11:38	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 11:38	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 11:38	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1

Eurofins Denver

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-23

Date Collected: 04/09/25 12:15

Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 11:38	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 11:38	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:38	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:38	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/14/25 11:38	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/14/25 11:38	1
Dibromofluoromethane (Surr)	97		80 - 120		04/14/25 11:38	1
Toluene-d8 (Surr)	100		80 - 120		04/14/25 11:38	1

Client Sample ID: P-8

Date Collected: 04/09/25 13:15

Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 11:58	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 11:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 11:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 11:58	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 11:58	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: P-8

Date Collected: 04/09/25 13:15

Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 11:58	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 11:58	1
Acetone	ND		15	5.0	ug/L			04/14/25 11:58	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 11:58	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 11:58	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 11:58	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 11:58	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 11:58	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 11:58	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		04/14/25 11:58	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/14/25 11:58	1
Dibromofluoromethane (Surr)	96		80 - 120		04/14/25 11:58	1
Toluene-d8 (Surr)	101		80 - 120		04/14/25 11:58	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: Duplicate 2
Date Collected: 04/09/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 12:18	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 12:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 12:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 12:18	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 12:18	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 12:18	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 12:18	1
Acetone	ND		15	5.0	ug/L			04/14/25 12:18	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 12:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 12:18	1
cis-1,2-Dichloroethene	1.2		1.0	0.25	ug/L			04/14/25 12:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: Duplicate 2
Date Collected: 04/09/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 12:18	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 12:18	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Tetrachloroethene	6.7		1.0	0.25	ug/L			04/14/25 12:18	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 12:18	1
Trichloroethene	2.1		1.0	0.25	ug/L			04/14/25 12:18	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 12:18	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		04/14/25 12:18	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/14/25 12:18	1
Dibromofluoromethane (Surr)	97		80 - 120		04/14/25 12:18	1
Toluene-d8 (Surr)	100		80 - 120		04/14/25 12:18	1

Client Sample ID: Field Blank
Date Collected: 04/09/25 00:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 22:52	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 22:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 22:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 22:52	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 22:52	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: Field Blank
Date Collected: 04/09/25 00:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 22:52	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 22:52	1
Acetone	ND		15	5.0	ug/L			04/14/25 22:52	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 22:52	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 22:52	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 22:52	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 22:52	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 22:52	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 22:52	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 22:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		04/14/25 22:52	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/14/25 22:52	1
Dibromofluoromethane (Surr)	99		80 - 120		04/14/25 22:52	1
Toluene-d8 (Surr)	97		80 - 120		04/14/25 22:52	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-12S
Date Collected: 04/09/25 08:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	J B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 16:49	1

Client Sample ID: MW-12D
Date Collected: 04/09/25 09:35
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.52	J B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 16:52	1

Client Sample ID: MW-27
Date Collected: 04/09/25 10:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24	B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 16:54	1

Client Sample ID: MW-26
Date Collected: 04/09/25 11:10
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	18	B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 16:56	1

Client Sample ID: MW-23
Date Collected: 04/09/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15	B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 16:59	1

Client Sample ID: P-8
Date Collected: 04/09/25 13:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.65	J B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 17:01	1

Client Sample ID: Duplicate 2
Date Collected: 04/09/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.1	J B	2.0	0.50	ug/L	-	04/11/25 15:36	04/14/25 17:04	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-12S
Date Collected: 04/09/25 08:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	47000		200	60	ug/L	-	04/11/25 15:36	04/14/25 17:34	1
Iron	650		100	40	ug/L	-	04/11/25 15:36	04/14/25 17:34	1
Magnesium	22000		200	50	ug/L	-	04/11/25 15:36	04/14/25 17:34	1
Manganese	600		10	2.5	ug/L	-	04/11/25 15:36	04/14/25 17:34	1
Sodium	32000		1000	450	ug/L	-	04/11/25 15:36	04/14/25 17:34	1

Eurofins Denver

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-12D
Date Collected: 04/09/25 09:35
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25000		200	60	ug/L		04/11/25 15:36	04/14/25 17:40	1
Iron	ND		100	40	ug/L		04/11/25 15:36	04/14/25 17:40	1
Magnesium	11000		200	50	ug/L		04/11/25 15:36	04/14/25 17:40	1
Manganese	ND		10	2.5	ug/L		04/11/25 15:36	04/14/25 17:40	1
Sodium	23000		1000	450	ug/L		04/11/25 15:36	04/14/25 17:40	1

Client Sample ID: MW-27
Date Collected: 04/09/25 10:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		200	60	ug/L		04/11/25 15:36	04/14/25 17:45	1
Iron	5400		100	40	ug/L		04/11/25 15:36	04/14/25 17:45	1
Magnesium	33000		200	50	ug/L		04/11/25 15:36	04/14/25 17:45	1
Manganese	8800		10	2.5	ug/L		04/11/25 15:36	04/14/25 17:45	1
Sodium	35000		1000	450	ug/L		04/11/25 15:36	04/14/25 17:45	1

Client Sample ID: MW-26
Date Collected: 04/09/25 11:10
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000		200	60	ug/L		04/11/25 15:36	04/14/25 17:49	1
Iron	710		100	40	ug/L		04/11/25 15:36	04/14/25 17:49	1
Magnesium	13000		200	50	ug/L		04/11/25 15:36	04/14/25 17:49	1
Manganese	1100		10	2.5	ug/L		04/11/25 15:36	04/14/25 17:49	1
Sodium	23000		1000	450	ug/L		04/11/25 15:36	04/14/25 17:49	1

Client Sample ID: MW-23
Date Collected: 04/09/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		04/11/25 15:36	04/14/25 17:54	1
Iron	360		100	40	ug/L		04/11/25 15:36	04/14/25 17:54	1
Magnesium	8700		200	50	ug/L		04/11/25 15:36	04/14/25 17:54	1
Manganese	540		10	2.5	ug/L		04/11/25 15:36	04/14/25 17:54	1
Sodium	26000		1000	450	ug/L		04/11/25 15:36	04/14/25 17:54	1

Client Sample ID: P-8
Date Collected: 04/09/25 13:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	30000		200	60	ug/L		04/11/25 15:36	04/14/25 18:00	1
Iron	ND		100	40	ug/L		04/11/25 15:36	04/14/25 18:00	1
Magnesium	14000		200	50	ug/L		04/11/25 15:36	04/14/25 18:00	1
Manganese	ND		10	2.5	ug/L		04/11/25 15:36	04/14/25 18:00	1
Sodium	28000		1000	450	ug/L		04/11/25 15:36	04/14/25 18:00	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: Duplicate 2
Date Collected: 04/09/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49000		200	60	ug/L		04/11/25 15:36	04/14/25 18:22	1
Iron	540		100	40	ug/L		04/11/25 15:36	04/14/25 18:22	1
Magnesium	23000		200	50	ug/L		04/11/25 15:36	04/14/25 18:22	1
Manganese	550		10	2.5	ug/L		04/11/25 15:36	04/14/25 18:22	1
Sodium	33000		1000	450	ug/L		04/11/25 15:36	04/14/25 18:22	1

General Chemistry

Client Sample ID: MW-12S
Date Collected: 04/09/25 08:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	38		3.0	1.3	mg/L			04/11/25 19:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	240		10	7.0	mg/L			04/12/25 01:24	1
Total Dissolved Solids (SM 2540C)	340		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	1.6	J	4.0	1.5	mg/L			04/11/25 13:04	1

Client Sample ID: MW-12D
Date Collected: 04/09/25 09:35
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	10		3.0	1.3	mg/L			04/11/25 19:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	140		10	7.0	mg/L			04/12/25 01:29	1
Total Dissolved Solids (SM 2540C)	210		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/11/25 13:04	1

Client Sample ID: MW-27
Date Collected: 04/09/25 10:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		3.0	1.3	mg/L			04/11/25 19:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	420		10	7.0	mg/L			04/12/25 01:36	1
Total Dissolved Solids (SM 2540C)	470		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	46		4.0	1.5	mg/L			04/11/25 13:04	1

Client Sample ID: MW-26
Date Collected: 04/09/25 11:10
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	20		3.0	1.3	mg/L			04/11/25 20:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	170		10	7.0	mg/L			04/12/25 01:41	1
Total Dissolved Solids (SM 2540C)	220		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	10		4.0	1.5	mg/L			04/11/25 13:04	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

General Chemistry

Client Sample ID: MW-23
Date Collected: 04/09/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.8		3.0	1.3	mg/L			04/11/25 21:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	150		10	7.0	mg/L			04/12/25 01:46	1
Total Dissolved Solids (SM 2540C)	200		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	21		4.0	1.5	mg/L			04/11/25 13:04	1

Client Sample ID: P-8
Date Collected: 04/09/25 13:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	9.4		3.0	1.3	mg/L			04/11/25 21:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	170		10	7.0	mg/L			04/12/25 01:52	1
Total Dissolved Solids (SM 2540C)	230		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/11/25 13:04	1

Client Sample ID: Duplicate 2
Date Collected: 04/09/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	39		3.0	1.3	mg/L			04/11/25 18:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	240		10	7.0	mg/L			04/12/25 01:58	1
Total Dissolved Solids (SM 2540C)	340		10	6.0	mg/L			04/11/25 09:11	1
Total Suspended Solids (SM 2540D)	4.0		4.0	1.5	mg/L			04/11/25 13:04	1

Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
280-205609-L-1 MS	Matrix Spike	100	94	99	97
280-205609-L-1 MSD	Matrix Spike Duplicate	99	96	99	99
280-205774-1	MW-12S	97	99	97	101
280-205774-2	MW-12D	96	99	97	99
280-205774-3	MW-27	96	100	94	102
280-205774-4	MW-26	97	97	96	100
280-205774-5	MW-23	97	97	97	100
280-205774-6	P-8	98	96	96	101
280-205774-7	Duplicate 2	98	97	97	100
280-205774-8	Field Blank	94	97	99	97
280-205959-D-8 MS	Matrix Spike	94	97	103	97
280-205959-D-8 MSD	Matrix Spike Duplicate	97	97	104	96
LCS 280-691419/4	Lab Control Sample	93	94	97	94
LCS 280-691580/4	Lab Control Sample	96	96	102	98
LCSD 280-691419/5	Lab Control Sample Dup	98	95	98	97
LCSD 280-691580/5	Lab Control Sample Dup	96	96	104	96
MB 280-691419/9	Method Blank	96	98	95	99
MB 280-691580/9	Method Blank	96	97	101	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 280-691419/9

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 06:56	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 06:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 06:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 06:56	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 06:56	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 06:56	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 06:56	1
Acetone	ND		15	5.0	ug/L			04/14/25 06:56	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 06:56	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 06:56	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 06:56	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: MB 280-691419/9

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 06:56	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 06:56	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 06:56	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 06:56	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 06:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/14/25 06:56	1
4-Bromofluorobenzene (Surr)	98		80 - 120		04/14/25 06:56	1
Dibromofluoromethane (Surr)	95		80 - 120		04/14/25 06:56	1
Toluene-d8 (Surr)	99		80 - 120		04/14/25 06:56	1

