A Republic Services Company
P.O. Box 206, Sheffield, IL 61361
P 815.454.2342 F 815.454.2253

January 31, 2024

US Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Attention: Ms. Hala Kuss
Associate regional Counsel
RCRA Enforcement Branch
Region 5 MAIL CODE LR-16J

Re: US Ecology Illinois Inc. LSTP 2023 Monitoring Report
ILD 045 063 450

Dear Ms. Kuss:

As required by the 2020 Long-term Stewardship Program we are submitting our annual 2023 monitoring report for the Sheffield facility in the US Ecology SharePoint USE-IL LTSP Reports.

If you should have any questions regarding this annual report, please contact me at (815) 454-2342

Sincerely,

Doug Long

Doug Long
Environmental Supervisor

A Republic Services Company

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personnel knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Doug Long

Name: Doug Long

Title: Facility Manager

Date: January 31, 2024

Long-term Stewardship Program

2023 Annual Monitoring Report

US Ecology Illinois, Inc.

IEPA No. 011 905000 3
USEPA No. ILD 04-506-3450

Submitted to:

US Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604

Submitted by:

US Ecology Illinois Inc.
13279-350 E. Street
Sheffield, Illinois 61361

January 31, 2024

Table of Contents

Tables

Figures

Appendices

1 Summary

This Long-term Stewardship Program (LTSP) annual report provides a summary of the groundwater monitoring events and other site stewardship activities that took place in 2023 at US Ecology's closed Sheffield facility. This LTSP report represents a transition from work previously conducted under the 1985 Administrative Order by Consent (AOC) with the US Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) post-closure permit, to the 2020 USEPA AOC for long-term site stewardship.

The 2023 analytical results indicated no migration of contaminants of concern (COCs) to boundary wells. Cis-1,2-dichloroethene (cis-1,2-DCE) was detected in Trout Lake but not at a concentration exceeding the Region 4 freshwater screening levels. The results of groundwater samples collected within the known plume and downgradient areas indicate continued declines in concentrations over time, particularly in the last 5 to 10 years. Exceedances of Region 4 freshwater screening levels were limited to tetrachloroethene (PCE) in plume well G168 (spring only); PCE in plume well G547 (fall only); benzene at guard well G591 (spring only); and cis-1,2-DCE, PCE, and TCE in guard well G600 (spring only).

2 Site Background

The US Ecology Sheffield site is a 46-acre permitted hazardous waste facility that operated from 1968 to 1983 (Figure 1, Vicinity Map). The facility includes two hazardous waste landfills referred to as the Old Chem Site and New Chem Site (Figure 2, Site Layout). A closed 20-acre, low-level radioactive waste (LLRW) facility owned and monitored by the state of Illinois is adjacent to the facility and lies within the property owned by US Ecology but is not considered as a part of this LTSP. During operations, the US Ecology facility accepted industrial, laboratory, and agricultural hazardous wastes. Approximately 165,000 cubic yards (cy) of waste were reportedly disposed at the two landfills (93 percent at the New Chem Site). The Old Chem Site consists of six disposal trenches covering about 6 acres. The New Chem Site consists of 19 clay-lined burial cells covering approximately 40 acres.

2.1 Corrective Action

In 1985, the facility was subject to an AOC administered by the USEPA under the Resource Conservation and Recovery Act (RCRA). The AOC required (1) investigation of potential site releases that could adversely affect human or environmental health through exposure to hazardous contaminants (primarily volatile organic compounds [VOCs]); (2) evaluation of alternatives to address exposure pathways; and (3) implementation of corrective actions that would protect people and the environment.

Subsequent corrective actions included containment of remaining on-site waste, and groundwater extraction and treatment to address a contaminated groundwater plume in the shallow aquifer beneath the facility. To contain the waste, portions of the landfill were isolated by constructing subsurface barrier walls to divert groundwater away from

the cells, followed by capping the landfill surface in 1994. After the initial source control actions, additional groundwater remediation systems were installed in several phases including groundwater extraction and treatment, and in-situ treatment by an air-sparging/soil vapor-extraction (AS/SVE) system. Various modifications were made to the remediation systems over the years to optimize performance. In 2006, an injection system was added around some of the AS/SVE wells to further degrade VOC compounds present in groundwater. In 2009, an AS/SVE system was installed to address ongoing regulatory exceedances in seeps along the north side of the landfill.

US Ecology applied for a post-closure permit with IEPA on October 24, 2008. IEPA and USEPA agreed that all future post-closure activities would be carried out under the 1985 USEPA AOC (January 21, 2010, correspondence from USEPA); however, IEPA issued a post-closure permit to US Ecology on March 18, 2010. The IEPA permit required preparation of a post-closure plan for the site and ongoing environmental monitoring for at least 30 years from the September 30, 1996, closure certification date. The IEPA permit also required the facility to follow the post-closure plan associated with the September 30, 1985, AOC between USEPA and US Ecology.

The post-closure groundwater and surface water monitoring program was approved by the USEPA on July 1, 2009, following inclusion of additional groundwater monitoring wells identified in USEPA's response-to-comments (RTC) document for the facility dated October 1990 (Figure 3, Post-Closure Groundwater Monitoring Network (2008-2020) shows the groundwater monitoring wells sampled under the post-closure plan). This program was conducted from 2009 to 2020 and forms the basis of the post-closure plan also required under the IEPA permit.

More than 25 years of groundwater monitoring data have been collected since the initial remedial systems were installed, with VOCs comprising the primary COCs. VOC concentrations have declined over time, demonstrating that natural attenuation is occurring, and leading to decommissioning of the on-site wastewater treatment plant in 2013. Other treatment systems were decommissioned as corrective action goals were achieved.

Investigations of site-specific geological conditions have shown the shallow, contaminated aquifer is sufficiently isolated from the deeper water-bearing zone, which provides regional drinking water. Site hydrogeology is well known with most of the shallow groundwater discharging to a local surface water feature (Trout Lake) formed by historical coal mining activity (see Section 3.2 below). Surface water monitoring results have shown the contaminated groundwater plume is not impacting Trout Lake, which serves as the point of compliance (POC) for the LTSP.

In 2019 and 2020, a conceptual site model (CSM) and LTSP were prepared at USEPA's request for the Sheffield facility to support USEPA decisions regarding long-term site management (GeoEngineers 2019; GeoEngineers 2020). Based on information presented in the CSM and LTSP, an AOC was filed by the USEPA that will govern the long-term care of the facility.

2.2 Long-term Stewardship Program

The LTSP (GeoEngineers 2020) incorporates environmental monitoring, inspection of engineering controls, and certifying institutional controls to ensure continued performance and site integrity. The results of these activities are the basis for this report. Environmental monitoring is conducted to demonstrate the effectiveness of existing source controls and support site management decisions regarding performance. Inspections, maintenance, and minor repairs are performed to maintain site integrity. Deed restrictions have been filed with the Bureau County (county) to ensure the continued land use associated with the landfill.

3 Site Geology and Hydrogeology

3.1 Geology

The facility is located on the northwestern margin of the Till Plains Section of the Central Lowlands physiographic province in Illinois. The Till Plains Section is composed of multiple Pleistocene epoch glacial ice sheet advances and retreats that scoured underlying bedrock and deposited till as terminal and ground moraines with subsequent outwash plains. Surficial geologic maps indicate Pleistocene aeolian silts and fine sand overlay clay, silt, and pebble till derived from ground moraines; outwash sands cap the local area. The loess and glacial deposits lie unconformably over shale and sandstone with thin coal seams and limestone beds.

Though that portion of the site occupied by the landfill area is generally undisturbed, much of the adjacent area had been surface mined for coal and backfilled with mine spoils in the 1940s and early 1950s. The approximately 23-acre Trout Lake originated as a surface mining pit. The mine spoils consist of intermixed glacial deposits and bedrock.

Site boring logs indicate loess, glacial till, glacial outwash sand and gravel, and lacustrine material underly the site. Fill material, derived from surface mining, as well as landfill capping material was also present.

3.2 Site Hydrogeology

Prior to area surface mining in the late 1920s and early 1930s, surface water at the site drained to the northeast through an unnamed tributary to Lawson Creek, which currently drains to the north. Upon conclusion of surface mining activity, the tributary drainage was captured by the pit that became Trout Lake. Additionally, ponds and lakes originating as surface mine pits currently receive groundwater discharge in the vicinity of the facility. Trout Lake is impounded by an earthen dam to the east that maintains the pool elevation at approximately 698 to 700 feet above mean sea level (MSL). The dam does not have a control gate and seasonal runoff can overtop the dam, with excess water discharging into a small ephemeral drainage and ultimately, either infiltrating to groundwater or into Lawson Creek.

Groundwater lies within three hydrogeologic systems in the area: (1) a deep principal regional aquifer; (2) a Pennsylvanian bedrock aquifer; and (3) an uppermost unconfined aquifer within unconsolidated glacial deposits. Groundwater flow beneath the facility is impacted by unconsolidated material heterogeneity, complex bedrock vertical joints, and horizontal bedding planes, as well as irregular surface topography, and interference from engineered barriers and nearby surface water bodies.

Groundwater flow in the shallow unconfined aquifer is generally to the north-northeast and then east toward Trout Lake. However, subsurface barrier walls designed to isolate waste disposal trenches from groundwater flow-through were installed in the 1990s around the Old Chem Site and portions of the New Chem Site. The barrier walls were installed from roughly ground surface to bedrock. The barrier walls disrupt the north-northeasterly groundwater flow, diverting it to the east and northwest, creating a broad flattening of the groundwater gradient to the north of the landfill facility. The barrier walls do not affect local groundwater flow in the deep aquifer. Maps showing groundwater contours in the shallow and deep aquifers are presented in Figures 4 through 7.

4 Groundwater and Surface Water Chemical Monitoring and Evaluation Approach

Groundwater and surface water sampling protocols are outlined in the 2020 LTSP. The sampling locations and well type designations are described below.

Twelve wells (identified as boundary, guard, and plume wells) are sampled for the LTSP monitoring program along with two Trout Lake shoreline wells and two surface water sampling locations (Figure 8. Long-term Stewardship Plan Monitoring Locations). The groundwater and surface water sampling locations are discussed below:

- Boundary wells (G160 and G162) are situated downgradient of the Old Chem and New Chem landfill units to assess whether site-generated contamination is migrating towards the facility boundaries.

- Guard wells (G591, G592, and G600) are located to the east between the disposal cells and Trout Lake and are intended to provide an early warning of contaminant migration towards and possible impacts to the lake.

- Plume wells (G165, G166, G168, G547, G564, G575, and G594) are located within the historical path of the VOC plume. Analytical data are used to evaluate plume stability and concentration trends.

- The two shoreline wells (G211 and G570) are used to monitor groundwater-surface water interactions (GSI) downgradient of the guard wells.

- Two surface water sampling locations (S501 and S502) are near the shoreline in an area where groundwater from the site is likely to discharge to the lake (GeoEngineers 2020).

4.1 Monitoring Frequency

The wells are sampled in the spring and fall of each year. Fall 2020 represented the first sampling event under the LTSP; spring sampling was conducted under the post-closure permit and includes additional wells. Monitoring frequency in the LTSP array of wells may be reduced if contaminant concentrations continue to decline or remain stable.

Six additional wells from historical investigations will be monitored as part of a 5-year review cycle to assess the long-term effectiveness of the original corrective actions. These wells have historically had few, if any, COC criteria exceedances. The well locations were selected to be close to various source control structures and will be used to confirm the effectiveness of these source controls provided by the original corrective actions. The first 5-year cycle sampling event will be in 2025.

4.2 Data Evaluation

Analytical results for surface water and groundwater are compared to USEPA Region 4 surface water screening levels in this annual report (previous years were compared to screening levels required under the post-closure permit). Region 4 screening levels are provided in inset Table I below.

TABLE I. SURFACE WATER SCREENING LEVELS

Contaminant of Concern	Region 4 Surface Water Screening Values (µg/L)
Benzene	160
Chloroform	140
1,1-Dichloroethane	410
1,1-Dichloroethene	130
1,2-dichloroethane (EDC)	2,000
cis-1,2-Dichloroethene	620
trans-1,2-Dichloroethene	558
1,2-Dichloropropane	520
Methylene chloride (aka dichloromethane)	1,500
Tetrachloroethene (PCE)	53
Trichloroethene (TCE)	220
Vinyl chloride	930

Note:
µg/L = micrograms per liter

The surface water sampling locations in Trout Lake are the point of compliance for the site, such that an exceedance of a screening level would trigger additional investigation and potentially a corrective action, developed in coordination with the USEPA. Comparison of groundwater concentrations to screening levels provides an assessment of trends and the efficacy of source controls at the site. Additional investigation might occur should trends in a well change significantly (i.e., indicate increasing

concentrations where previously declining or stable). Table 1, Response Actions based on Chemical Monitoring Results (attached) presents the potential response actions, based on chemical results under the LTSP that could be implemented during the program.

5 Groundwater and Surface Water Monitoring Results

Results are presented and discussed by well type (guard, plume, etc.) or surface water sampling location in this section. Laboratory reports associated with the spring and fall 2023 monitoring are provided in Appendix A, Analytical Results along with a summary of fall detected results (spring data were previously reported to the USEPA). Conventional parameters were measured at the wells sampled during a monitoring event; COCs were analyzed for selected wells sampled in the spring and in the wells sampled in the fall. COC concentrations are compared to screening levels for surface water per the LTSP and any exceedances are identified. Trends in chemical concentrations are discussed for each well type and graphics displayed trends are provided in Appendix B, Graphical Evaluation. Groundwater flow and an assessment of gains or losses in the lake are presented in the attached Figures 4 through 7 and 9, respectively.

5.1 Ambient Condition Monitoring Results

The Ambient Condition Wells (G145, G186, and G434) provide data regarding inorganic concentrations in upgradient groundwater and establish guidelines for Illinois EPA's "Class IV-Other Groundwater" standards for other wells.

The baseline inorganic constituent concentrations established in the groundwater monitoring plan for the Ambient Condition Monitoring Wells are presented in inset Table II below. The unconsolidated upper aquifer ambient condition data represents the maximum concentrations measured in well G434 since the post-closure monitoring began. The deep bedrock aquifer data represent the maximum concentrations measured in either G145 or G186 since the post-closure monitoring began.

TABLE II. MAXIMUM CONCENTRATIONS OF CONVENTIONAL PARAMETERS IN AMBIENT WELLS

Constituent	Units	Shallow aquifer	Deep aquifer
Total Chlorides	mg/L	1.7	7.8
Total Sulfate	mg/L	23	1,600
Total Dissolved Solids (TDS)	mg/L	360	3,000
Total Iron	mg/L	1,100	3,700
Total Manganese	mg/L	150	3,900

Notes:
mg/l = milligrams per liter

5.2 Boundary Well Monitoring Results

Two boundary wells (G-160 and G-162) were monitored in spring and fall 2023. Comparison with baseline conventional water quality concentrations show elevated total iron, total manganese, and TDS values. Total iron, total manganese, and TDS concentrations are above their baselines up to a magnitude of one. Conventional water quality parameter concentrations in boundary wells are summarized in Table 2, Summary of the 2023 Groundwater and Surface Water Conventional Water Quality Parameter Monitoring Data for the Long-term Stewardship Program. (attached).

COC's were not detected in boundary well groundwater samples. Analytical data for boundary wells are summarized in Table 3, Summary of the 2023 Groundwater and Surface Water Monitoring Data for the Long-term Stewardship Program (attached).

Trends were not evaluated in boundary wells because COCs have not been detected historically. No additional evaluation is currently required.

5.3 Plume Well Monitoring Results

Seven plume wells were sampled in the 2023 sampling events. Plume monitoring wells G165, G166, and G168 are located north of the New Chem Site and upgradient of the Old Chem Site and LLRW disposal site (G547, G564, G575, and G594).

Elevated total iron up to a magnitude of one was reported in four eastern plume wells during the spring and fall monitoring events. The three northern plume well total concentrations were within baseline values. Total manganese concentrations were slightly above baseline values in G564 for both spring and fall 2023; and were within baseline values in the remaining plume wells. TDS was greater than the baseline by up to a magnitude of one in six of the seven plume wells in both fall and spring 2023. TDS in G547 was below baseline concentrations during both sampling events. The attached Table 2 summarizes conventional parameter concentrations in the plume wells.

COCs were not detected in groundwater from wells G165 and G166 in either spring or fall. Well G168 had several detections of COCs in both the spring and fall; PCE exceeded its screening level in both events by an approximate factor of 2 to 3 (concentrations were similar across both monitoring events).

COCs were detected in the four wells east of the Old Chem Site in both sampling events. Well G547 was reported with a concentration of PCE in the fall sampling event exceeding the screening level. Wells G547, G575, and G594 were reported with multiple analyte concentrations but the detected values were below USEPA Region 4 surface water screening levels (see attached Table 3 for a summary of analytical results for plume wells).

5.3.1 Plume Well Trend Analysis

COC results were initially graphed using Excel™ for those wells with a recent Region 4 screening level exceedance. Where the initial graphs suggested a trend, chemical concentrations were imported into USEPA's ProUCL (version 5.1) to determine the significance of that trend. The Trends Analysis module in ProUCL was used for this analysis. When there was insufficient evidence to determine the presence or significance of a trend (as determined by ProUCL), shorter time periods were evaluated (e.g., last 5 or 10 years).

In almost all cases, COCs continue to display significant declines in concentrations since 1999. A summary of the trends analysis is provided in Table 4, Summary of the 2023 Groundwater Trends for the Long-term Stewardship Program (attached). Concentration line graphs are presented in Appendix B.1, Concentration Lint Plots. Trend analysis graphs are included in Appendix B.2, Trend Analysis (ProUCL).

5.4 Guard Well Monitoring Results

Three guard wells (G591, G592, and G600), east of the Old Chem Site and within the groundwater plume to monitor conditions between the Old Chem Site and Trout Lake, were sampled in the spring event. G591 and G592 were sampled again in the fall, but G600 was dry and was not sampled in fall 2023.

Elevated total iron (up to 2 orders of magnitude of baseline values) was reported in G591 and G600 during the spring and fall monitoring events. The G592 well total iron concentrations were below baseline values. Total manganese concentrations were above baseline values in G591 and G600; and below baseline values in G592. TDS was greater than the baseline in the three guard wells in both fall and spring 2023. Conventional water quality parameter results for guard wells are provided in attached Table 2.

COCs were detected in all three guard wells. Detected concentrations were reported below the USEPA Region 4 screening levels except benzene at G591 (spring only); which was reported at the screening level (160 µg/L), and cis-1,2-DCE, PCE, and TCE in G600, which exceeded regulatory criterion by up to a factor of about 2 in the spring. Analytical results for guard wells are summarized in Table 3.

5.4.1 Guard Well Trend Analysis

In most cases, COCs with one or more historical exceedances of screening levels have displayed significant declines in concentrations since 1999. Exceptions included cis-1,2-DCE in G600, PCE at G592, and TCE at G600 where the initial evaluation suggested that there was insufficient evidence that a trend existed. However, when shorter (5 years) timeframes were evaluated, declining trends became significant for TCE and PCE. The presence and significance of trends for benzene at G591 indicate statistical evidence of a slight decreasing trend.

In most cases, COCs continue to display significant declines in concentrations since 1999. Review of the G591 benzene concentration line graph shows a small increase in March 2018/2019 and April 2021/2022 and 2023 followed by a concentration decrease

below the screening level, thus there is variability; however, the recent increase does not exceed the typical range. Benzene concentrations in hydrogeologically upgradient well G575 and adjacent wells G592 and G594 were not reported above the laboratory method detection limit, thus the concentration increase appears to be isolated to the G591 well. The well will continue to be monitored at scheduled intervals and no further evaluation is required at this time.

A summary of the trends analysis is provided in Table 4. Concentration line graphs are presented in Appendix B.1. Trend analysis graphs are included in Appendix B.2.

5.5 Groundwater-Surface Water Interaction Monitoring Results

Two shoreline wells (G211 and G570) downgradient of the plume were added in fall 2020 (Figure 8) to assess GSI.

Conventional parameters were dissimilar between the two GSI wells, with total and dissolved iron, dissolved sulfate, and TDS concentrations being elevated in G570 relative to G211. Total and dissolved manganese concentrations in G211 and G570 were similar in value with respect to each other.

COCs were not detected in GSI well G211; cis-1,2-DCE concentrations were detected in groundwater from G570 in spring and fall at concentrations well below the screening levels (Table 3).

Current data are not sufficient to evaluate trends in G211 and G570. The wells will continue to be monitored at scheduled intervals and no further evaluation is required.

5.6 Surface Water Monitoring Results

Surface water was sampled at S501 and S502 during the 2023 monitoring.

Conventional parameters were similar at both locations; no comparison was made to ambient groundwater conditions. Conventional parameter results are reported in the attached Table 2. Cis-1,2-DCE, PCE and TCE were reported with concentrations above the laboratory MDL in the initial April 19, 2023 sampling. Surface water was resampled in May 2023, with PCE and TCE reported as non-detect. Cis-1,2-DCE was detected in the resample for point S502 at 1.0 µg/L, below the regulatory level of 620 µg/L. Other COCs were not detected in either surface water sample in 2023, which is consistent with historical data (analytical data are summarized in the attached Table 3). The site continues to comply with the original post-closure permit and the 2020 AOC.

5.7 Groundwater Flow

5.7.1 Direction

The depth to groundwater was measured in each of the previously identified wells plus additional wells along the shoreline[1] to provide groundwater elevation data across the site. Groundwater elevations were calculated based on the top of well casing (TOC) surveyed elevations. Interpreting site groundwater flow direction is complex due to the geology, history of surface mining and associated site disturbances, and the installation of barrier walls around the Old Chem Site and along the southern edge of the New Chem Site. Generally, the unconsolidated glacial deposit upper aquifer flows from a hydrogeologic high centered around well G192 toward the northwest and northeast. The barrier walls surrounding the Old Chem Site appear to disrupt flow to the northeast. East of the Old Chem Site groundwater flows to the east-southeast. Groundwater in the deeper bedrock aquifer appears to flow toward a northeast-trending trough located beneath the New Chem Site and does not appear to be affected by the barrier walls. Groundwater contours are presented in Figures 4 through 7. Groundwater sampling logs and elevation data are included in Appendix C, Well Sampling Logs and Elevation.

5.7.2 Gain/Loss Assessment

To assess whether Trout Lake gains/intercepts groundwater or loses water into the surrounding sediments, eight established monitoring wells located along the shoreline were surveyed and added to the current monitoring well network for static water level measurements in the spring and fall (Figure 9). Water levels measured in the spring and fall of 2023 indicate that upland groundwater is discharging to the lake (i.e., the lake level is lower than the well groundwater elevations) in six of the eight wells (G570, G211, RIB-6, RIB-11, G572, and G212. Lake water appears to be discharging to the surrounding sediments in the two wells closest to the earthen embankment (G573 and G574).

6 Inspections and Maintenance

A copy of the 2023 Routine Inspection and Maintenance Report is included in Appendix D.1, Routine Inspection and Maintenance Report, Leachate Management.

6.1 Physical Inspections

Facility inspections performed in 2023 included assessing the physical integrity and condition of the vegetation landfill caps, containment/barrier walls, leachate collection system, stormwater drainage, and boundary fence and site access controls. Additionally, groundwater monitoring well monuments were also assessed. Engineering control deficiencies are noted in Exception Reports.

[1] Additional shoreline wells used to measure groundwater elevations included RIB-6, RIB-11, 572, 573, 574, and 212. See Figure 9, Shoreline Monitoring Well Locations of Fall 2023 Lake Gain/Loss Assessment for locations.

6.1.1 Landfill Cover and Stormwater Drainage

No deficiencies were reported.

Landfill cover vegetation, containment/barrier walls, slopes, and stormwater runoff areas were in good condition. Mowing and trimming activities were performed twice during the year. A total of 38.25 inches of precipitation has been measured through December 2023. Stormwater drainage ditches and other ditches were clear, properly sloped, and prepared to handle runoff.

6.1.2 Monitoring Wells and Fence Lines

No deficiencies were reported.

The New Chem Site boundary fence was in good condition. Monitoring well monuments were in excellent condition and locked with security seals.

6.2 Annual Certification

US Ecology affirms that the institutional controls and deed restrictions remain in place for the Sheffield facility, as required by the LTSP and the AOC.

6.3 Leachate Collection System and Management

No deficiencies were reported.

The leachate collection sumps were in good condition. A total of 1,992 gallons of leachate and 99.70 kilograms of hazardous waste solids derived from 2023 leachate collection operations, were collected between August and October 2023 (Appendix D.2, Leachate Collection Volume). The leachate was stored on site prior to disposing at Veolia in Port Arthur, Texas in October 2023. PCB hazardous waste solids were stored on site prior to disposing at US Ecology Texas in October 2023. A copy of the disposal manifest is included in Appendix D.3, Leachate Disposal Manifest.

7 Conclusions

The spring and fall 2023 analytical data indicate that site contamination remains within the existing on-site plume with no indication of contaminant migration outside the monitoring area except for a low cis-1,2-DCE concentration in Trout Lake surface water.

COC concentrations in the Old Chem Site northwest plume area monitored by wells G165, G166, G167, and G168 have declined significantly from historical concentrations and only PCE exceeds its Region 4 screening level at one location (G168). There has been no indication of plume migration to the boundary wells, and it is likely that continued reduction of COCs will occur due to natural attenuation. US Ecology will continue monitoring these wells in accordance with the LTSP.

The Old Chem Site eastern plume area characterized by monitoring wells G547, G564, G575, and G594 indicates some COC variability. PCE concentrations in G547, and cis-1,2-DCE in G564 increased from previous monitoring events and may indicate continued chemical movement within the plume.

Concentrations of COCs in guard wells G591, G592, and G600 have declined from historically elevated concentrations. Though variable, reported concentrations of benzene and PCE do not appear to exceed the typical range at this time. The reported cis-1,2-DCE and TCE concentrations in G600 were sharp increases and fall outside the upper typical range limit for concentration fluctuations.

Cis-1,2-DCE was reported in Trout Lake for the first time; however, the surface water quality continues to comply with the terms of the post-closure permit and current LTSP and AOC.

8 References

GeoEngineers, Inc. (GeoEngineers). 2019. Conceptual Site Model. Sheffield Former Hazardous Waste Facility, Sheffield, Illinois. July 2, 2019.

GeoEngineers, Inc. (GeoEngineers). 2020. Long-term Stewardship Plan—Final. Sheffield Former Hazardous Waste Facility, Sheffield, Illinois. July 28, 2020.

US Ecology Illinois, Inc. 2020. Resource Conservation and Recovery Act. Administrative Order on Consent. Sheffield Facility, Bureau County, Sheffield, IL. September 22, 2020.

Table 1

Response Actions based on Chemical Monitoring Results

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Long-Term Stewardship Program Element	Sampling/ Observation Point	Adverse Event	Trigger	Response
Chemical Monitoring				
Groundwater	Boundary well	Contaminated groundwater is migrating toward facility boundary	Groundwater COC concentrations exceed Region 4 surface water screening levels at one or more boundary wells	Evaluate short-term (5 year) COC concentration trends and variability in boundary well. If there appears to be a significant increase in concentration or variability exceeds the typical range, evaluate upgradient wells for similar trend along with any change in groundwater flow path. If exceedance is a function of a landfill source, evaluate integrity of source controls at landfill boundary (may include sampling historical wells); repair remedy element (cap, barrier wall) as needed. Continue monitoring according to scheduled interval.
	Plume well	Groundwater contamination trends change	Statistically significant increasing trend in COC concentration in plume detected	Evaluate guard well COC concentration trends. Continue monitoring at scheduled interval.
	Guard well	Contaminated groundwater is migrating toward lake	Groundwater COC concentrations exceed Region 4 surface water screening levels at one or more guard wells	Evaluate short-term (5 year) trend and variability in guard well. If there appears to be a significant increase in a COC concentration or variability exceeds the typical range, evaluate potential correlation with upgradient COC concentrations to determine potential source of increasing trend. Consider sampling additional historical wells to evaluate performance of upgradient barrier walls. Continue monitoring guard wells at scheduled interval.
	GSI well	Groundwater at shoreline shows evidence of site-specific contamination	Site-specific COCs are detected in shoreline wells	Determine if Region 4 water quality screening levels are exceeded at GSI well. If yes, evaluate upgradient wells within the LTSP monitoring array to determine if there is correlative increase in COC concentrations and/or potential source of the increasing trend. Consider sampling additional historical wells. Consider evaluation of sediment porewater adjacent to the shoreline to determine if shoreline groundwater concentrations are attenuating prior to discharge to surface water (sediment-water interface). Consider an increase to monitoring frequency at GSI wells.
Surface water	Surface water points of compliance	Surface water becomes contaminated with site-specific contaminants of concern	Surface water COC concentrations exceed Region 4 surface water quality criteria	Resample points of compliance to confirm. If confirmed, evaluate groundwater concentrations in LTSP monitoring well array to determine likely source area. Consider sampling additional historical wells to evaluate distribution of contaminants near the POC. Determine the need for and type of corrective action needed based on likely risks to aquatic and water-dependent receptors. Consider an increase in monitoring frequency at POCs or locations within the lake.

Notes:

COC = contaminant of concern

GSI = groundwater-surface water interaction

LTSP = Long-term Stewardship Program

POC = point of compliance

Table 2

Summary of the 2023 Groundwater and Surface Water Conventional Water Quality Parameter Monitoring Data for the Long-term Stewardship Program[1]

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Monitoring Location and Type	Spring Event (April 2023)							Fall Event (September 2023)						
	Chloride-Dissolved	Iron- Total	Iron-Dissolved	Manganese - Total	Manganese-Dissolved	Total Dissolved Solids	Sulfate - Dissolved	Chloride-Dissolved	Iron-Total	Iron-Dissolved	Manganese-Total	Manganese-Dissolved	Total Dissolved Solids	Sulfate-Dissolved
Units	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L
Surface Water														
S-501	5.3	71	37	35	34	1,500	870	5.5	64	41	36	35	1,700	980
S-502	5.7	53	50	34	36	1,500	830	5.6	41	28	32	33	1,600	960
Boundary Wells														
G-160	4.9	6,000	4,800	2,300	2,300	3,000	1,700	<5	2,700	2,500	1,900	1,900	3,300	1,600
G-162	5.4	18,000	9,800	3,200	3,000	3,100	1,800	<5	1,800	1,600	2,800	2,800	2,800	1,400
Guard Wells														
G-591	34	5,700	5,500	620	630	600	48	29	7,100	5,900	690	620	560	45
G-592	8.3	110	100	2.2	<1.0	600	60	9.4	1,100	930	27	21	620	58
G-600	11	13,000	7,800	600	530	600	65	NS	NS	NS	NS	NS	NS	NS
Plume Wells														
G-165	<1.0	410	180	18	19	840	410	<1	210	170	4.5	3.9	720	270
G-166	3.2	51	30	12	12	510	2.4	3.2	27	26	18	18	560	3
G-168	<5.0	11	<10	<1.0	<1.0	1,100	280	2.4	<10	<10	<1	<1	1,100	290
G-547	9.2	4,600	2,100	66	53	260	4.2	18.0	1,500	1,100	7.4	6.6	180	5.9
G-564	5.1	11,000	9,400	400	370	1,800	730	7.7	13,000	13,000	380	380	1,800	640
G-575	8.1	12,000	7,700	46	37	640	84	6.6	11,000	7,600	55	46	600	52
G-594	14	530	1,100	11	23	480	38	15	6,900	6,700	66	77	560	40
GSI														
G-211	3.0	2,700	2,000	340	330	420	2.7	2.7	6,400	5,100	330	330	460	2.1
G-570	3.1	10,000	7,600	230	260	1,600	750	2.8	11,000	11,000	230	250	1,500	840

Notes:

[1] This summary represents a transition from the monitoring program conducted under the 1985 Adminstrative Order by Consent (AOC) to the Long-term Stewardship Program (LTSP) conducted under the 2020 AOC with the U.S. Environmental Protection Agency (USEPA).

mg/L = milligrams per liter; µg/L = micrograms per liter

<# = Not detected above the laboratory method reporting limit; NS = Not sampled, well was dry.

Bold value = detected

Table 3

Summary of the 2023 Groundwater and Surface Water Monitoring Data for the Long-term Stewardship Program[1]

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Contaminant of Concern[2]	Region 4 Screening Level	Units	Surface Water		Groundwater															Surface Water		Groundwater	
					Boundary Wells		Plume Wells								Guard Wells			GSI					
			S-501	S-502	G-160	G-162	G-165	G-166	G-168	G-547	G-564	G-575	G-594	G-591	G-592	G-600	G-211	G-570		Frequency of Detection	Frequency of Exceedance	Frequency of Detection	Frequency of Exceedance
Spring Sampling Event--April 19, 2023																							
1,1-Dichloroethane	410	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**51**	**1.6**	**47**	**34**	**12**	<1	<1		0%	0%	36%	0%
1,1-Dichloroethene	130	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**3.1**	<1	<1		0%	0%	7%	0%
1,2-Dichloroethane	2,000	µg/L	<1	<1	<1	<1	<1	<1	<1	**1.5**	<1	<1	<1	**4.3**	<1	**4.4**	<1	<1		0%	0%	21%	0%
1,2-Dichloropropane	520	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**13**	<1	**2.1**	<1	<1		0%	0%	14%	0%
Benzene	160	µg/L	<1	<1	<1	<1	<1	<1	<1	**64**	**5**	<1	<1	**160**	<1	**2.5**	<1	<1		0%	0%	28%	25%
Chloroform	140	µg/L	<1	<1	<1	<1	<1	<1	**2.1**	<1	<1	**2.3**	<1	<1.0	**1.4**	**5.6**	<1	<1		0%	0%	28%	0%
cis-1,2-Dichloroethene	620	µg/L	<1	**1.0**	<1	<1	<1	<1	<1	**58**	**180**	**1.5**	**39**	**5.1**	**1.8**	**1,100**	<1	**2.8**		50%	0%	57%	13%
Methylene Chloride	1,500	µg/L	<1	<1	<1	<1	<1	<1	<1	**2.2**	<1	<1	<1	<1	<1	<1	<1	<1		0%	0%	7%	0%
Tetrachloroethene	53	µg/L	<1	<1	<1	<1	<1	<1	**110**	**30**	**8.1**	**6.4**	**1.5**	<1	**15**	**280**	<1	<1		0%	0%	50%	29%
trans-1,2-Dichloroethene	558	µg/L	<1	<1	<1	<1	<1	<1	<1	**4.5**	**4.7**	<1	<1	<1	<1	<1	<1	<1		0%	0%	14%	0%
Trichloroethene	220	µg/L	<1	<1	<1	<1	<1	<1	**5.1**	**95**	**1.2**	**2.1**	**3.3**	**1.1**	**2.4**	**270**	<1	<1		0%	0%	57%	13%
Vinyl Chloride	930	µg/L	<1	<1	<1	<1	<1	<1	<1	**8.7**	**56**	<1	**1.5**	**6.2**	<1	**23**	<1	<1		0%	0%	36%	0%
Fall Sampling Event--October 4, 2023																							
1,1-Dichloroethane	410	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	**29**	<5	**40**	**68**	NS	<5	<5		0%	0%	23%	0%
1,1-Dichloroethene	130	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	0%	0%
1,2-Dichloroethane	2000	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	0%	0%
1,2-Dichloropropane	520	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	**13**	<5	NS	<5	<5		0%	0%	7%	0%
Benzene	160	µg/L	<5	<5	<5	<5	<5	<5	<5	**130**	<5	<5	<5	**95**	<5	NS	<5	<5		0%	0%	15%	0%
Chloroform	140	µg/L	<5	<5	<5	<5	<5	<5	**6**	<5	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	7%	0%
cis-1,2-Dichloroethene	620	µg/L	<5	<5	<5	<5	<5	<5	<5	**130**	**370**	<5	**43**	**12**	<5	NS	<5	**5.4**		0%	0%	38%	0%
Methylene Chloride	1,500	µg/L	<5	<5	<5	<5	<5	<5	<5	**7.1**	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	7%	0%
Tetrachloroethene	53	µg/L	<5	<5	<5	<5	<5	<5	**150**	**89**	**5.1**	**11**	<5	<5	**24**	NS	<5	<5		0%	0%	38%	40%
trans-1,2-Dichloroethene	558	µg/L	<5	<5	<5	<5	<5	<5	<5	**9.1**	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	7%	0%
Trichloroethene	220	µg/L	<5	<5	<5	<5	<5	<5	**8.8**	**90**	<5	<5	<5	<5	<5	NS	<5	<5		0%	0%	15%	0%
Vinyl Chloride	930	µg/L	<5	<5	<5	<5	<5	<5	<5	**21**	**45**	<5	<5	<5	<5	NS	<5	<5		0%	0%	15%	0%

Notes:

[1] This summary represents a transition from the monitoring program conducted under the 1985 Adminstrative Order by Consent (AOC) to the Long-term Stewardship Program conducted under the 2020 AOC with the U.S. Environmental Protection Agency (USEPA).