Lab Sample ID: LCS 280-691419/4

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	48.3		ug/L		97	79 - 125
1,1,1-Trichloroethane	50.0	43.8		ug/L		88	78 - 125
1,1,2,2-Tetrachloroethane	50.0	52.2		ug/L		104	73 - 126
1,1,2-Trichloroethane	50.0	52.6		ug/L		105	80 - 121
1,1-Dichloroethane	50.0	44.5		ug/L		89	78 - 124
1,1-Dichloroethene	50.0	45.6		ug/L		91	76 - 124
1,1-Dichloropropene	50.0	44.3		ug/L		89	80 - 124
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	57 - 136
1,2,3-Trichloropropane	50.0	47.0		ug/L		94	75 - 123
1,2,4-Trichlorobenzene	50.0	51.9		ug/L		104	69 - 130
1,2,4-Trimethylbenzene	50.0	47.0		ug/L		94	80 - 123
1,2-Dibromo-3-Chloropropane	50.0	52.4		ug/L		105	64 - 130
1,2-Dibromoethane	50.0	49.9		ug/L		100	80 - 120
1,2-Dichlorobenzene	50.0	48.8		ug/L		98	80 - 120
1,2-Dichloroethane	50.0	42.5		ug/L		85	73 - 124
1,2-Dichloropropane	50.0	46.6		ug/L		93	78 - 124
1,3,5-Trimethylbenzene	50.0	46.6		ug/L		93	80 - 122
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCS 280-691419/4

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	50.0	48.6		ug/L		97	80 - 121
1,4-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 120
2,2-Dichloropropane	50.0	45.9		ug/L		92	72 - 131
2-Butanone (MEK)	200	205		ug/L		102	59 - 141
2-Chlorotoluene	50.0	46.1		ug/L		92	80 - 120
2-Hexanone	200	209		ug/L		105	59 - 146
4-Chlorotoluene	50.0	47.0		ug/L		94	80 - 121
4-Isopropyltoluene	50.0	47.6		ug/L		95	80 - 124
4-Methyl-2-pentanone (MIBK)	200	227		ug/L		114	63 - 144
Acetone	200	172		ug/L		86	57 - 143
Benzene	50.0	46.1		ug/L		92	80 - 121
Bromobenzene	50.0	46.8		ug/L		94	80 - 120
Bromochloromethane	50.0	49.7		ug/L		99	76 - 126
Bromodichloromethane	50.0	46.2		ug/L		92	80 - 124
Bromoform	50.0	45.0		ug/L		90	66 - 134
Bromomethane	50.0	39.1		ug/L		78	10 - 150
Carbon disulfide	50.0	46.8		ug/L		94	70 - 127
Carbon tetrachloride	50.0	46.1		ug/L		92	72 - 131
Chlorobenzene	50.0	46.7		ug/L		93	80 - 120
Chloroethane	50.0	42.8		ug/L		86	51 - 149
Chloroform	50.0	45.4		ug/L		91	80 - 120
Chloromethane	50.0	45.2		ug/L		90	51 - 142
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	80 - 121
cis-1,3-Dichloropropene	50.0	45.0		ug/L		90	77 - 127
Dibromochloromethane	50.0	49.6		ug/L		99	77 - 128
Dibromomethane	50.0	47.6		ug/L		95	80 - 120
Dichlorodifluoromethane	50.0	40.5		ug/L		81	36 - 150
Ethylbenzene	50.0	45.6		ug/L		91	80 - 120
Hexachlorobutadiene	50.0	52.4		ug/L		105	66 - 135
Isopropylbenzene	50.0	44.1		ug/L		88	78 - 123
Methylene Chloride	50.0	48.1		ug/L		96	77 - 121
m-Xylene & p-Xylene	50.0	46.7		ug/L		93	80 - 121
Naphthalene	50.0	49.7		ug/L		99	55 - 135
n-Butylbenzene	50.0	51.3		ug/L		103	73 - 131
N-Propylbenzene	50.0	45.6		ug/L		91	80 - 123
o-Xylene	50.0	46.6		ug/L		93	80 - 121
sec-Butylbenzene	50.0	47.7		ug/L		95	80 - 125
Styrene	50.0	47.3		ug/L		95	80 - 123
tert-Butylbenzene	50.0	46.0		ug/L		92	80 - 121
Tetrachloroethene	50.0	44.7		ug/L		89	79 - 125
Toluene	50.0	46.1		ug/L		92	80 - 120
trans-1,2-Dichloroethene	50.0	44.7		ug/L		89	78 - 123
trans-1,3-Dichloropropene	50.0	50.6		ug/L		101	79 - 124
Trichloroethene	50.0	41.0		ug/L		82	79 - 121
Trichlorofluoromethane	50.0	42.7		ug/L		85	60 - 139
Vinyl chloride	50.0	56.2		ug/L		112	60 - 136

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCS 280-691419/4

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	94		80 - 120

Lab Sample ID: LCSD 280-691419/5

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	49.7		ug/L		99	79 - 125	3	20
1,1,1-Trichloroethane	50.0	43.5		ug/L		87	78 - 125	1	20
1,1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	73 - 126	0	20
1,1,2-Trichloroethane	50.0	48.8		ug/L		98	80 - 121	7	20
1,1-Dichloroethane	50.0	44.5		ug/L		89	78 - 124	0	20
1,1-Dichloroethene	50.0	44.2		ug/L		88	76 - 124	3	20
1,1-Dichloropropene	50.0	43.8		ug/L		88	80 - 124	1	20
1,2,3-Trichlorobenzene	50.0	54.3		ug/L		109	57 - 136	2	21
1,2,3-Trichloropropane	50.0	47.9		ug/L		96	75 - 123	2	26
1,2,4-Trichlorobenzene	50.0	52.2		ug/L		104	69 - 130	1	20
1,2,4-Trimethylbenzene	50.0	48.0		ug/L		96	80 - 123	2	20
1,2-Dibromo-3-Chloropropane	50.0	52.8		ug/L		106	64 - 130	1	20
1,2-Dibromoethane	50.0	49.8		ug/L		100	80 - 120	0	20
1,2-Dichlorobenzene	50.0	49.7		ug/L		99	80 - 120	2	20
1,2-Dichloroethane	50.0	43.2		ug/L		86	73 - 124	2	20
1,2-Dichloropropane	50.0	46.2		ug/L		92	78 - 124	1	20
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	80 - 122	4	20
1,3-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 120	3	20
1,3-Dichloropropane	50.0	48.3		ug/L		97	80 - 121	1	20
1,4-Dichlorobenzene	50.0	50.8		ug/L		102	80 - 120	2	20
2,2-Dichloropropane	50.0	44.9		ug/L		90	72 - 131	2	20
2-Butanone (MEK)	200	189		ug/L		94	59 - 141	8	20
2-Chlorotoluene	50.0	47.7		ug/L		95	80 - 120	3	20
2-Hexanone	200	202		ug/L		101	59 - 146	3	20
4-Chlorotoluene	50.0	48.6		ug/L		97	80 - 121	3	20
4-Isopropyltoluene	50.0	49.5		ug/L		99	80 - 124	4	20
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		104	63 - 144	9	20
Acetone	200	159		ug/L		80	57 - 143	8	22
Benzene	50.0	45.1		ug/L		90	80 - 121	2	20
Bromobenzene	50.0	48.2		ug/L		96	80 - 120	3	20
Bromochloromethane	50.0	48.2		ug/L		96	76 - 126	3	20
Bromodichloromethane	50.0	46.7		ug/L		93	80 - 124	1	20
Bromoform	50.0	43.5		ug/L		87	66 - 134	3	20
Bromomethane	50.0	39.5		ug/L		79	10 - 150	1	58
Carbon disulfide	50.0	45.8		ug/L		92	70 - 127	2	20
Carbon tetrachloride	50.0	46.7		ug/L		93	72 - 131	1	20
Chlorobenzene	50.0	47.7		ug/L		95	80 - 120	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCSD 280-691419/5

Matrix: Water

Analysis Batch: 691419

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
Chloroethane	50.0	44.5		ug/L		89	51 - 149	4	34
Chloroform	50.0	44.2		ug/L		88	80 - 120	3	20
Chloromethane	50.0	41.5		ug/L		83	51 - 142	9	21
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	80 - 121	3	20
cis-1,3-Dichloropropene	50.0	46.8		ug/L		94	77 - 127	4	20
Dibromochloromethane	50.0	49.3		ug/L		99	77 - 128	1	20
Dibromomethane	50.0	48.0		ug/L		96	80 - 120	1	20
Dichlorodifluoromethane	50.0	39.3		ug/L		79	36 - 150	3	35
Ethylbenzene	50.0	46.3		ug/L		93	80 - 120	2	20
Hexachlorobutadiene	50.0	54.9		ug/L		110	66 - 135	5	20
Isopropylbenzene	50.0	46.9		ug/L		94	78 - 123	6	20
Methylene Chloride	50.0	46.3		ug/L		93	77 - 121	4	20
m-Xylene & p-Xylene	50.0	47.8		ug/L		96	80 - 121	2	20
Naphthalene	50.0	49.5		ug/L		99	55 - 135	0	23
n-Butylbenzene	50.0	52.9		ug/L		106	73 - 131	3	25
N-Propylbenzene	50.0	47.9		ug/L		96	80 - 123	5	20
o-Xylene	50.0	47.2		ug/L		94	80 - 121	1	20
sec-Butylbenzene	50.0	49.4		ug/L		99	80 - 125	3	20
Styrene	50.0	47.5		ug/L		95	80 - 123	0	20
tert-Butylbenzene	50.0	48.2		ug/L		96	80 - 121	5	20
Tetrachloroethene	50.0	45.2		ug/L		90	79 - 125	1	20
Toluene	50.0	45.4		ug/L		91	80 - 120	1	20
trans-1,2-Dichloroethene	50.0	43.5		ug/L		87	78 - 123	3	20
trans-1,3-Dichloropropene	50.0	48.2		ug/L		96	79 - 124	5	20
Trichloroethene	50.0	43.0		ug/L		86	79 - 121	5	20
Trichlorofluoromethane	50.0	44.6		ug/L		89	60 - 139	4	25
Vinyl chloride	50.0	53.6		ug/L		107	60 - 136	5	23

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 280-205609-L-1 MS

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.9		ug/L		99	79 - 125
1,1,1-Trichloroethane	ND		25.0	22.3		ug/L		89	78 - 125
1,1,2,2-Tetrachloroethane	ND		25.0	28.1		ug/L		112	73 - 126
1,1,2-Trichloroethane	ND		25.0	29.3		ug/L		117	80 - 121
1,1-Dichloroethane	ND		25.0	24.0		ug/L		96	78 - 124
1,1-Dichloroethene	ND		25.0	23.6		ug/L		94	76 - 124
1,1-Dichloropropene	ND		25.0	23.0		ug/L		92	80 - 124
1,2,3-Trichlorobenzene	ND		25.0	28.6		ug/L		115	57 - 136

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205609-L-1 MS

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		25.0	25.9		ug/L		103	75 - 123
1,2,4-Trichlorobenzene	ND		25.0	27.1		ug/L		108	69 - 130
1,2,4-Trimethylbenzene	ND		25.0	24.4		ug/L		98	80 - 123
1,2-Dibromo-3-Chloropropane	ND		25.0	26.6		ug/L		106	64 - 130
1,2-Dibromoethane	ND		25.0	25.9		ug/L		104	80 - 120
1,2-Dichlorobenzene	ND		25.0	25.5		ug/L		102	80 - 120
1,2-Dichloroethane	ND		25.0	23.7		ug/L		95	73 - 124
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	78 - 124
1,3,5-Trimethylbenzene	ND		25.0	24.7		ug/L		99	80 - 122
1,3-Dichlorobenzene	ND		25.0	25.6		ug/L		103	80 - 120
1,3-Dichloropropane	ND		25.0	26.0		ug/L		104	80 - 121
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		104	80 - 120
2,2-Dichloropropane	ND		25.0	22.6		ug/L		90	72 - 131
2-Butanone (MEK)	ND		100	133		ug/L		133	59 - 141
2-Chlorotoluene	ND		25.0	24.9		ug/L		100	80 - 120
2-Hexanone	ND		100	112		ug/L		112	59 - 146
4-Chlorotoluene	ND		25.0	25.2		ug/L		101	80 - 121
4-Isopropyltoluene	ND		25.0	25.2		ug/L		101	80 - 124
4-Methyl-2-pentanone (MIBK)	ND		100	111		ug/L		111	63 - 144
Acetone	ND		100	129		ug/L		129	57 - 143
Benzene	ND		25.0	24.4		ug/L		98	80 - 121
Bromobenzene	ND		25.0	24.6		ug/L		99	80 - 120
Bromochloromethane	ND		25.0	26.5		ug/L		106	76 - 126
Bromodichloromethane	ND		25.0	23.9		ug/L		95	80 - 124
Bromoform	ND		25.0	20.4		ug/L		82	66 - 134
Bromomethane	ND		25.0	15.9		ug/L		64	10 - 150
Carbon disulfide	ND		25.0	21.7		ug/L		87	70 - 127
Carbon tetrachloride	ND		25.0	22.4		ug/L		89	72 - 131
Chlorobenzene	ND		25.0	25.4		ug/L		101	80 - 120
Chloroethane	ND		25.0	19.5		ug/L		78	51 - 149
Chloroform	3.7		25.0	26.8		ug/L		93	80 - 120
Chloromethane	ND		25.0	18.4		ug/L		74	51 - 142
cis-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	80 - 121
cis-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	77 - 127
Dibromochloromethane	ND		25.0	24.0		ug/L		96	77 - 128
Dibromomethane	ND		25.0	26.5		ug/L		106	80 - 120
Dichlorodifluoromethane	ND		25.0	12.4		ug/L		50	36 - 150
Ethylbenzene	ND		25.0	24.8		ug/L		99	80 - 120
Hexachlorobutadiene	ND		25.0	26.4		ug/L		106	66 - 135
Isopropylbenzene	0.28	J	25.0	23.9		ug/L		95	78 - 123
Methylene Chloride	ND		25.0	27.0		ug/L		108	77 - 121
m-Xylene & p-Xylene	ND		25.0	25.1		ug/L		100	80 - 121
Naphthalene	ND		25.0	26.5		ug/L		106	55 - 135
n-Butylbenzene	ND		25.0	27.1		ug/L		108	73 - 131
N-Propylbenzene	ND		25.0	24.7		ug/L		99	80 - 123
o-Xylene	ND		25.0	24.9		ug/L		100	80 - 121
sec-Butylbenzene	1.7		25.0	26.6		ug/L		100	80 - 125
Styrene	ND		25.0	25.1		ug/L		100	80 - 123

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205609-L-1 MS

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
tert-Butylbenzene	ND		25.0	24.9		ug/L		100	80 - 121
Tetrachloroethene	1.1		25.0	24.9		ug/L		95	79 - 125
Toluene	ND		25.0	24.5		ug/L		98	80 - 120
trans-1,2-Dichloroethene	ND		25.0	24.1		ug/L		96	78 - 123
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	79 - 124
Trichloroethene	ND		25.0	22.7		ug/L		91	79 - 121
Trichlorofluoromethane	ND		25.0	18.5		ug/L		74	60 - 139
Vinyl chloride	ND		25.0	25.0		ug/L		100	60 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 280-205609-L-1 MSD

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	26.4		ug/L		106	79 - 125	6	20
1,1,1-Trichloroethane	ND		25.0	23.8		ug/L		95	78 - 125	7	20
1,1,2,2-Tetrachloroethane	ND		25.0	29.8		ug/L		119	73 - 126	6	20
1,1,2-Trichloroethane	ND		25.0	30.1		ug/L		121	80 - 121	3	20
1,1-Dichloroethane	ND		25.0	24.6		ug/L		99	78 - 124	3	20
1,1-Dichloroethene	ND		25.0	23.7		ug/L		95	76 - 124	0	20
1,1-Dichloropropene	ND		25.0	24.1		ug/L		96	80 - 124	5	20
1,2,3-Trichlorobenzene	ND		25.0	30.9		ug/L		124	57 - 136	8	21
1,2,3-Trichloropropane	ND		25.0	27.7		ug/L		111	75 - 123	7	26
1,2,4-Trichlorobenzene	ND		25.0	29.5		ug/L		118	69 - 130	9	20
1,2,4-Trimethylbenzene	ND		25.0	26.4		ug/L		106	80 - 123	8	20
1,2-Dibromo-3-Chloropropane	ND		25.0	28.4		ug/L		114	64 - 130	7	20
1,2-Dibromoethane	ND		25.0	27.2		ug/L		109	80 - 120	5	20
1,2-Dichlorobenzene	ND		25.0	27.3		ug/L		109	80 - 120	7	20
1,2-Dichloroethane	ND		25.0	24.5		ug/L		98	73 - 124	3	20
1,2-Dichloropropane	ND		25.0	26.3		ug/L		105	78 - 124	3	20
1,3,5-Trimethylbenzene	ND		25.0	26.7		ug/L		107	80 - 122	8	20
1,3-Dichlorobenzene	ND		25.0	27.2		ug/L		109	80 - 120	6	20
1,3-Dichloropropane	ND		25.0	27.0		ug/L		108	80 - 121	4	20
1,4-Dichlorobenzene	ND		25.0	28.1		ug/L		112	80 - 120	7	20
2,2-Dichloropropane	ND		25.0	23.4		ug/L		94	72 - 131	3	20
2-Butanone (MEK)	ND		100	132		ug/L		132	59 - 141	1	20
2-Chlorotoluene	ND		25.0	26.8		ug/L		107	80 - 120	7	20
2-Hexanone	ND		100	118		ug/L		118	59 - 146	5	20
4-Chlorotoluene	ND		25.0	26.7		ug/L		107	80 - 121	6	20
4-Isopropyltoluene	ND		25.0	27.2		ug/L		109	80 - 124	8	20
4-Methyl-2-pentanone (MIBK)	ND		100	114		ug/L		114	63 - 144	3	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205609-L-1 MSD

Matrix: Water

Analysis Batch: 691419

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		100	114		ug/L		114	57 - 143	13	22
Benzene	ND		25.0	25.1		ug/L		100	80 - 121	3	20
Bromobenzene	ND		25.0	26.5		ug/L		106	80 - 120	7	20
Bromochloromethane	ND		25.0	27.0		ug/L		108	76 - 126	2	20
Bromodichloromethane	ND		25.0	24.9		ug/L		100	80 - 124	4	20
Bromoform	ND		25.0	21.6		ug/L		86	66 - 134	5	20
Bromomethane	ND		25.0	18.9		ug/L		76	10 - 150	17	58
Carbon disulfide	ND		25.0	22.1		ug/L		88	70 - 127	2	20
Carbon tetrachloride	ND		25.0	23.9		ug/L		96	72 - 131	7	20
Chlorobenzene	ND		25.0	26.8		ug/L		107	80 - 120	5	20
Chloroethane	ND		25.0	19.2		ug/L		77	51 - 149	1	34
Chloroform	3.7		25.0	28.0		ug/L		97	80 - 120	4	20
Chloromethane	ND		25.0	19.6		ug/L		78	51 - 142	6	21
cis-1,2-Dichloroethene	ND		25.0	25.6		ug/L		102	80 - 121	4	20
cis-1,3-Dichloropropene	ND		25.0	25.5		ug/L		102	77 - 127	6	20
Dibromochloromethane	ND		25.0	25.3		ug/L		101	77 - 128	5	20
Dibromomethane	ND		25.0	27.0		ug/L		108	80 - 120	2	20
Dichlorodifluoromethane	ND		25.0	12.8		ug/L		51	36 - 150	3	35
Ethylbenzene	ND		25.0	26.1		ug/L		104	80 - 120	5	20
Hexachlorobutadiene	ND		25.0	28.2		ug/L		113	66 - 135	6	20
Isopropylbenzene	0.28 J		25.0	25.8		ug/L		102	78 - 123	7	20
Methylene Chloride	ND		25.0	27.5		ug/L		110	77 - 121	2	20
m-Xylene & p-Xylene	ND		25.0	26.7		ug/L		107	80 - 121	6	20
Naphthalene	ND		25.0	28.5		ug/L		114	55 - 135	7	23
n-Butylbenzene	ND		25.0	29.3		ug/L		117	73 - 131	8	25
N-Propylbenzene	ND		25.0	26.7		ug/L		107	80 - 123	8	20
o-Xylene	ND		25.0	26.3		ug/L		105	80 - 121	5	20
sec-Butylbenzene	1.7		25.0	29.1		ug/L		109	80 - 125	9	20
Styrene	ND		25.0	26.4		ug/L		106	80 - 123	5	20
tert-Butylbenzene	ND		25.0	26.5		ug/L		106	80 - 121	6	20
Tetrachloroethene	1.1		25.0	25.8		ug/L		99	79 - 125	4	20
Toluene	ND		25.0	24.9		ug/L		100	80 - 120	2	20
trans-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	78 - 123	5	20
trans-1,3-Dichloropropene	ND		25.0	25.6		ug/L		103	79 - 124	2	20
Trichloroethene	ND		25.0	24.6		ug/L		98	79 - 121	8	20
Trichlorofluoromethane	ND		25.0	19.4		ug/L		78	60 - 139	5	25
Vinyl chloride	ND		25.0	26.1		ug/L		104	60 - 136	4	23

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: MB 280-691580/9

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/14/25 20:28	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/14/25 20:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/14/25 20:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/14/25 20:28	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/14/25 20:28	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
2-Hexanone	ND		5.0	1.5	ug/L			04/14/25 20:28	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/14/25 20:28	1
Acetone	ND		15	5.0	ug/L			04/14/25 20:28	1
Benzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Bromobenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Bromoform	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Bromomethane	ND		5.0	2.5	ug/L			04/14/25 20:28	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Chloroethane	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Chloroform	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Chloromethane	ND		2.0	0.50	ug/L			04/14/25 20:28	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Dibromomethane	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/14/25 20:28	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: MB 280-691580/9

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/14/25 20:28	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Naphthalene	ND		3.0	1.0	ug/L			04/14/25 20:28	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
o-Xylene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Styrene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Toluene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Trichloroethene	ND		1.0	0.25	ug/L			04/14/25 20:28	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/14/25 20:28	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/14/25 20:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/14/25 20:28	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/14/25 20:28	1
Dibromofluoromethane (Surr)	101		80 - 120		04/14/25 20:28	1
Toluene-d8 (Surr)	96		80 - 120		04/14/25 20:28	1