[2] Several other contaminants (1,4-dioxane, chloromethane, methacrynitrile, and vinyl acetate) were analyzed for during the spring 2020 monitoring event but were not detected. These contaminants were not identified as COCs based on a site-wide analysis.

µg/L = micrograms per liter

"<#" = Not detected above the laboratory method reporting limit; NS = Not sampled, well was dry.

Bold value = detected

Shaded value exceeds US EPA Region 4 surface water screening value for hazardous waste sites (USEPA 2018)

Table 4

Summary of the 2023 Groundwater Trends for the Long-term Stewardship Program[1]

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

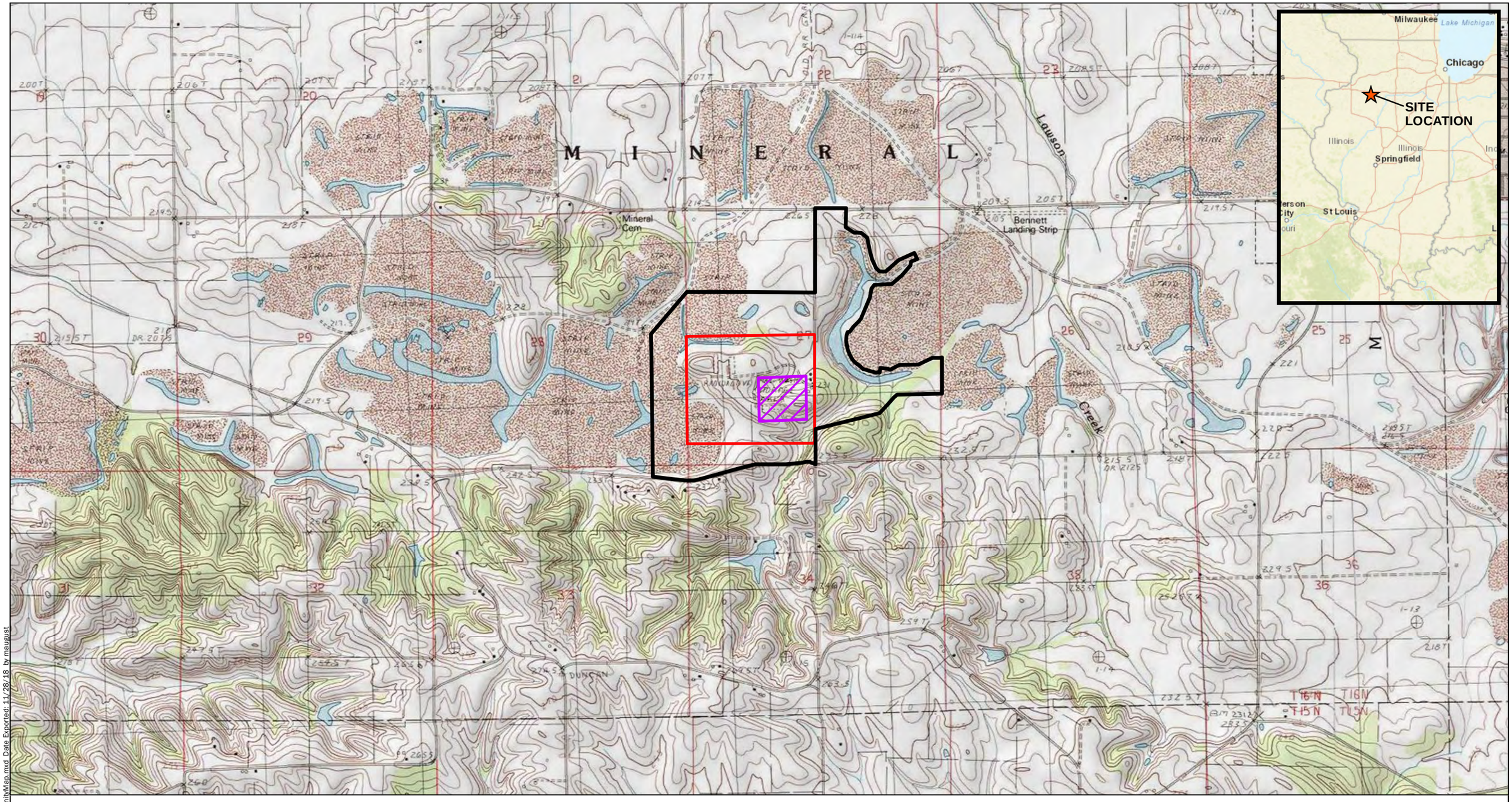
Contaminant of Concern	Boundary		Plume Wells							Guard Wells			GSI Wells	
	G-160	G-162	G-165	G-166	G-168	G-547	G-564	G-575	G-594	G-591	G-592	G-600	G-211	G-570
1,1-Dichloroethane	Not detected		Not detected or below screening level since 1999										Not detected	
1,1-Dichloroethene	Not detected		Not detected or below screening level since 1999										Not detected	
1,2-Dichloroethane	Not detected		Not detected or below screening level since 1999										Not detected	
1,2-Dichloropropane	Not detected		Not detected or below screening level since 1999										Not detected	
Benzene	Not detected		Not detected or below screening level since 1999			↓ Screening level exceedance in fall 2021	↓ Statistically decreasing	Not detected since 1999	Not detected or below screening level since 2002	↓ Statistical evidence of decreasing trend	Not detected since 2003	Not detected or below screening level since 2002	Not detected	
Chloroform	Not detected		Not detected or below screening level since 1999		↓ Last screening level exceedance in fall 2012	Not detected or below the screening level since 2001	Not detected or below the screening level since 2002	Not detected or below screening level since 1999	Not detected or below screening level since 2002	Not detected or below the screening level since 2003	Not detected or below the screening level since 2003	Not detected or below screening level since 1999	Not detected	
cis-1,2-Dichloroethene	Not detected		Not detected or below screening level since 2001	Not detected since 1999	Not detected or below the screening level since 1999	↓ Statistically decreasing	Statistically decreasing, ↔ (last 6 years)	Not detected or below screening levels since 1999	↓ Statistically decreasing	↓ Statistically decreasing	Not detected or below screening level since 1999	Insufficient evidence of decreasing trend	Not detected	Detected below the screening level
Methylene Chloride	Not detected		Not detected or below screening level since 1999			↓ Statistically decreasing	Not detected or below screening level since 1999			Not detected or below screening level since 2002	Not detected or below screening level since 1999		Not detected	
Tetrachloroethene	Not detected		Not detected since 1999	Not detected since 1999	↓ Statistically decreasing	↓ Statistically decreasing	↓ Statistically decreasing	↓ Statistically decreasing	Insufficient evidence of decreasing trend	Not detected or below the screening level since 2002	Last screening level exceedance in fall 2010. ↔	Statistically decreasing but over screening level	Not detected	
trans-1,2-Dichloroethene	Not detected		Not detected or below screening level since 1999										Not detected	
Trichloroethene	Not detected		Not detected since 2000	Not detected since 1999	↓ Statistically decreasing	↓ Statistically decreasing	↓ Statistically decreasing	Not detected or below screening level since 1999	↓ Statistically decreasing last 15 years	↓ Below screening level since 2011	Not detected or below screening level since 1999	Insufficient evidence of decreasing trend	Not detected	
Vinyl Chloride	Not detected		Not detected or below screening level since 1999				Below screening level since 2007	Not detected or below screening level since 1999		Not detected or below screening level since 2006	Not detected or below screening level since 1999		Not detected	

Notes:

[1] This summary represents a transition from the monitoring program conducted under the 1985 Adminstrative Order by Consent (AOC) to the Long-term Stewardship Program conducted under the 2020 AOC with the U.S. Environmental Protection Agency (USEPA).

↓ Statistically significantly decreasing trend since 1999 or as indicated.

GSI wells = groundwater-surface water interaction wells



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- U.S. Ecology Sheffield Property Line
- Facility Legal Boundary
- Property Owned by State of Illinois

N W E S

2,000 0 2,000

Feet

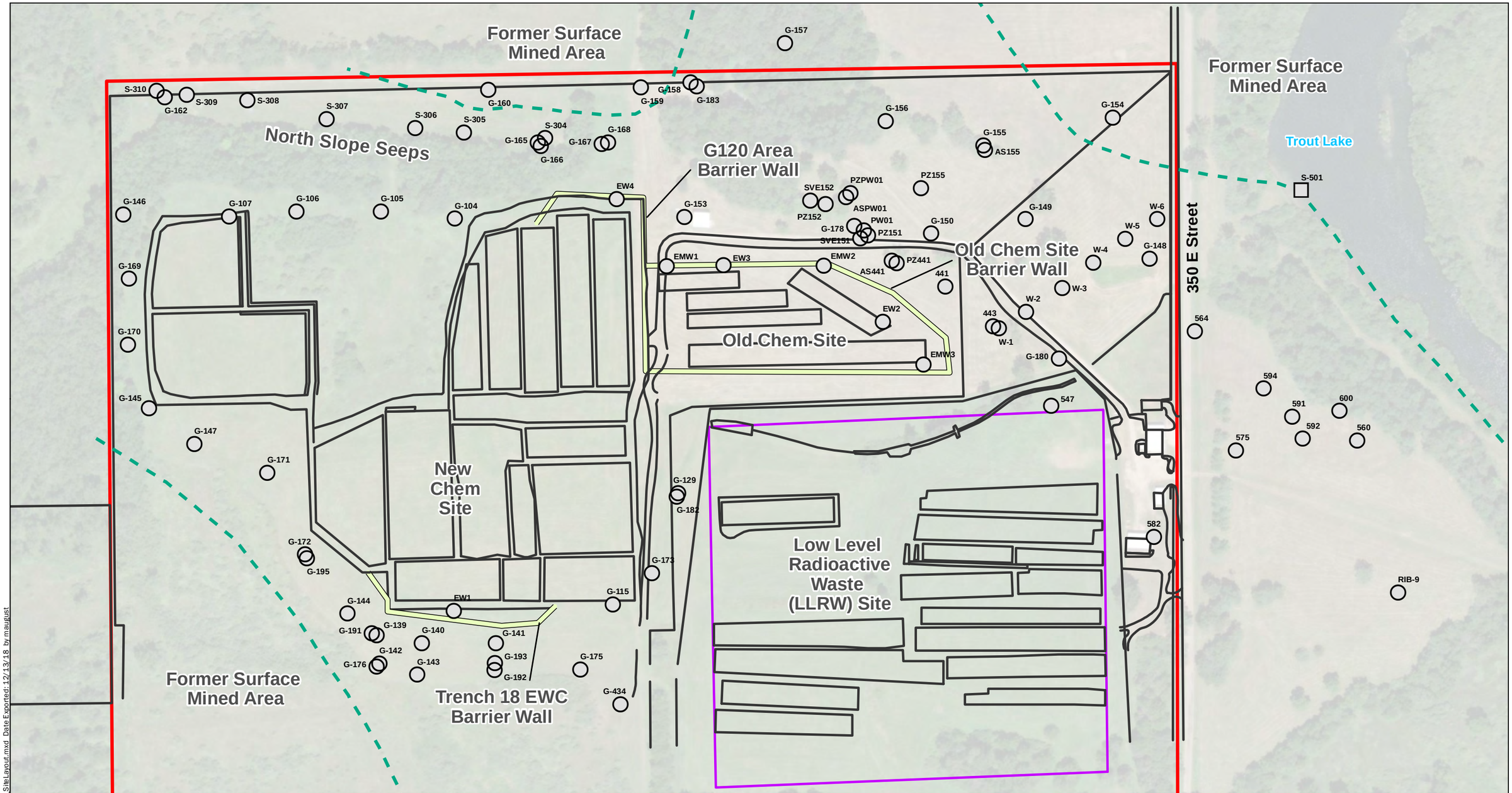
Vicinity Map

US Ecology Former Hazardous Waste Facility
Sheffield, Illinois

GeoEngineers

Figure 1

P:\19\19730002\GIS\MXD\19730200_VicinityMap.mxd Date Exported: 11/28/18 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: PDC Technical Services, Inc., 2008.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Surface Water Sample Location
- Groundwater Monitoring Wells
- Facility Legal Boundary
- Property Owned by State of Illinois
- Barrier Walls
- Boundary of Former Surface Mining

N W E S

240 0 240

Feet

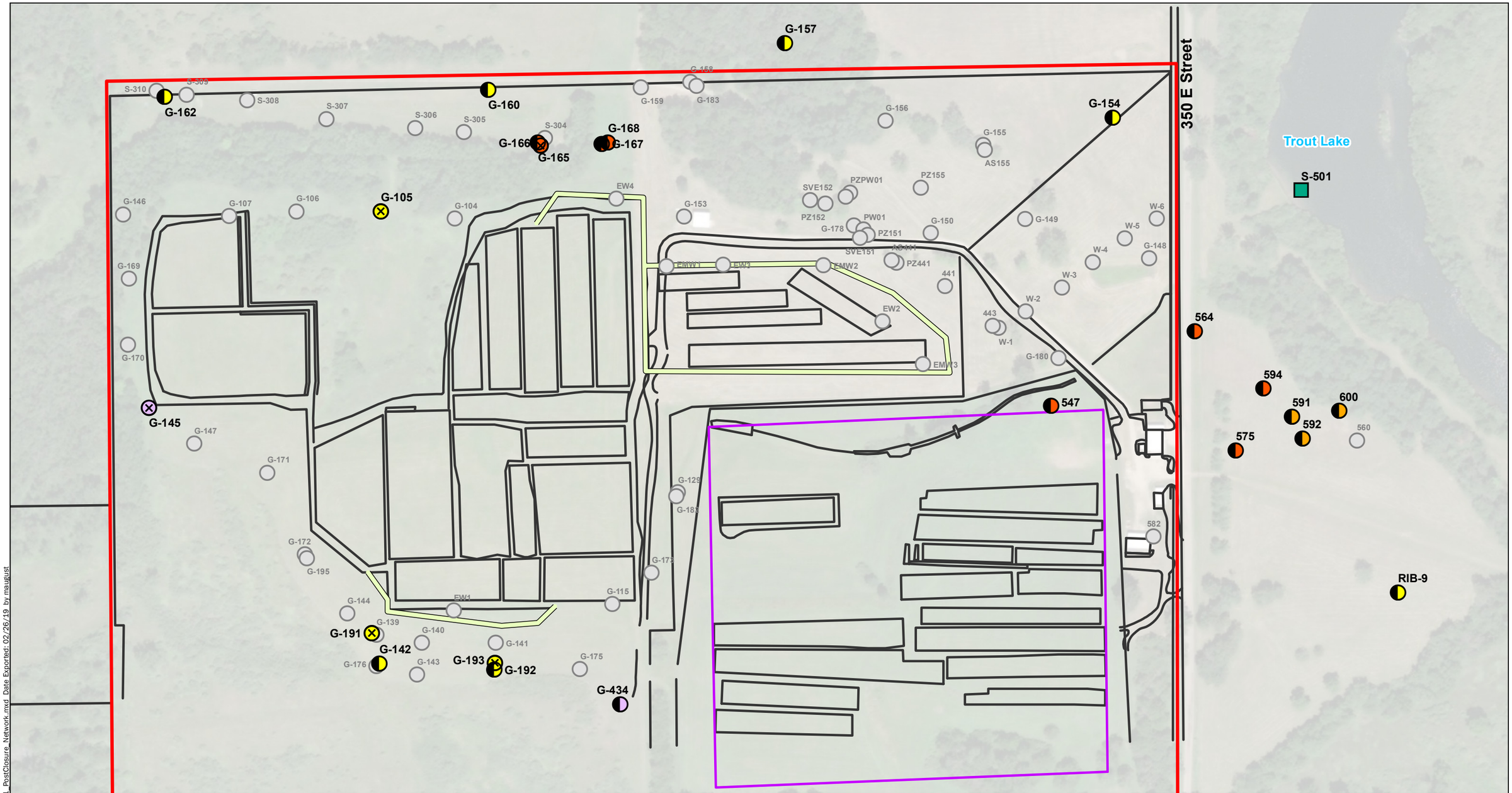
Site Layout

US Ecology Former Hazardous Waste Facility
Sheffield, Illinois

GeoEngineers

Figure 2

P:\19\19730002\GIS\MXD\19730002G00_Fig2_SiteLayout.mxd Date Exported: 12/13/18 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: PDC Technical Services, Inc., 2008.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Boundary Well
- Plume Well
- Ambient Well
- Guard Well
- Surface Water Sample Location
- Other Wells
- Facility Legal Boundary
- Property Owned by State of Illinois
- Barrier Walls
- Screened in Glacial Deposits or Mine Spoils
- Screened in Pennsylvanian Bedrock

N W E S

240 0 240

Feet

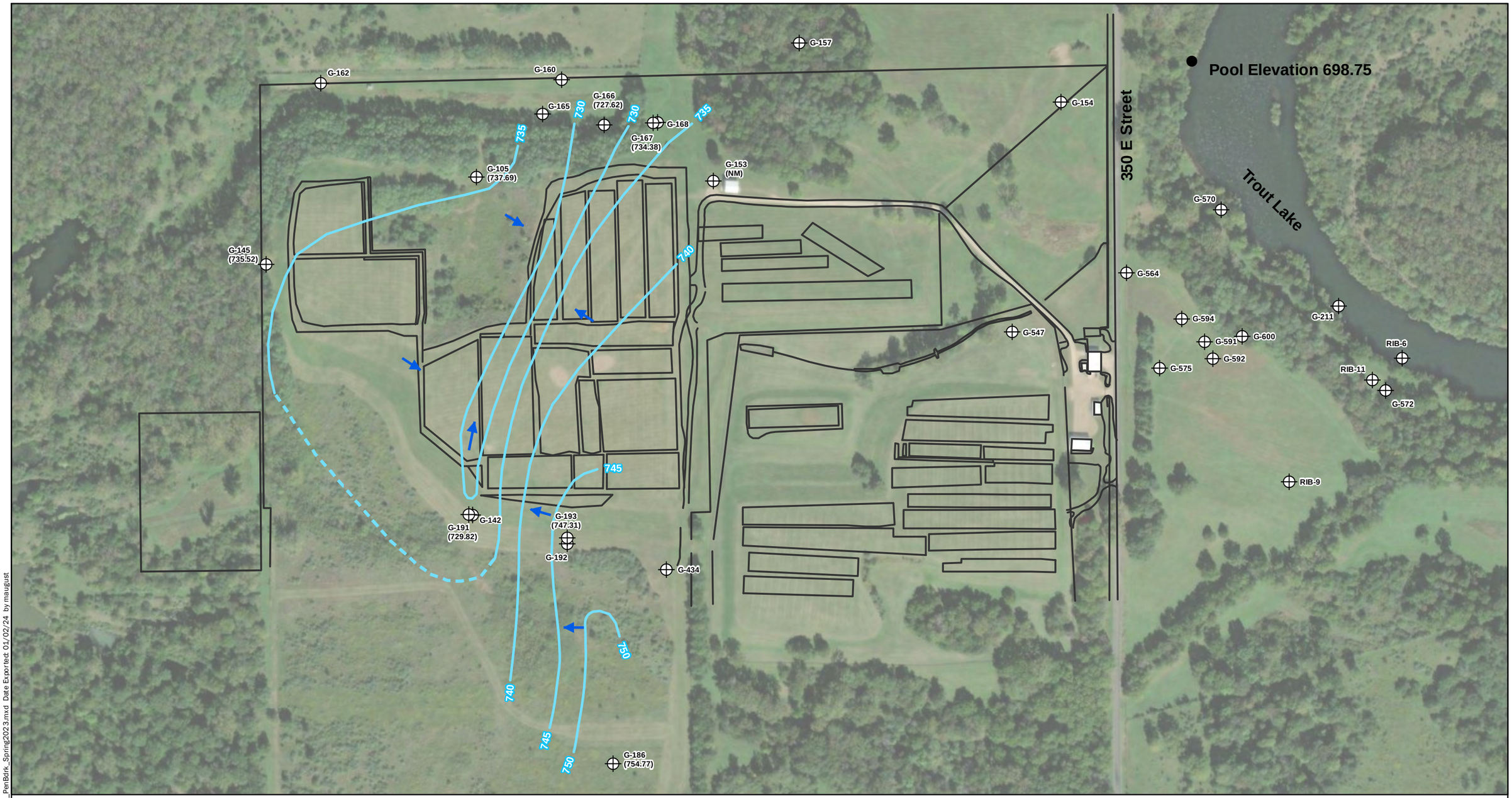
Post-Closure Groundwater Monitoring Network (2008-2020)

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 3

P:\19\19730002\GIS\MXD\19730002200_Fig11_PostClosure_Network.mxd Date Exported: 02/26/19 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet relative to sea level.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

G-105 (737.63) — Approximate Monitoring Well Location, Designation, and Potentiometric Elevation[3]

Groundwater Elevation Contour (5-Foot Interval, Dashed where inferred)

Interpreted Groundwater Flow Direction

N W E S

300 0 300

Feet

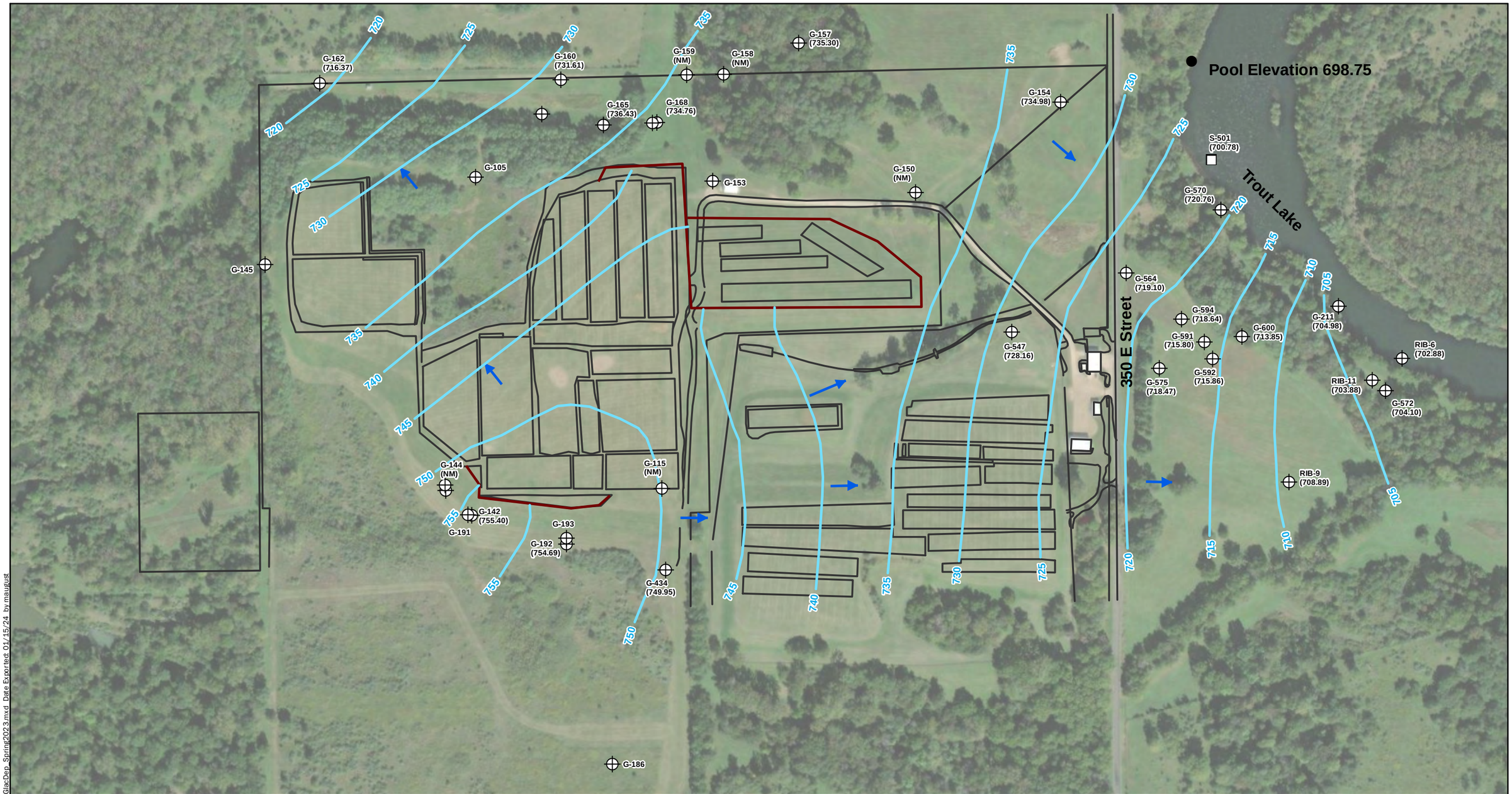
2023 Pennsylvanian Bedrock (Spring) Groundwater Contours

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 4

P:\19_19730001\GIS\mxd\19730000100_F04_PenBdrk_Spring2023.mxd Date Exported: 01/02/24 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet relative to sea level.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- G-142 (750.23) — Approximate Monitoring Well Location, Designation, and Potentiometric Elevation[3]
- Groundwater Elevation Contour (5-Foot Interval)
- Barrier Wall
- Interpreted Groundwater Flow Direction

N W E S

300 0 300

Feet

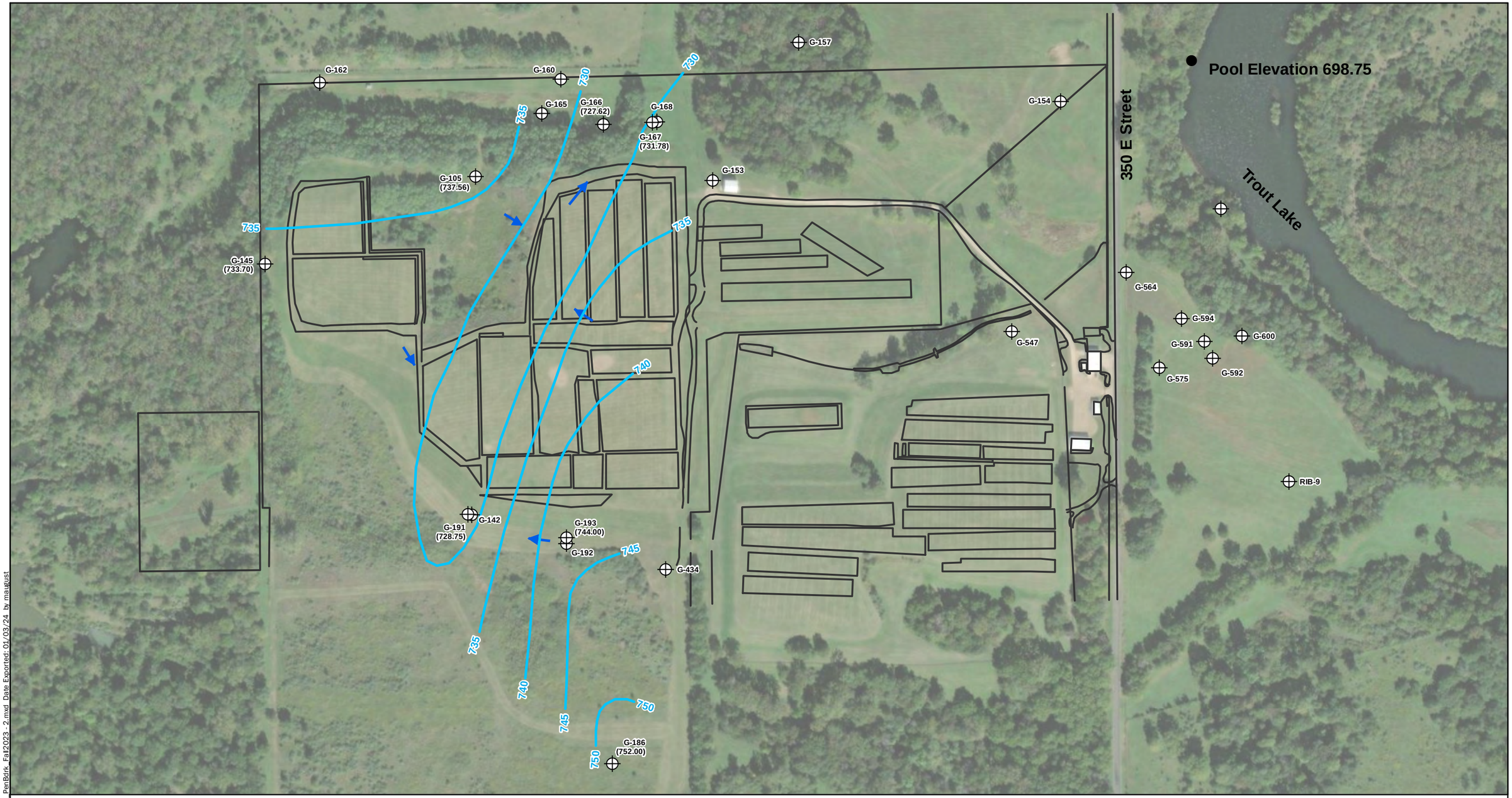
2023 Glacial Deposit (Spring) Groundwater Contours

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 5

P:\19\19730001\GIS\mxd\19730001 00_F05_GlacDep_Spring2023.mxd Date Exported: 01/15/24 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet relative to sea level.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

G-105 (737.34) — Approximate Monitoring Well Location, Designation, and Potentiometric Elevation[3]

Groundwater Elevation Contour (5-Foot Interval)

Interpreted Groundwater Flow Direction

N W E S

300 0 300

Feet

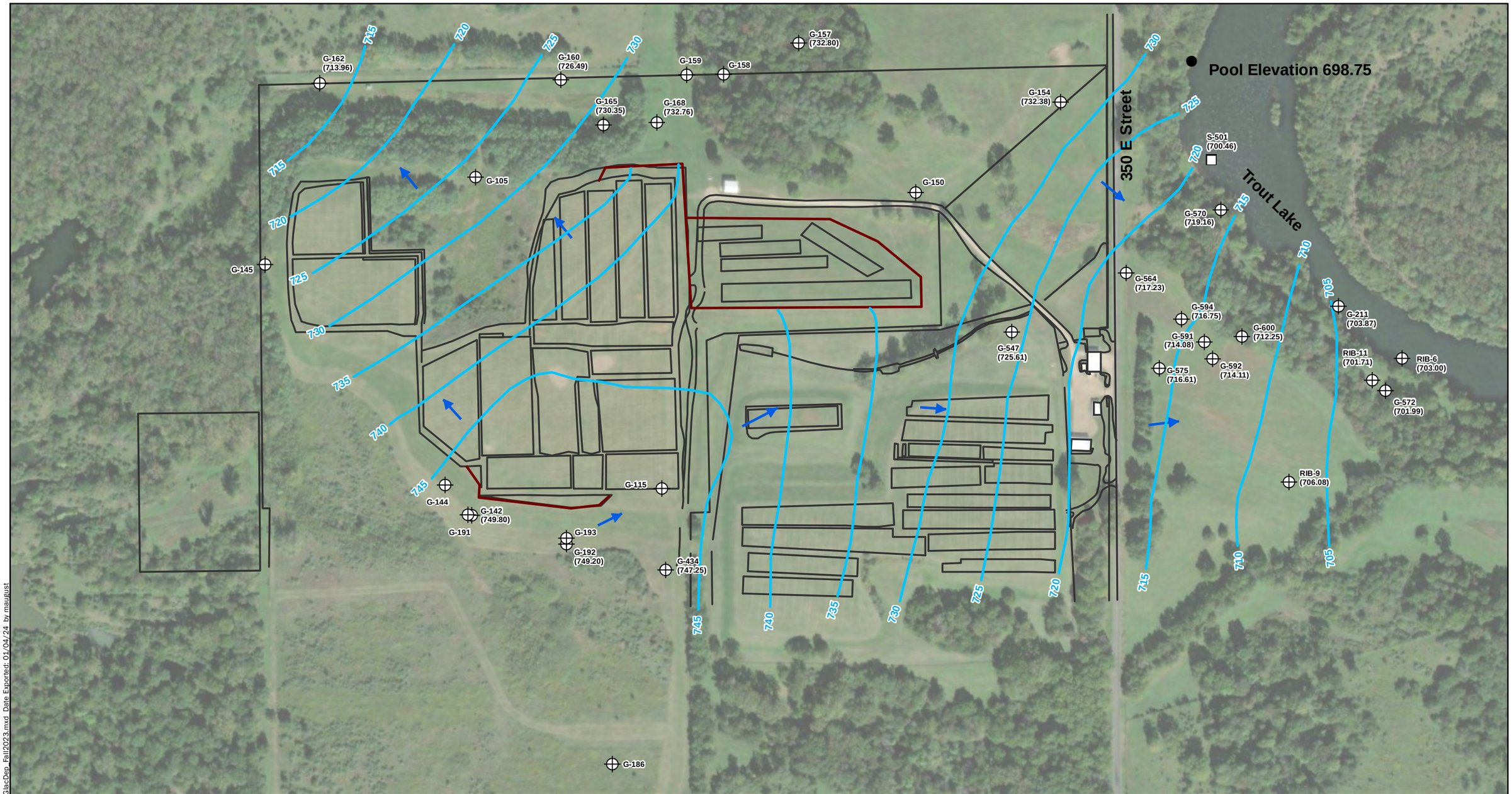
2023 Pennsylvanian Bedrock (Fall) Groundwater Contours

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 6

P:\19_19730001\GIS\mxd\19730001_F06_PenBdrk_Fal2023 - 2.mxd Date Exported: 01/03/24 by maugust



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet relative to sea level.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- G-142 (750.23) — Approximate Monitoring Well Location, Designation, and Potentiometric Elevation[3]
- Groundwater Elevation Contour (5-Foot Interval)
- Barrier Wall
- Interpreted Groundwater Flow Direction

N W E S

300 0 300

Feet

2023 Glacial Deposit (Fall) Groundwater Contours

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 7

P:\19\19730001\GIS\mxd\19730001 00_F07_GlacDep_Fall2023.mxd Date Exported: 01/04/24 by maufrust

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: PDC Technical Services, Inc., 2008.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Boundary Well
- Plume Well
- Guard Well
- 5-Year Review Well
- Groundwater-Surface Interaction Well
- Surface Water Sample Location
- Other Wells
- Facility Legal Boundary
- Property Owned by State of Illinois
- Barrier Walls
- Screened in Glacial Deposits or Mine Spoils
- Screened in Pennsylvanian Bedrock

* Sediment in well 571 dry. Replaced with well 570.