Lab Sample ID: LCS 280-691580/4

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	79 - 125
1,1,1-Trichloroethane	50.0	49.5		ug/L		99	78 - 125
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/L		93	73 - 126
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 121
1,1-Dichloroethane	50.0	49.5		ug/L		99	78 - 124
1,1-Dichloroethene	50.0	49.4		ug/L		99	76 - 124
1,1-Dichloropropene	50.0	50.7		ug/L		101	80 - 124
1,2,3-Trichlorobenzene	50.0	48.0		ug/L		96	57 - 136
1,2,3-Trichloropropane	50.0	46.1		ug/L		92	75 - 123
1,2,4-Trichlorobenzene	50.0	47.9		ug/L		96	69 - 130
1,2,4-Trimethylbenzene	50.0	45.0		ug/L		90	80 - 123
1,2-Dibromo-3-Chloropropane	50.0	53.0		ug/L		106	64 - 130
1,2-Dibromoethane	50.0	48.5		ug/L		97	80 - 120
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	80 - 120
1,2-Dichloroethane	50.0	45.6		ug/L		91	73 - 124
1,2-Dichloropropane	50.0	49.9		ug/L		100	78 - 124
1,3,5-Trimethylbenzene	50.0	45.1		ug/L		90	80 - 122
1,3-Dichlorobenzene	50.0	45.8		ug/L		92	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCS 280-691580/4

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	50.0	47.3		ug/L		95	80 - 121
1,4-Dichlorobenzene	50.0	45.4		ug/L		91	80 - 120
2,2-Dichloropropane	50.0	50.3		ug/L		101	72 - 131
2-Butanone (MEK)	200	197		ug/L		98	59 - 141
2-Chlorotoluene	50.0	46.7		ug/L		93	80 - 120
2-Hexanone	200	193		ug/L		97	59 - 146
4-Chlorotoluene	50.0	46.7		ug/L		93	80 - 121
4-Isopropyltoluene	50.0	46.3		ug/L		93	80 - 124
4-Methyl-2-pentanone (MIBK)	200	200		ug/L		100	63 - 144
Acetone	200	207		ug/L		103	57 - 143
Benzene	50.0	48.4		ug/L		97	80 - 121
Bromobenzene	50.0	45.5		ug/L		91	80 - 120
Bromochloromethane	50.0	48.3		ug/L		97	76 - 126
Bromodichloromethane	50.0	50.5		ug/L		101	80 - 124
Bromoform	50.0	47.5		ug/L		95	66 - 134
Bromomethane	50.0	30.5		ug/L		61	10 - 150
Carbon disulfide	50.0	53.4		ug/L		107	70 - 127
Carbon tetrachloride	50.0	52.4		ug/L		105	72 - 131
Chlorobenzene	50.0	47.7		ug/L		95	80 - 120
Chloroethane	50.0	48.5		ug/L		97	51 - 149
Chloroform	50.0	47.5		ug/L		95	80 - 120
Chloromethane	50.0	45.7		ug/L		91	51 - 142
cis-1,2-Dichloroethene	50.0	49.7		ug/L		99	80 - 121
cis-1,3-Dichloropropene	50.0	51.2		ug/L		102	77 - 127
Dibromochloromethane	50.0	54.1		ug/L		108	77 - 128
Dibromomethane	50.0	49.3		ug/L		99	80 - 120
Dichlorodifluoromethane	50.0	49.4		ug/L		99	36 - 150
Ethylbenzene	50.0	48.2		ug/L		96	80 - 120
Hexachlorobutadiene	50.0	49.5		ug/L		99	66 - 135
Isopropylbenzene	50.0	46.5		ug/L		93	78 - 123
Methylene Chloride	50.0	50.3		ug/L		101	77 - 121
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	80 - 121
Naphthalene	50.0	46.3		ug/L		93	55 - 135
n-Butylbenzene	50.0	45.3		ug/L		91	73 - 131
N-Propylbenzene	50.0	45.8		ug/L		92	80 - 123
o-Xylene	50.0	48.5		ug/L		97	80 - 121
sec-Butylbenzene	50.0	46.8		ug/L		94	80 - 125
Styrene	50.0	48.6		ug/L		97	80 - 123
tert-Butylbenzene	50.0	45.5		ug/L		91	80 - 121
Tetrachloroethene	50.0	48.5		ug/L		97	79 - 125
Toluene	50.0	49.0		ug/L		98	80 - 120
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	78 - 123
trans-1,3-Dichloropropene	50.0	51.3		ug/L		103	79 - 124
Trichloroethene	50.0	47.2		ug/L		94	79 - 121
Trichlorofluoromethane	50.0	49.3		ug/L		99	60 - 139
Vinyl chloride	50.0	47.8		ug/L		96	60 - 136

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCS 280-691580/4

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 280-691580/5

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	79 - 125	0	20
1,1,1-Trichloroethane	50.0	50.7		ug/L		101	78 - 125	3	20
1,1,1,2,2-Tetrachloroethane	50.0	45.5		ug/L		91	73 - 126	2	20
1,1,2-Trichloroethane	50.0	50.8		ug/L		102	80 - 121	2	20
1,1-Dichloroethane	50.0	50.3		ug/L		101	78 - 124	2	20
1,1-Dichloroethene	50.0	51.6		ug/L		103	76 - 124	4	20
1,1-Dichloropropene	50.0	51.1		ug/L		102	80 - 124	1	20
1,2,3-Trichlorobenzene	50.0	48.4		ug/L		97	57 - 136	1	21
1,2,3-Trichloropropane	50.0	47.2		ug/L		94	75 - 123	2	26
1,2,4-Trichlorobenzene	50.0	47.7		ug/L		95	69 - 130	0	20
1,2,4-Trimethylbenzene	50.0	46.2		ug/L		92	80 - 123	3	20
1,2-Dibromo-3-Chloropropane	50.0	55.0		ug/L		110	64 - 130	4	20
1,2-Dibromoethane	50.0	47.0		ug/L		94	80 - 120	3	20
1,2-Dichlorobenzene	50.0	46.6		ug/L		93	80 - 120	1	20
1,2-Dichloroethane	50.0	46.7		ug/L		93	73 - 124	2	20
1,2-Dichloropropane	50.0	49.5		ug/L		99	78 - 124	1	20
1,3,5-Trimethylbenzene	50.0	45.7		ug/L		91	80 - 122	1	20
1,3-Dichlorobenzene	50.0	47.0		ug/L		94	80 - 120	3	20
1,3-Dichloropropane	50.0	47.0		ug/L		94	80 - 121	1	20
1,4-Dichlorobenzene	50.0	46.1		ug/L		92	80 - 120	2	20
2,2-Dichloropropane	50.0	50.9		ug/L		102	72 - 131	1	20
2-Butanone (MEK)	200	200		ug/L		100	59 - 141	2	20
2-Chlorotoluene	50.0	47.7		ug/L		95	80 - 120	2	20
2-Hexanone	200	193		ug/L		96	59 - 146	0	20
4-Chlorotoluene	50.0	47.9		ug/L		96	80 - 121	2	20
4-Isopropyltoluene	50.0	47.3		ug/L		95	80 - 124	2	20
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	63 - 144	2	20
Acetone	200	207		ug/L		104	57 - 143	0	22
Benzene	50.0	49.4		ug/L		99	80 - 121	2	20
Bromobenzene	50.0	45.7		ug/L		91	80 - 120	0	20
Bromochloromethane	50.0	48.3		ug/L		97	76 - 126	0	20
Bromodichloromethane	50.0	51.0		ug/L		102	80 - 124	1	20
Bromoform	50.0	48.7		ug/L		97	66 - 134	2	20
Bromomethane	50.0	35.3		ug/L		71	10 - 150	14	58
Carbon disulfide	50.0	53.9		ug/L		108	70 - 127	1	20
Carbon tetrachloride	50.0	54.1		ug/L		108	72 - 131	3	20
Chlorobenzene	50.0	47.5		ug/L		95	80 - 120	1	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: LCSD 280-691580/5

Matrix: Water

Analysis Batch: 691580

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
Chloroethane	50.0	50.8		ug/L		102	51 - 149	5	34
Chloroform	50.0	48.3		ug/L		97	80 - 120	2	20
Chloromethane	50.0	46.8		ug/L		94	51 - 142	2	21
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	80 - 121	1	20
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	77 - 127	1	20
Dibromochloromethane	50.0	55.6		ug/L		111	77 - 128	3	20
Dibromomethane	50.0	49.9		ug/L		100	80 - 120	1	20
Dichlorodifluoromethane	50.0	50.9		ug/L		102	36 - 150	3	35
Ethylbenzene	50.0	47.6		ug/L		95	80 - 120	1	20
Hexachlorobutadiene	50.0	49.0		ug/L		98	66 - 135	1	20
Isopropylbenzene	50.0	47.0		ug/L		94	78 - 123	1	20
Methylene Chloride	50.0	51.0		ug/L		102	77 - 121	1	20
m-Xylene & p-Xylene	50.0	47.4		ug/L		95	80 - 121	0	20
Naphthalene	50.0	46.1		ug/L		92	55 - 135	0	23
n-Butylbenzene	50.0	44.6		ug/L		89	73 - 131	2	25
N-Propylbenzene	50.0	47.1		ug/L		94	80 - 123	3	20
o-Xylene	50.0	47.7		ug/L		95	80 - 121	2	20
sec-Butylbenzene	50.0	46.6		ug/L		93	80 - 125	0	20
Styrene	50.0	47.9		ug/L		96	80 - 123	1	20
tert-Butylbenzene	50.0	46.4		ug/L		93	80 - 121	2	20
Tetrachloroethene	50.0	48.9		ug/L		98	79 - 125	1	20
Toluene	50.0	50.1		ug/L		100	80 - 120	2	20
trans-1,2-Dichloroethene	50.0	52.0		ug/L		104	78 - 123	2	20
trans-1,3-Dichloropropene	50.0	52.0		ug/L		104	79 - 124	1	20
Trichloroethene	50.0	48.9		ug/L		98	79 - 121	4	20
Trichlorofluoromethane	50.0	51.1		ug/L		102	60 - 139	4	25
Vinyl chloride	50.0	49.3		ug/L		99	60 - 136	3	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 280-205959-D-8 MS

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		50.0	48.3		ug/L		97	79 - 125
1,1,1-Trichloroethane	ND		50.0	49.0		ug/L		98	78 - 125
1,1,2,2-Tetrachloroethane	ND		50.0	45.7		ug/L		91	73 - 126
1,1,2-Trichloroethane	ND		50.0	48.9		ug/L		98	80 - 121
1,1-Dichloroethane	ND		50.0	49.0		ug/L		98	78 - 124
1,1-Dichloroethene	ND		50.0	49.0		ug/L		98	76 - 124
1,1-Dichloropropene	ND		50.0	49.0		ug/L		98	80 - 124
1,2,3-Trichlorobenzene	ND		50.0	45.0		ug/L		90	57 - 136

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205959-D-8 MS

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	45.6		ug/L		91	75 - 123
1,2,4-Trichlorobenzene	ND		50.0	45.2		ug/L		90	69 - 130
1,2,4-Trimethylbenzene	ND		50.0	44.3		ug/L		89	80 - 123
1,2-Dibromo-3-Chloropropane	ND		50.0	51.2		ug/L		102	64 - 130
1,2-Dibromoethane	ND		50.0	46.0		ug/L		92	80 - 120
1,2-Dichlorobenzene	ND		50.0	44.7		ug/L		89	80 - 120
1,2-Dichloroethane	ND		50.0	45.2		ug/L		90	73 - 124
1,2-Dichloropropane	ND		50.0	48.3		ug/L		97	78 - 124
1,3,5-Trimethylbenzene	ND		50.0	44.7		ug/L		89	80 - 122
1,3-Dichlorobenzene	ND		50.0	44.9		ug/L		90	80 - 120
1,3-Dichloropropane	ND		50.0	45.5		ug/L		91	80 - 121
1,4-Dichlorobenzene	ND		50.0	44.6		ug/L		89	80 - 120
2,2-Dichloropropane	ND		50.0	43.8		ug/L		88	72 - 131
2-Butanone (MEK)	ND		200	199		ug/L		99	59 - 141
2-Chlorotoluene	ND		50.0	45.3		ug/L		91	80 - 120
2-Hexanone	ND		200	191		ug/L		95	59 - 146
4-Chlorotoluene	ND		50.0	46.3		ug/L		93	80 - 121
4-Isopropyltoluene	ND		50.0	44.2		ug/L		88	80 - 124
4-Methyl-2-pentanone (MIBK)	ND		200	201		ug/L		100	63 - 144
Acetone	ND		200	194		ug/L		97	57 - 143
Benzene	ND		50.0	47.4		ug/L		95	80 - 121
Bromobenzene	ND		50.0	44.2		ug/L		88	80 - 120
Bromochloromethane	ND		50.0	49.1		ug/L		98	76 - 126
Bromodichloromethane	ND		50.0	49.6		ug/L		99	80 - 124
Bromoform	ND		50.0	42.7		ug/L		85	66 - 134
Bromomethane	ND		50.0	34.5		ug/L		69	10 - 150
Carbon disulfide	ND		50.0	50.9		ug/L		102	70 - 127
Carbon tetrachloride	ND		50.0	49.9		ug/L		100	72 - 131
Chlorobenzene	ND		50.0	46.1		ug/L		92	80 - 120
Chloroethane	ND		50.0	47.9		ug/L		96	51 - 149
Chloroform	ND		50.0	47.5		ug/L		95	80 - 120
Chloromethane	ND		50.0	45.6		ug/L		91	51 - 142
cis-1,2-Dichloroethene	ND		50.0	48.9		ug/L		98	80 - 121
cis-1,3-Dichloropropene	ND		50.0	48.1		ug/L		96	77 - 127
Dibromochloromethane	ND		50.0	50.9		ug/L		102	77 - 128
Dibromomethane	ND		50.0	49.1		ug/L		98	80 - 120
Dichlorodifluoromethane	ND		50.0	46.3		ug/L		93	36 - 150
Ethylbenzene	ND		50.0	46.2		ug/L		92	80 - 120
Hexachlorobutadiene	ND		50.0	43.3		ug/L		87	66 - 135
Isopropylbenzene	ND		50.0	44.8		ug/L		90	78 - 123
Methylene Chloride	ND		50.0	50.5		ug/L		101	77 - 121
m-Xylene & p-Xylene	ND		50.0	46.4		ug/L		93	80 - 121
Naphthalene	ND		50.0	44.1		ug/L		88	55 - 135
n-Butylbenzene	ND		50.0	41.6		ug/L		83	73 - 131
N-Propylbenzene	ND		50.0	45.2		ug/L		90	80 - 123
o-Xylene	ND		50.0	46.4		ug/L		93	80 - 121
sec-Butylbenzene	ND		50.0	44.1		ug/L		88	80 - 125
Styrene	ND		50.0	46.7		ug/L		93	80 - 123

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205959-D-8 MS

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
tert-Butylbenzene	ND		50.0	43.9		ug/L		88	80 - 121
Tetrachloroethene	ND		50.0	47.0		ug/L		94	79 - 125
Toluene	ND		50.0	47.7		ug/L		95	80 - 120
trans-1,2-Dichloroethene	ND		50.0	50.4		ug/L		101	78 - 123
trans-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	79 - 124
Trichloroethene	ND		50.0	46.2		ug/L		92	79 - 121
Trichlorofluoromethane	ND		50.0	46.8		ug/L		94	60 - 139
Vinyl chloride	ND		50.0	46.4		ug/L		93	60 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 280-205959-D-8 MSD

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	47.4		ug/L		95	79 - 125	2	20
1,1,1-Trichloroethane	ND		50.0	47.9		ug/L		96	78 - 125	2	20
1,1,2,2-Tetrachloroethane	ND		50.0	44.5		ug/L		89	73 - 126	3	20
1,1,2-Trichloroethane	ND		50.0	48.3		ug/L		97	80 - 121	1	20
1,1-Dichloroethane	ND		50.0	47.5		ug/L		95	78 - 124	3	20
1,1-Dichloroethene	ND		50.0	48.6		ug/L		97	76 - 124	1	20
1,1-Dichloropropene	ND		50.0	47.9		ug/L		96	80 - 124	2	20
1,2,3-Trichlorobenzene	ND		50.0	44.5		ug/L		89	57 - 136	1	21
1,2,3-Trichloropropane	ND		50.0	45.1		ug/L		90	75 - 123	1	26
1,2,4-Trichlorobenzene	ND		50.0	44.2		ug/L		88	69 - 130	2	20
1,2,4-Trimethylbenzene	ND		50.0	43.4		ug/L		87	80 - 123	2	20
1,2-Dibromo-3-Chloropropane	ND		50.0	51.1		ug/L		102	64 - 130	0	20
1,2-Dibromoethane	ND		50.0	43.3		ug/L		87	80 - 120	6	20
1,2-Dichlorobenzene	ND		50.0	44.2		ug/L		88	80 - 120	1	20
1,2-Dichloroethane	ND		50.0	44.1		ug/L		88	73 - 124	2	20
1,2-Dichloropropane	ND		50.0	47.4		ug/L		95	78 - 124	2	20
1,3,5-Trimethylbenzene	ND		50.0	42.7		ug/L		85	80 - 122	5	20
1,3-Dichlorobenzene	ND		50.0	43.2		ug/L		86	80 - 120	4	20
1,3-Dichloropropane	ND		50.0	44.2		ug/L		88	80 - 121	3	20
1,4-Dichlorobenzene	ND		50.0	43.7		ug/L		87	80 - 120	2	20
2,2-Dichloropropane	ND		50.0	43.0		ug/L		86	72 - 131	2	20
2-Butanone (MEK)	ND		200	195		ug/L		97	59 - 141	2	20
2-Chlorotoluene	ND		50.0	44.6		ug/L		89	80 - 120	1	20
2-Hexanone	ND		200	182		ug/L		91	59 - 146	5	20
4-Chlorotoluene	ND		50.0	45.5		ug/L		91	80 - 121	2	20
4-Isopropyltoluene	ND		50.0	43.1		ug/L		86	80 - 124	3	20
4-Methyl-2-pentanone (MIBK)	ND		200	197		ug/L		99	63 - 144	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

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

Lab Sample ID: 280-205959-D-8 MSD

Matrix: Water

Analysis Batch: 691580

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		200	193		ug/L		97	57 - 143	1	22
Benzene	ND		50.0	47.0		ug/L		94	80 - 121	1	20
Bromobenzene	ND		50.0	43.6		ug/L		87	80 - 120	1	20
Bromochloromethane	ND		50.0	47.2		ug/L		94	76 - 126	4	20
Bromodichloromethane	ND		50.0	48.6		ug/L		97	80 - 124	2	20
Bromoform	ND		50.0	42.6		ug/L		85	66 - 134	0	20
Bromomethane	ND		50.0	37.7		ug/L		75	10 - 150	9	58
Carbon disulfide	ND		50.0	50.1		ug/L		100	70 - 127	2	20
Carbon tetrachloride	ND		50.0	49.5		ug/L		99	72 - 131	1	20
Chlorobenzene	ND		50.0	44.5		ug/L		89	80 - 120	4	20
Chloroethane	ND		50.0	45.3		ug/L		91	51 - 149	6	34
Chloroform	ND		50.0	46.8		ug/L		94	80 - 120	2	20
Chloromethane	ND		50.0	43.1		ug/L		86	51 - 142	6	21
cis-1,2-Dichloroethene	ND		50.0	47.7		ug/L		95	80 - 121	2	20
cis-1,3-Dichloropropene	ND		50.0	46.2		ug/L		92	77 - 127	4	20
Dibromochloromethane	ND		50.0	49.2		ug/L		98	77 - 128	4	20
Dibromomethane	ND		50.0	48.7		ug/L		97	80 - 120	1	20
Dichlorodifluoromethane	ND		50.0	42.7		ug/L		85	36 - 150	8	35
Ethylbenzene	ND		50.0	45.2		ug/L		90	80 - 120	2	20
Hexachlorobutadiene	ND		50.0	42.2		ug/L		84	66 - 135	3	20
Isopropylbenzene	ND		50.0	44.1		ug/L		88	78 - 123	2	20
Methylene Chloride	ND		50.0	48.3		ug/L		97	77 - 121	4	20
m-Xylene & p-Xylene	ND		50.0	44.2		ug/L		88	80 - 121	5	20
Naphthalene	ND		50.0	44.0		ug/L		88	55 - 135	0	23
n-Butylbenzene	ND		50.0	40.7		ug/L		81	73 - 131	2	25
N-Propylbenzene	ND		50.0	43.1		ug/L		86	80 - 123	5	20
o-Xylene	ND		50.0	44.0		ug/L		88	80 - 121	5	20
sec-Butylbenzene	ND		50.0	42.6		ug/L		85	80 - 125	3	20
Styrene	ND		50.0	44.7		ug/L		89	80 - 123	5	20
tert-Butylbenzene	ND		50.0	43.4		ug/L		87	80 - 121	1	20
Tetrachloroethene	ND		50.0	45.9		ug/L		92	79 - 125	2	20
Toluene	ND		50.0	47.2		ug/L		94	80 - 120	1	20
trans-1,2-Dichloroethene	ND		50.0	49.2		ug/L		98	78 - 123	2	20
trans-1,3-Dichloropropene	ND		50.0	48.1		ug/L		96	79 - 124	2	20
Trichloroethene	ND		50.0	43.8		ug/L		88	79 - 121	5	20
Trichlorofluoromethane	ND		50.0	43.8		ug/L		88	60 - 139	7	25
Vinyl chloride	ND		50.0	43.3		ug/L		87	60 - 136	7	23

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	96		80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-691283/1-A

Matrix: Water

Analysis Batch: 691609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 691283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.50	ug/L		04/11/25 15:36	04/14/25 16:45	1

Lab Sample ID: LCS 280-691283/2-A

Matrix: Water

Analysis Batch: 691609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 691283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	38.6		ug/L		96	89 - 111

Lab Sample ID: 280-205778-B-1-E MS

Matrix: Water

Analysis Batch: 691609

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 691283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.62	J B	40.0	38.5		ug/L		95	79 - 120

Lab Sample ID: 280-205778-B-1-F MSD

Matrix: Water

Analysis Batch: 691609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 691283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.62	J B	40.0	40.3		ug/L		99	79 - 120	5	20

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-691288/1-A

Matrix: Water

Analysis Batch: 691635

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 691288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	60	ug/L		04/11/25 15:36	04/14/25 15:19	1
Iron	ND		100	40	ug/L		04/11/25 15:36	04/14/25 15:19	1
Magnesium	ND		200	50	ug/L		04/11/25 15:36	04/14/25 15:19	1
Manganese	ND		10	2.5	ug/L		04/11/25 15:36	04/14/25 15:19	1
Sodium	ND		1000	450	ug/L		04/11/25 15:36	04/14/25 15:19	1

Lab Sample ID: LCS 280-691288/2-A

Matrix: Water

Analysis Batch: 691635

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 691288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47700		ug/L		95	85 - 115
Iron	10000	9690		ug/L		97	85 - 115
Magnesium	50000	47700		ug/L		95	85 - 115
Manganese	1000	966		ug/L		97	85 - 115
Sodium	50000	49000		ug/L		98	85 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 280-205762-B-1-B MS