Long-term Stewardship Plan Monitoring Locations

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 8

P:\19\19730002\GIS\MXD\19730002000_Fig2_LTStewardshipMonNetwork_05112020_new.mxd Date Exported: 05/14/20 by maugust

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Water Level Measurement Well
- Surface Water Sample Location
- Earthen Dam Approximate Location

N
W E
S

200 0 200
Feet

Shoreline Monitoring Well Locations for Fall 2023 Lake Gain/Loss Assessment

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 9

P:\19\19730002\GIS\MXD\19730000200_Fig9_2023_ShorelineGainLoss.mxd Date Exported: 01/04/24 by maugust

APPENDIX A

Summary of Analytical Results

APPENDIX A.1

Laboratory Reports

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

May 05, 2023

Doug Long
US Ecology, Inc. Sheffield
PO Box 206
Sheffield, IL 61361

RE: US ECOLOGY LTSP

Dear Doug Long:

Please find enclosed the analytical results for the **19** sample(s) the laboratory received on **4/20/23 9:23 am** and logged in under work order **GD03631**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise . We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail J Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GD03631

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-01
Name: G160
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:40
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	3200	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	4.9	mg/L		05/01/23 11:59	1	1.0	05/01/23 11:59	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	1700	mg/L		05/01/23 12:17	250	250	05/01/23 12:17	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	3000	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	4800	ug/L		04/26/23 07:38	5	10	04/26/23 12:07	JMW	EPA 6020A
Magnesium, Dissolved	300	mg/L		04/26/23 07:38	5	0.10	04/26/23 12:07	JMW	EPA 6020A
Manganese, Dissolved	2300	ug/L		04/26/23 07:38	5	1.0	04/26/23 12:07	JMW	EPA 6020A
Total Metals - PIA									
Iron	6000	ug/L		04/25/23 09:01	5	10	04/27/23 14:23	JMW	EPA 6020A
Magnesium	290	mg/L		04/25/23 09:01	5	0.10	04/27/23 14:23	JMW	EPA 6020A
Manganese	2300	ug/L		04/25/23 09:01	5	1.0	04/27/23 14:23	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:03	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-02
Name: G162
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:31
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	3200	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.4	mg/L		05/01/23 12:35	1	1.0	05/01/23 12:35	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	1800	mg/L		05/01/23 12:53	250	250	05/01/23 12:53	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	3100	mg/L	M	04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	9800	ug/L		04/26/23 07:38	5	10	04/26/23 12:11	JMW	EPA 6020A
Magnesium, Dissolved	280	mg/L		04/26/23 07:38	5	0.10	04/26/23 12:11	JMW	EPA 6020A
Manganese, Dissolved	3000	ug/L		04/26/23 07:38	5	1.0	04/26/23 12:11	JMW	EPA 6020A
Total Metals - PIA									
Iron	18000	ug/L		04/25/23 09:01	5	10	04/27/23 14:26	JMW	EPA 6020A
Magnesium	290	mg/L		04/25/23 09:01	5	0.10	04/27/23 14:26	JMW	EPA 6020A
Manganese	3200	ug/L		04/25/23 09:01	5	1.0	04/27/23 14:26	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:29	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-03
Name: G165
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:12
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	900	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		05/01/23 13:11	1	1.0	05/01/23 13:11	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	410	mg/L		05/01/23 13:29	50	50	05/01/23 13:29	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	840	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	180	ug/L		04/26/23 07:38	5	10	04/26/23 13:10	JMW	EPA 6020A
Magnesium, Dissolved	66	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:10	JMW	EPA 6020A
Manganese, Dissolved	19	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:10	JMW	EPA 6020A
Total Metals - PIA									
Iron	410	ug/L		04/26/23 09:02	5	10	04/27/23 08:37	JMW	EPA 6020A
Magnesium	68	mg/L	Q4	04/26/23 09:02	5	0.10	04/27/23 08:37	JMW	EPA 6020A
Manganese	18	ug/L		04/26/23 09:02	5	1.0	04/27/23 08:37	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 12:56	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-04
Name: G166
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:23
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1300	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	3.2	mg/L		05/01/23 13:47	1	1.0	05/01/23 13:47	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	2.4	mg/L		05/01/23 13:47	1	1.0	05/01/23 13:47	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	510	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	30	ug/L		04/26/23 07:38	5	10	04/26/23 13:14	JMW	EPA 6020A
Magnesium, Dissolved	1.5	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:14	JMW	EPA 6020A
Manganese, Dissolved	12	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:14	JMW	EPA 6020A
Total Metals - PIA									
Iron	51	ug/L		04/26/23 09:02	5	10	04/27/23 08:41	JMW	EPA 6020A
Magnesium	1.6	mg/L		04/26/23 09:02	5	0.10	04/27/23 08:41	JMW	EPA 6020A
Manganese	12	ug/L		04/26/23 09:02	5	1.0	04/27/23 08:41	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:22	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-05
Name: G168
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:02
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1000	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 5.0	mg/L		05/01/23 15:54	5	5.0	05/01/23 15:54	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	280	mg/L		05/01/23 16:12	50	50	05/01/23 16:12	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1100	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		04/26/23 07:38	5	10	04/26/23 13:18	JMW	EPA 6020A
Magnesium, Dissolved	110	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:18	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:18	JMW	EPA 6020A
Total Metals - PIA									
Iron	11	ug/L		04/26/23 09:02	5	10	04/27/23 08:45	JMW	EPA 6020A
Magnesium	100	mg/L		04/26/23 09:02	5	0.10	04/27/23 08:45	JMW	EPA 6020A
Manganese	< 1.0	ug/L		04/26/23 09:02	5	1.0	04/27/23 08:45	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
Chloroform	2.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
Tetrachloroethene	110	ug/L		04/27/23 09:18	10	10	04/27/23 18:19	GCC	EPA 8260B
Trichloroethene	5.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 13:49	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-06
Name: G211
Matrix: Ground Water - Grab

Sampled: 04/19/23 11:13
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	550	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	3.0	mg/L		05/01/23 16:30	1	1.0	05/01/23 16:30	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	2.7	mg/L		05/01/23 16:30	1	1.0	05/01/23 16:30	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	420	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	2000	ug/L		04/26/23 07:38	5	10	04/26/23 13:22	JMW	EPA 6020A
Magnesium, Dissolved	39	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:22	JMW	EPA 6020A
Manganese, Dissolved	330	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:22	JMW	EPA 6020A
Total Metals - PIA									
Iron	2700	ug/L		04/26/23 09:02	5	10	04/27/23 09:24	JMW	EPA 6020A
Magnesium	40	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:24	JMW	EPA 6020A
Manganese	340	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:24	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:15	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-07
Name: G547
Matrix: Ground Water - Grab

Sampled: 04/19/23 09:50
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	380	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	9.2	mg/L	Q4	05/01/23 17:24	1	1.0	05/01/23 17:24	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	4.2	mg/L		05/01/23 17:24	1	1.0	05/01/23 17:24	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	260	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	2100	ug/L		04/26/23 07:38	5	10	04/26/23 13:26	JMW	EPA 6020A
Magnesium, Dissolved	28	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:26	JMW	EPA 6020A
Manganese, Dissolved	53	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:26	JMW	EPA 6020A
Total Metals - PIA									
Iron	4600	ug/L		04/26/23 09:02	5	10	04/27/23 09:28	JMW	EPA 6020A
Magnesium	31	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:28	JMW	EPA 6020A
Manganese	66	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:28	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
1,2-Dichloroethane	1.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Benzene	64	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
cis-1,2-Dichloroethene	58	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
trans-1,2-Dichloroethene	4.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Methylene chloride	2.2	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Tetrachloroethene	30	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Trichloroethene	95	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B
Vinyl chloride	8.7	ug/L		04/25/23 09:24	1	1.0	04/25/23 14:42	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-08
Name: G564
Matrix: Ground Water - Grab

Sampled: 04/19/23 10:02
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1900	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.1	mg/L		05/01/23 19:31	5	5.0	05/01/23 19:31	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	730	mg/L		05/01/23 19:49	100	100	05/01/23 19:49	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1800	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	9400	ug/L		04/26/23 07:38	5	10	04/26/23 13:29	JMW	EPA 6020A
Magnesium, Dissolved	150	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:29	JMW	EPA 6020A
Manganese, Dissolved	370	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:29	JMW	EPA 6020A
Total Metals - PIA									
Iron	11000	ug/L		04/26/23 09:02	5	10	04/27/23 09:31	JMW	EPA 6020A
Magnesium	170	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:31	JMW	EPA 6020A
Manganese	400	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:31	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
Benzene	5.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
cis-1,2-Dichloroethene	180	ug/L		04/27/23 09:18	10	10	04/27/23 18:46	GCC	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
trans-1,2-Dichloroethene	4.7	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
Tetrachloroethene	8.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
Trichloroethene	1.2	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B
Vinyl chloride	56	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:08	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-09
Name: G570
Matrix: Ground Water - Grab

Sampled: 04/19/23 11:25
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1800	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	3.1	mg/L		05/01/23 20:07	1	1.0	05/01/23 20:07	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	750	mg/L		05/01/23 20:43	100	100	05/01/23 20:43	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1600	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	7600	ug/L		04/26/23 07:38	5	10	04/26/23 13:33	JMW	EPA 6020A
Magnesium, Dissolved	180	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:33	JMW	EPA 6020A
Manganese, Dissolved	260	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:33	JMW	EPA 6020A
Total Metals - PIA									
Iron	10000	ug/L		04/26/23 09:02	5	10	04/27/23 09:35	JMW	EPA 6020A
Magnesium	180	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:35	JMW	EPA 6020A
Manganese	230	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:35	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
cis-1,2-Dichloroethene	2.8	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 15:35	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-10
Name: G575
Matrix: Ground Water - Grab

Sampled: 04/19/23 10:15
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	780	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	8.1	mg/L		05/03/23 03:37	5	5.0	05/03/23 03:37	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	84	mg/L		05/01/23 21:19	10	10	05/01/23 21:19	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	640	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	7700	ug/L		04/26/23 07:38	5	10	04/26/23 13:37	JMW	EPA 6020A
Magnesium, Dissolved	63	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:37	JMW	EPA 6020A
Manganese, Dissolved	37	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:37	JMW	EPA 6020A
Total Metals - PIA									
Iron	12000	ug/L		04/26/23 09:02	5	10	04/27/23 09:39	JMW	EPA 6020A
Magnesium	65	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:39	JMW	EPA 6020A
Manganese	46	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:39	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	51	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
cis-1,2-Dichloroethene	1.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Chloroform	2.3	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Tetrachloroethene	6.4	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Trichloroethene	2.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:01	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-11
Name: G591
Matrix: Ground Water - Grab

Sampled: 04/19/23 10:35
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	600	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	34	mg/L		05/01/23 21:37	10	10	05/01/23 21:37	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	48	mg/L		05/01/23 21:37	10	10	05/01/23 21:37	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		04/24/23 16:37	1	26	04/24/23 17:50	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	5500	ug/L		04/26/23 07:38	5	10	04/26/23 13:41	JMW	EPA 6020A
Magnesium, Dissolved	67	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:41	JMW	EPA 6020A
Manganese, Dissolved	630	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:41	JMW	EPA 6020A
Total Metals - PIA									
Iron	5700	ug/L		04/26/23 09:02	5	10	04/27/23 09:43	JMW	EPA 6020A
Magnesium	68	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:43	JMW	EPA 6020A
Manganese	620	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:43	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	47	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
1,2-Dichloroethane	4.3	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
1,2-Dichloropropane	13	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Benzene	160	ug/L		04/27/23 09:18	10	10	04/27/23 19:12	GCC	EPA 8260B
cis-1,2-Dichloroethene	5.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Trichloroethene	1.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B
Vinyl chloride	6.2	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:28	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-12
Name: G592
Matrix: Ground Water - Grab

Sampled: 04/19/23 10:48
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	670	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	8.3	mg/L		05/01/23 21:55	5	5.0	05/01/23 21:55	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	60	mg/L		05/01/23 22:50	10	10	05/01/23 22:50	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		04/25/23 10:57	1	26	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	100	ug/L		04/26/23 07:38	5	10	04/26/23 13:45	JMW	EPA 6020A
Magnesium, Dissolved	60	mg/L		04/26/23 07:38	5	0.10	04/26/23 13:45	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		04/26/23 07:38	5	1.0	04/26/23 13:45	JMW	EPA 6020A
Total Metals - PIA									
Iron	110	ug/L		04/26/23 09:02	5	10	04/27/23 09:47	JMW	EPA 6020A
Magnesium	62	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:47	JMW	EPA 6020A
Manganese	2.2	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:47	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	34	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
cis-1,2-Dichloroethene	1.8	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Chloroform	1.4	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Tetrachloroethene	15	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Trichloroethene	2.4	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 16:54	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-13
Name: G594
Matrix: Ground Water - Grab

Sampled: 04/19/23 10:24
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	540	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	14	mg/L		05/01/23 23:08	10	10	05/01/23 23:08	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	38	mg/L		05/01/23 23:08	10	10	05/01/23 23:08	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	480	mg/L		04/25/23 10:57	1	26	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	1100	ug/L		04/26/23 07:38	5	10	04/26/23 14:03	JMW	EPA 6020A
Magnesium, Dissolved	50	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:03	JMW	EPA 6020A
Manganese, Dissolved	23	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:03	JMW	EPA 6020A
Total Metals - PIA									
Iron	530	ug/L		04/26/23 09:02	5	10	04/27/23 09:50	JMW	EPA 6020A
Magnesium	51	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:50	JMW	EPA 6020A
Manganese	11	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:50	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	1.6	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
cis-1,2-Dichloroethene	39	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Tetrachloroethene	1.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Trichloroethene	3.3	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B
Vinyl chloride	1.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:21	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-14
Name: G600
Matrix: Ground Water - Grab

Sampled: 04/19/23 11:00
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	630	mg/L		04/24/23 10:43	1	26	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	11	mg/L		05/01/23 23:44	10	10	05/01/23 23:44	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	65	mg/L		05/01/23 23:44	10	10	05/01/23 23:44	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		04/25/23 10:57	1	26	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	7800	ug/L		04/26/23 07:38	5	10	04/26/23 10:40	JMW	EPA 6020A
Magnesium, Dissolved	58	mg/L	Q3	04/26/23 07:38	5	0.10	04/26/23 10:40	JMW	EPA 6020A
Manganese, Dissolved	530	ug/L	Q3	04/26/23 07:38	5	1.0	04/26/23 10:40	JMW	EPA 6020A
Total Metals - PIA									
Iron	13000	ug/L		04/26/23 09:02	5	10	04/27/23 09:54	JMW	EPA 6020A
Magnesium	62	mg/L		04/26/23 09:02	5	0.10	04/27/23 09:54	JMW	EPA 6020A
Manganese	600	ug/L		04/26/23 09:02	5	1.0	04/27/23 09:54	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	12	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
1,1-Dichloroethene	3.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
1,2-Dichloroethane	4.4	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
1,2-Dichloropropane	2.1	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
Benzene	2.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
cis-1,2-Dichloroethene	1100	ug/L		04/27/23 09:18	50	50	04/27/23 19:39	GCC	EPA 8260B
Chloroform	5.6	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
trans-1,2-Dichloroethene	7.5	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B
Tetrachloroethene	280	ug/L		04/27/23 09:18	50	50	04/27/23 19:39	GCC	EPA 8260B
Trichloroethene	270	ug/L		04/27/23 09:18	50	50	04/27/23 19:39	GCC	EPA 8260B
Vinyl chloride	23	ug/L		04/25/23 09:24	1	1.0	04/25/23 17:47	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-15
Name: S501
Matrix: Surface Water - Grab

Sampled: 04/19/23 11:55
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1700	mg/L		04/24/23 10:43	1	34	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.3	mg/L		05/02/23 00:02	5	5.0	05/02/23 00:02	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	870	mg/L		05/02/23 00:20	250	250	05/02/23 00:20	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1500	mg/L		04/25/23 10:57	1	34	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	37	ug/L		04/26/23 07:38	5	10	04/26/23 14:07	JMW	EPA 6020A
Magnesium, Dissolved	180	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:07	JMW	EPA 6020A
Manganese, Dissolved	34	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:07	JMW	EPA 6020A
Total Metals - PIA									
Iron	71	ug/L		04/26/23 09:02	5	10	04/27/23 10:15	JMW	EPA 6020A
Magnesium	180	mg/L		04/26/23 09:02	5	0.10	04/27/23 10:15	JMW	EPA 6020A
Manganese	35	ug/L		04/26/23 09:02	5	1.0	04/27/23 10:15	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Benzene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
cis-1,2-Dichloroethene	1.8	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Chloroform	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/25/23 09:24	1	1.0	04/25/23 18:14	MTM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-16
Name: S502
Matrix: Surface Water - Grab

Sampled: 04/19/23 12:15
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1600	mg/L		04/24/23 10:43	1	34	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.7	mg/L		05/02/23 00:38	5	5.0	05/02/23 00:38	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	830	mg/L		05/02/23 00:56	250	250	05/02/23 00:56	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1500	mg/L		04/25/23 10:57	1	34	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	50	ug/L		04/26/23 07:38	5	10	04/26/23 14:10	JMW	EPA 6020A
Magnesium, Dissolved	170	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:10	JMW	EPA 6020A
Manganese, Dissolved	36	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:10	JMW	EPA 6020A
Total Metals - PIA									
Iron	53	ug/L		04/26/23 09:02	5	10	04/27/23 10:19	JMW	EPA 6020A
Magnesium	180	mg/L		04/26/23 09:02	5	0.10	04/27/23 10:19	JMW	EPA 6020A
Manganese	34	ug/L		04/26/23 09:02	5	1.0	04/27/23 10:19	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Benzene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
cis-1,2-Dichloroethene	15	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Chloroform	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Tetrachloroethene	6.6	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Trichloroethene	2.7	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:02	GCC	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-17
Name: FIELD BLANK 1
Matrix: Surface Water - Grab

Sampled: 04/19/23 10:37
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	20	mg/L		04/24/23 10:43	1	17	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		05/02/23 01:15	1	1.0	05/02/23 01:15	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		05/02/23 01:15	1	1.0	05/02/23 01:15	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		04/25/23 10:57	1	17	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		04/26/23 07:38	5	10	04/26/23 14:14	JMW	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:14	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:14	JMW	EPA 6020A
Total Metals - PIA									
Iron	14	ug/L		04/26/23 09:02	5	10	04/27/23 10:23	JMW	EPA 6020A
Magnesium	< 0.10	mg/L		04/26/23 09:02	5	0.10	04/27/23 10:23	JMW	EPA 6020A
Manganese	< 1.0	ug/L		04/26/23 09:02	5	1.0	04/27/23 10:23	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Benzene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Chloroform	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:30	GCC	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-18
Name: EQUIPMENT BLANK
Matrix: Surface Water - Grab

Sampled: 04/19/23 15:30
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	< 17	mg/L		04/24/23 10:43	1	17	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		05/02/23 01:34	1	1.0	05/02/23 01:34	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		05/02/23 01:34	1	1.0	05/02/23 01:34	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		04/25/23 10:57	1	17	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		04/26/23 07:38	5	10	04/26/23 14:18	JMW	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:18	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:18	JMW	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		04/26/23 09:02	5	10	04/27/23 10:27	JMW	EPA 6020A
Magnesium	< 0.10	mg/L		04/26/23 09:02	5	0.10	04/27/23 10:27	JMW	EPA 6020A
Manganese	< 1.0	ug/L		04/26/23 09:02	5	1.0	04/27/23 10:27	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Benzene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Chloroform	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 12:57	GCC	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GD03631-19
Name: TRIP BLANK
Matrix: Surface Water - Grab

Sampled: 04/19/23 15:30
Received: 04/20/23 09:23

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	< 17	mg/L		04/24/23 10:43	1	17	04/24/23 13:06	CPS	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		05/02/23 02:30	1	1.0	05/02/23 02:30	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		05/02/23 02:30	1	1.0	05/02/23 02:30	CRD	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		04/25/23 10:57	1	17	04/25/23 11:58	HRF	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		04/26/23 07:38	5	10	04/26/23 14:22	JMW	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		04/26/23 07:38	5	0.10	04/26/23 14:22	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		04/26/23 07:38	5	1.0	04/26/23 14:22	JMW	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		04/26/23 09:02	5	10	04/27/23 10:31	JMW	EPA 6020A
Magnesium	< 0.10	mg/L		04/26/23 09:02	5	0.10	04/27/23 10:31	JMW	EPA 6020A
Manganese	< 1.0	ug/L		04/26/23 09:02	5	1.0	04/27/23 10:31	JMW	EPA 6020A
Volatile Organics - PIA									
1,1-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
1,1-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
1,2-Dichloroethane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
1,2-Dichloropropane	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Benzene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
cis-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Chloroform	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
trans-1,2-Dichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Methylene chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Trichloroethene	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B
Vinyl chloride	< 1.0	ug/L		04/26/23 09:35	1	1.0	04/26/23 13:25	GCC	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

M	Analyte failed to meet the required acceptance criteria for duplicate analysis.
Q3	Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
Q4	The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.

Gail J Schindler

Certified by: Gail Schindler, Project Manager

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT	PROJECT NUMBER	PROJECT LOCATION	PURCHASE ORDER #
US ECOLOGY	LTSP/ Spring 2023	Sheffield	
ADDRESS: PO BOX 206	PHONE NUMBER: 815-454-2342	E-MAIL: doug.long@usecology.com	DATE SHIPPED: 4-20-23
CITY / STATE / ZIP: SHEFFIELD IL 61361	SAMPLER (PLEASE PRINT): Shawn Long	MATRIX TYPES: WW- WASTEWATER, DW- DRINKING WATER, GW- GROUND WATER, WWSL- SLUDGE, NAS- NON AQUEOUS SOLID, LCHT-LEACHATE, OIL-OIL, SO-SOIL, SOL-SOLID	
CONTACT PERSON: DOUG LONG	SAMPLER'S SIGNATURE: Shawn Long		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # GD03631
LOGGED BY: SAB
CLIENT: US ECOLOGY - SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA					REMARKS
G160	4-19-23	0940	X		GW	7	1,3,6	X	X	X					*DISSOLVED
G162		0931	X		GW	7	1,3,6	X	X	X					** TOTAL & DISSOLVED
G165		0912	X		GW	7	1,3,6	X	X	X					
G166		0923	X		GW	7	1,3,6	X	X	X					
G168		0902	X		GW	7	1,3,6	X	X	X					
G211		1113	X		GW	7	1,3,6	X	X	X					
G547		0950	X		GW	7	1,3,6	X	X	X					
G564		1002	X		GW	7	1,3,6	X	X	X					
G570		1125	X		GW	7	1,3,6	X	X	X					

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:
DATE RESULTS NEEDED

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7		DATE	TIME		DATE	TIME
RELINQUISHED BY: (SIGNATURE)	Shawn Long	4-19-23	1345	RECEIVED BY: (SIGNATURE)	4-20-23	0830
RELINQUISHED BY: (SIGNATURE)		4-20-23	0920	RECEIVED BY: (SIGNATURE)		
RELINQUISHED BY: (SIGNATURE)				RECEIVED BY: (SIGNATURE)	4/20/23	923

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 9.2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: US ECOLOGY
PROJECT NUMBER: LTSP / Spring 2023
PROJECT LOCATION: Sheffield
PURCHASE ORDER #: —
ADDRESS: PO BOX 206
PHONE NUMBER: 815-454-2342
E-MAIL: doug.long@usecology.com
DATE SHIPPED: 4-20-23
CITY / STATE / ZIP: SHEFFIELD IL 61361
SAMPLER (PLEASE PRINT): Shawn Long
CONTACT PERSON: DOUG LONG
SAMPLER'S SIGNATURE: Shawn Long

MATRIX TYPES: WW- WASTEWATER; DW- DRINKING WATER; GW- GROUND WATER; WWSL- SLUDGE; NAS- NON AQUEOUS SOLID; LCHT-LEACHATE; OIL-OIL; SO-SOIL; SOL-SOLID

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # GD03631
LOGGED BY: SAB
CLIENT: US ECOLOGY - SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA					REMARKS
G575	4-19-23	1015	X		GW	7	1,3,6	X	X	X					*DISSOLVED
G591		1035	X		GW	7	1,3,6	X	X	X					** TOTAL & DISSOLVED
G592		1048	X		GW	7	1,3,6	X	X	X					
G594		1024	X		GW	7	1,3,6	X	X	X					
G600		1100	X		GW	7	1,3,6	X	X	X					
S501		1155	X		SW	7	1,3,6	X	X	X					
S502		1215	X		SW	7	1,3,6	X	X	X					
FIELD BLANK 1		1037	X		DI	7	1,3,6	X	X	X					
~~FIELD BLANK 2~~			X		DI	7	1,3,6	X	X	X					

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
DATE RESULTS NEEDED:
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
	Shawn Long	4-19-23	1345	Nathan Ly	4-20-23	0830
	Nathan Ly	4-20-23	0920			
					4/20/23	923

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 9.2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: US ECOLOGY

ADDRESS: PO BOX 206

CITY / STATE / ZIP: SHEFFIELD IL 61361

CONTACT PERSON: DOUG LONG

PROJECT NUMBER: LTSP / Spring 2023

PROJECT LOCATION: Sheffield

PURCHASE ORDER #: —

PHONE NUMBER: 815-454-2342

E-MAIL: doug.long@usecology.com

DATE SHIPPED: 4-20-23

SAMPLER (PLEASE PRINT): Shawn Long

SAMPLER'S SIGNATURE: Shawn Long

MATRIX TYPES:
WW- WASTEWATER
DW- DRINKING WATER
GW- GROUND WATER
WWSL- SLUDGE
NAS- NON AQUEOUS SOLID
LCHT-LEACHATE
OIL-OIL
SO-SOIL
SOL-SOLID

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # GD03631
LOGGED BY: SAB
CLIENT: US ECOLOGY - SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA					REMARKS
EQUIPMENT BLANK	4-19-23	1530	X		DI	7	1,3,6	X	X	X					*DISSOLVED
TRIP BLANK	4-19-23	1530	X		DI	7	1,3,6	X	X	X					** TOTAL & DISSOLVED

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)

RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE

EMAIL IF DIFFERENT FROM ABOVE:

PHONE # IF DIFFERENT FROM ABOVE:

DATE RESULTS NEEDED

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*

PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7				
RELINQUISHED BY: (SIGNATURE) Shawn Long	DATE 4-19-23 TIME 1345	RECEIVED BY: (SIGNATURE)	DATE 4-20-23 TIME 0830	8 COMMENTS: (FOR LAB USE ONLY)
RELINQUISHED BY: (SIGNATURE)	DATE 4-20-23 TIME 0920	RECEIVED BY: (SIGNATURE)	DATE TIME	SAMPLE TEMPERATURE UPON RECEIPT 9.2 °C
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED BY: (SIGNATURE)	DATE 4/20/23 TIME 923	CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N SAMPLE(S) RECEIVED ON ICE Y OR N SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N DATE AND TIME TAKEN FROM SAMPLE BOTTLE

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

June 02, 2023

Doug Long
US Ecology, Inc. Sheffield
PO Box 206
Sheffield, IL 61361

RE: US ECOLOGY LTSP

Dear Doug Long:

Please find enclosed the analytical results for the **2** sample(s) the laboratory received on **5/17/23 9:45 am** and logged in under work order **GE03411**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise . We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail J Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GE03411

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GE03411-01
Name: S501
Matrix: Surface Water - Grab

Sampled: 05/16/23 08:38
Received: 05/17/23 09:45

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Volatile Organics - PIA									
cis-1,2-Dichloroethene	< 1.0	ug/L		05/18/23 09:25	1	1.0	05/18/23 17:02	GCC	EPA 8260B

Sample: GE03411-02
Name: S502
Matrix: Surface Water - Grab

Sampled: 05/16/23 08:50
Received: 05/17/23 09:45

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Volatile Organics - PIA									
cis-1,2-Dichloroethene	1.0	ug/L		05/18/23 09:25	1	1.0	05/18/23 17:29	GCC	EPA 8260B
Tetrachloroethene	< 1.0	ug/L		05/18/23 09:25	1	1.0	05/18/23 17:29	GCC	EPA 8260B
Trichloroethene	< 1.0	ug/L		05/18/23 09:25	1	1.0	05/18/23 17:29	GCC	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Gail J Schindler

Certified by: Gail Schindler, Project Manager

Pace

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED

(1) CLIENT	PROJECT NUMBER	PROJECT LOCATION	PURCHASE ORDER #
US ECOLOGY	LTSP Resample	Sheffield	
ADDRESS: PO BOX 206	PHONE NUMBER: 815-454-2342	E-MAIL: dlong@usecology.com	DATE SHIPPED: 5-16-23
CITY / STATE / ZIP: SHEFFIELD IL 61361	SAMPLER (PLEASE PRINT): Shawn Long		
CONTACT PERSON: DOUG LONG	SAMPLER'S SIGNATURE: Shawn Long		

MATRIX TYPES: WW- WASTEWATER; DW- DRINKING WATER; GW- GROUND WATER; WWSL- SLUDGE; NAS- NON AQUEOUS SOLID; LCHT-LEACHATE; OIL-OIL; SO-SOIL; SOL-SOLID

(3) ANALYSIS REQUESTED

(4) (FOR LAB USE ONLY)
LOGIN # GE034411
LOGGED BY:
US ECOLOGY
USE LTSP
GAIL SCHINDLER

(2) SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE (CLIENT PROVIDED)	8260 CIS-1,2-DCENE	TETRACHLOROETHENE	TRICHLOROETHENE	REMARKS
S501	5/16/23	0838	X		SW	3	1	X			
S502	5/16/23	0850	X		SW	3	1	X	X	X	

CHEMICAL PRESERVATION CODES: 1 – HCL; 2 – H2SO4; 3 – HNO3; 4 – NAOH; 5 – NA2S2O3; 6 – UNPRESERVED; 7 – OTHER

(5) TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
DATE RESULTS NEEDED:
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

(6) *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

(7) RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
Shawn Long	5-16-23 0915		
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE 5/17/23 TIME 945

(8) COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 7.0 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

October 20, 2023

Doug Long
US Ecology, Inc. Sheffield
PO Box 206
Sheffield, IL 61361

RE: US ECOLOGY LTSP

Dear Doug Long:

Please find enclosed the analytical results for the **18** sample(s) the laboratory received on **10/5/23 9:15 am** and logged in under work order **GJ00970**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise . We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail J Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GJ00970

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-01
Name: G160
Matrix: Ground Water - Grab

Sampled: 10/04/23 09:15
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	3200	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 5.0	mg/L		10/09/23 20:16	5	5.0	10/09/23 20:16	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	1600	mg/L		10/09/23 20:34	250	250	10/09/23 20:34	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	3300	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	2500	ug/L		10/16/23 14:06	5	10	10/17/23 14:41	TJJ	EPA 6020A
Magnesium, Dissolved	290	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:40	TJJ	EPA 6020A
Manganese, Dissolved	1900	ug/L		10/16/23 14:06	5	1.0	10/17/23 14:41	TJJ	EPA 6020A
Total Metals - PIA									
Iron	2700	ug/L		10/09/23 09:01	5	10	10/16/23 12:29	TJJ	EPA 6020A
Magnesium	300	mg/L		10/09/23 09:01	5	0.10	10/16/23 12:29	TJJ	EPA 6020A
Manganese	1900	ug/L		10/09/23 09:01	5	1.0	10/16/23 12:29	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:45	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-02
Name: G162
Matrix: Ground Water - Grab

Sampled: 10/04/23 09:03
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	2800	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 5.0	mg/L		10/09/23 20:52	5	5.0	10/09/23 20:52	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	1400	mg/L		10/09/23 21:10	250	250	10/09/23 21:10	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	2800	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	1600	ug/L		10/16/23 14:06	5	10	10/17/23 14:44	TJJ	EPA 6020A
Magnesium, Dissolved	250	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:44	TJJ	EPA 6020A
Manganese, Dissolved	2800	ug/L		10/16/23 14:06	5	1.0	10/17/23 14:44	TJJ	EPA 6020A
Total Metals - PIA									
Iron	1800	ug/L		10/09/23 09:01	5	10	10/16/23 12:57	TJJ	EPA 6020A
Magnesium	270	mg/L		10/09/23 09:01	5	0.10	10/16/23 12:57	TJJ	EPA 6020A
Manganese	2800	ug/L		10/09/23 09:01	5	1.0	10/16/23 12:57	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:11	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-03
Name: G165
Matrix: Ground Water - Grab

Sampled: 10/04/23 08:41
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	730	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		10/09/23 21:28	1	1.0	10/09/23 21:28	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	270	mg/L		10/09/23 21:46	50	50	10/09/23 21:46	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	720	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	170	ug/L		10/16/23 14:06	5	10	10/17/23 14:48	TJJ	EPA 6020A
Magnesium, Dissolved	53	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:48	TJJ	EPA 6020A
Manganese, Dissolved	3.9	ug/L		10/16/23 14:06	5	1.0	10/17/23 14:48	TJJ	EPA 6020A
Total Metals - PIA									
Iron	210	ug/L		10/09/23 09:01	5	10	10/16/23 13:00	TJJ	EPA 6020A
Magnesium	56	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:00	TJJ	EPA 6020A
Manganese	4.5	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:00	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 15:38	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-04
Name: G166
Matrix: Ground Water - Grab

Sampled: 10/04/23 08:51
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	840	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	3.2	mg/L		10/09/23 22:04	1	1.0	10/09/23 22:04	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	3.0	mg/L		10/09/23 22:04	1	1.0	10/09/23 22:04	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	560	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	26	ug/L		10/16/23 14:06	5	10	10/17/23 14:52	TJJ	EPA 6020A
Magnesium, Dissolved	1.7	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:52	TJJ	EPA 6020A
Manganese, Dissolved	18	ug/L		10/16/23 14:06	5	1.0	10/17/23 14:52	TJJ	EPA 6020A
Total Metals - PIA									
Iron	27	ug/L		10/09/23 09:01	5	10	10/16/23 13:04	TJJ	EPA 6020A
Magnesium	1.8	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:04	TJJ	EPA 6020A
Manganese	18	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:04	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:04	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-05
Name: G168
Matrix: Ground Water - Grab

Sampled: 10/04/23 08:30
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1100	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	2.4	mg/L		10/11/23 13:42	1	1.0	10/11/23 13:42	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	290	mg/L		10/09/23 23:53	50	50	10/09/23 23:53	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1100	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		10/16/23 14:06	5	10	10/17/23 14:56	TJJ	EPA 6020A
Magnesium, Dissolved	100	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:56	TJJ	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		10/16/23 14:06	5	1.0	10/17/23 14:56	TJJ	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		10/09/23 09:01	5	10	10/16/23 13:08	TJJ	EPA 6020A
Magnesium	110	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:08	TJJ	EPA 6020A
Manganese	< 1.0	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:08	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Chloroform	6.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Tetrachloroethene	150	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Trichloroethene	8.8	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:30	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-06
Name: G211
Matrix: Ground Water - Grab

Sampled: 10/04/23 10:50
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	640	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	2.7	mg/L		10/11/23 14:01	1	1.0	10/11/23 14:01	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	2.1	mg/L	Q1	10/10/23 00:11	1	1.0	10/10/23 00:11	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	460	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	5100	ug/L		10/16/23 14:06	5	10	10/17/23 15:00	TJJ	EPA 6020A
Magnesium, Dissolved	41	mg/L		10/16/23 14:06	5	0.10	10/18/23 10:59	TJJ	EPA 6020A
Manganese, Dissolved	330	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:00	TJJ	EPA 6020A
Total Metals - PIA									
Iron	6400	ug/L		10/09/23 09:01	5	10	10/16/23 13:12	TJJ	EPA 6020A
Magnesium	43	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:12	TJJ	EPA 6020A
Manganese	330	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:12	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 16:56	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-07
Name: G547
Matrix: Ground Water - Grab