Matrix: Water

Analysis Batch: 691635

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 691288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	86000		50000	136000		ug/L		99	75 - 125
Iron	180		10000	10100		ug/L		99	75 - 125
Magnesium	47000		50000	96800		ug/L		100	75 - 125
Manganese	150		1000	1140		ug/L		99	75 - 125
Sodium	14000		50000	67300		ug/L		107	75 - 125

Lab Sample ID: 280-205762-B-1-C MSD

Matrix: Water

Analysis Batch: 691635

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 691288

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	86000		50000	131000		ug/L		90	75 - 125	3	20
Iron	180		10000	9750		ug/L		96	75 - 125	3	20
Magnesium	47000		50000	93500		ug/L		94	75 - 125	3	20
Manganese	150		1000	1100		ug/L		95	75 - 125	3	20
Sodium	14000		50000	65300		ug/L		103	75 - 125	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-691260/6

Matrix: Water

Analysis Batch: 691260

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	1.3	mg/L			04/11/25 15:18	1

Lab Sample ID: LCS 280-691260/4

Matrix: Water

Analysis Batch: 691260

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	101		mg/L		101	90 - 110

Lab Sample ID: LCSD 280-691260/5

Matrix: Water

Analysis Batch: 691260

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	101		mg/L		101	90 - 110	0	10

Lab Sample ID: MRL 280-691260/3

Matrix: Water

Analysis Batch: 691260

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3.00	2.98	J	mg/L		99	50 - 150

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-205774-4 MS

Matrix: Water

Analysis Batch: 691260

Client Sample ID: MW-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20		50.0	71.3		mg/L		103	80 - 120

Lab Sample ID: 280-205774-4 MSD

Matrix: Water

Analysis Batch: 691260

Client Sample ID: MW-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	20		50.0	71.4		mg/L		103	80 - 120	0	20

Lab Sample ID: 280-205774-4 DU

Matrix: Water

Analysis Batch: 691260

Client Sample ID: MW-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	20		19.5		mg/L		0.9	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-691409/34

Matrix: Water

Analysis Batch: 691409

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	7.0	mg/L			04/12/25 00:04	1

Lab Sample ID: 280-205548-B-1 DU

Matrix: Water

Analysis Batch: 691409

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	90		93.9		mg/L		5	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-691228/1

Matrix: Water

Analysis Batch: 691228

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	6.0	mg/L			04/11/25 09:11	1

Lab Sample ID: LCS 280-691228/2

Matrix: Water

Analysis Batch: 691228

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	500		mg/L		99	88 - 114

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 280-205763-G-3 DU

Matrix: Water

Analysis Batch: 691228

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	16000		16500		mg/L		5	10

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

Lab Sample ID: MB 280-691304/1

Matrix: Water

Analysis Batch: 691304

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	1.5	mg/L			04/11/25 13:04	1

Lab Sample ID: LCS 280-691304/2

Matrix: Water

Analysis Batch: 691304

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	505	461		mg/L		91	80 - 114

Lab Sample ID: 280-205703-E-2 DU

Matrix: Water

Analysis Batch: 691304

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

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

GC/MS VOA

Analysis Batch: 691419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	8260D	
280-205774-2	MW-12D	Total/NA	Water	8260D	
280-205774-3	MW-27	Total/NA	Water	8260D	
280-205774-4	MW-26	Total/NA	Water	8260D	
280-205774-5	MW-23	Total/NA	Water	8260D	
280-205774-6	P-8	Total/NA	Water	8260D	
280-205774-7	Duplicate 2	Total/NA	Water	8260D	
MB 280-691419/9	Method Blank	Total/NA	Water	8260D	
LCS 280-691419/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 280-691419/5	Lab Control Sample Dup	Total/NA	Water	8260D	
280-205609-L-1 MS	Matrix Spike	Total/NA	Water	8260D	
280-205609-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 691580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-8	Field Blank	Total/NA	Water	8260D	
MB 280-691580/9	Method Blank	Total/NA	Water	8260D	
LCS 280-691580/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 280-691580/5	Lab Control Sample Dup	Total/NA	Water	8260D	
280-205959-D-8 MS	Matrix Spike	Total/NA	Water	8260D	
280-205959-D-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Metals

Prep Batch: 691283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	200.8	
280-205774-2	MW-12D	Total/NA	Water	200.8	
280-205774-3	MW-27	Total/NA	Water	200.8	
280-205774-4	MW-26	Total/NA	Water	200.8	
280-205774-5	MW-23	Total/NA	Water	200.8	
280-205774-6	P-8	Total/NA	Water	200.8	
280-205774-7	Duplicate 2	Total/NA	Water	200.8	
MB 280-691283/1-A	Method Blank	Total/NA	Water	3005A	
LCS 280-691283/2-A	Lab Control Sample	Total/NA	Water	3005A	
280-205778-B-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-205778-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 691288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Dissolved	Water	3005A	
280-205774-2	MW-12D	Dissolved	Water	3005A	
280-205774-3	MW-27	Dissolved	Water	3005A	
280-205774-4	MW-26	Dissolved	Water	3005A	
280-205774-5	MW-23	Dissolved	Water	3005A	
280-205774-6	P-8	Dissolved	Water	3005A	
280-205774-7	Duplicate 2	Dissolved	Water	3005A	
MB 280-691288/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-691288/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-205762-B-1-B MS	Matrix Spike	Dissolved	Water	3005A	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Metals (Continued)

Prep Batch: 691288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205762-B-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 691609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	200.8	691283
280-205774-2	MW-12D	Total/NA	Water	200.8	691283
280-205774-3	MW-27	Total/NA	Water	200.8	691283
280-205774-4	MW-26	Total/NA	Water	200.8	691283
280-205774-5	MW-23	Total/NA	Water	200.8	691283
280-205774-6	P-8	Total/NA	Water	200.8	691283
280-205774-7	Duplicate 2	Total/NA	Water	200.8	691283
MB 280-691283/1-A	Method Blank	Total/NA	Water	200.8	691283
LCS 280-691283/2-A	Lab Control Sample	Total/NA	Water	200.8	691283
280-205778-B-1-E MS	Matrix Spike	Total Recoverable	Water	200.8	691283
280-205778-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	691283

Analysis Batch: 691635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Dissolved	Water	6010D	691288
280-205774-2	MW-12D	Dissolved	Water	6010D	691288
280-205774-3	MW-27	Dissolved	Water	6010D	691288
280-205774-4	MW-26	Dissolved	Water	6010D	691288
280-205774-5	MW-23	Dissolved	Water	6010D	691288
280-205774-6	P-8	Dissolved	Water	6010D	691288
280-205774-7	Duplicate 2	Dissolved	Water	6010D	691288
MB 280-691288/1-A	Method Blank	Total Recoverable	Water	6010D	691288
LCS 280-691288/2-A	Lab Control Sample	Total Recoverable	Water	6010D	691288
280-205762-B-1-B MS	Matrix Spike	Dissolved	Water	6010D	691288
280-205762-B-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	691288

General Chemistry

Analysis Batch: 691228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	SM 2540C	
280-205774-2	MW-12D	Total/NA	Water	SM 2540C	
280-205774-3	MW-27	Total/NA	Water	SM 2540C	
280-205774-4	MW-26	Total/NA	Water	SM 2540C	
280-205774-5	MW-23	Total/NA	Water	SM 2540C	
280-205774-6	P-8	Total/NA	Water	SM 2540C	
280-205774-7	Duplicate 2	Total/NA	Water	SM 2540C	
MB 280-691228/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-691228/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-205763-G-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 691260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	300.0	
280-205774-2	MW-12D	Total/NA	Water	300.0	
280-205774-3	MW-27	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

General Chemistry (Continued)

Analysis Batch: 691260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-4	MW-26	Total/NA	Water	300.0	
280-205774-5	MW-23	Total/NA	Water	300.0	
280-205774-6	P-8	Total/NA	Water	300.0	
280-205774-7	Duplicate 2	Total/NA	Water	300.0	
MB 280-691260/6	Method Blank	Total/NA	Water	300.0	
LCS 280-691260/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-691260/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-691260/3	Lab Control Sample	Total/NA	Water	300.0	
280-205774-4 MS	MW-26	Total/NA	Water	300.0	
280-205774-4 MSD	MW-26	Total/NA	Water	300.0	
280-205774-4 DU	MW-26	Total/NA	Water	300.0	

Analysis Batch: 691304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	SM 2540D	
280-205774-2	MW-12D	Total/NA	Water	SM 2540D	
280-205774-3	MW-27	Total/NA	Water	SM 2540D	
280-205774-4	MW-26	Total/NA	Water	SM 2540D	
280-205774-5	MW-23	Total/NA	Water	SM 2540D	
280-205774-6	P-8	Total/NA	Water	SM 2540D	
280-205774-7	Duplicate 2	Total/NA	Water	SM 2540D	
MB 280-691304/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-691304/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-205703-E-2 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 691409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-205774-1	MW-12S	Total/NA	Water	SM 2320B	
280-205774-2	MW-12D	Total/NA	Water	SM 2320B	
280-205774-3	MW-27	Total/NA	Water	SM 2320B	
280-205774-4	MW-26	Total/NA	Water	SM 2320B	
280-205774-5	MW-23	Total/NA	Water	SM 2320B	
280-205774-6	P-8	Total/NA	Water	SM 2320B	
280-205774-7	Duplicate 2	Total/NA	Water	SM 2320B	
MB 280-691409/34	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-691409/32	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-691409/33	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-205548-B-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Client Sample ID: MW-12S

Lab Sample ID: 280-205774-1

Date Collected: 04/09/25 08:25

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 10:19	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 16:49	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 17:34	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 19:14	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:24	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Client Sample ID: MW-12D

Lab Sample ID: 280-205774-2

Date Collected: 04/09/25 09:35

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 10:39	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 16:52	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 17:40	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 19:28	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:29	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Client Sample ID: MW-27

Lab Sample ID: 280-205774-3

Date Collected: 04/09/25 10:25

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 10:59	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 16:54	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 17:45	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 19:42	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:36	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Client Sample ID: MW-26

Lab Sample ID: 280-205774-4

Date Collected: 04/09/25 11:10

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 11:18	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 16:56	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 17:49	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 20:24	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:41	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Client Sample ID: MW-23

Lab Sample ID: 280-205774-5

Date Collected: 04/09/25 12:15

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 11:38	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 16:59	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 17:54	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 21:21	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:46	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Client Sample ID: P-8

Lab Sample ID: 280-205774-6

Date Collected: 04/09/25 13:15

Matrix: Water

Date Received: 04/10/25 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 11:58	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 17:01	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 18:00	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 21:35	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:52	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin
Butte-Groundwater

Job ID: 280-205774-1

Client Sample ID: Duplicate 2

Date Collected: 04/09/25 07:00

Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691419	04/14/25 12:18	MD	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	691283	04/11/25 15:36	SLH	EET DEN
Total/NA	Analysis	200.8		1			691609	04/14/25 17:04	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	691288	04/11/25 15:36	SLH	EET DEN
Dissolved	Analysis	6010D		1			691635	04/14/25 18:22	NKC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	691260	04/11/25 18:04	CLP	EET DEN
Total/NA	Analysis	SM 2320B		1			691409	04/12/25 01:58	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	691228	04/11/25 09:11	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	691304	04/11/25 13:04	BRD	EET DEN