Sampled: 10/04/23 09:25
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	500	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	18	mg/L		10/11/23 14:20	5	5.0	10/11/23 14:20	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	5.9	mg/L		10/10/23 01:05	1	1.0	10/10/23 01:05	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	180	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	1100	ug/L		10/16/23 14:06	5	10	10/17/23 15:04	TJJ	EPA 6020A
Magnesium, Dissolved	3.6	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:03	TJJ	EPA 6020A
Manganese, Dissolved	6.6	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:04	TJJ	EPA 6020A
Total Metals - PIA									
Iron	1500	ug/L		10/09/23 09:01	5	10	10/16/23 13:16	TJJ	EPA 6020A
Magnesium	3.3	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:16	TJJ	EPA 6020A
Manganese	7.4	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:16	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Benzene	130	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
cis-1,2-Dichloroethene	130	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Methylene chloride	7.1	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Tetrachloroethene	89	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Tetrachloroethene	90	ug/L		10/10/23 06:56	2	10	10/10/23 12:56	MBM	EPA 8260B
trans-1,2-Dichloroethene	9.1	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B
Vinyl chloride	21	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:23	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-08
Name: G564
Matrix: Ground Water - Grab

Sampled: 10/04/23 09:45
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1800	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	7.7	mg/L		10/11/23 14:40	1	1.0	10/11/23 14:40	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	640	mg/L		10/10/23 02:55	100	100	10/10/23 02:55	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1800	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	13000	ug/L		10/16/23 14:06	5	10	10/17/23 15:08	TJJ	EPA 6020A
Magnesium, Dissolved	150	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:07	TJJ	EPA 6020A
Manganese, Dissolved	380	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:08	TJJ	EPA 6020A
Total Metals - PIA									
Iron	13000	ug/L		10/09/23 09:01	5	10	10/16/23 13:20	TJJ	EPA 6020A
Magnesium	160	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:20	TJJ	EPA 6020A
Manganese	380	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:20	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
cis-1,2-Dichloroethene	370	ug/L		10/10/23 06:56	2	10	10/10/23 13:23	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
Tetrachloroethene	5.1	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B
Vinyl chloride	45	ug/L		10/09/23 09:00	1	5.0	10/09/23 17:49	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-09
Name: G570
Matrix: Ground Water - Grab

Sampled: 10/04/23 11:00
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1600	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	2.8	mg/L		10/11/23 14:59	1	1.0	10/11/23 14:59	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	840	mg/L		10/10/23 03:32	100	100	10/10/23 03:32	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1500	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	11000	ug/L		10/16/23 14:06	5	10	10/17/23 15:11	TJJ	EPA 6020A
Magnesium, Dissolved	180	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:11	TJJ	EPA 6020A
Manganese, Dissolved	250	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:11	TJJ	EPA 6020A
Total Metals - PIA									
Iron	11000	ug/L		10/09/23 09:01	5	10	10/16/23 13:32	TJJ	EPA 6020A
Magnesium	180	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:32	TJJ	EPA 6020A
Manganese	230	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:32	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
cis-1,2-Dichloroethene	5.4	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:15	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-10
Name: G575
Matrix: Ground Water - Grab

Sampled: 10/04/23 10:00
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	680	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	6.6	mg/L		10/11/23 15:18	1	1.0	10/11/23 15:18	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	52	mg/L		10/10/23 04:10	10	10	10/10/23 04:10	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	7600	ug/L		10/16/23 14:06	5	10	10/17/23 15:15	TJJ	EPA 6020A
Magnesium, Dissolved	60	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:26	TJJ	EPA 6020A
Manganese, Dissolved	46	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:15	TJJ	EPA 6020A
Total Metals - PIA									
Iron	11000	ug/L		10/09/23 09:01	5	10	10/16/23 13:36	TJJ	EPA 6020A
Magnesium	65	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:36	TJJ	EPA 6020A
Manganese	55	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:36	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	29	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Tetrachloroethene	11	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 18:41	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-11
Name: G591
Matrix: Ground Water - Grab

Sampled: 10/04/23 10:20
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	630	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	29	mg/L		10/11/23 15:38	10	10	10/11/23 15:38	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	45	mg/L		10/10/23 04:29	10	10	10/10/23 04:29	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	560	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	5900	ug/L		10/16/23 14:06	5	10	10/17/23 15:27	TJJ	EPA 6020A
Magnesium, Dissolved	65	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:29	TJJ	EPA 6020A
Manganese, Dissolved	620	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:27	TJJ	EPA 6020A
Total Metals - PIA									
Iron	7100	ug/L		10/09/23 09:01	5	10	10/16/23 13:40	TJJ	EPA 6020A
Magnesium	70	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:40	TJJ	EPA 6020A
Manganese	690	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:40	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	40	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
1,2-Dichloropropane	13	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Benzene	95	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
cis-1,2-Dichloroethene	12	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:07	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-12
Name: G592
Matrix: Ground Water - Grab

Sampled: 10/04/23 10:30
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	660	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	9.4	mg/L		10/11/23 15:57	1	1.0	10/11/23 15:57	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	58	mg/L		10/10/23 05:07	10	10	10/10/23 05:07	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	620	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	930	ug/L		10/16/23 14:06	5	10	10/17/23 15:31	TJJ	EPA 6020A
Magnesium, Dissolved	63	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:33	TJJ	EPA 6020A
Manganese, Dissolved	21	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:31	TJJ	EPA 6020A
Total Metals - PIA									
Iron	1100	ug/L		10/09/23 09:01	5	10	10/16/23 13:44	TJJ	EPA 6020A
Magnesium	68	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:44	TJJ	EPA 6020A
Manganese	27	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:44	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	68	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Tetrachloroethene	24	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 19:34	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-13
Name: G594
Matrix: Ground Water - Grab

Sampled: 10/04/23 10:10
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	600	mg/L		10/06/23 13:47	1	26	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	15	mg/L		10/11/23 16:16	10	10	10/11/23 16:16	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	40	mg/L		10/10/23 05:26	10	10	10/10/23 05:26	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	560	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	6700	ug/L		10/16/23 14:06	5	10	10/17/23 15:34	TJJ	EPA 6020A
Magnesium, Dissolved	52	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:37	TJJ	EPA 6020A
Manganese, Dissolved	77	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:34	TJJ	EPA 6020A
Total Metals - PIA									
Iron	6900	ug/L		10/09/23 09:01	5	10	10/16/23 13:48	TJJ	EPA 6020A
Magnesium	55	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:48	TJJ	EPA 6020A
Manganese	66	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:48	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
cis-1,2-Dichloroethene	43	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:00	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-14
Name: S501
Matrix: Surface Water - Grab

Sampled: 10/04/23 12:55
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1800	mg/L		10/06/23 13:47	1	34	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.5	mg/L		10/10/23 06:22	1	1.0	10/10/23 06:22	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	980	mg/L		10/10/23 06:41	100	100	10/10/23 06:41	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1700	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	41	ug/L		10/16/23 14:06	5	10	10/17/23 15:38	TJJ	EPA 6020A
Magnesium, Dissolved	190	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:41	TJJ	EPA 6020A
Manganese, Dissolved	35	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:38	TJJ	EPA 6020A
Total Metals - PIA									
Iron	64	ug/L		10/09/23 09:01	5	10	10/16/23 13:51	TJJ	EPA 6020A
Magnesium	200	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:51	TJJ	EPA 6020A
Manganese	36	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:51	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:26	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-15
Name: S502
Matrix: Surface Water - Grab

Sampled: 10/04/23 13:15
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	1800	mg/L		10/06/23 13:47	1	34	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	5.6	mg/L		10/10/23 07:00	1	1.0	10/10/23 07:00	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	960	mg/L		10/10/23 07:19	100	100	10/10/23 07:19	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1600	mg/L		10/09/23 10:29	1	26	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	28	ug/L		10/16/23 14:06	5	10	10/17/23 15:42	TJJ	EPA 6020A
Magnesium, Dissolved	190	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:45	TJJ	EPA 6020A
Manganese, Dissolved	33	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:42	TJJ	EPA 6020A
Total Metals - PIA									
Iron	41	ug/L		10/09/23 09:01	5	10	10/16/23 13:55	TJJ	EPA 6020A
Magnesium	200	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:55	TJJ	EPA 6020A
Manganese	32	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:55	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 20:52	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-16
Name: FIELD BLANK 1
Matrix: Surface Water - Grab

Sampled: 10/04/23 10:05
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	< 17	mg/L		10/06/23 13:47	1	17	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		10/10/23 07:37	1	1.0	10/10/23 07:37	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		10/10/23 07:37	1	1.0	10/10/23 07:37	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		10/09/23 10:29	1	17	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		10/16/23 14:06	5	10	10/17/23 15:46	TJJ	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:49	TJJ	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:46	TJJ	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		10/09/23 09:01	5	10	10/16/23 13:59	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		10/09/23 09:01	5	0.10	10/16/23 13:59	TJJ	EPA 6020A
Manganese	< 1.0	ug/L		10/09/23 09:01	5	1.0	10/16/23 13:59	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:18	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-17
Name: EQUIPMENT BLANK
Matrix: Surface Water - Grab

Sampled: 10/04/23 15:00
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	< 17	mg/L		10/06/23 13:47	1	17	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		10/10/23 07:56	1	1.0	10/10/23 07:56	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		10/10/23 07:56	1	1.0	10/10/23 07:56	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		10/09/23 10:29	1	17	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		10/16/23 14:06	5	10	10/17/23 15:50	TJJ	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:52	TJJ	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:50	TJJ	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		10/09/23 09:01	5	10	10/16/23 14:03	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		10/09/23 09:01	5	0.10	10/16/23 14:03	TJJ	EPA 6020A
Manganese	< 1.0	ug/L		10/09/23 09:01	5	1.0	10/16/23 14:03	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 21:45	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GJ00970-18
Name: TRIP BLANK
Matrix: Surface Water - Grab

Sampled: 10/04/23 15:15
Received: 10/05/23 09:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total solids (TS)	< 17	mg/L		10/06/23 13:47	1	17	10/06/23 16:04	LAL2	SM 2540B 1991
Soluble Anions - PIA									
Chloride, Dissolved	< 1.0	mg/L		10/13/23 03:24	1	1.0	10/13/23 03:24	TMS	EPA 300.0 REV 2.1
Sulfate, Dissolved	< 1.0	mg/L		10/10/23 01:41	1	1.0	10/10/23 01:41	TMS	EPA 300.0 REV 2.1
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	< 17	mg/L		10/09/23 10:29	1	17	10/09/23 12:25	LAL2	SM 2540C
Soluble Metals - PIA									
Iron, Dissolved	< 10	ug/L		10/16/23 14:06	5	10	10/17/23 15:54	TJJ	EPA 6020A
Magnesium, Dissolved	< 0.10	mg/L		10/16/23 14:06	5	0.10	10/18/23 11:56	TJJ	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		10/16/23 14:06	5	1.0	10/17/23 15:54	TJJ	EPA 6020A
Total Metals - PIA									
Iron	< 10	ug/L		10/09/23 09:01	5	10	10/16/23 14:07	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		10/09/23 09:01	5	0.10	10/16/23 14:07	TJJ	EPA 6020A
Manganese	< 1.0	ug/L		10/09/23 09:01	5	1.0	10/16/23 14:07	TJJ	EPA 6020A
Volatile Organics - STL									
1,1-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
1,1-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
1,2-Dichloroethane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
1,2-Dichloropropane	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Benzene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Chloroform	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
cis-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Methylene chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Tetrachloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
trans-1,2-Dichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Trichloroethene	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B
Vinyl chloride	< 5.0	ug/L		10/09/23 09:00	1	5.0	10/09/23 14:19	MBM	EPA 8260B

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

Q1 Matrix Spike failed % recovery acceptance limits. The associated blank spike recovery was acceptable.

Gail J Schindler

Certified by: Gail Schindler, Project Manager

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT	PROJECT NUMBER	PROJECT LOCATION	PURCHASE ORDER #
US ECOLOGY	LTSP - Fall 2023	Sheffield, Illinois	—
ADDRESS: PO BOX 206	PHONE NUMBER: 815-454-2342	E-MAIL: Doug.long@usecology.com	DATE SHIPPED: 10-5-23
CITY / STATE / ZIP: SHEFFIELD IL 61361	SAMPLER (PLEASE PRINT): Shawn Long	MATRIX TYPES: WW- WASTEWATER, DW- DRINKING WATER, GW- GROUND WATER, WWSL- SLUDGE, NAS- NON AQUEOUS SOLID, LCHT-LEACHATE, OIL-OIL, SO-SOIL, SOL-SOLID	
CONTACT PERSON: DOUG LONG	SAMPLER'S SIGNATURE: Shawn Long		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # GJ00970
LOGGED BY: gjf
CLIENT: US ECOLOGY - SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA	REMARKS
G160	10-4-23	0915	X		GW	7	1,3,6	X	X	X	*DISSOLVED
G162		0903	X		GW	7	1,3,6	X	X	X	** TOTAL & DISSOLVED
G165		0841	X		GW	7	1,3,6	X	X	X	
G166		0851	X		GW	7	1,3,6	X	X	X	
G168		0830	X		GW	7	1,3,6	X	X	X	
G211		1050	X		GW	7	1,3,6	X	X	X	
G547		0925	X		GW	7	1,3,6	X	X	X	
G564		0945	X		GW	7	1,3,6	X	X	X	
G570		1100	X		GW	7	1,3,6	X	X	X	

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:
DATE RESULTS NEEDED

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7		DATE	TIME		DATE	TIME
RELINQUISHED BY: (SIGNATURE)	Shawn Long	10-4-23	1530	RECEIVED BY: (SIGNATURE) Nathan L	10-5-23	0805
RELINQUISHED BY: (SIGNATURE)		10-5-23	0910	RECEIVED BY: (SIGNATURE)		
RELINQUISHED BY: (SIGNATURE)				RECEIVED BY: (SIGNATURE)	10/5/23	915

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 5.9 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

1 **CLIENT**: Client's company name
ADDRESS: Client's mailing address
CITY, STATE, ZIP: Client's city, state and zip code for mailing
CONTACT PERSON: Person to receive results
PROJECT NUMBER: Client's reference to the project or work involved with these samples
PROJECT LOCATION: Client's location of project
PURCHASE ORDER NUMBER: Client's invoicing information
MEANS SHIPPED: UPS, FedEx, USPS, courier, hand carried, etc.
PHONE NUMBER: Client's phone number (please include area code)
E-MAIL: Client's e-mail address where results are to be sent
DATE SHIPPED: Month, date and year samples were shipped or delivered to the lab
SAMPLER: Printed name of sample collector
SAMPLER'S SIGNATURE: Signature of sample collector
REGULATORY PROGRAM: Circle regulatory program if applicable.
STATE WHERE SAMPLES COLLECTED: Enter the state if different from client address

2 **SAMPLE DESCRIPTION**: The unique sample description you want to appear on the analytical report
DATE COLLECTED: Date sample was collected. For composite samples, this is typically the date when the last aliquot was added
TIME COLLECTED: Time sample was collected. For composite samples, this is typically the time when the last aliquot was added
SAMPLE TYPE: Place an check mark in the box marked "GRAB" if the sample was collected at one time from one specific location. Place an check mark in the box marked "COMP" if the sample is a composite of samples collected at one or more times or locations and combined to make one sample
MATRIX TYPE: From field above. If "OTHER" please identify
BOTLE COUNT: Total number of containers submitted for the samples
PRESERVATION CODE: Indicate bottle preservative using the codes on the front of the COC for non-Pace bottles, client provided

3 **ANALYSIS REQUESTED**: Write the analysis name (or an abbreviation), the name of a group of tests, or the method number you would like us to perform. Examples are BOD, TCLP Metals, PCBs, Method 624, etc. Place a check mark in the small boxes that correspond to the sample(s) on which you want these tests performed.

REMARKS: List special instructions about the sample here. This space can also be used for listing additional analyses, or to request an extra copy of the report to be sent to an alternate person/address.

4 To be completed by laboratory personnel

5 **TURNAROUND TIME REQUESTED**: Circle "NORMAL" if you want routine 10 working day TAT. If faster results are needed circle "RUSH" and, if possible, call the lab in advance to schedule this work. Surcharges may apply for non-routine.
RUSH RESULTS VIA: Choose method by which you would like to receive the RUSH results by circling either "PHONE" or E-MAIL". List the appropriate number/e-mail if different from that listed in section 1.

6 Place your initials on the line to give the lab permission to proceed with analysis without calling you regarding a sample nonconformance. If the sample does not meet the Sample Acceptance Policy requirements then the appropriate case narrative and/or data qualifiers will be added to the corresponding analysis and may not be acceptable to use for regulatory purposes. Contact your project manager for further information or to obtain a copy of the Sample Acceptance Policy.

Summarized Sample Acceptance Policy Requirements:

- Proper, full and completed chain-of-custody documentation
- Readable unique sample container identification written in indelible ink
- Appropriate sample container
- Sufficient sample volume to perform requested tests
- Received within required holding time
- Received within temperature preservation requirements
- Sample containers received in good condition (not leaking or broken)
- Any custody seal intact
- Properly preserved, and
- No headspace in volatile water samples

A data qualifier and/or case narrative will be added to the final test report when the above sample acceptance requirements are not met. A Sample Acceptance Nonconformance Report (SANR) may be attached to the COC depending on the receiving facility's Sample Acceptance Policy.

7 **RELINQUISHED BY/RECEIVED BY:** This form must be signed each time the sample(s) changes hands. Chain-of-Custody seals are available upon request if needed.

8 To be completed by laboratory personnel.

Sample Acceptance Policy – Receiving facility's specific policy available from your project manager.

SERVING YOU IN THE FOLLOWING LOCATIONS

2231 W Altorfer Dr
Peoria, IL 61615
309-692-9688

944 Anglum Rd
Hazelwood, MO 63042
314-432-0550

1805 W Sunset St.
Springfield, MO 65807
417-964-8924

4314-A Crystal Lake Rd
McHenry, IL 60050
815-344-4044

Thank you for using Pace Analytical Services.
Please call 800-752-6651 if you have any questions about completing this form.

Pace **PACE ANALYTICAL SERVICES**
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

(1) CLIENT: US ECOLOGY
ADDRESS: PO BOX 206
CITY / STATE / ZIP: SHEFFIELD IL 61361
CONTACT PERSON: DOUG LONG

PROJECT NUMBER: LTSP - Fall 2023
PROJECT LOCATION: Sheffield, Illinois
PURCHASE ORDER #: —
PHONE NUMBER: 815-454-2342
E-MAIL: doug.long@usecology.com
DATE SHIPPED: 10-5-23
SAMPLER (PLEASE PRINT): Shawn Long
SAMPLER'S SIGNATURE: Shawn Long

MATRIX TYPES:
WW- WASTEWATER
DW- DRINKING WATER
GW- GROUND WATER
WWSL- SLUDGE
NAS- NON AQUEOUS SOLID
LCHT-LEACHATE
OIL-OIL
SO-SOIL
SOL-SOLID

(3) ANALYSIS REQUESTED

(4) (FOR LAB USE ONLY)
LOGIN # GJ00970
LOGGED BY: gcg
CLIENT: US ECOLOGY SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

(2) SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA					REMARKS
G575	10-4-23	1000	X		GW	7	1,3,6	X	X	X					*DISSOLVED
G591		1020	X		GW	7	1,3,6	X	X	X					** TOTAL & DISSOLVED
G592		1030	X		GW	7	1,3,6	X	X	X					
G594		1010	X		GW	7	1,3,6	X	X	X					
G600		Dry	X		GW	7	1,3,6	X	X	X					
S501		1255	X		SW	7	1,3,6	X	X	X					
S502		1315	X		SW	7	1,3,6	X	X	X					
FIELD BLANK 1		1005	X		DI	7	1,3,6	X	X	X					
~~FIELD BLANK 2~~	—	—	X	—	DI	7	1,3,6	X	X	X					

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

(5) TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:
DATE RESULTS NEEDED:

(6) *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

(7)		DATE	TIME		DATE	TIME
RELINQUISHED BY: (SIGNATURE)	Shawn Long	10-4-23	1530	RECEIVED BY: (SIGNATURE)		
RELINQUISHED BY: (SIGNATURE)		10-5-23	0910	RECEIVED BY: (SIGNATURE)		
RELINQUISHED BY: (SIGNATURE)				RECEIVED BY: (SIGNATURE)	10/5/23	915

(8) COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT: 5.1 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT: Y OR N
SAMPLE(S) RECEIVED ON ICE: Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED: Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE: _____

1 **CLIENT**: Client's company name
ADDRESS: Client's mailing address
CITY, STATE, ZIP: Client's city, state and zip code for mailing
CONTACT PERSON: Person to receive results
PROJECT NUMBER: Client's reference to the project or work involved with these samples
PROJECT LOCATION: Client's location of project
PURCHASE ORDER NUMBER: Client's invoicing information
MEANS SHIPPED: UPS, FedEx, USPS, courier, hand carried, etc.
PHONE NUMBER: Client's phone number (please include area code)
E-MAIL: Client's e-mail address where results are to be sent
DATE SHIPPED: Month, date and year samples were shipped or delivered to the lab
SAMPLER: Printed name of sample collector
SAMPLER'S SIGNATURE: Signature of sample collector
REGULATORY PROGRAM: Circle regulatory program if applicable.
STATE WHERE SAMPLES COLLECTED: Enter the state if different from client address

2 **SAMPLE DESCRIPTION**: The unique sample description you want to appear on the analytical report
DATE COLLECTED: Date sample was collected. For composite samples, this is typically the date when the last aliquot was added
TIME COLLECTED: Time sample was collected. For composite samples, this is typically the time when the last aliquot was added
SAMPLE TYPE: Place an check mark in the box marked "GRAB" if the sample was collected at one time from one specific location. Place an check mark in the box marked "COMP" if the sample is a composite of samples collected at one or more times or locations and combined to make one sample
MATRIX TYPE: From field above. If "OTHER" please identify
BOTLE COUNT: Total number of containers submitted for the samples
PRESERVATION CODE: Indicate bottle preservative using the codes on the front of the COC for non-Pace bottles, client provided

3 **ANALYSIS REQUESTED**: Write the analysis name (or an abbreviation), the name of a group of tests, or the method number you would like us to perform. Examples are BOD, TCLP Metals, PCBs, Method 624, etc. Place a check mark in the small boxes that correspond to the sample(s) on which you want these tests performed.

REMARKS: List special instructions about the sample here. This space can also be used for listing additional analyses, or to request an extra copy of the report to be sent to an alternate person/address.

4 To be completed by laboratory personnel

5 **TURNAROUND TIME REQUESTED**: Circle "NORMAL" if you want routine 10 working day TAT. If faster results are needed circle "RUSH" and, if possible, call the lab in advance to schedule this work. Surcharges may apply for non-routine.
RUSH RESULTS VIA: Choose method by which you would like to receive the RUSH results by circling either "PHONE" or E-MAIL". List the appropriate number/e-mail if different from that listed in section 1.

6 Place your initials on the line to give the lab permission to proceed with analysis without calling you regarding a sample nonconformance. If the sample does not meet the Sample Acceptance Policy requirements then the appropriate case narrative and/or data qualifiers will be added to the corresponding analysis and may not be acceptable to use for regulatory purposes. Contact your project manager for further information or to obtain a copy of the Sample Acceptance Policy.

Summarized Sample Acceptance Policy Requirements:

- Proper, full and completed chain-of-custody documentation
- Readable unique sample container identification written in indelible ink
- Appropriate sample container
- Sufficient sample volume to perform requested tests
- Received within required holding time
- Received within temperature preservation requirements
- Sample containers received in good condition (not leaking or broken)
- Any custody seal intact
- Properly preserved, and
- No headspace in volatile water samples

A data qualifier and/or case narrative will be added to the final test report when the above sample acceptance requirements are not met. A Sample Acceptance Nonconformance Report (SANR) may be attached to the COC depending on the receiving facility's Sample Acceptance Policy.

7 **RELINQUISHED BY/RECEIVED BY:** This form must be signed each time the sample(s) changes hands. Chain-of-Custody seals are available upon request if needed.

8 To be completed by laboratory personnel.

Sample Acceptance Policy – Receiving facility's specific policy available from your project manager.

SERVING YOU IN THE FOLLOWING LOCATIONS

2231 W Altorfer Dr
Peoria, IL 61615
309-692-9688

944 Anglum Rd
Hazelwood, MO 63042
314-432-0550

1805 W Sunset St.
Springfield, MO 65807
417-964-8924

4314-A Crystal Lake Rd
McHenry, IL 60050
815-344-4044

Thank you for using Pace Analytical Services.
Please call 800-752-6651 if you have any questions about completing this form.

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

(1) CLIENT: US ECOLOGY

ADDRESS: PO BOX 206

CITY / STATE / ZIP: SHEFFIELD IL 61361

CONTACT PERSON: DOUG LONG

PROJECT NUMBER: LTSP- Fall 2023

PROJECT LOCATION: Sheffield, Illinois

PURCHASE ORDER #: —

PHONE NUMBER: 815-454-2342

E-MAIL: doug.long@usecology.com

DATE SHIPPED: 10-5-23

SAMPLER (PLEASE PRINT): Shawn Long

SAMPLER'S SIGNATURE: Shawn Long

MATRIX TYPES:
WW- WASTEWATER
DW- DRINKING WATER
GW- GROUND WATER
WWSL- SLUDGE
NAS- NON AQUEOUS SOLID
LCHT-LEACHATE
OIL-OIL
SO-SOIL
SOL-SOLID

(3) ANALYSIS REQUESTED

(4) (FOR LAB USE ONLY)
LOGIN # GJ00970
LOGGED BY: gd
CLIENT: US ECOLOGY - SHEFFIELD
PROJECT: USE LTSP
PROJ. MGR.: GAIL SCHINDLER

(2) SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	CL*, SO4*, TDS*, TS	FE**, MG**, MN**	VOA	REMARKS
EQUIPMENT BLANK	10/4/23	1500	X		DI	7	1,3,6	X	X	X	*DISSOLVED
TRIP BLANK	↓	1515	X		DI	7	1,3,6	X	X	X	** TOTAL & DISSOLVED

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

(5) TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:
DATE RESULTS NEEDED

(6) *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

(7) RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Shawn Long	10-4-23	1530	Nathan Ly	10-5-23	0805
Nathan Ly	10-5-23	0910			
			gd	10/5/23	915

(8) COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 5.9 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

1 **CLIENT**: Client's company name
ADDRESS: Client's mailing address
CITY, STATE, ZIP: Client's city, state and zip code for mailing
CONTACT PERSON: Person to receive results
PROJECT NUMBER: Client's reference to the project or work involved with these samples
PROJECT LOCATION: Client's location of project
PURCHASE ORDER NUMBER: Client's invoicing information
MEANS SHIPPED: UPS, FedEx, USPS, courier, hand carried, etc.
PHONE NUMBER: Client's phone number (please include area code)
E-MAIL: Client's e-mail address where results are to be sent
DATE SHIPPED: Month, date and year samples were shipped or delivered to the lab
SAMPLER: Printed name of sample collector
SAMPLER'S SIGNATURE: Signature of sample collector
REGULATORY PROGRAM: Circle regulatory program if applicable.
STATE WHERE SAMPLES COLLECTED: Enter the state if different from client address

2 **SAMPLE DESCRIPTION**: The unique sample description you want to appear on the analytical report
DATE COLLECTED: Date sample was collected. For composite samples, this is typically the date when the last aliquot was added
TIME COLLECTED: Time sample was collected. For composite samples, this is typically the time when the last aliquot was added
SAMPLE TYPE: Place an check mark in the box marked "GRAB" if the sample was collected at one time from one specific location. Place an check mark in the box marked "COMP" if the sample is a composite of samples collected at one or more times or locations and combined to make one sample
MATRIX TYPE: From field above. If "OTHER" please identify
BOTLE COUNT: Total number of containers submitted for the samples
PRESERVATION CODE: Indicate bottle preservative using the codes on the front of the COC for non-Pace bottles, client provided

3 **ANALYSIS REQUESTED**: Write the analysis name (or an abbreviation), the name of a group of tests, or the method number you would like us to perform. Examples are BOD, TCLP Metals, PCBs, Method 624, etc. Place a check mark in the small boxes that correspond to the sample(s) on which you want these tests performed.

REMARKS: List special instructions about the sample here. This space can also be used for listing additional analyses, or to request an extra copy of the report to be sent to an alternate person/address.

4 To be completed by laboratory personnel

5 **TURNAROUND TIME REQUESTED**: Circle "NORMAL" if you want routine 10 working day TAT. If faster results are needed circle "RUSH" and, if possible, call the lab in advance to schedule this work. Surcharges may apply for non-routine.
RUSH RESULTS VIA: Choose method by which you would like to receive the RUSH results by circling either "PHONE" or E-MAIL". List the appropriate number/e-mail if different from that listed in section 1.

6 Place your initials on the line to give the lab permission to proceed with analysis without calling you regarding a sample nonconformance. If the sample does not meet the Sample Acceptance Policy requirements then the appropriate case narrative and/or data qualifiers will be added to the corresponding analysis and may not be acceptable to use for regulatory purposes. Contact your project manager for further information or to obtain a copy of the Sample Acceptance Policy.

Summarized Sample Acceptance Policy Requirements:

- Proper, full and completed chain-of-custody documentation
- Readable unique sample container identification written in indelible ink
- Appropriate sample container
- Sufficient sample volume to perform requested tests
- Received within required holding time
- Received within temperature preservation requirements
- Sample containers received in good condition (not leaking or broken)
- Any custody seal intact
- Properly preserved, and
- No headspace in volatile water samples

A data qualifier and/or case narrative will be added to the final test report when the above sample acceptance requirements are not met. A Sample Acceptance Nonconformance Report (SANR) may be attached to the COC depending on the receiving facility's Sample Acceptance Policy.

7 **RELINQUISHED BY/RECEIVED BY:** This form must be signed each time the sample(s) changes hands. Chain-of-Custody seals are available upon request if needed.

8 To be completed by laboratory personnel.

Sample Acceptance Policy – Receiving facility's specific policy available from your project manager.

SERVING YOU IN THE FOLLOWING LOCATIONS

2231 W Altorfer Dr
Peoria, IL 61615
309-692-9688

944 Anglum Rd
Hazelwood, MO 63042
314-432-0550

1805 W Sunset St.
Springfield, MO 65807
417-964-8924

4314-A Crystal Lake Rd
McHenry, IL 60050
815-344-4044

Thank you for using Pace Analytical Services.
Please call 800-752-6651 if you have any questions about completing this form.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

GJ00970

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical Services, LLC - Hazelwood
944 Anglum Road
Hazelwood, MO 63042
(314) 432-0550

Sample: GJ00970-01
Name: G160

Sampled: 10/04/23 09:15
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 09:15	

Sample: GJ00970-02
Name: G162

Sampled: 10/04/23 09:03
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 09:03	

Sample: GJ00970-03
Name: G165

Sampled: 10/04/23 08:41
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 08:41	

Sample: GJ00970-04
Name: G166

Sampled: 10/04/23 08:51
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 08:51	

Sample: GJ00970-05
Name: G168

Sampled: 10/04/23 08:30
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 08:30	

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

GJ00970

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical Services, LLC - Hazelwood
944 Anglum Road
Hazelwood, MO 63042
(314) 432-0550

Sample: GJ00970-06
Name: G211

Sampled: 10/04/23 10:50
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:50	

Sample: GJ00970-07
Name: G547

Sampled: 10/04/23 09:25
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 09:25	

Sample: GJ00970-08
Name: G564

Sampled: 10/04/23 09:45
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 09:45	

Sample: GJ00970-09
Name: G570

Sampled: 10/04/23 11:00
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 11:00	

Sample: GJ00970-10
Name: G575

Sampled: 10/04/23 10:00
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:00	

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

GJ00970

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical Services, LLC - Hazelwood
944 Anglum Road
Hazelwood, MO 63042
(314) 432-0550

Sample: GJ00970-11
Name: G591

Sampled: 10/04/23 10:20
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:20	

Sample: GJ00970-12
Name: G592

Sampled: 10/04/23 10:30
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:30	

Sample: GJ00970-13
Name: G594

Sampled: 10/04/23 10:10
Matrix: Ground Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:10	

Sample: GJ00970-14
Name: S501

Sampled: 10/04/23 12:55
Matrix: Surface Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 12:55	

Sample: GJ00970-15
Name: S502

Sampled: 10/04/23 13:15
Matrix: Surface Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 13:15	

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

GJ00970

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical Services, LLC - Hazelwood
944 Anglum Road
Hazelwood, MO 63042
(314) 432-0550

Sample: GJ00970-16
Name: FIELD BLANK 1

Sampled: 10/04/23 10:05
Matrix: Surface Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 10:05	

Sample: GJ00970-17
Name: EQUIPMENT BLANK

Sampled: 10/04/23 15:00
Matrix: Surface Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 15:00	

Sample: GJ00970-18
Name: TRIP BLANK

Sampled: 10/04/23 15:15
Matrix: Surface Water
Preservative: Cool <6

Analysis	Due	Expires	Comments
02-M8260 GW G2	10/17/23 16:00	10/18/23 15:15	

Please email results to Gail Schindler at gail.schindler@pacelabs.com

Date Shipped: 8/9/23 Total # of Containers: 54 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	8/9/23 0700		8-9-23 0730
	8-9-23 1040		10/6/2023

Sample Temperature Upon Receipt	4.1 °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

APPENDIX A.2

Spring and Fall 2023 Data Summary

January 17, 2024

Environmental VOC Monitoring Data

Boundary Well G160

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	41.06	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	41.06	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	41.06	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	41.06	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	41.06	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	41.06	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	41.06	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	41.06	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	41.06	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	41.06	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	41.06	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	41.06	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Boundary Well G162

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	29.30	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	29.30	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	29.30	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	29.30	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	29.30	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	29.30	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	29.30	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	29.30	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	29.30	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	29.30	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	29.30	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	29.30	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Guard Well G591

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	41.86	Benzene	160 ppb	160 ppb	160 ppb
04/19/2023	41.86	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	41.86	1,1 Dichloroethane	26 ppb	47 ppb	410 ppb
04/19/2023	41.86	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	41.86	1,2,-Dichloroethane	Non-Detect	4.3 ppb	2000 ppb
04/19/2023	41.86	cis-1,2-Dichloroethene	19 ppb	5.1 ppb	620 ppb
04/19/2023	41.86	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	41.86	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	41.86	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	41.86	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	41.86	Trichloroethene	Non-Detect	1.1 ppb	220 ppb
04/19/2023	41.86	Vinyl Chloride	21 ppb	6.2 ppb	930 ppb

Guard Well G592

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	35.66	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	35.66	Chloroform	1.5 ppb	1.4 ppb	140 ppb
04/19/2023	35.66	1,1 Dichloroethane	43 ppb	34 ppb	410 ppb
04/19/2023	35.66	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	35.66	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	35.66	cis-1,2-Dichloroethene	2.5 ppb	1.8 ppb	620 ppb
04/19/2023	35.66	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	35.66	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	35.66	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	35.66	Tetrachloroethene	23 ppb	15 ppb	53 ppb
04/19/2023	35.66	Trichloroethene	2.5 ppb	2.4 ppb	220 ppb
04/19/2023	35.66	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Guard Well G600

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	22.30	Benzene	Non-Detect	2.5 ppb	160 ppb
04/19/2023	22.30	Chloroform	Non-Detect	5.6 ppb	140 ppb
04/19/2023	22.30	1,1 Dichloroethane	Non-Detect	12 ppb	410 ppb
04/19/2023	22.30	1,1 Dichloroethene	Non-Detect	4.4 ppb	130 ppb
04/19/2023	22.30	1,2,-Dichloroethane	Non-Detect	2.1 ppb	2000 ppb
04/19/2023	22.30	cis-1,2-Dichloroethene	250 ppb	1100 ppb	620 ppb
04/19/2023	22.30	trans-1,2-Dichloroethene	Non-Detect	7.5 ppb	558 ppb
04/19/2023	22.30	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	22.30	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	22.30	Tetrachloroethene	100 ppb	280 ppb	53 ppb
04/19/2023	22.30	Trichloroethene	120 ppb	270 ppb	220 ppb
04/19/2023	22.30	Vinyl Chloride	16 ppb	23 ppb	930 ppb

Plume Well G165

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	44.66	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	44.66	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	44.66	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	44.66	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	44.66	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	44.66	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	44.66	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	44.66	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	44.66	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	44.66	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	44.66	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	44.66	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G166

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	71.41	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	71.41	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	71.41	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	71.41	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	71.41	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	71.41	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	71.41	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	71.41	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	71.41	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	71.41	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	71.41	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	71.41	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G168

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	50.30	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	50.30	Chloroform	Non-Detect	2.1 ppb	140 ppb
04/19/2023	50.30	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	50.30	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	50.30	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	50.30	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	50.30	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	50.30	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	50.30	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	50.30	Tetrachloroethene	100 ppb	110 ppb	53 ppb
04/19/2023	50.30	Trichloroethene	Non-Detect	5.1 ppb	220 ppb
04/19/2023	50.30	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G547

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	44.21	Benzene	50 ppb	64 ppb	160 ppb
04/19/2023	44.21	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	44.21	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	44.21	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	44.21	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	44.21	cis-1,2-Dichloroethene	38 ppb	58 ppb	620 ppb
04/19/2023	44.21	trans-1,2-Dichloroethene	Non-Detect	4.5 ppb	558 ppb
04/19/2023	44.21	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	44.21	Methylene Chloride	Non-Detect	2.2 ppb	1500 ppb
04/19/2023	44.21	Tetrachloroethene	30 ppb	30 ppb	53 ppb
04/19/2023	44.21	Trichloroethene	78 ppb	95 ppb	220 ppb
04/19/2023	44.21	Vinyl Chloride	Non-Detect	8.7 ppb	930 ppb

Plume Well G564

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	45.93	Benzene	Non-Detect	5.0 ppb	160 ppb
04/19/2023	45.93	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	45.93	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	45.93	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	45.93	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	45.93	cis-1,2-Dichloroethene	730 ppb	180 ppb	620 ppb
04/19/2023	45.93	trans-1,2-Dichloroethene	Non-Detect	4.7 ppb	558 ppb
04/19/2023	45.93	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	45.93	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	45.93	Tetrachloroethene	Non-Detect	8.1 ppb	53 ppb
04/19/2023	45.93	Trichloroethene	Non-Detect	1.2 ppb	220 ppb
04/19/2023	45.93	Vinyl Chloride	58 ppb	56 ppb	930 ppb

Plume Well G575

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	46.52	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	46.52	Chloroform	1.7 ppb	2.3 ppb	140 ppb
04/19/2023	46.52	1,1 Dichloroethane	35 ppb	51 ppb	410 ppb
04/19/2023	46.52	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	46.52	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	46.52	cis-1,2-Dichloroethene	Non-Detect	1.5 ppb	620 ppb
04/19/2023	46.52	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	46.52	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	46.52	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	46.52	Tetrachloroethene	8.3 ppb	6.4 ppb	53 ppb
04/19/2023	46.52	Trichloroethene	1.5 ppb	2.1 ppb	220 ppb
04/19/2023	46.52	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G594

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	41.71	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	41.71	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	41.71	1,1 Dichloroethane	2.0 ppb	1.6 ppb	410 ppb
04/19/2023	41.71	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	41.71	1,2,-Dichloroethane	1.4 ppb	Non-Detect	2000 ppb
04/19/2023	41.71	cis-1,2-Dichloroethene	62 ppb	39 ppb	620 ppb
04/19/2023	41.71	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	41.71	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	41.71	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	41.71	Tetrachloroethene	2.3 ppb	1.5 ppb	53 ppb
04/19/2023	41.71	Trichloroethene	4.0 ppb	3.3 ppb	220 ppb
04/19/2023	41.71	Vinyl Chloride	2.3 ppb	1.5 ppb	930 ppb

(GSI) Shoreline Well G211

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Fall 2023	USEPA Region 4
04/19/2023	42.60	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	42.60	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	42.60	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	42.60	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	42.60	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	42.60	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
04/19/2023	42.60	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	42.60	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	42.60	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	42.60	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	42.60	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	42.60	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

(GSI) Shoreline Well G570

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	17.00	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	17.00	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	17.00	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	17.00	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	17.00	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023	17.00	cis-1,2-Dichloroethene	2.8 ppb	2.8 ppb	620 ppb
04/19/2023	17.00	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	17.00	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	17.00	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	17.00	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	17.00	Trichloroethene	1.4 ppb	Non-Detect	220 ppb
04/19/2023	17.00	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Surface Monitoring Point of Compliance S501

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	N/A	Benzene	Non-Detect	Non-Detect	160 ppb
04/19/2023	N/A	Chloroform	Non-Detect	Non-Detect	140 ppb
04/19/2023	N/A	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
04/19/2023	N/A	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
04/19/2023	N/A	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
04/19/2023 5/16/2023	N/A Resample	cis-1,2-Dichloroethene	Non-Detect	1.8 ppb Non-Detect	620 ppb
04/19/2023	N/A	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
04/19/2023	N/A	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
04/19/2023	N/A	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
04/19/2023	N/A	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
04/19/2023	N/A	Trichloroethene	Non-Detect	Non-Detect	220 ppb
04/19/2023	N/A	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Surface Monitoring Point of Compliance S502

Sample Date	Well Screen Depth	Constituent	Concentrations Spring 2022	Concentrations Spring 2023	USEPA Region 4
04/19/2023	N/A	Benzene	No Sample	Non-Detect	160 ppb
04/19/2023	N/A	Chloroform	No Sample	Non-Detect	140 ppb
04/19/2023	N/A	1,1 Dichloroethane	No Sample	Non-Detect	410 ppb
04/19/2023	N/A	1,1 Dichloroethene	No Sample	Non-Detect	130 ppb
04/19/2023	N/A	1,2,-Dichloroethane	No Sample	Non-Detect	2000 ppb
04/19/2023 5/16/2023	N/A Resample	cis-1,2-Dichloroethene	Non-Detect	15 ppb 1.0 ppb	620 ppb
04/19/2023	N/A	trans-1,2-Dichloroethene	No Sample	Non-Detect	558 ppb
04/19/2023	N/A	1,2-Dichloropropane	No Sample	Non-Detect	520 ppb
04/19/2023	N/A	Methylene Chloride	No Sample	Non-Detect	1500 ppb
04/19/2023 5/16/2023	N/A Resample	Tetrachloroethene	No Sample	6.6 ppb Non-Detect	53 ppb
04/19/2023 5/16/2023	N/A Resample	Trichloroethene	No Sample	2.7 ppb Non-Detect	220 ppb
04/19/2023	N/A	Vinyl Chloride	No Sample	Non-Detect	930 ppb

Environmental VOC Monitoring Data

Boundary Well G160

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	41.06	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	41.06	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	41.06	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	41.06	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	41.06	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	41.06	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	41.06	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	41.06	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	41.06	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	41.06	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	41.06	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	41.06	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Boundary Well G162

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	29.30	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	29.30	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	29.30	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	29.30	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	29.30	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	29.30	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	29.30	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	29.30	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	29.30	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	29.30	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	29.30	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	29.30	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Guard Well G591

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	41.86	Benzene	120 ppb	95 ppb	160 ppb
10/4/2023	41.86	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	41.86	1,1 Dichloroethane	39 ppb	40 ppb	410 ppb
10/4/2023	41.86	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	41.86	1,2,-Dichloroethane	4.0 ppb	Non-Detect	2000 ppb
10/4/2023	41.86	cis-1,2-Dichloroethene	10 ppb	12 ppb	620 ppb
10/4/2023	41.86	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	41.86	1,2-Dichloropropane	10 ppb	13 ppb	520 ppb
10/4/2023	41.86	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	41.86	Tetrachloroethene	1.4 ppb	Non-Detect	53 ppb
10/4/2023	41.86	Trichloroethene	2.1 ppb	Non-Detect	220 ppb
10/4/2023	41.86	Vinyl Chloride	6.4 ppb	Non-Detect	930 ppb

Guard Well G592

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	35.66	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	35.66	Chloroform	1.8 ppb	1.8 ppb	140 ppb
10/4/2023	35.66	1,1 Dichloroethane	45 ppb	68 ppb	410 ppb
10/4/2023	35.66	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	35.66	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	35.66	cis-1,2-Dichloroethene	3.2 ppb	Non-Detect	620 ppb
10/4/2023	35.66	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	35.66	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	35.66	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	35.66	Tetrachloroethene	24 ppb	24 ppb	53 ppb
10/4/2023	35.66	Trichloroethene	3.8 ppb	Non-Detect	220 ppb
10/4/2023	35.66	Vinyl Chloride	3.1 ppb	Non-Detect	930 ppb

Guard Well G600

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	22.30	Benzene	Non-Detect	Dry, not sampled (NS)	160 ppb
10/4/2023	22.30	Chloroform	Non-Detect	Dry, NS	140 ppb
10/4/2023	22.30	1,1 Dichloroethane	13 ppb	Dry, NS	410 ppb
10/4/2023	22.30	1,1 Dichloroethene	Non-Detect	Dry, NS	130 ppb
10/4/2023	22.30	1,2,-Dichloroethane	Non-Detect	Dry, NS	2000 ppb
10/4/2023	22.30	cis-1,2-Dichloroethene	210 ppb	Dry, NS	620 ppb
10/4/2023	22.30	trans-1,2-Dichloroethene	2.4 ppb	Dry, NS	558 ppb
10/4/2023	22.30	1,2-Dichloropropane	Non-Detect	Dry, NS	520 ppb
10/4/2023	22.30	Methylene Chloride	Non-Detect	Dry, NS	1500 ppb
10/4/2023	22.30	Tetrachloroethene	23 ppb	Dry, NS	53 ppb
10/4/2023	22.30	Trichloroethene	59 ppb	Dry, NS	220 ppb
10/4/2023	22.30	Vinyl Chloride	21 ppb	Dry, NS	930 ppb

Plume Well G165

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	44.66	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	44.66	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	44.66	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	44.66	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	44.66	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	44.66	cis-1,2-Dichlorothene	620 ppb	Non-Detect	620 ppb
10/4/2023	44.66	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	44.66	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	44.66	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	44.66	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	44.66	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	44.66	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G166

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	71.41	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	71.41	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	71.41	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	71.41	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	71.41	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	71.41	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	71.41	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	71.41	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	71.41	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	71.41	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	71.41	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	71.41	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G168

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	50.30	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	50.30	Chloroform	3.9 ppb	6.0 ppb	140 ppb
10/4/2023	50.30	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	50.30	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	50.30	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	50.30	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	50.30	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	50.30	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	50.30	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	50.30	Tetrachloroethene	110 ppb	150 ppb	53 ppb
10/4/2023	50.30	Trichloroethene	6.4 ppb	8.8 ppb	220 ppb
10/4/2023	50.30	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Plume Well G547

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	44.21	Benzene	60 ppb	130 ppb	160 ppb
10/4/2023	44.21	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	44.21	1,1 Dichloroethane	1.4 ppb	1.4 ppb	410 ppb
10/4/2023	44.21	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	44.21	1,2,-Dichloroethane	4.3 ppb	4.3 ppb	2000 ppb
10/4/2023	44.21	cis-1,2-Dichloroethene	72 ppb	130 ppb	620 ppb
10/4/2023	44.21	trans-1,2Dichloroethene	8.3 ppb	9.1 ppb	558 ppb
10/4/2023	44.21	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	44.21	Methylene Chloride	6.4 ppb	7.1 ppb	1500 ppb
10/4/2023	44.21	Tetrachloroethene	35 ppb	89 ppb	53 ppb
10/4/2023	44.21	Trichloroethene	210 ppb	90 ppb	220 ppb
10/4/2023	44.21	Vinyl Chloride	15 ppb	21 ppb	930 ppb

Plume Well G564

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	45.93	Benzene	8.5 ppb	Non-Detect	160 ppb
10/4/2023	45.93	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	45.93	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	45.93	1,1 Dichloroethene	3.9 ppb	Non-Detect	130 ppb
10/4/2023	45.93	1,2,-Dichloroethane	1.3 ppb	Non-Detect	2000 ppb
10/4/2023	45.93	cis-1,2-Dichloroethene	1100 ppb	370 ppb	620 ppb
10/4/2023	45.93	trans-1,2-Dichloroethene	13 ppb	Non-Detect	558 ppb
10/4/2023	45.93	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	45.93	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	45.93	Tetrachloroethene	9.0 ppb	5.1 ppb	53 ppb
10/4/2023	45.93	Trichloroethene	2.5 ppb	Non-Detect	220 ppb
10/4/2023	45.93	Vinyl Chloride	89 ppb	45 ppb	930 ppb

Plume Well G575

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	46.52	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	46.52	Chloroform	1.1ppb	1.1 ppb	140 ppb
10/4/2023	46.52	1,1 Dichloroethane	19 ppb	29 ppb	410 ppb
10/4/2023	46.52	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	46.52	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	46.52	cis-1,2-Dichloroethene	1.1 ppb	Non-Detect	620 ppb
10/4/2023	46.52	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	46.52	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	46.52	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	46.52	Tetrachloroethene	3.1 ppb	11 ppb	53 ppb
10/4/2023	46.52	Trichloroethene	1.6 ppb	Non-Detect	220 ppb
10/4/2023	46.52	Vinyl Chloride	1.6 ppb	Non-Detect	930 ppb

Plume Well G594

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	41.71	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	41.71	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	41.71	1,1 Dichloroethane	2.1 ppb	Non-Detect	410 ppb
10/4/2023	41.71	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	41.71	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	41.71	cis-1,2-Dichloroethene	44 ppb	43 ppb	620 ppb
10/4/2023	41.71	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	41.71	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	41.71	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	41.71	Tetrachloroethene	2.3 ppb	Non-Detect	53 ppb
10/4/2023	41.71	Trichloroethene	4.0 ppb	Non-Detect	220 ppb
10/4/2023	41.71	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

(GSI) Shoreline Well G211

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	42.60	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	42.60	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	42.60	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	42.60	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	42.60	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	42.60	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	42.60	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	42.60	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	42.60	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	42.60	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	42.60	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	42.60	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

(GSI) Shoreline Well G570

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	17.00	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	17.00	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	17.00	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	17.00	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	17.00	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	17.00	cis-1,2-Dichloroethene	3.3 ppb	5.4 ppb	620 ppb
10/4/2023	17.00	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	17.00	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	17.00	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	17.00	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	17.00	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	17.00	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Surface Monitoring Point of Compliance S501

Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	N/A	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	N/A	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	N/A	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	N/A	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	N/A	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	N/A	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	N/A	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	N/A	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	N/A	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	N/A	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	N/A	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	N/A	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

Surface Monitoring Point of Compliance S502

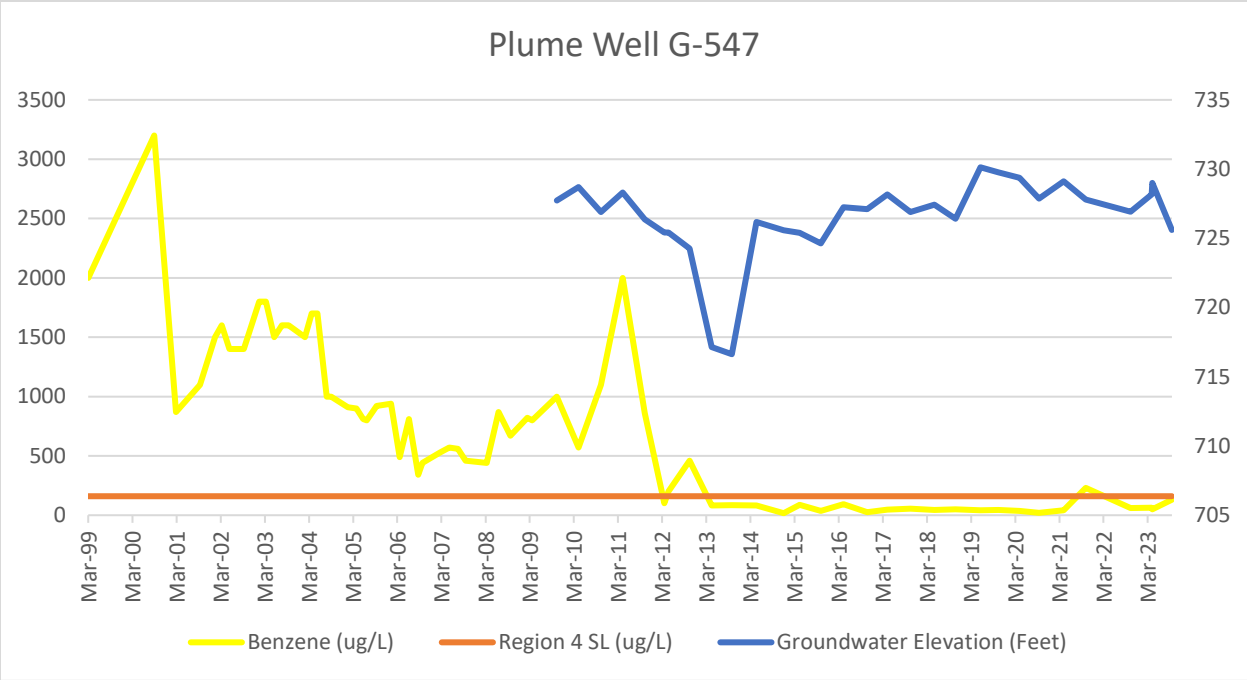
Sample Date	Well Screen Depth	Constituent	Concentrations Fall 2022	Concentrations Fall 2023	USEPA Region 4
10/4/2023	N/A	Benzene	Non-Detect	Non-Detect	160 ppb
10/4/2023	N/A	Chloroform	Non-Detect	Non-Detect	140 ppb
10/4/2023	N/A	1,1 Dichloroethane	Non-Detect	Non-Detect	410 ppb
10/4/2023	N/A	1,1 Dichloroethene	Non-Detect	Non-Detect	130 ppb
10/4/2023	N/A	1,2,-Dichloroethane	Non-Detect	Non-Detect	2000 ppb
10/4/2023	N/A	cis-1,2-Dichloroethene	Non-Detect	Non-Detect	620 ppb
10/4/2023	N/A	trans-1,2-Dichloroethene	Non-Detect	Non-Detect	558 ppb
10/4/2023	N/A	1,2-Dichloropropane	Non-Detect	Non-Detect	520 ppb
10/4/2023	N/A	Methylene Chloride	Non-Detect	Non-Detect	1500 ppb
10/4/2023	N/A	Tetrachloroethene	Non-Detect	Non-Detect	53 ppb
10/4/2023	N/A	Trichloroethene	Non-Detect	Non-Detect	220 ppb
10/4/2023	N/A	Vinyl Chloride	Non-Detect	Non-Detect	930 ppb

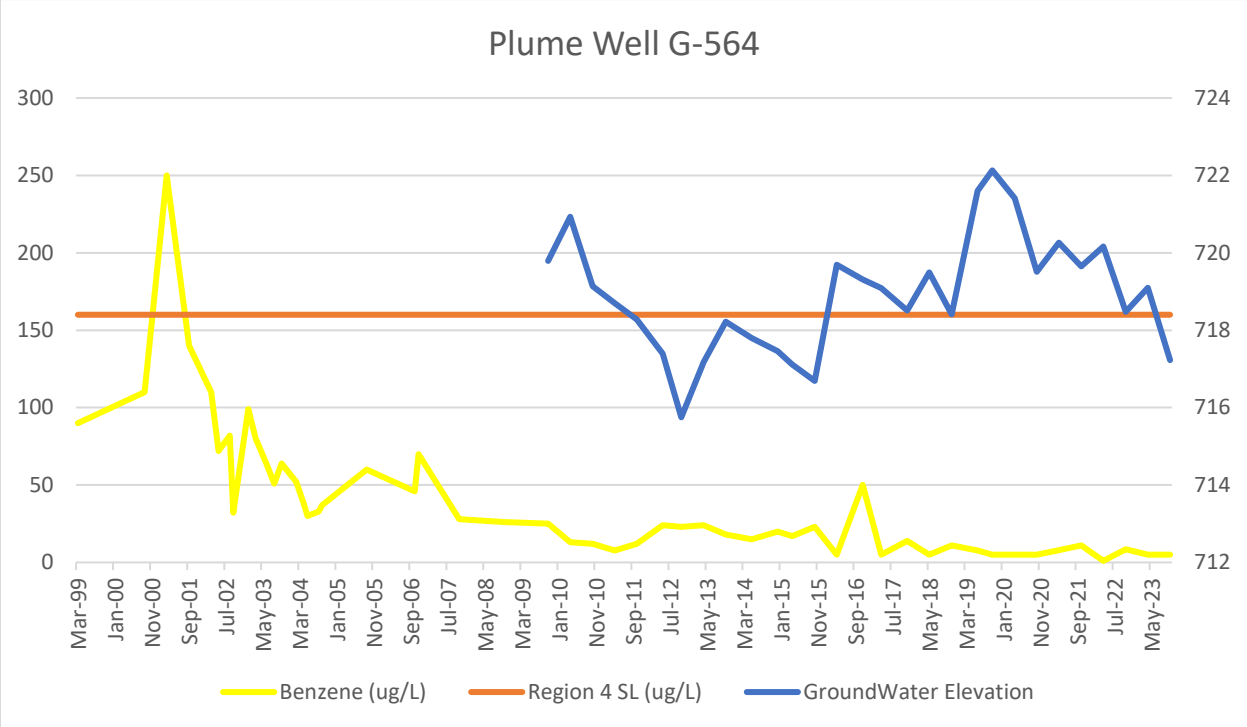
APPENDIX B

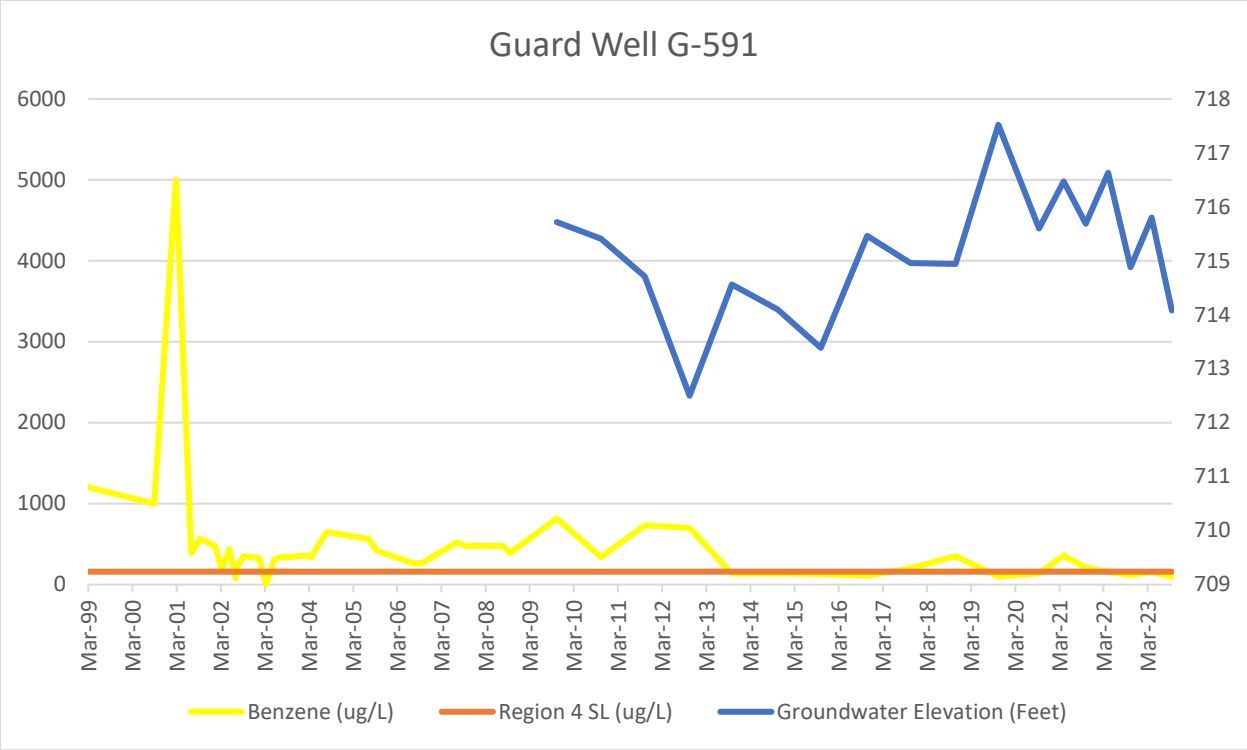
Graphical Evaluation

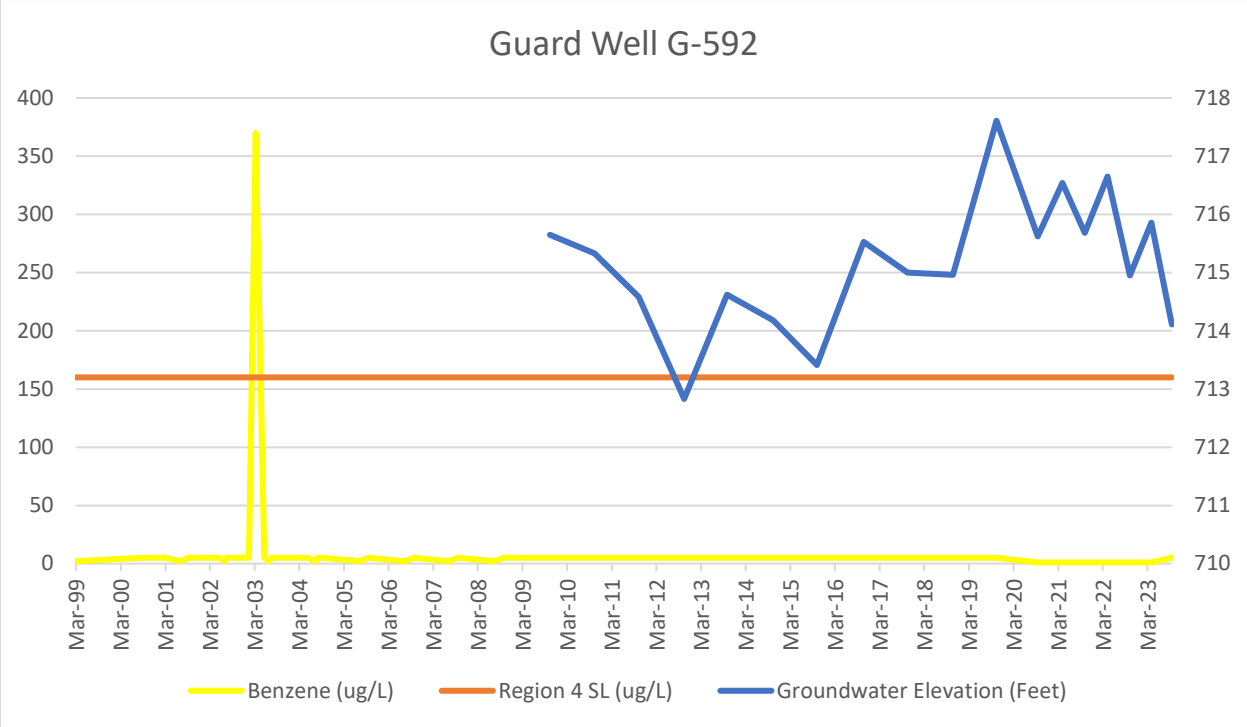
APPENDIX B.1

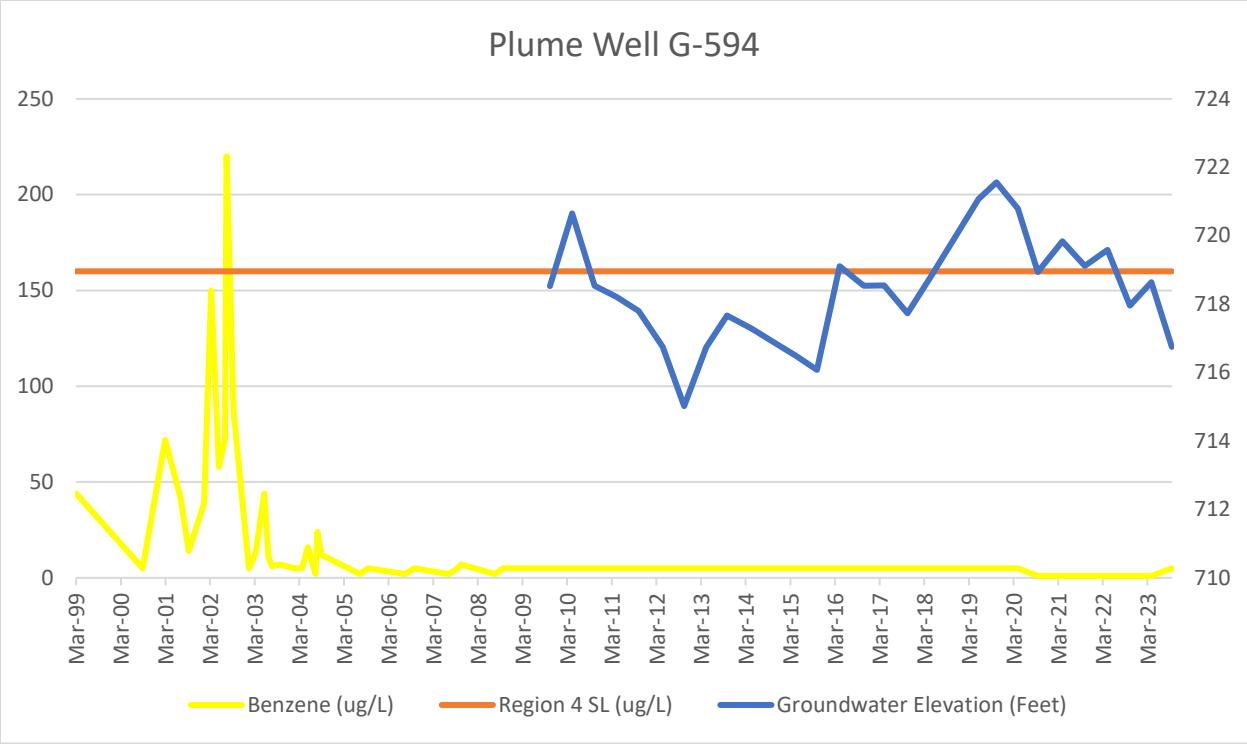
Concentration Line Plots

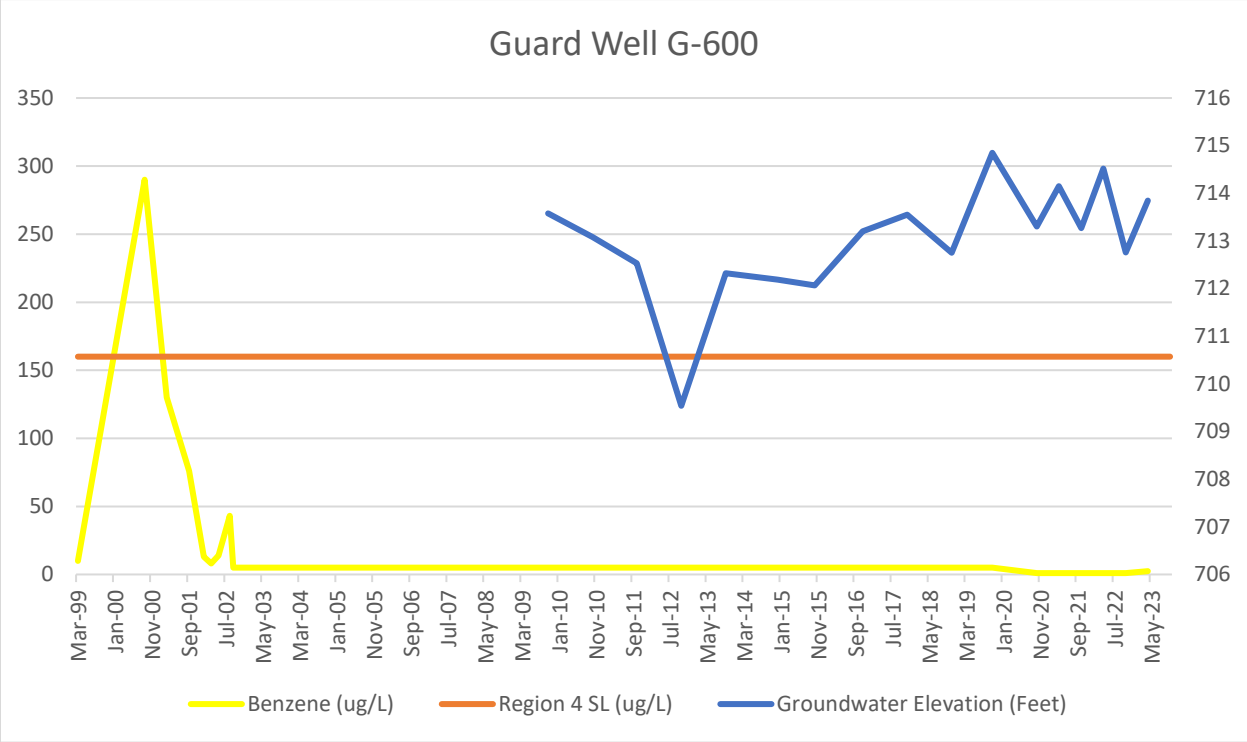

Plume Well G-547
3500
3000
2500
2000
1500
1000
500
0
735
730
725
720
715
710
705
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
Benzene (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

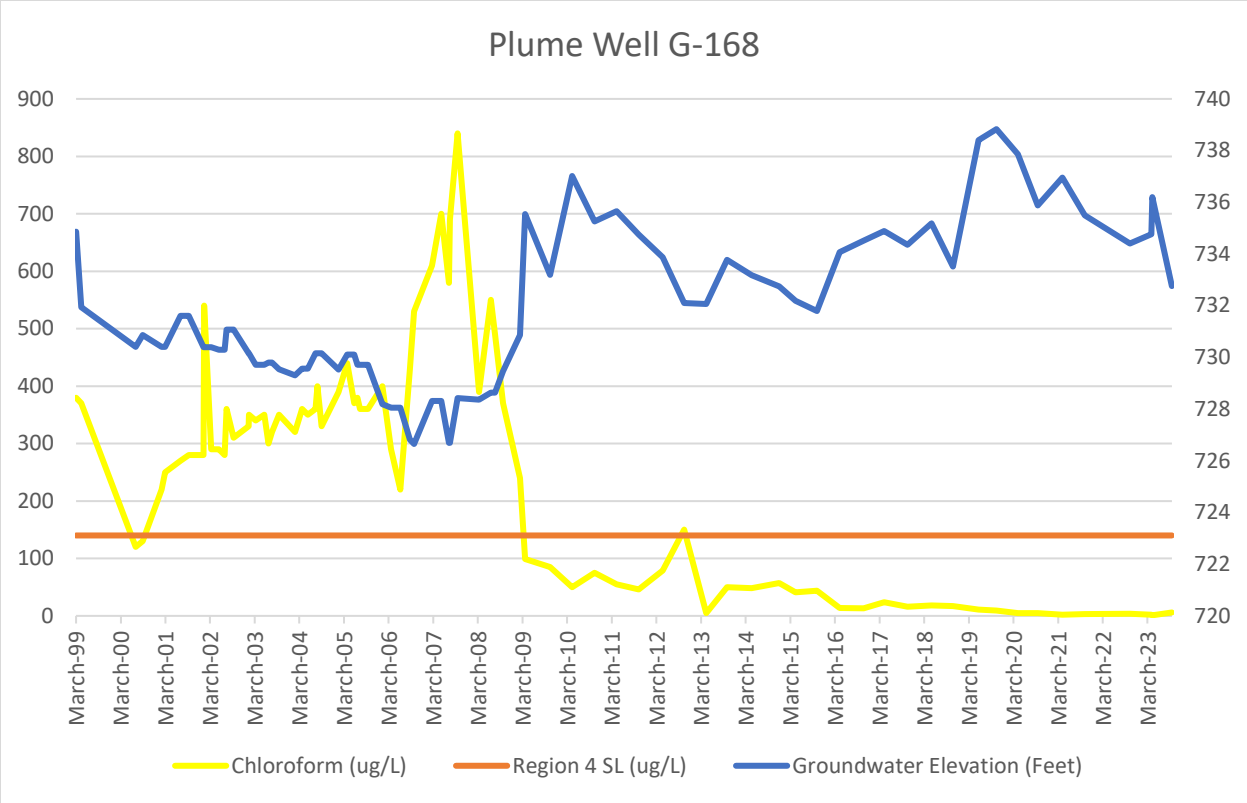

Plume Well G-564
300
250
200
150
100
50
0
724
722
720
718
716
714
712
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
Benzene (ug/L)
Region 4 SL (ug/L)
GroundWater Elevation