Client Sample ID: Field Blank

Date Collected: 04/09/25 00:00

Date Received: 04/10/25 09:35

Lab Sample ID: 280-205774-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	691580	04/14/25 22:52	BMJ	EET DEN

Laboratory References:

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

Client Information			Company: Valley Landfills, Inc. Republic Services		
Sampler: Nicholas Rudolph			Lab PM: Collins, Janice S		
Client Contact: Phone: 5038806462			E-Mail: Janice.Collins@et.eurofinsus.com		
Address: 28972 Coffin Butte Road			Carrier Tracking No(s): 280-97584-22898.1		
City: Corvallis			Page:		
State, Zip: OR, 97330			Job #:		
Phone: 503-675-1335(Tel)			Preservation Codes:		
Email:			A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - other (specify)		
Project Name: Coffin Butte/Valley Landfills			Other:		
Site:			Special Instructions/Note:		
Due Date Requested:			Total Number of containers		
TAT Requested (days):			8260D - VOCs		
Compliance Project: ☐ Yes ☐ No			2540D - TSS		
PO #: PO# 1584668			200.8 - Total Arsenic		
WO #:			6010D - Dissolved Metals - List D1 (FF)		
Project #: 28003197 "GW_SLCS_Leachate"			2540C/300 - TDS/Chloride		
SSOW#:			2320B - Bicarb Alkalinity		
Sample Identification			Perform MS/MSD (Yes or No)		
Sample Date			Field Filtered Sample (Yes or No)		
Sample Time			Matrix (W=water, S=solid, O=wastewater)		
Sample Type (C=Comp, G=grab)			Preservation Code:		
MW-125			G		
MW-127			G		
MW-27			G		
MW-26			G		
MW-23			G		
P-8			G		
Duplicate 2			G		
Possible Hazard Identification			Radiological		
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown			☐ 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:			Method of Shipment:		
Relinquished by: Nicholas Rudolph			Date/Time: 4/9/25 1430		
Relinquished by:			Date/Time:		
Relinquished by:			Date/Time:		
Custody Seal No.: A Yes A No			Cooler Temperature(s) °C and Other Remarks: 1:0.3 CF0.3 PR106GA		

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-205774-1

Login Number: 205774

List Number: 1

Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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.	False	Refer to Job Narrative for details.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/17/2025 11:26:44 AM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-205820-1

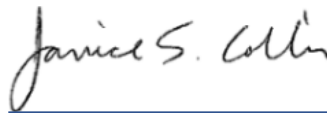
Eurofins Denver

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



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



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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD 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.

Metals

Qualifier	Qualifier Description
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
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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Job ID: 280-205820-1

Eurofins Denver

Job Narrative 280-205820-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 4/10/2025 9:35 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 1.9°C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 280-205820-1. The container label lists collection time "11:24", while the COC lists "11:20". The sample was logged per the collection time listed on the COC.

GC/MS VOA

Method 8260D: The following compounds were outside control limits of 20%D in the continuing calibration verification (CCV) associated with batch 280-691604: Dichlorodifluoromethane (-28.1%D). This compound is considered a poor performer and has recovered within LCS/LCSD limits. The following samples are affected: 280-205820-1 and CCV 280-691604/2.

Method 8260D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-691604 recovered outside control limits for Acetone (RPD 24, RPD Limit 22). Laboratory control sample / laboratory control sample duplicate (LCS/LCSD) percent recovery is in control for affected analytes. The associated samples are: 280-205820-1 and LCSD 280-691604/5.

Method 8260D: For Method 8260, the RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-691740 recovered outside control limits (22%) for the following analytes: Acetone at 25%. 280-205820-2, 280-205820-3, 280-205820-4, 280-205820-5, 280-205820-6, 280-205820-7 and LCSD 280-691740/5

Method 8260D: For Method 8260, the method blank for analytical batch 280-691740 contained Acetone above the method detection limit. This target analyte concentration was greater than half of the reporting limit (RL) in the method blank but Acetone is a common laboratory contaminate and is under the RL; therefore, re-extraction and/or re-analysis of samples was not performed. 280-205820-2, 280-205820-3, 280-205820-4, 280-205820-5, 280-205820-6, 280-205820-7 and MB 280-691740/9

Method 8260D: For Method 8260, insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-691740. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 280-205820-2, 280-205820-3, 280-205820-4, 280-205820-5, 280-205820-6 and 280-205820-7

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

Metals

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

General Chemistry

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

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Client Sample ID: MW-11D

Lab Sample ID: 280-205820-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	230000		200	60	ug/L	1		6010D	Dissolved
Magnesium	94000		200	50	ug/L	1		6010D	Dissolved
Manganese	25		10	2.5	ug/L	1		6010D	Dissolved
Sodium	40000		1000	450	ug/L	1		6010D	Dissolved
Chloride	100		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	830		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1100		20	12	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-11S

Lab Sample ID: 280-205820-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49000		200	60	ug/L	1		6010D	Dissolved
Magnesium	20000		200	50	ug/L	1		6010D	Dissolved
Sodium	23000		1000	450	ug/L	1		6010D	Dissolved
Chloride	21		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	180		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	260		10	6.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	11		4.0	1.5	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-1D

Lab Sample ID: 280-205820-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.77	J	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	22000		200	60	ug/L	1		6010D	Dissolved
Iron	44	J	100	40	ug/L	1		6010D	Dissolved
Magnesium	9100		200	50	ug/L	1		6010D	Dissolved
Sodium	22000		1000	450	ug/L	1		6010D	Dissolved
Chloride	7.1		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	6.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3D

Lab Sample ID: 280-205820-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.82	J	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	41000		200	60	ug/L	1		6010D	Dissolved
Magnesium	18000		200	50	ug/L	1		6010D	Dissolved
Sodium	20000		1000	450	ug/L	1		6010D	Dissolved
Chloride	54		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	290		10	6.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-10S

Lab Sample ID: 280-205820-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	310000		200	60	ug/L	1		6010D	Dissolved
Magnesium	130000		200	50	ug/L	1		6010D	Dissolved
Manganese	78		10	2.5	ug/L	1		6010D	Dissolved
Sodium	36000		1000	450	ug/L	1		6010D	Dissolved
Chloride	550		30	13	mg/L	10		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	620		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	720		10	6.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Client Sample ID: MW-10D

Lab Sample ID: 280-205820-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	110000		200	60	ug/L	1		6010D	Dissolved
Magnesium	34000		200	50	ug/L	1		6010D	Dissolved
Manganese	59		10	2.5	ug/L	1		6010D	Dissolved
Sodium	33000		1000	450	ug/L	1		6010D	Dissolved
Chloride	82		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	350		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	540		10	6.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Duplicate

Lab Sample ID: 280-205820-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.64	J	2.0	0.50	ug/L	1		200.8	Total/NA
Calcium	25000		200	60	ug/L	1		6010D	Dissolved
Magnesium	10000		200	50	ug/L	1		6010D	Dissolved
Sodium	24000		1000	450	ug/L	1		6010D	Dissolved
Chloride	7.2		3.0	1.3	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	7.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10	6.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
6010D	Metals (ICP)	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
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-205820-1	MW-11D	Water	04/08/25 11:20	04/10/25 09:35
280-205820-2	MW-11S	Water	04/08/25 12:15	04/10/25 09:35
280-205820-3	MW-1D	Water	04/08/25 14:20	04/10/25 09:35
280-205820-4	MW-3D	Water	04/08/25 15:25	04/10/25 09:35
280-205820-5	MW-10S	Water	04/08/25 16:45	04/10/25 09:35
280-205820-6	MW-10D	Water	04/08/25 17:25	04/10/25 09:35
280-205820-7	Duplicate	Water	04/08/25 07:00	04/10/25 09:35

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-11D
Date Collected: 04/08/25 11:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/15/25 10:22	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/15/25 10:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/15/25 10:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/15/25 10:22	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/15/25 10:22	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
2-Hexanone	ND		5.0	1.5	ug/L			04/15/25 10:22	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/15/25 10:22	1
Acetone	ND	*1	15	5.0	ug/L			04/15/25 10:22	1
Benzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Bromobenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Bromoform	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Bromomethane	ND		5.0	2.5	ug/L			04/15/25 10:22	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Chloroethane	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Chloroform	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Chloromethane	ND		2.0	0.50	ug/L			04/15/25 10:22	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Dibromomethane	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/15/25 10:22	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-11D
Date Collected: 04/08/25 11:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Naphthalene	ND		3.0	1.0	ug/L			04/15/25 10:22	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
o-Xylene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Styrene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Toluene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Trichloroethene	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/15/25 10:22	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/15/25 10:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120					04/15/25 10:22	1
4-Bromofluorobenzene (Surr)	96		80 - 120					04/15/25 10:22	1
Dibromofluoromethane (Surr)	96		80 - 120					04/15/25 10:22	1
Toluene-d8 (Surr)	98		80 - 120					04/15/25 10:22	1

Client Sample ID: MW-11S
Date Collected: 04/08/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/15/25 23:09	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/15/25 23:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/15/25 23:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/15/25 23:09	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/15/25 23:09	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
2-Hexanone	ND		5.0	1.5	ug/L			04/15/25 23:09	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-11S
Date Collected: 04/08/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/15/25 23:09	1
Acetone	ND	*1	15	5.0	ug/L			04/15/25 23:09	1
Benzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Bromobenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Bromoform	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Bromomethane	ND		5.0	2.5	ug/L			04/15/25 23:09	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Chloroethane	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Chloroform	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Chloromethane	ND		2.0	0.50	ug/L			04/15/25 23:09	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Dibromomethane	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/15/25 23:09	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Naphthalene	ND		3.0	1.0	ug/L			04/15/25 23:09	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
o-Xylene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Styrene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Toluene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Trichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:09	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:09	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/15/25 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		80 - 120		04/15/25 23:09	1
4-Bromofluorobenzene (Surr)	87		80 - 120		04/15/25 23:09	1
Dibromofluoromethane (Surr)	98		80 - 120		04/15/25 23:09	1
Toluene-d8 (Surr)	94		80 - 120		04/15/25 23:09	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-1D
Date Collected: 04/08/25 14:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/15/25 23:29	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/15/25 23:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/15/25 23:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/15/25 23:29	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/15/25 23:29	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
2-Hexanone	ND		5.0	1.5	ug/L			04/15/25 23:29	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/15/25 23:29	1
Acetone	ND	*1	15	5.0	ug/L			04/15/25 23:29	1
Benzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Bromobenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Bromoform	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Bromomethane	ND		5.0	2.5	ug/L			04/15/25 23:29	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Chloroethane	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Chloroform	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Chloromethane	ND		2.0	0.50	ug/L			04/15/25 23:29	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Dibromomethane	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/15/25 23:29	1

Eurofins Denver

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-1D
Date Collected: 04/08/25 14:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Naphthalene	ND		3.0	1.0	ug/L			04/15/25 23:29	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
o-Xylene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Styrene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Toluene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Trichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:29	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/15/25 23:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		80 - 120					04/15/25 23:29	1
4-Bromofluorobenzene (Surr)	89		80 - 120					04/15/25 23:29	1
Dibromofluoromethane (Surr)	99		80 - 120					04/15/25 23:29	1
Toluene-d8 (Surr)	96		80 - 120					04/15/25 23:29	1