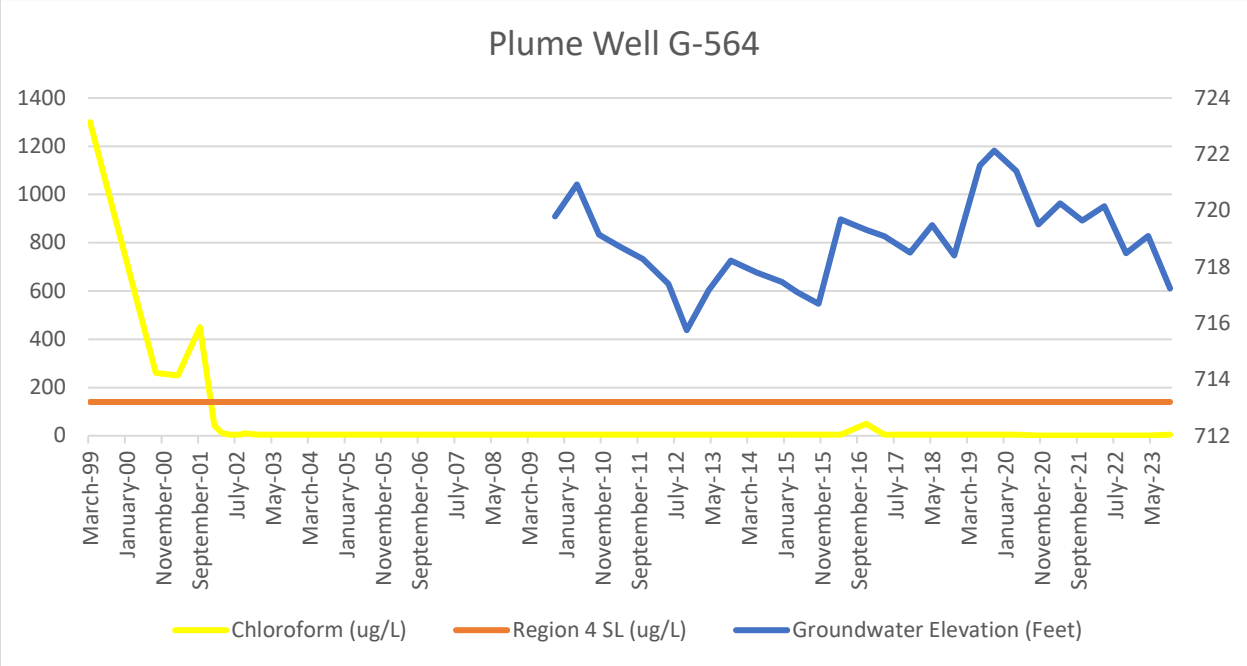

Guard Well G-591
6000
5000
4000
3000
2000
1000
0
718
717
716
715
714
713
712
711
710
709
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
Benzene (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

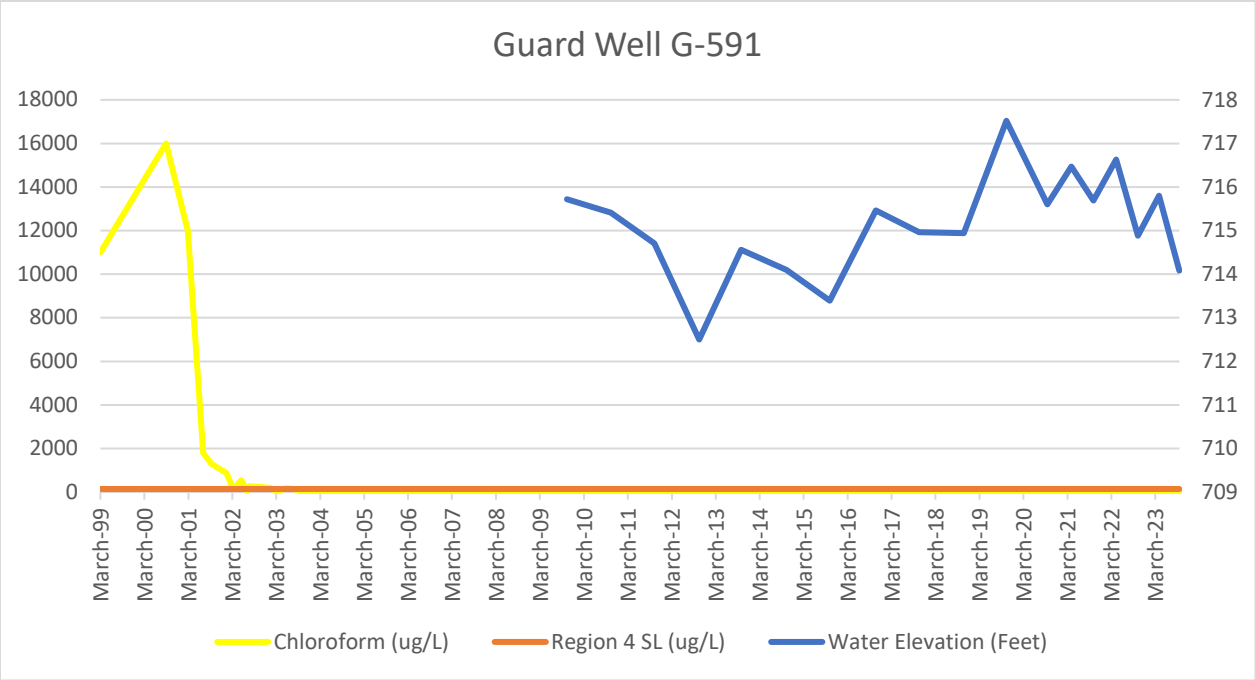

Guard Well G-592
400
350
300
250
200
150
100
50
0
718
717
716
715
714
713
712
711
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
Benzene (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

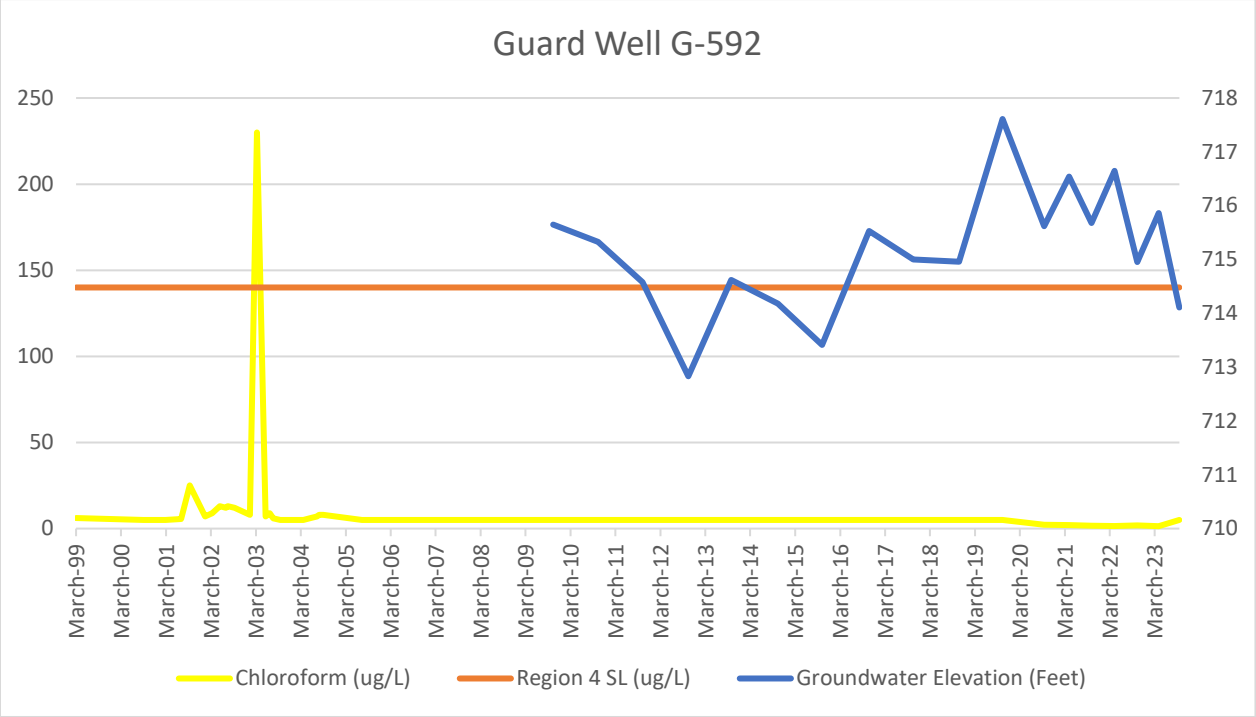

Plume Well G-594
250
200
150
100
50
0
724
722
720
718
716
714
712
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
Benzene (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

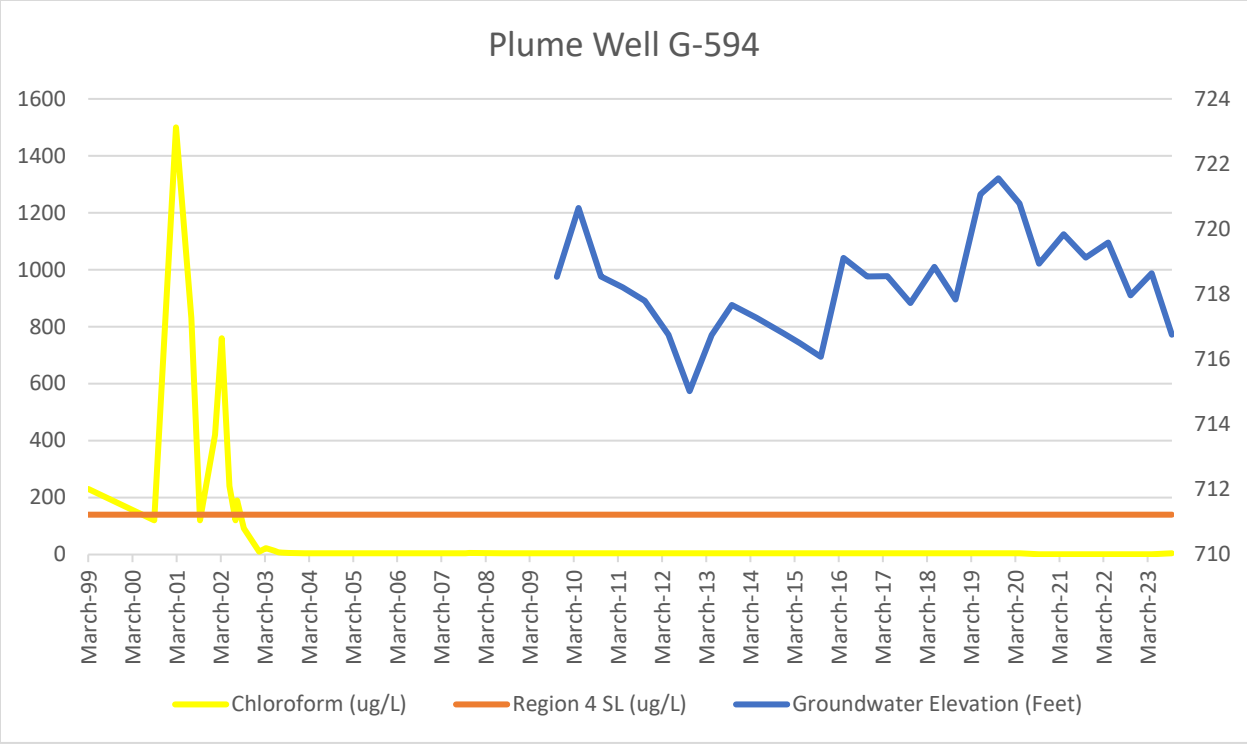

Guard Well G-600
350
300
250
200
150
100
50
0
716
715
714
713
712
711
710
709
708
707
706
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
Benzene (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

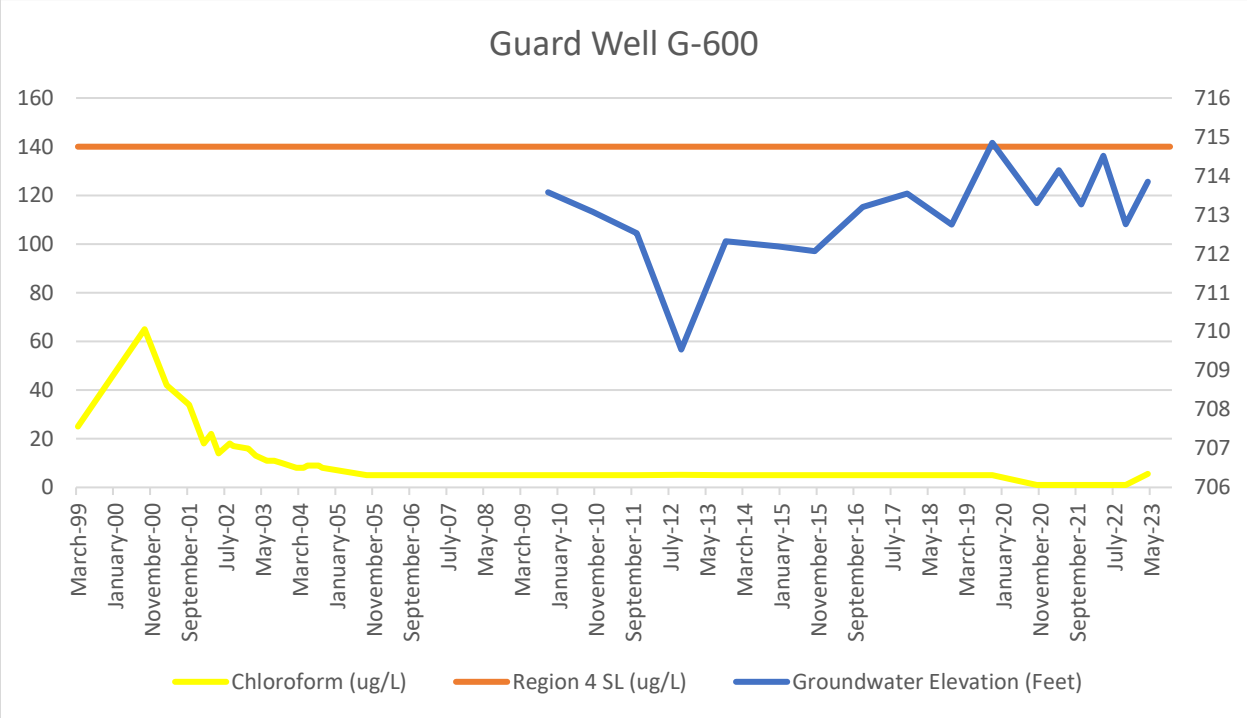

Plume Well G-168
900
800
700
600
500
400
300
200
100
0
740
738
736
734
732
730
728
726
724
722
720
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

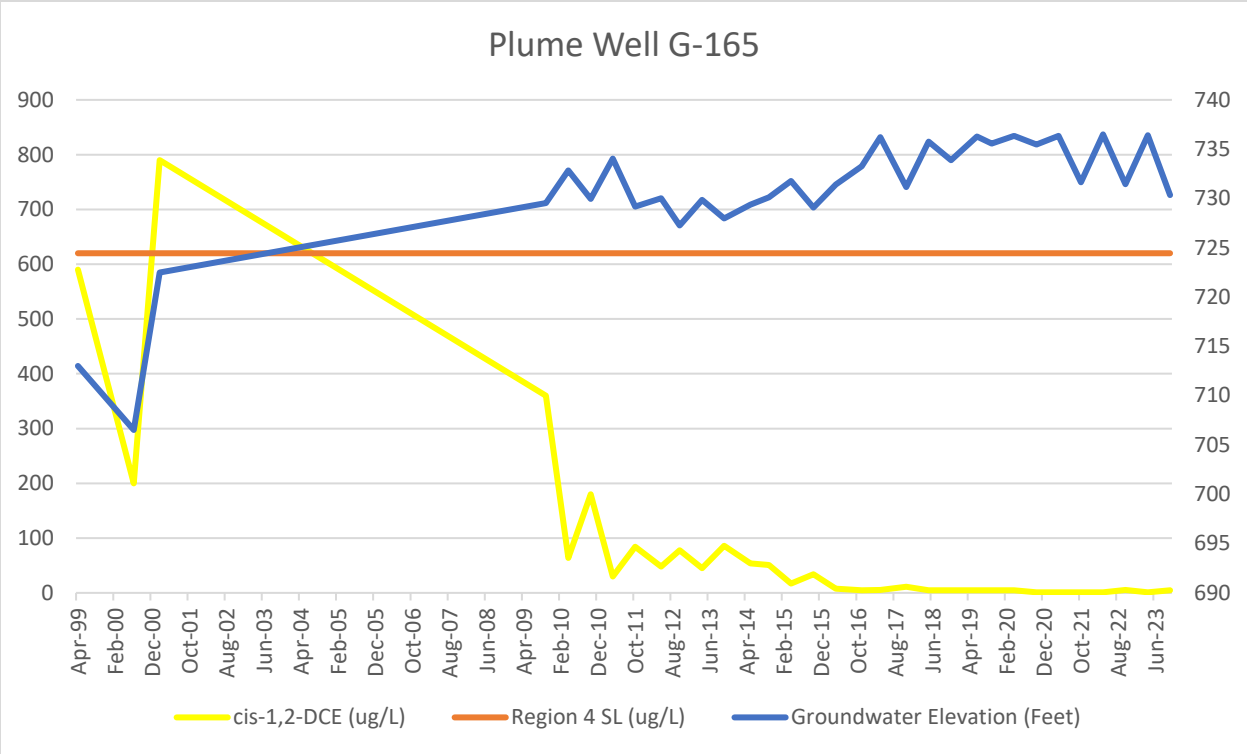

Plume Well G-564
1400
1200
1000
800
600
400
200
0
724
722
720
718
716
714
712
March-99
January-00
November-00
September-01
July-02
May-03
March-04
January-05
November-05
September-06
July-07
May-08
March-09
January-10
November-10
September-11
July-12
May-13
March-14
January-15
November-15
September-16
July-17
May-18
March-19
January-20
November-20
September-21
July-22
May-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

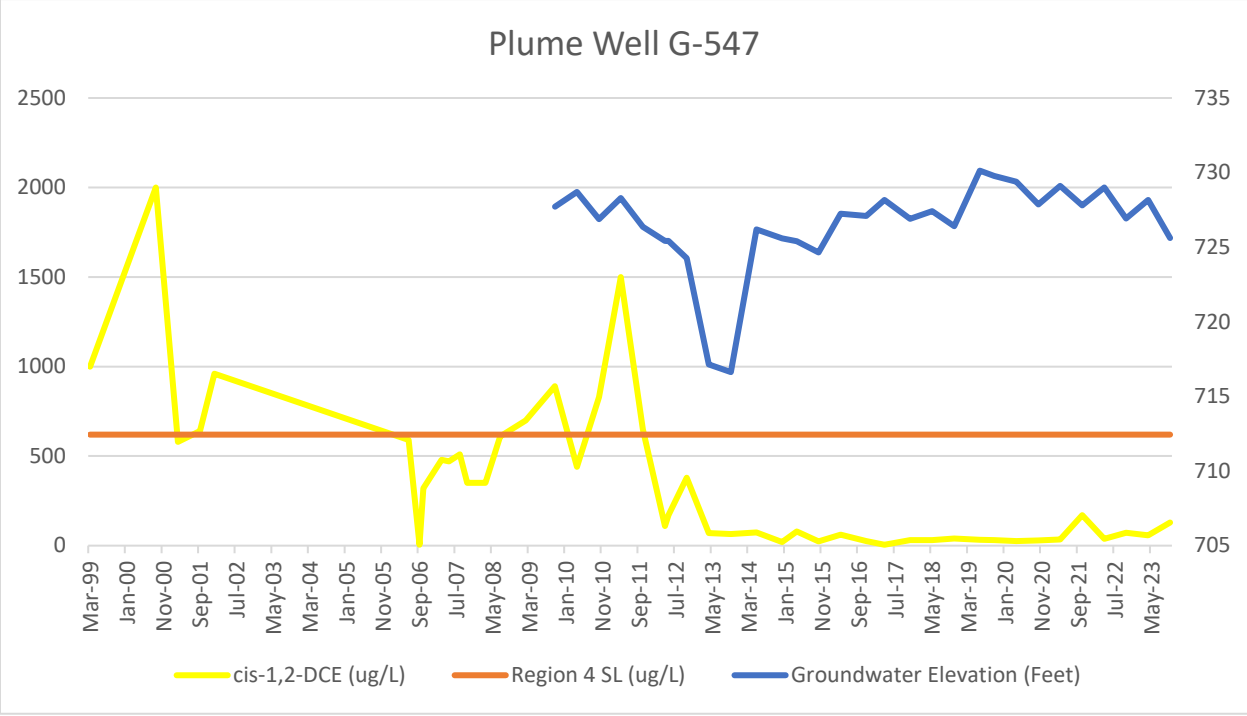

Guard Well G-591
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
718
717
716
715
714
713
712
711
710
709
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Water Elevation (Feet)

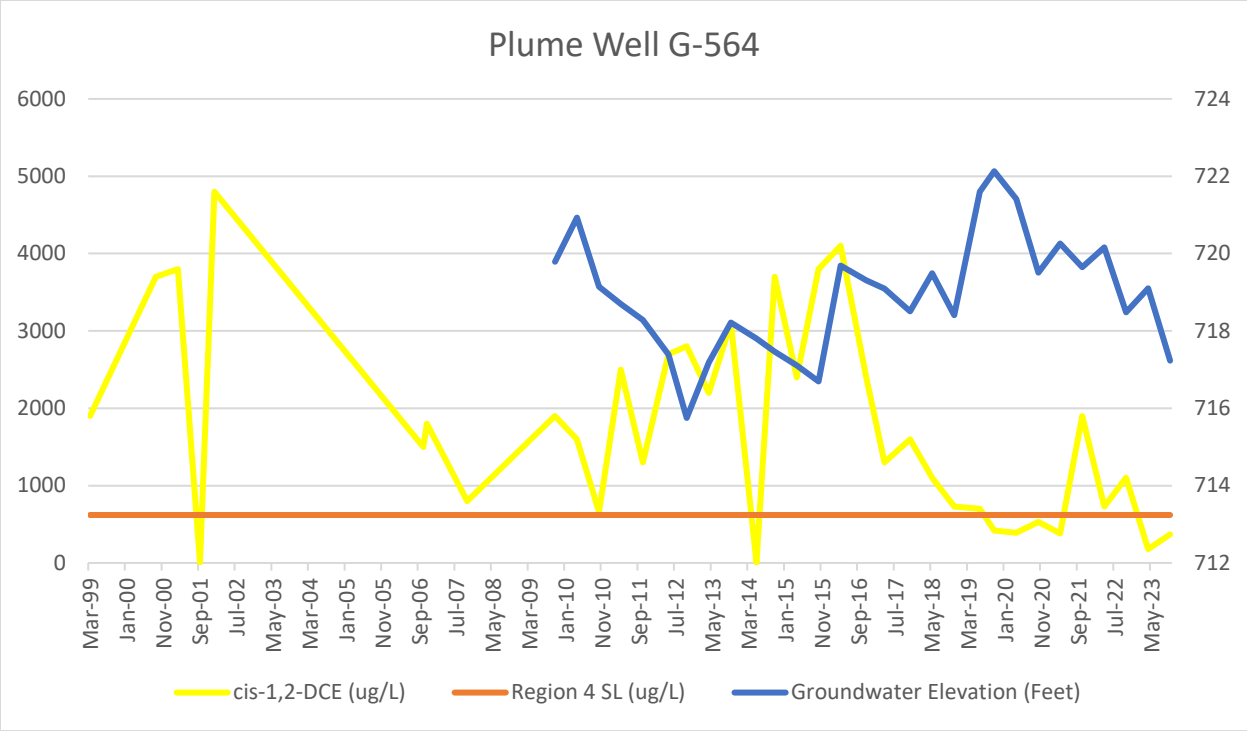

Guard Well G-592
250
200
150
100
50
0
718
717
716
715
714
713
712
711
710
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

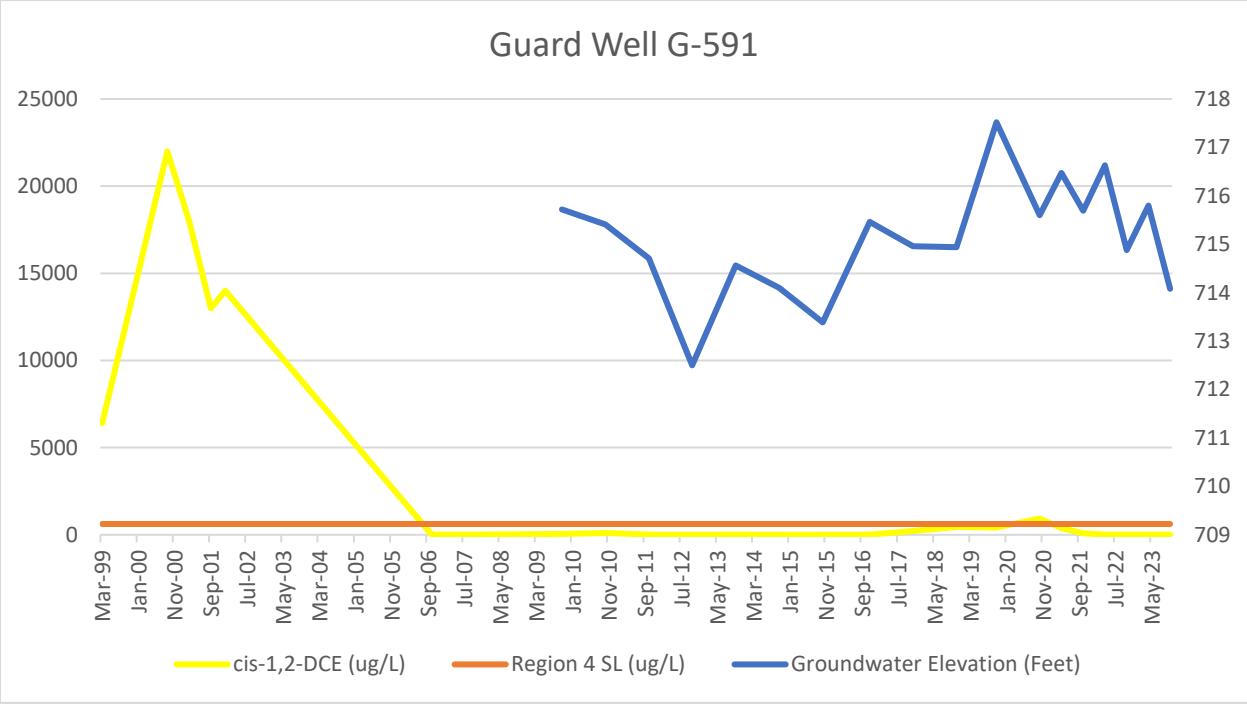

Plume Well G-594
1600
1400
1200
1000
800
600
400
200
0
724
722
720
718
716
714
712
710
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

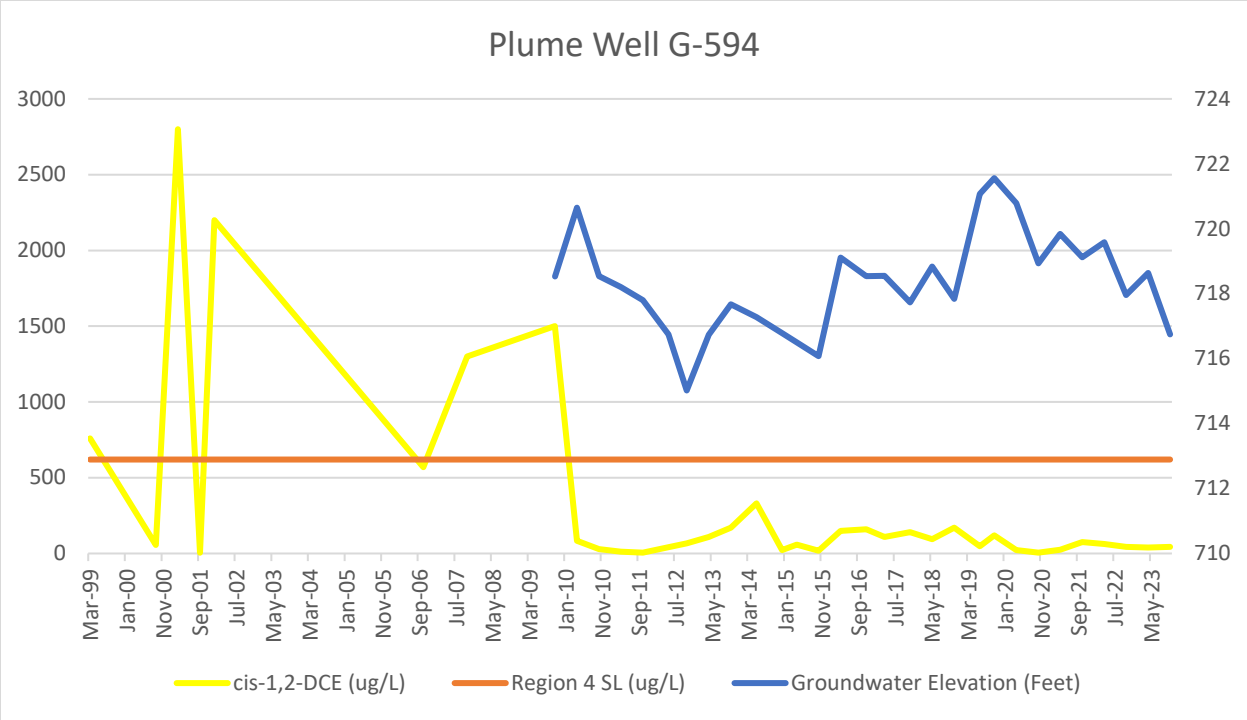

Guard Well G-600
160
140
120
100
80
60
40
20
0
716
715
714
713
712
711
710
709
708
707
706
March-99
January-00
November-00
September-01
July-02
May-03
March-04
January-05
November-05
September-06
July-07
May-08
March-09
January-10
November-10
September-11
July-12
May-13
March-14
January-15
November-15
September-16
July-17
May-18
March-19
January-20
November-20
September-21
July-22
May-23
Chloroform (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

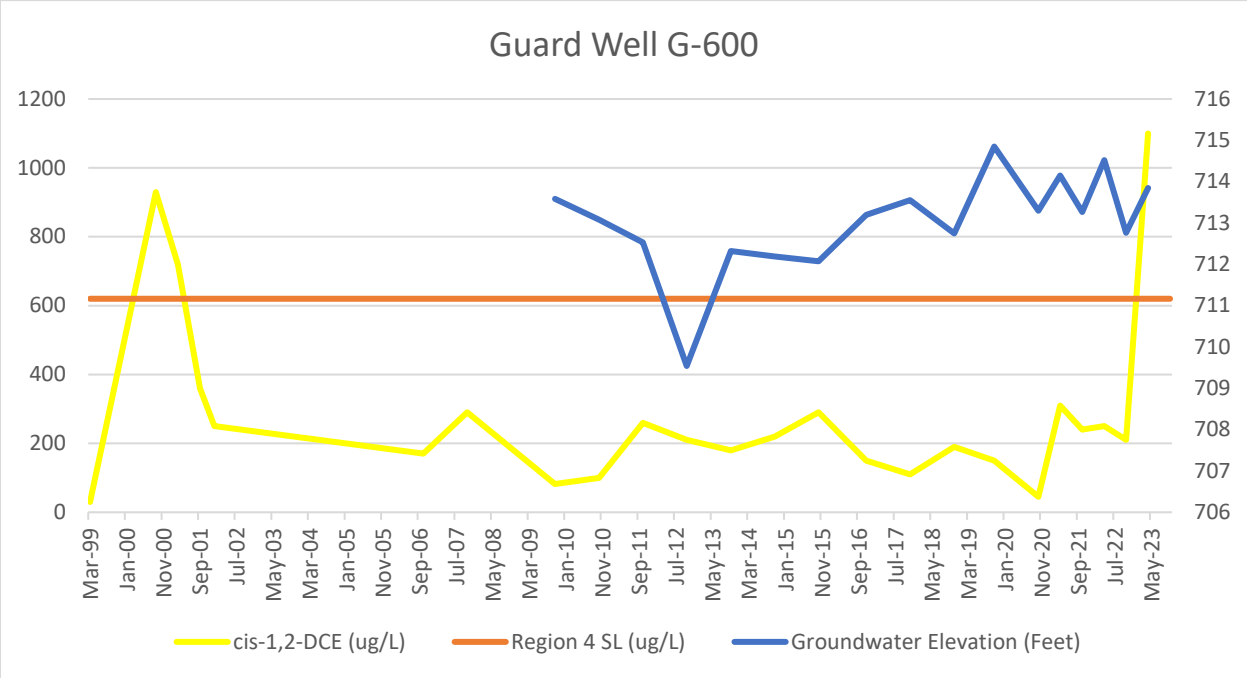

Plume Well G-165
900
800
700
600
500
400
300
200
100
0
740
735
730
725
720
715
710
705
700
695
690
Apr-99
Feb-00
Dec-00
Oct-01
Aug-02
Jun-03
Apr-04
Feb-05
Dec-05
Oct-06
Aug-07
Jun-08
Apr-09
Feb-10
Dec-10
Oct-11
Aug-12
Jun-13
Apr-14
Feb-15
Dec-15
Oct-16
Aug-17
Jun-18
Apr-19
Feb-20
Dec-20
Oct-21
Aug-22
Jun-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

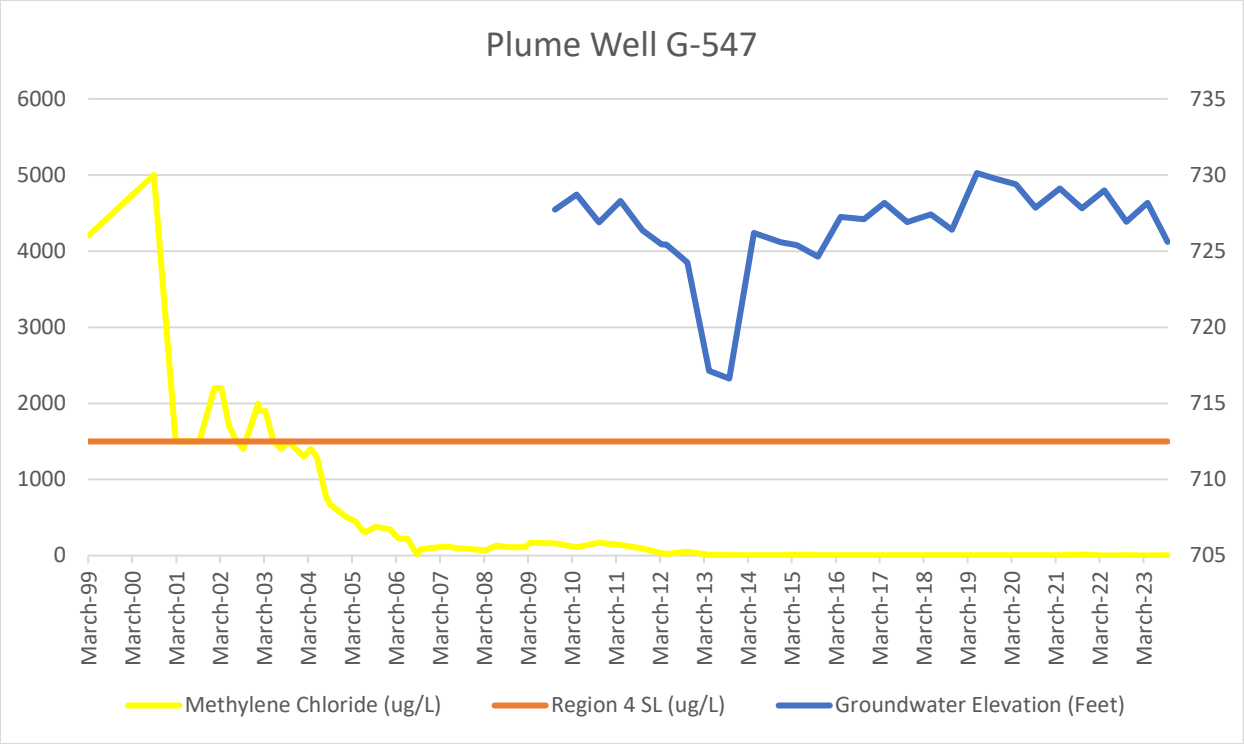

Plume Well G-547
2500
2000
1500
1000
500
0
735
730
725
720
715
710
705
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

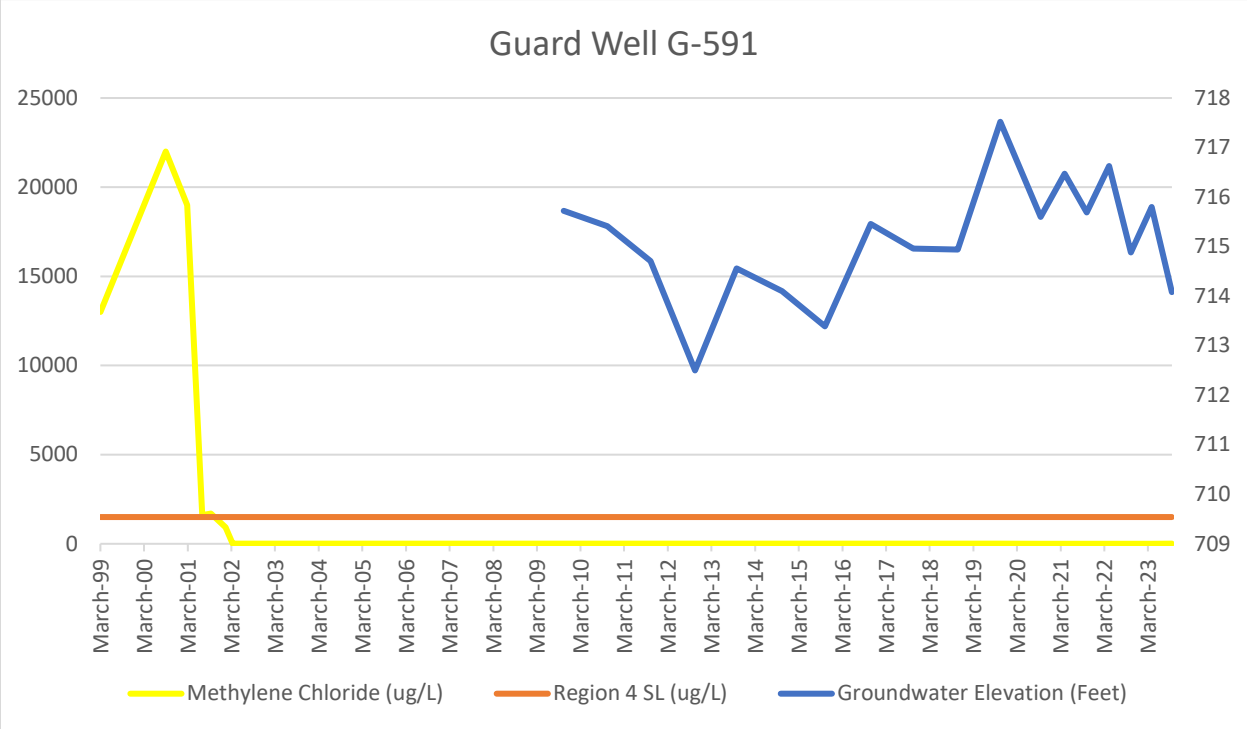

Plume Well G-564
6000
5000
4000
3000
2000
1000
0
724
722
720
718
716
714
712
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

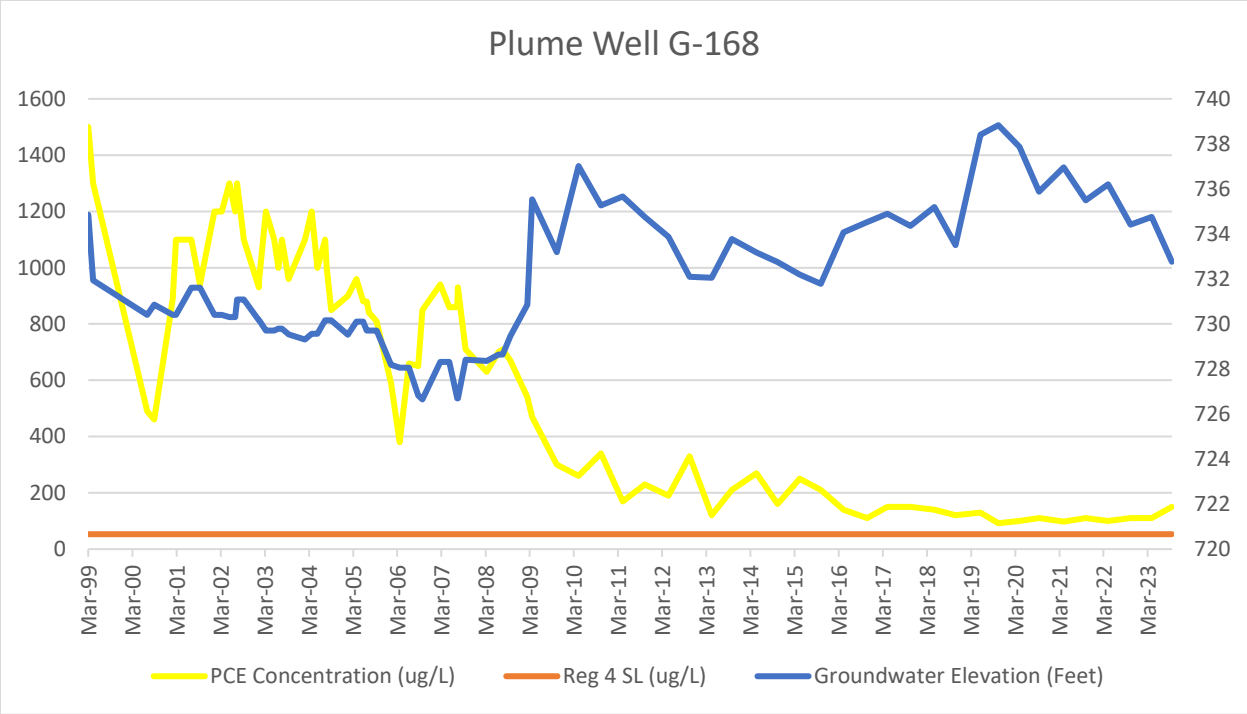

Guard Well G-591
25000
20000
15000
10000
5000
0
718
717
716
715
714
713
712
711
710
709
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

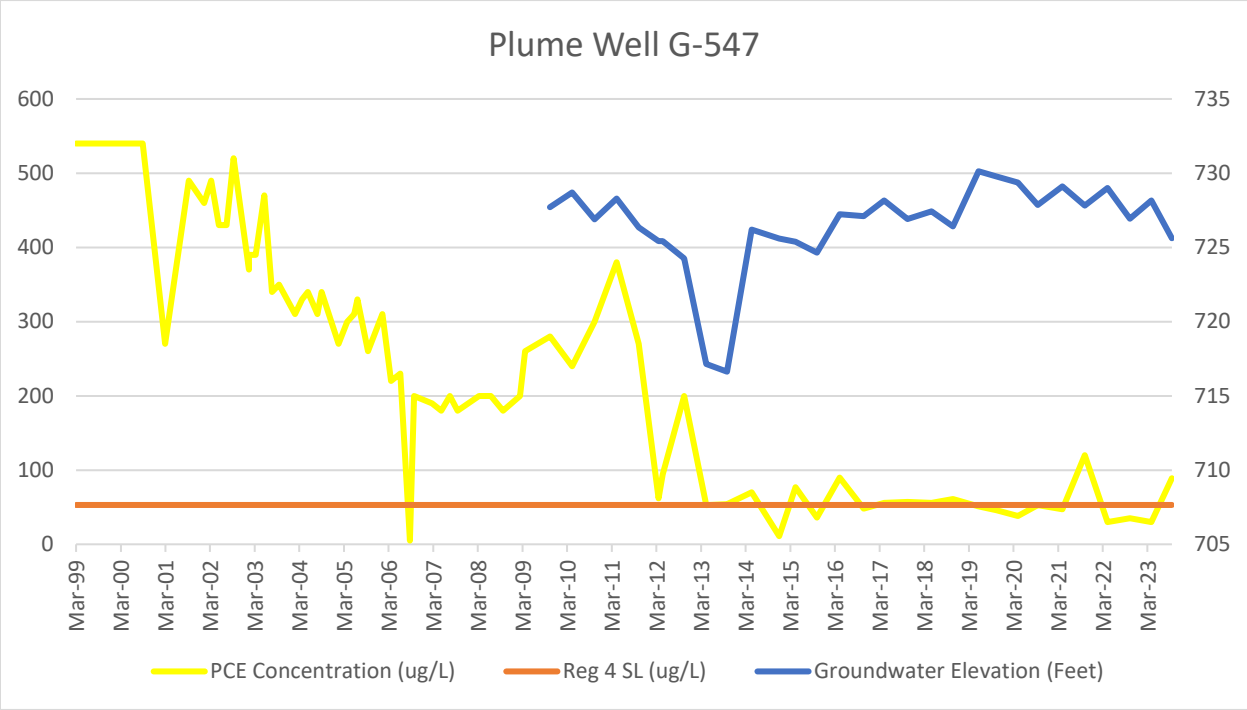

Plume Well G-594
3000
2500
2000
1500
1000
500
0
724
722
720
718
716
714
712
710
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

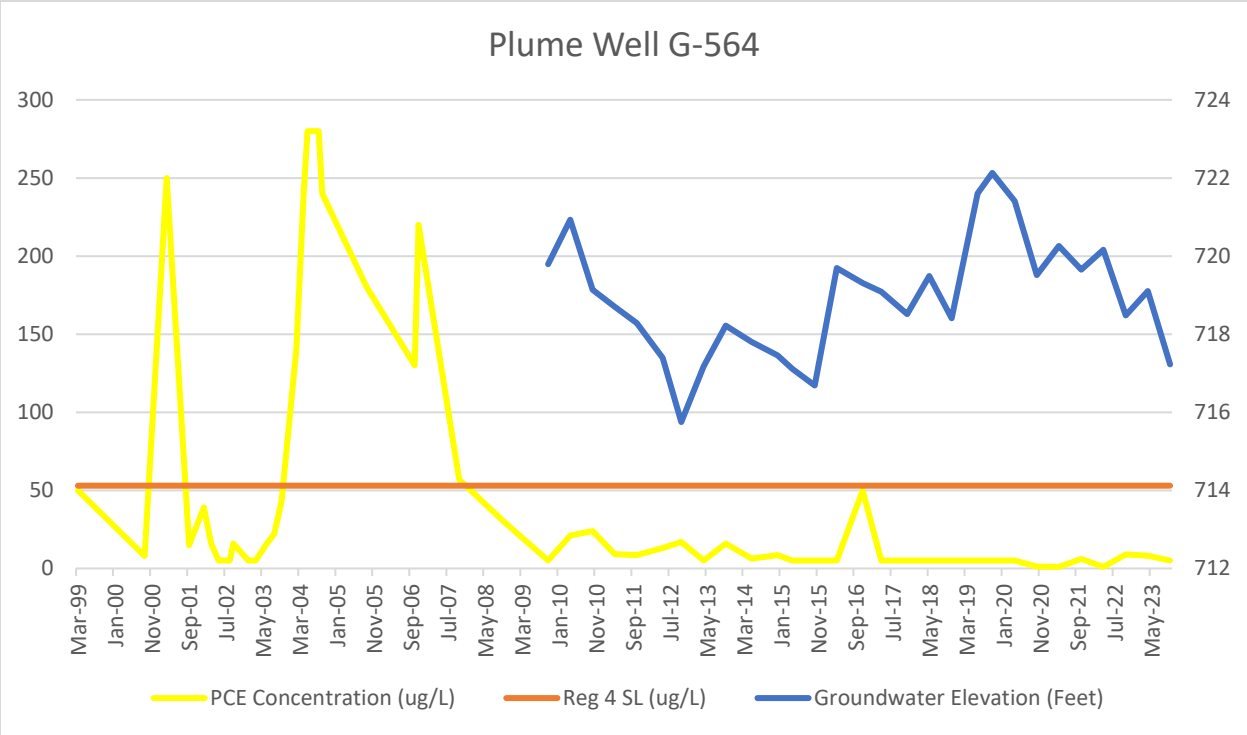

Guard Well G-600
1200
1000
800
600
400
200
0
716
715
714
713
712
711
710
709
708
707
706
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
cis-1,2-DCE (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

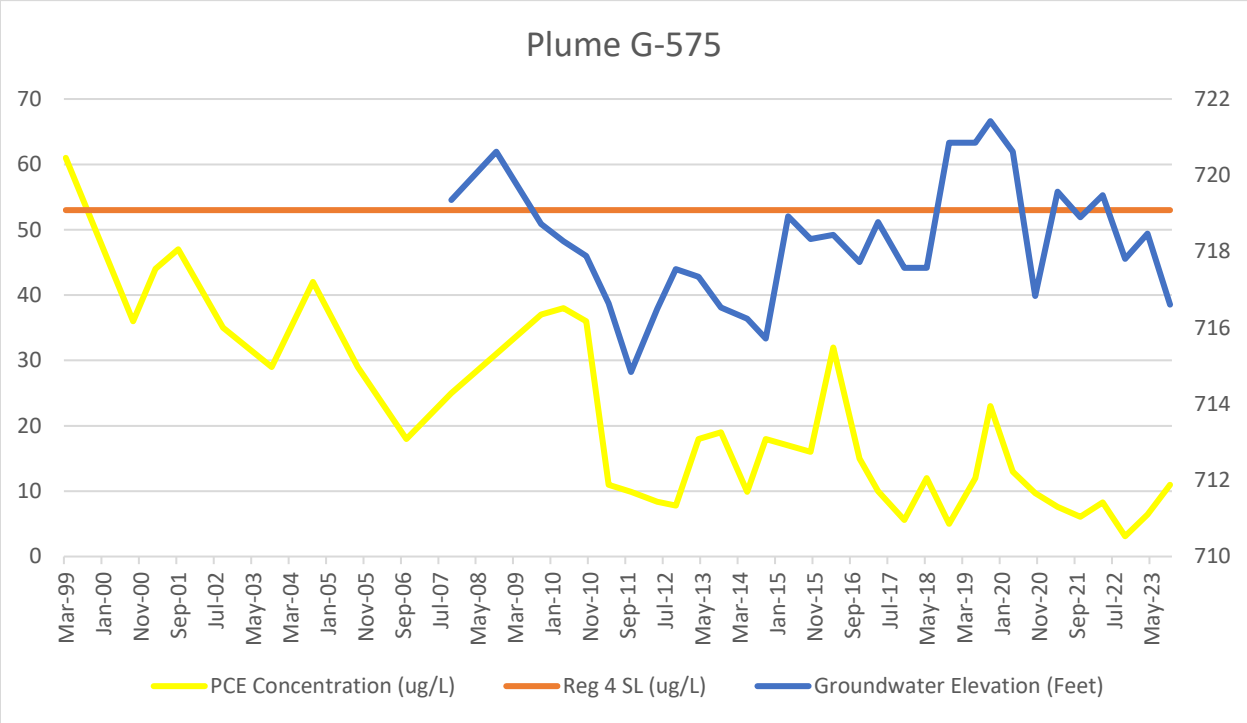

Plume Well G-547
6000
5000
4000
3000
2000
1000
0
735
730
725
720
715
710
705
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Methylene Chloride (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

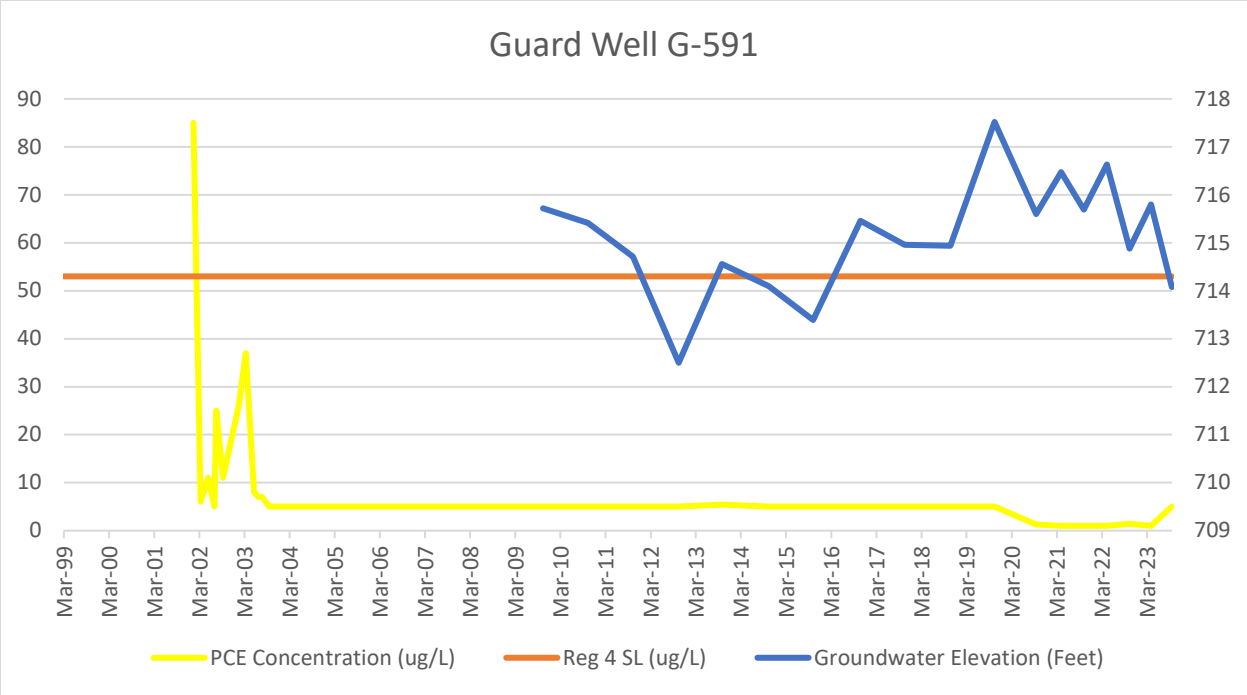

Guard Well G-591
25000
20000
15000
10000
5000
0
718
717
716
715
714
713
712
711
710
709
March-99
March-00
March-01
March-02
March-03
March-04
March-05
March-06
March-07
March-08
March-09
March-10
March-11
March-12
March-13
March-14
March-15
March-16
March-17
March-18
March-19
March-20
March-21
March-22
March-23
Methylene Chloride (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

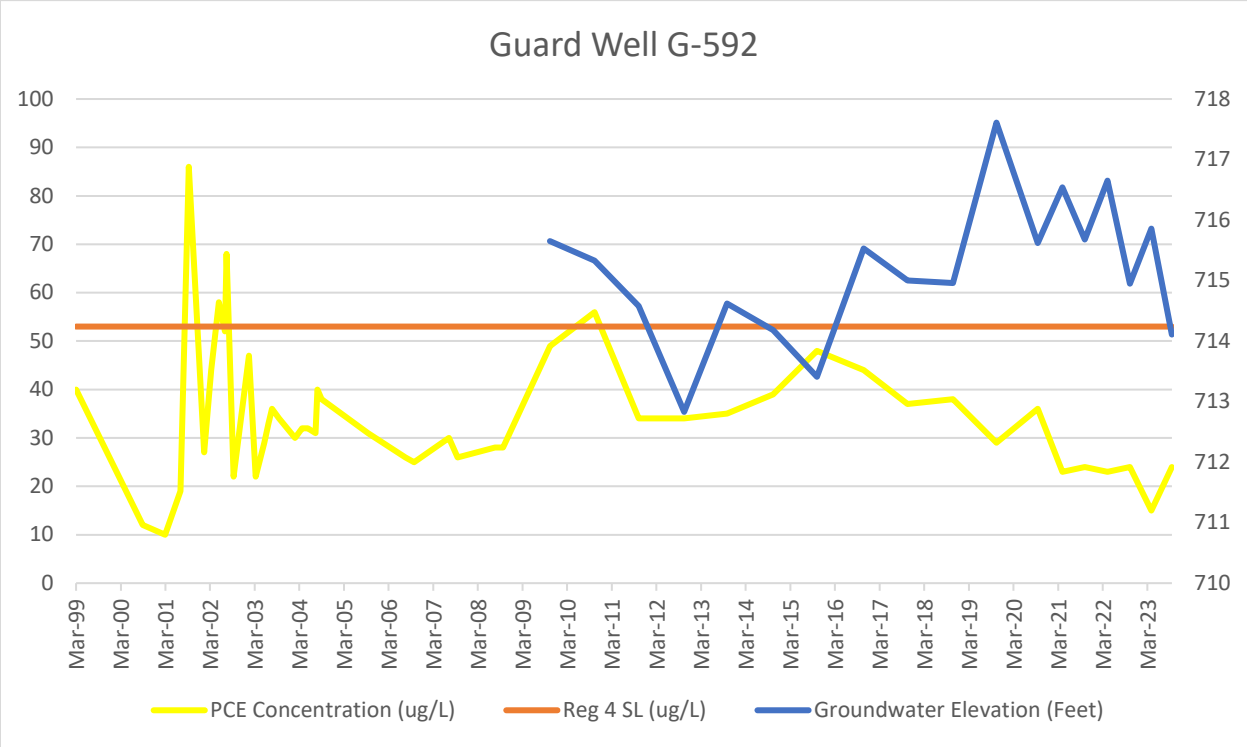

Plume Well G-168
1600
1400
1200
1000
800
600
400
200
0
740
738
736
734
732
730
728
726
724
722
720
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

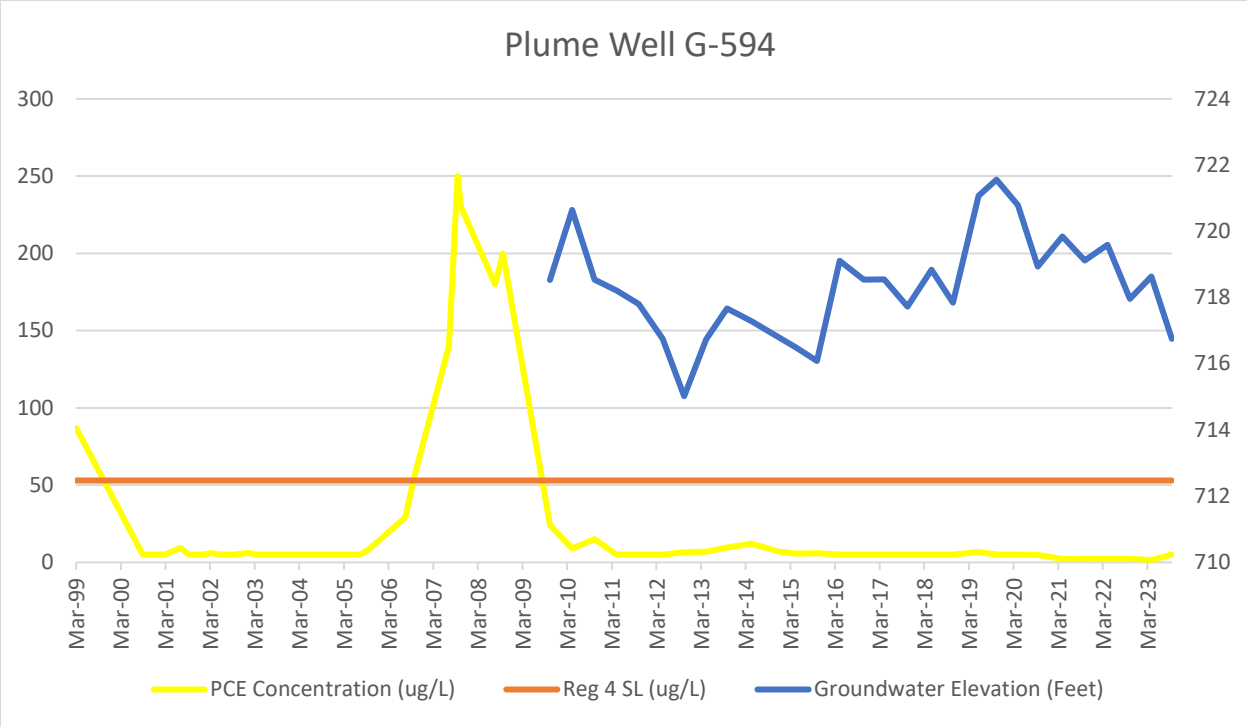

Plume Well G-547
600
500
400
300
200
100
0
735
730
725
720
715
710
705
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

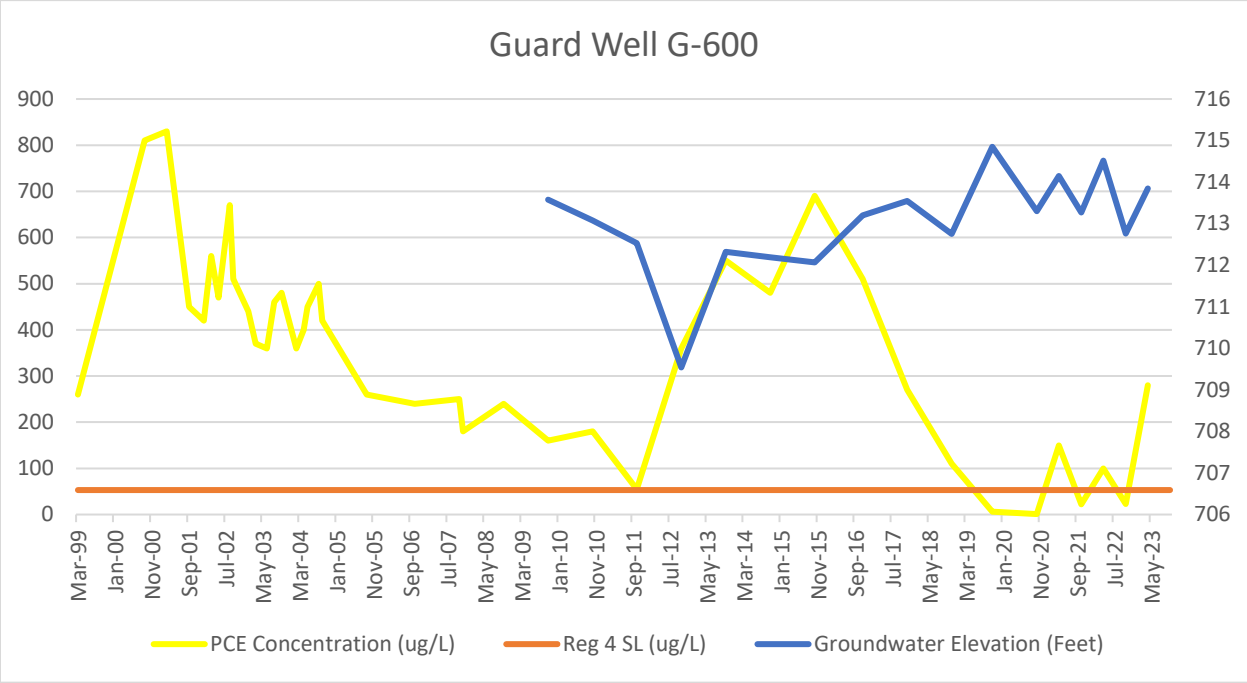

Plume Well G-564
300
250
200
150
100
50
0
724
722
720
718
716
714
712
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

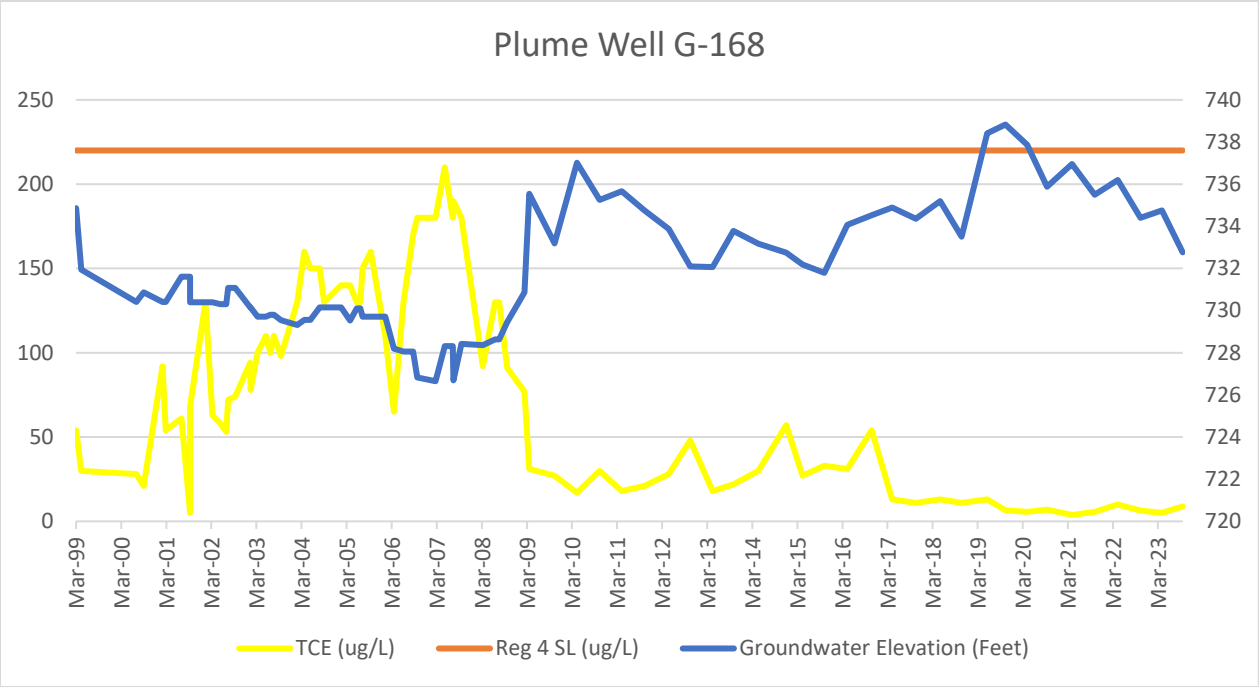

Plume G-575
70
60
50
40
30
20
10
0
722
720
718
716
714
712
710
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

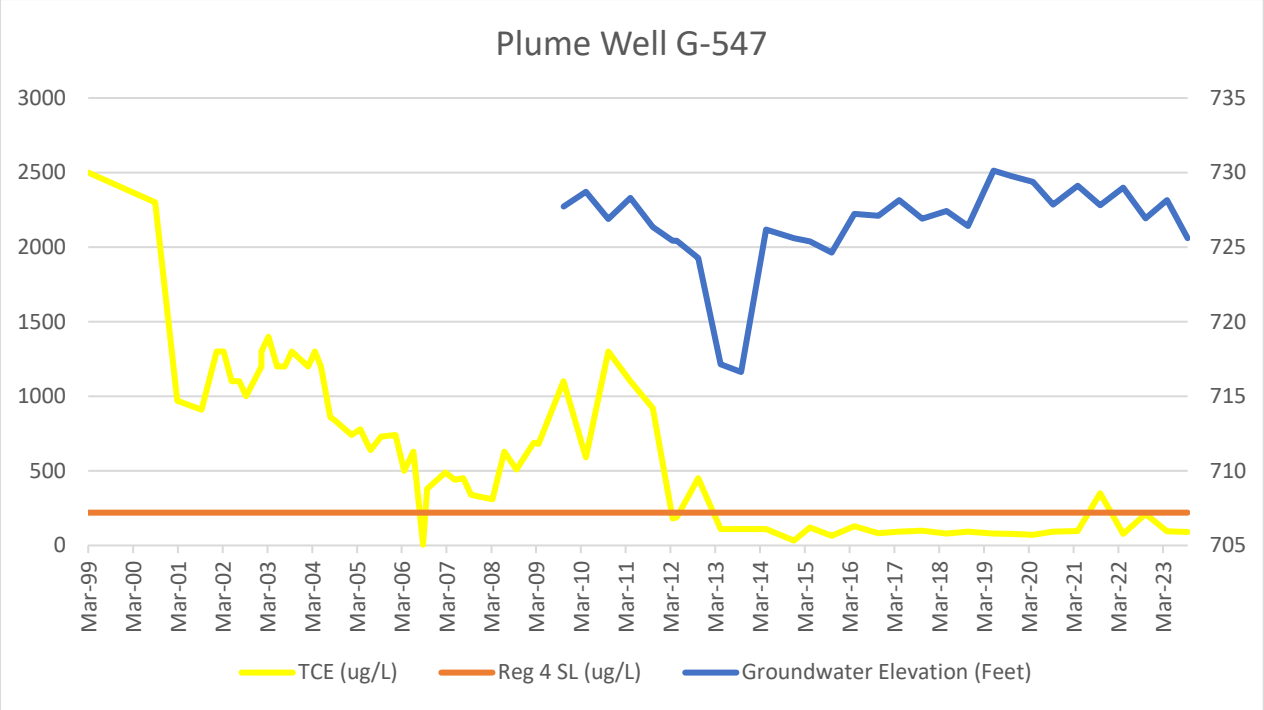

Guard Well G-591
90
80
70
60
50
40
30
20
10
0
718
717
716
715
714
713
712
711
710
709
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