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/15/25 23:49	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/15/25 23:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/15/25 23:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/15/25 23:49	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/15/25 23:49	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
2-Hexanone	ND		5.0	1.5	ug/L			04/15/25 23:49	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/15/25 23:49	1
Acetone	ND	*1	15	5.0	ug/L			04/15/25 23:49	1
Benzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Bromobenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Bromoform	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Bromomethane	ND		5.0	2.5	ug/L			04/15/25 23:49	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Chloroethane	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Chloroform	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Chloromethane	ND		2.0	0.50	ug/L			04/15/25 23:49	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Dibromomethane	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/15/25 23:49	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Naphthalene	ND		3.0	1.0	ug/L			04/15/25 23:49	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
o-Xylene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Styrene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Toluene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Trichloroethene	ND		1.0	0.25	ug/L			04/15/25 23:49	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/15/25 23:49	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/15/25 23:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		04/15/25 23:49	1
4-Bromofluorobenzene (Surr)	90		80 - 120		04/15/25 23:49	1
Dibromofluoromethane (Surr)	98		80 - 120		04/15/25 23:49	1
Toluene-d8 (Surr)	98		80 - 120		04/15/25 23:49	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-10S
Date Collected: 04/08/25 16:45
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/16/25 00:08	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/16/25 00:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/16/25 00:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/16/25 00:08	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/16/25 00:08	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
2-Hexanone	ND		5.0	1.5	ug/L			04/16/25 00:08	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/16/25 00:08	1
Acetone	ND	*1	15	5.0	ug/L			04/16/25 00:08	1
Benzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Bromobenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Bromoform	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Bromomethane	ND		5.0	2.5	ug/L			04/16/25 00:08	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Chloroethane	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Chloroform	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Chloromethane	ND		2.0	0.50	ug/L			04/16/25 00:08	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Dibromomethane	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/16/25 00:08	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-10S
Date Collected: 04/08/25 16:45
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Naphthalene	ND		3.0	1.0	ug/L			04/16/25 00:08	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
o-Xylene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Styrene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Toluene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Trichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:08	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/16/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120					04/16/25 00:08	1
4-Bromofluorobenzene (Surr)	89		80 - 120					04/16/25 00:08	1
Dibromofluoromethane (Surr)	98		80 - 120					04/16/25 00:08	1
Toluene-d8 (Surr)	96		80 - 120					04/16/25 00:08	1

Client Sample ID: MW-10D
Date Collected: 04/08/25 17:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/16/25 00:28	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/16/25 00:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/16/25 00:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/16/25 00:28	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/16/25 00:28	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
2-Hexanone	ND		5.0	1.5	ug/L			04/16/25 00:28	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-10D
Date Collected: 04/08/25 17:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/16/25 00:28	1
Acetone	ND	*1	15	5.0	ug/L			04/16/25 00:28	1
Benzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Bromobenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Bromoform	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Bromomethane	ND		5.0	2.5	ug/L			04/16/25 00:28	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Chloroethane	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Chloroform	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Chloromethane	ND		2.0	0.50	ug/L			04/16/25 00:28	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Dibromomethane	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/16/25 00:28	1
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Naphthalene	ND		3.0	1.0	ug/L			04/16/25 00:28	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
o-Xylene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Styrene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Toluene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Trichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:28	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:28	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/16/25 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120		04/16/25 00:28	1
4-Bromofluorobenzene (Surr)	88		80 - 120		04/16/25 00:28	1
Dibromofluoromethane (Surr)	99		80 - 120		04/16/25 00:28	1
Toluene-d8 (Surr)	95		80 - 120		04/16/25 00:28	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,2,3-Trichlorobenzene	ND		4.0	1.0	ug/L			04/16/25 00:48	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			04/16/25 00:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.50	ug/L			04/16/25 00:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.5	ug/L			04/16/25 00:48	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
2,2-Dichloropropane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
2-Butanone (MEK)	ND		10	4.0	ug/L			04/16/25 00:48	1
2-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
2-Hexanone	ND		5.0	1.5	ug/L			04/16/25 00:48	1
4-Chlorotoluene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
4-Isopropyltoluene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.5	ug/L			04/16/25 00:48	1
Acetone	ND	*1	15	5.0	ug/L			04/16/25 00:48	1
Benzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Bromobenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Bromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Bromodichloromethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Bromoform	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Bromomethane	ND		5.0	2.5	ug/L			04/16/25 00:48	1
Carbon disulfide	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Chlorobenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Chloroethane	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Chloroform	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Chloromethane	ND		2.0	0.50	ug/L			04/16/25 00:48	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Dibromochloromethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Dibromomethane	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Dichlorodifluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Ethylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Isopropylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Methylene Chloride	ND		2.0	1.0	ug/L			04/16/25 00:48	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Naphthalene	ND		3.0	1.0	ug/L			04/16/25 00:48	1
n-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
N-Propylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
o-Xylene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Styrene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Tetrachloroethene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Toluene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Trichloroethene	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Trichlorofluoromethane	ND		2.0	0.50	ug/L			04/16/25 00:48	1
Vinyl chloride	ND		1.0	0.25	ug/L			04/16/25 00:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120					04/16/25 00:48	1
4-Bromofluorobenzene (Surr)	87		80 - 120					04/16/25 00:48	1
Dibromofluoromethane (Surr)	100		80 - 120					04/16/25 00:48	1
Toluene-d8 (Surr)	94		80 - 120					04/16/25 00:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-11D
Date Collected: 04/08/25 11:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:00	1

Client Sample ID: MW-11S
Date Collected: 04/08/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:07	1

Client Sample ID: MW-1D
Date Collected: 04/08/25 14:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.77	J	2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:09	1

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.82	J	2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:12	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-10S
Date Collected: 04/08/25 16:45
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:14	1

Client Sample ID: MW-10D
Date Collected: 04/08/25 17:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:16	1

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.64	J	2.0	0.50	ug/L		04/11/25 13:04	04/14/25 16:19	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-11D
Date Collected: 04/08/25 11:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		200	60	ug/L		04/14/25 15:46	04/15/25 20:55	1
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 20:55	1
Magnesium	94000		200	50	ug/L		04/14/25 15:46	04/15/25 20:55	1
Manganese	25		10	2.5	ug/L		04/14/25 15:46	04/15/25 20:55	1
Sodium	40000		1000	450	ug/L		04/14/25 15:46	04/15/25 20:55	1

Client Sample ID: MW-11S
Date Collected: 04/08/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49000		200	60	ug/L		04/14/25 15:46	04/15/25 20:59	1
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 20:59	1
Magnesium	20000		200	50	ug/L		04/14/25 15:46	04/15/25 20:59	1
Manganese	ND		10	2.5	ug/L		04/14/25 15:46	04/15/25 20:59	1
Sodium	23000		1000	450	ug/L		04/14/25 15:46	04/15/25 20:59	1

Client Sample ID: MW-1D
Date Collected: 04/08/25 14:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22000		200	60	ug/L		04/14/25 15:46	04/15/25 21:17	1
Iron	44	J	100	40	ug/L		04/14/25 15:46	04/15/25 21:17	1
Magnesium	9100		200	50	ug/L		04/14/25 15:46	04/15/25 21:17	1
Manganese	ND		10	2.5	ug/L		04/14/25 15:46	04/15/25 21:17	1
Sodium	22000		1000	450	ug/L		04/14/25 15:46	04/15/25 21:17	1

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	41000		200	60	ug/L		04/14/25 15:46	04/15/25 21:21	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

Method: SW846 6010D - Metals (ICP) - Dissolved (Continued)

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 21:21	1
Magnesium	18000		200	50	ug/L		04/14/25 15:46	04/15/25 21:21	1
Manganese	ND		10	2.5	ug/L		04/14/25 15:46	04/15/25 21:21	1
Sodium	20000		1000	450	ug/L		04/14/25 15:46	04/15/25 21:21	1

Client Sample ID: MW-10S
Date Collected: 04/08/25 16:45
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	310000		200	60	ug/L		04/14/25 15:46	04/15/25 21:25	1
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 21:25	1
Magnesium	130000		200	50	ug/L		04/14/25 15:46	04/15/25 21:25	1
Manganese	78		10	2.5	ug/L		04/14/25 15:46	04/15/25 21:25	1
Sodium	36000		1000	450	ug/L		04/14/25 15:46	04/15/25 21:25	1

Client Sample ID: MW-10D
Date Collected: 04/08/25 17:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		200	60	ug/L		04/14/25 15:46	04/15/25 21:29	1
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 21:29	1
Magnesium	34000		200	50	ug/L		04/14/25 15:46	04/15/25 21:29	1
Manganese	59		10	2.5	ug/L		04/14/25 15:46	04/15/25 21:29	1
Sodium	33000		1000	450	ug/L		04/14/25 15:46	04/15/25 21:29	1

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25000		200	60	ug/L		04/14/25 15:46	04/15/25 21:51	1
Iron	ND		100	40	ug/L		04/14/25 15:46	04/15/25 21:51	1
Magnesium	10000		200	50	ug/L		04/14/25 15:46	04/15/25 21:51	1
Manganese	ND		10	2.5	ug/L		04/14/25 15:46	04/15/25 21:51	1
Sodium	24000		1000	450	ug/L		04/14/25 15:46	04/15/25 21:51	1

General Chemistry

Client Sample ID: MW-11D
Date Collected: 04/08/25 11:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	100		3.0	1.3	mg/L			04/14/25 18:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	830		10	7.0	mg/L			04/16/25 15:18	1
Total Dissolved Solids (SM 2540C)	1100		20	12	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

General Chemistry

Client Sample ID: MW-11S
Date Collected: 04/08/25 12:15
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	21		3.0	1.3	mg/L			04/14/25 18:56	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	180		10	7.0	mg/L			04/16/25 15:24	1
Total Dissolved Solids (SM 2540C)	260		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	11		4.0	1.5	mg/L			04/14/25 12:38	1

Client Sample ID: MW-1D
Date Collected: 04/08/25 14:20
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	7.1		3.0	1.3	mg/L			04/14/25 20:35	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	140		10	7.0	mg/L			04/16/25 15:29	1
Total Dissolved Solids (SM 2540C)	200		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1

Client Sample ID: MW-3D
Date Collected: 04/08/25 15:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	54		3.0	1.3	mg/L			04/14/25 20:21	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	150		10	7.0	mg/L			04/16/25 15:35	1
Total Dissolved Solids (SM 2540C)	290		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1

Client Sample ID: MW-10S
Date Collected: 04/08/25 16:45
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	550		30	13	mg/L			04/15/25 01:58	10
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	620		10	7.0	mg/L			04/16/25 15:43	1
Total Dissolved Solids (SM 2540C)	720		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1

Client Sample ID: MW-10D
Date Collected: 04/08/25 17:25
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	82		3.0	1.3	mg/L			04/14/25 20:07	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	350		10	7.0	mg/L			04/16/25 15:49	1
Total Dissolved Solids (SM 2540C)	540		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	7.2		3.0	1.3	mg/L			04/14/25 19:53	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-205820-1

General Chemistry (Continued)

Client Sample ID: Duplicate
Date Collected: 04/08/25 07:00
Date Received: 04/10/25 09:35

Lab Sample ID: 280-205820-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	140		10	7.0	mg/L			04/16/25 15:54	1
Total Dissolved Solids (SM 2540C)	190		10	6.0	mg/L			04/14/25 08:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.5	mg/L			04/14/25 12:38	1