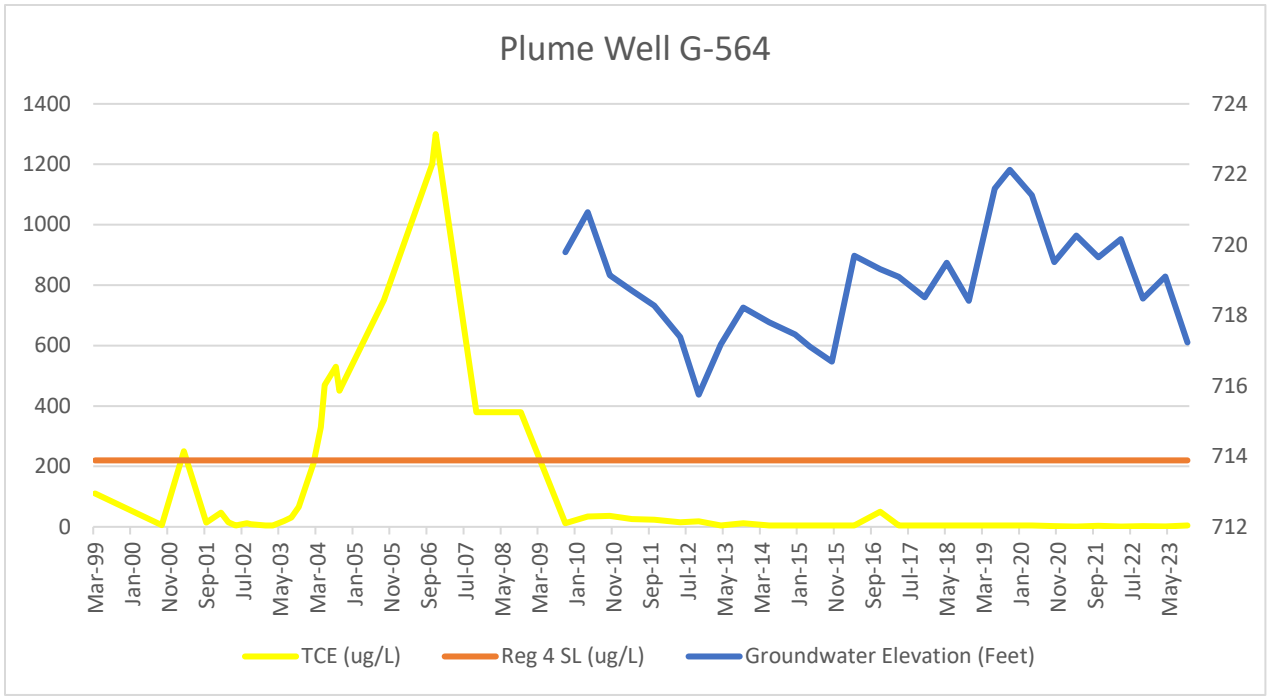

Guard Well G-592
100
90
80
70
60
50
40
30
20
10
0
718
717
716
715
714
713
712
711
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

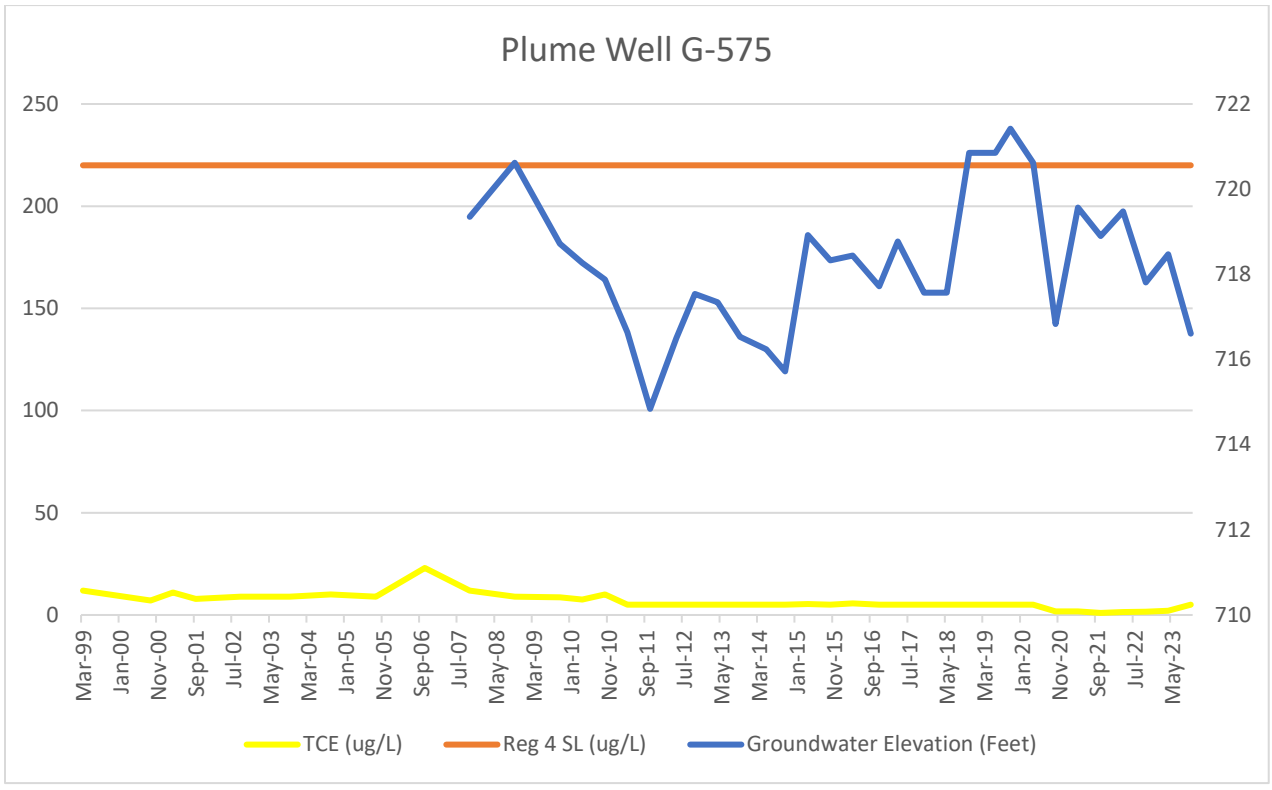

Plume Well G-594
300
250
200
150
100
50
0
724
722
720
718
716
714
712
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

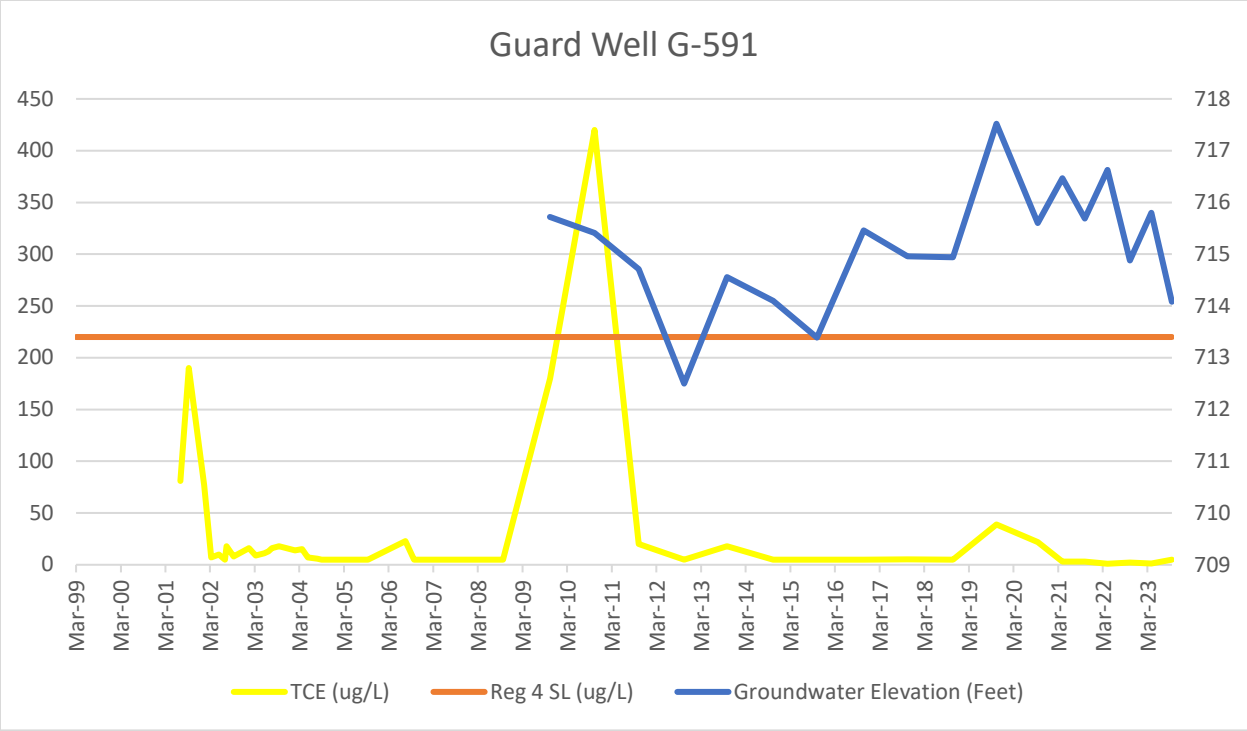

Guard Well G-600
900
800
700
600
500
400
300
200
100
0
716
715
714
713
712
711
710
709
708
707
706
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
PCE Concentration (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

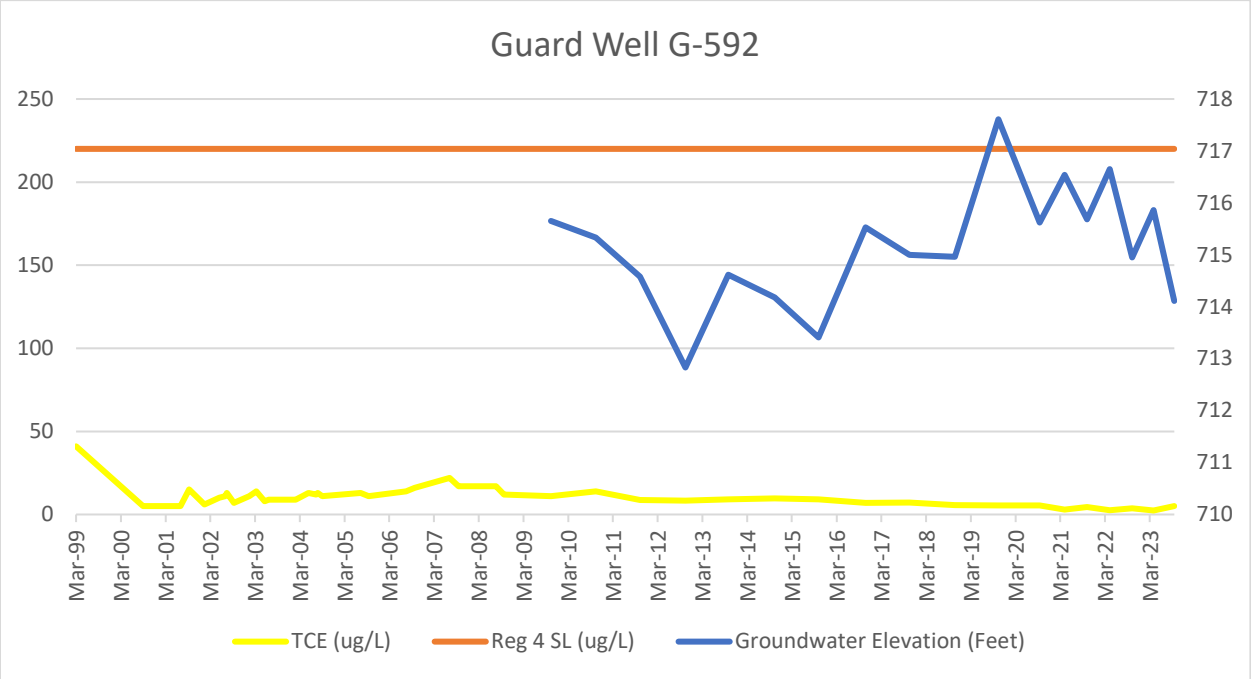

Plume Well G-168
250
200
150
100
50
0
740
738
736
734
732
730
728
726
724
722
720
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

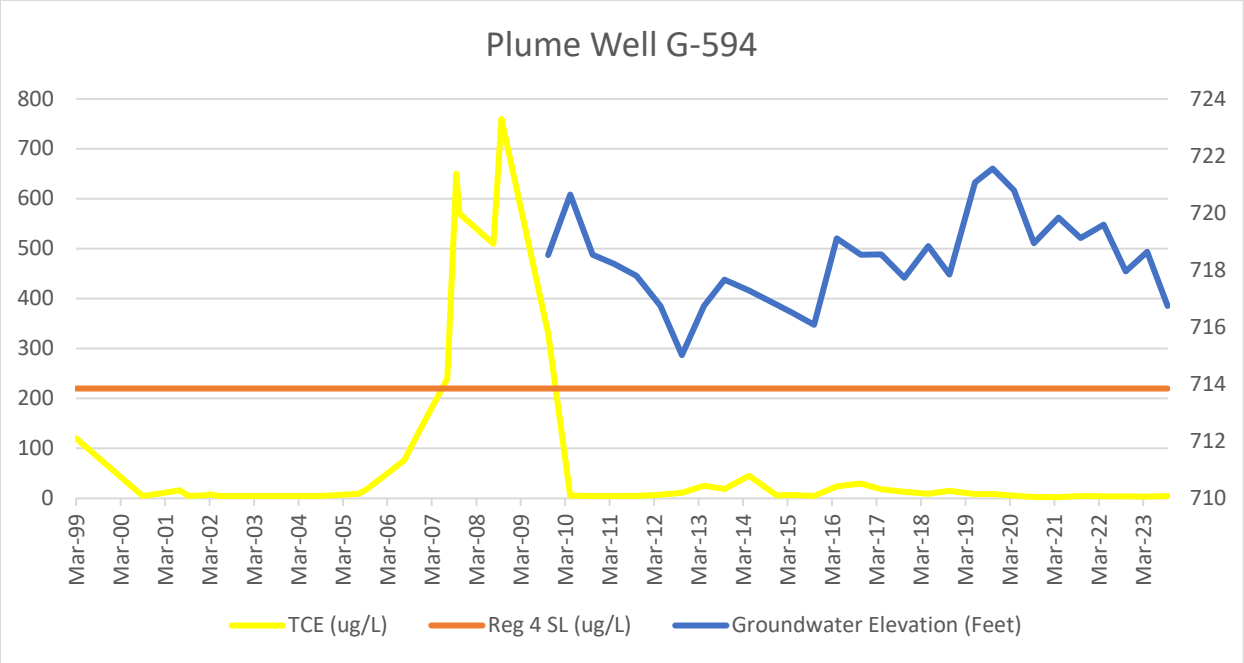

Plume Well G-547
3000
2500
2000
1500
1000
500
0
735
730
725
720
715
710
705
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

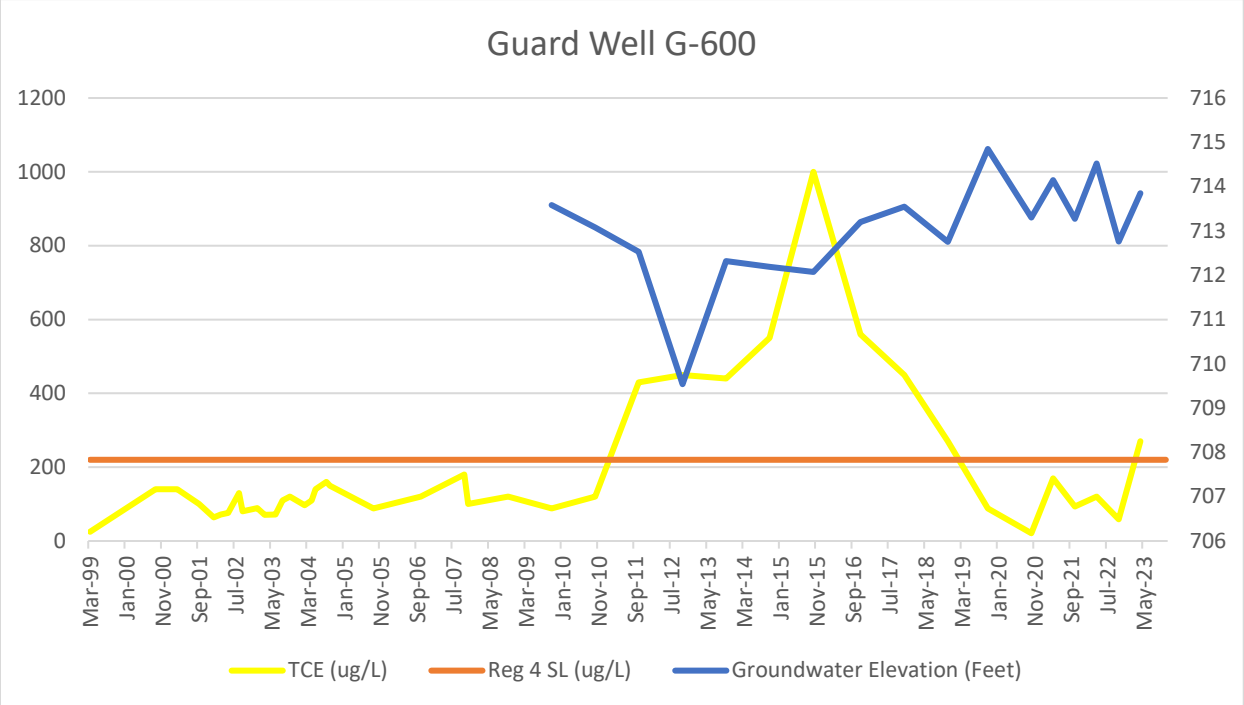

Plume Well G-564
1400
1200
1000
800
600
400
200
0
724
722
720
718
716
714
712
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

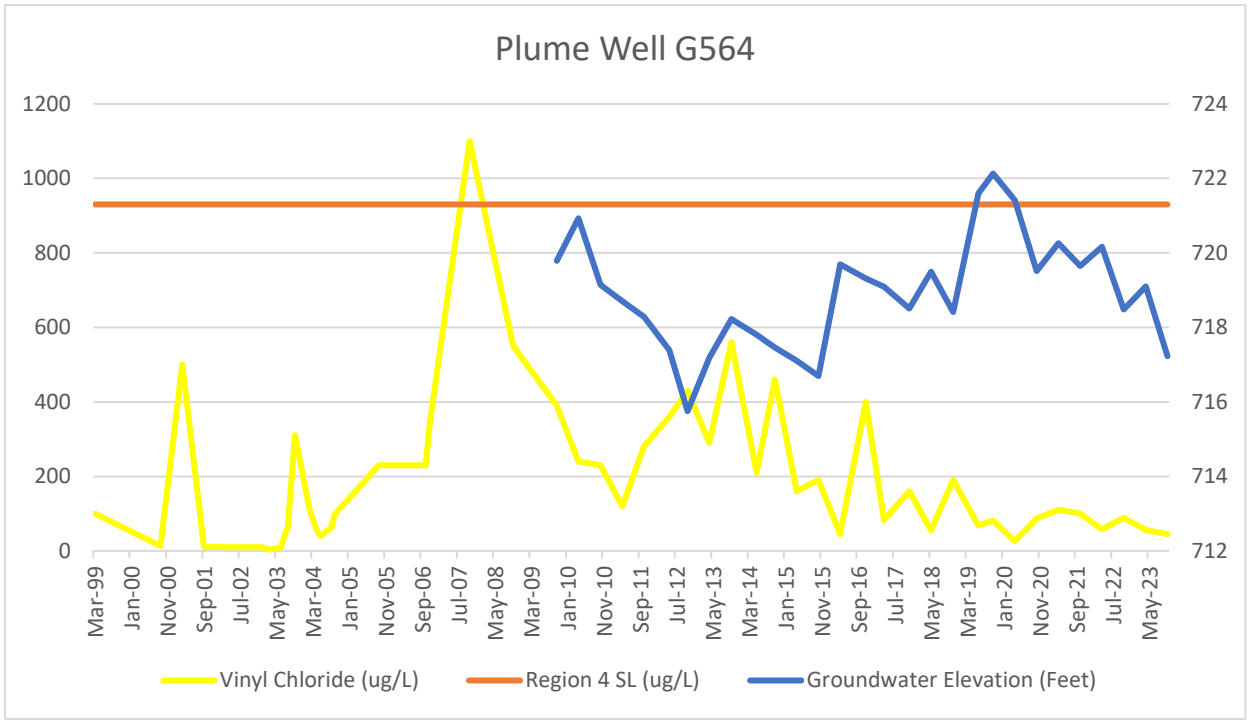

Plume Well G-575
250
200
150
100
50
0
722
720
718
716
714
712
710
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

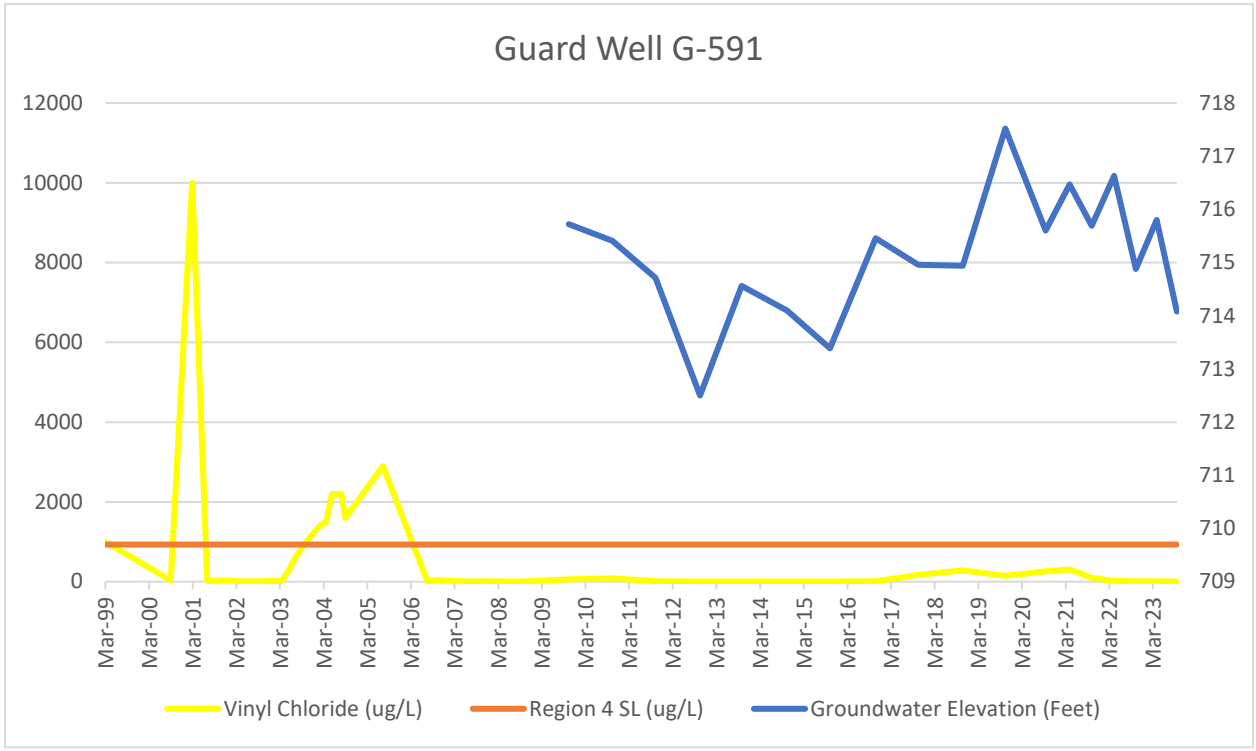

Guard Well G-591
450
400
350
300
250
200
150
100
50
0
718
717
716
715
714
713
712
711
710
709
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)


Guard Well G-592
250
200
150
100
50
0
718
717
716
715
714
713
712
711
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)


Plume Well G-594
800
700
600
500
400
300
200
100
0
724
722
720
718
716
714
712
710
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

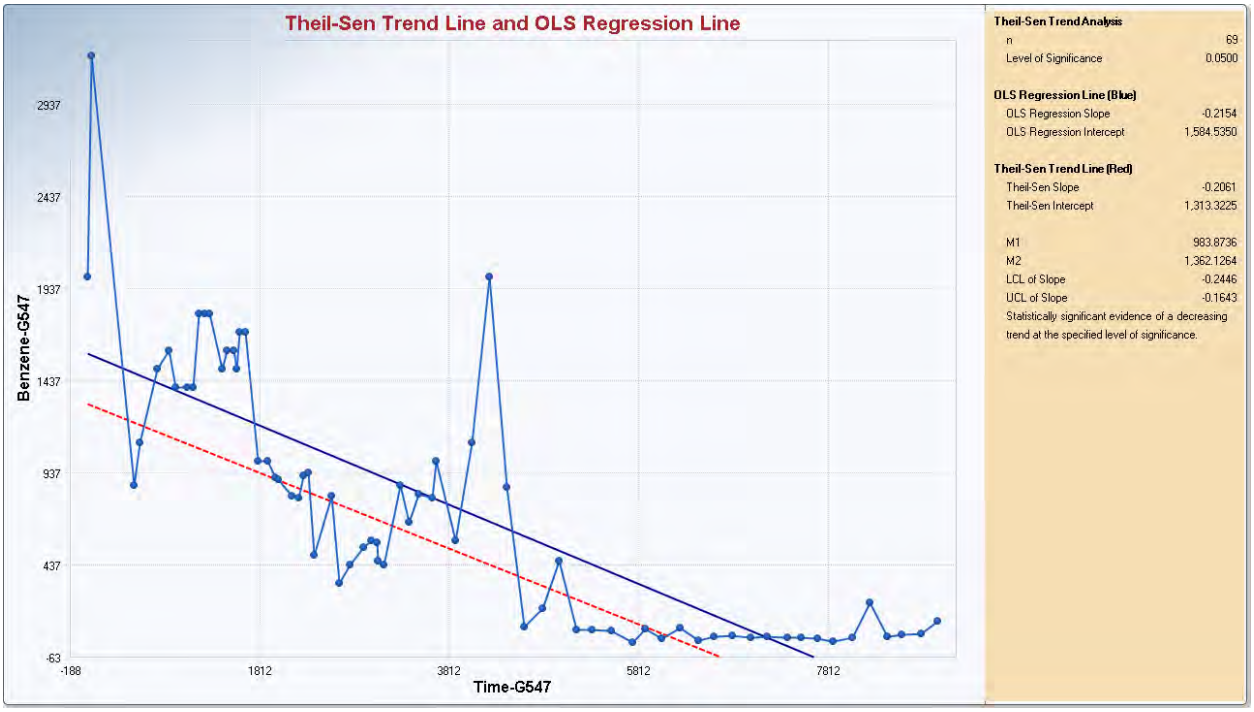

Guard Well G-600
1200
1000
800
600
400
200
0
716
715
714
713
712
711
710
709
708
707
706
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
TCE (ug/L)
Reg 4 SL (ug/L)
Groundwater Elevation (Feet)

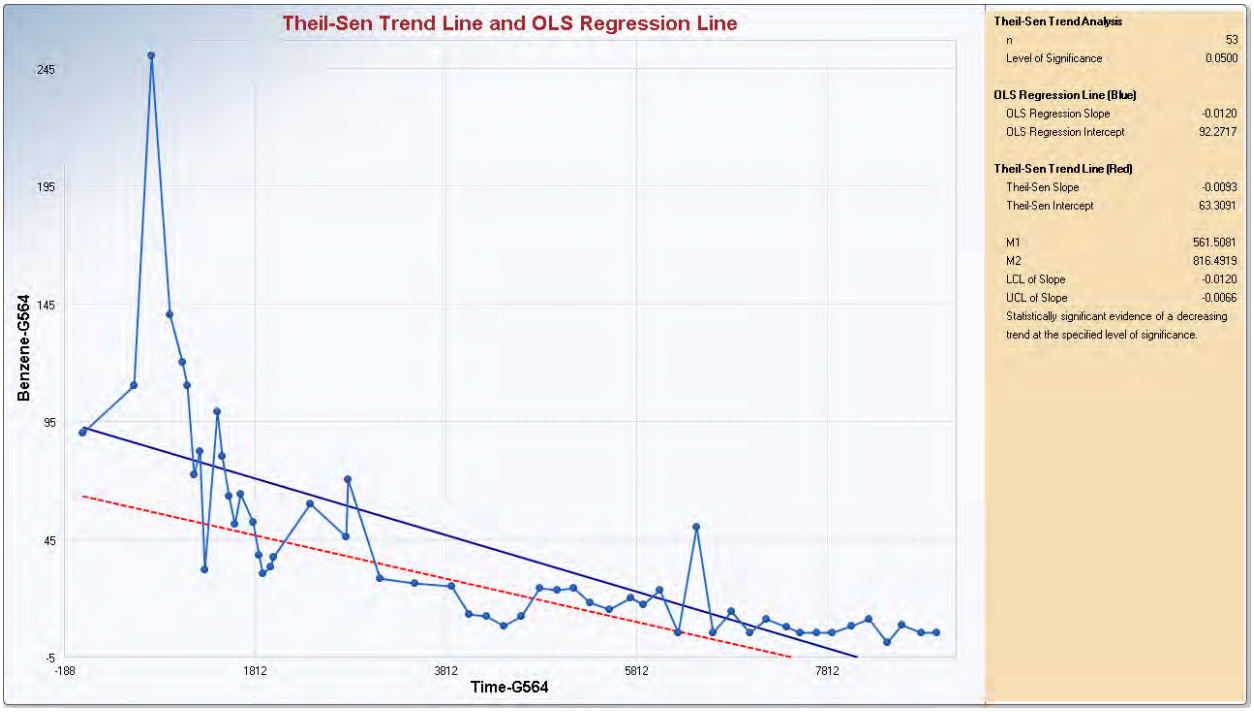

Plume Well G564
1200
1000
800
600
400
200
0
724
722
720
718
716
714
712
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Jul-17
May-18
Mar-19
Jan-20
Nov-20
Sep-21
Jul-22
May-23
Vinyl Chloride (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

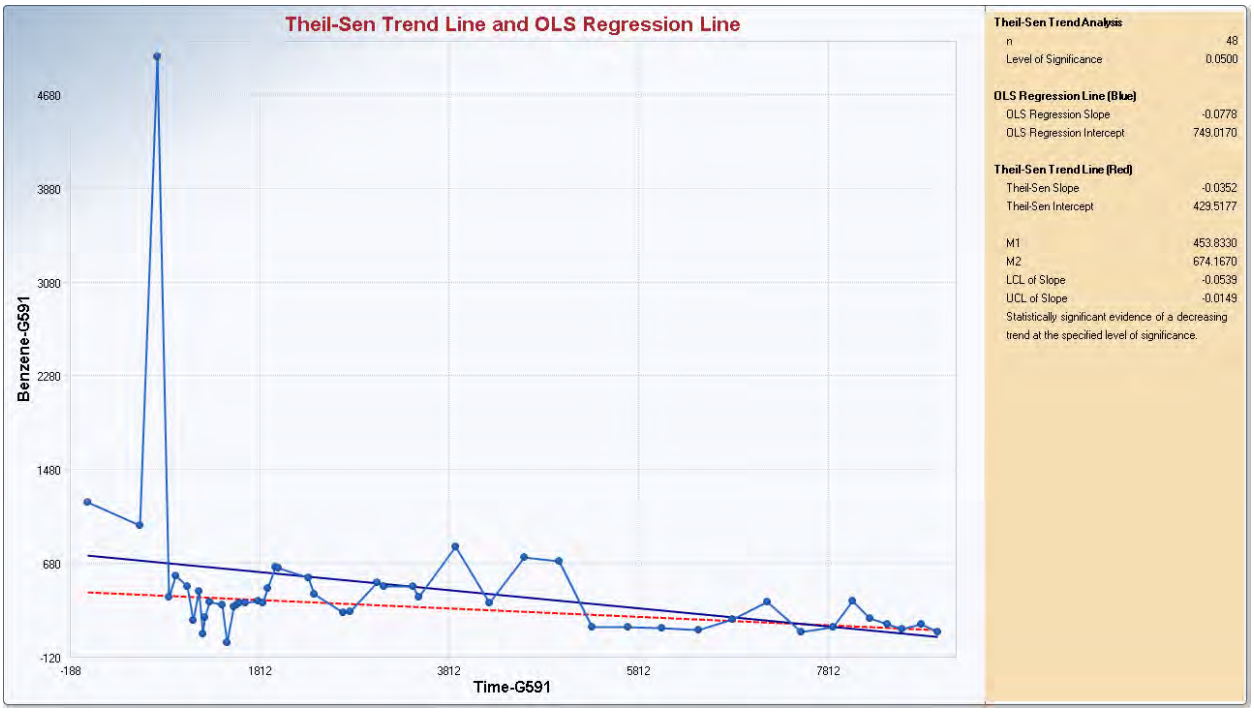

Guard Well G-591
12000
10000
8000
6000
4000
2000
0
718
717
716
715
714
713
712
711
710
709
Mar-99
Mar-00
Mar-01
Mar-02
Mar-03
Mar-04
Mar-05
Mar-06
Mar-07
Mar-08
Mar-09
Mar-10
Mar-11
Mar-12
Mar-13
Mar-14
Mar-15
Mar-16
Mar-17
Mar-18
Mar-19
Mar-20
Mar-21
Mar-22
Mar-23
Vinyl Chloride (ug/L)
Region 4 SL (ug/L)
Groundwater Elevation (Feet)

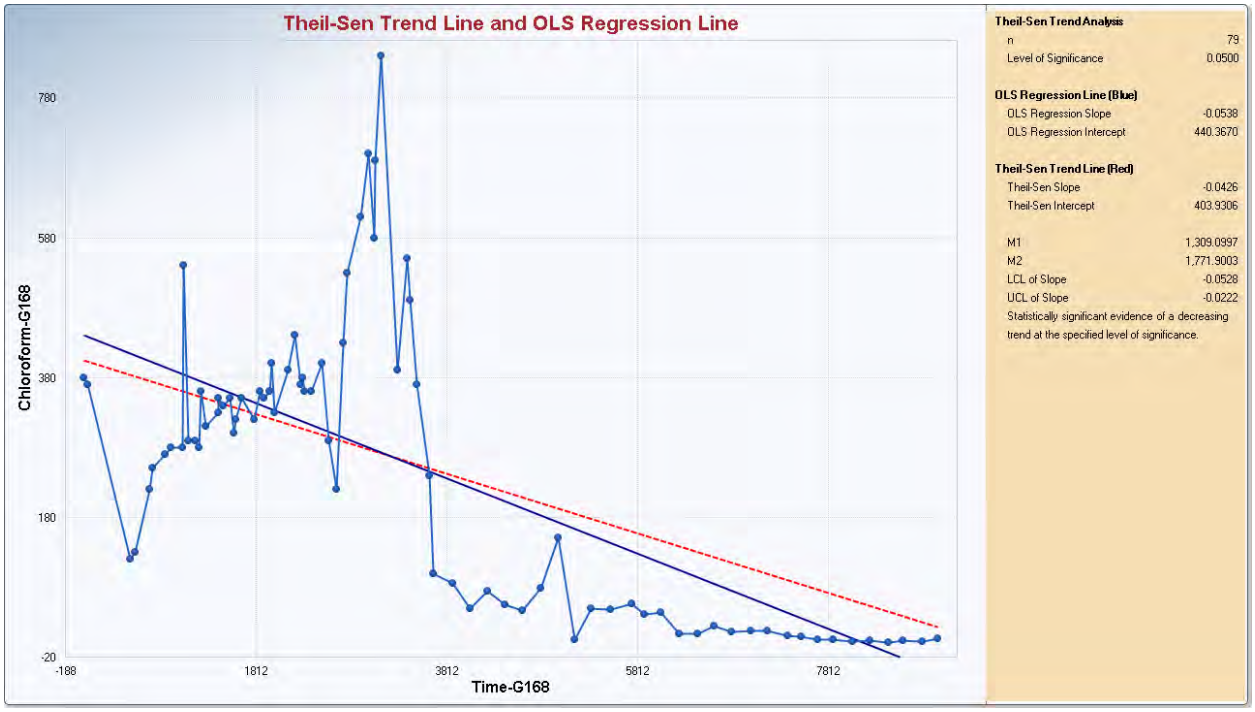
APPENDIX B.2

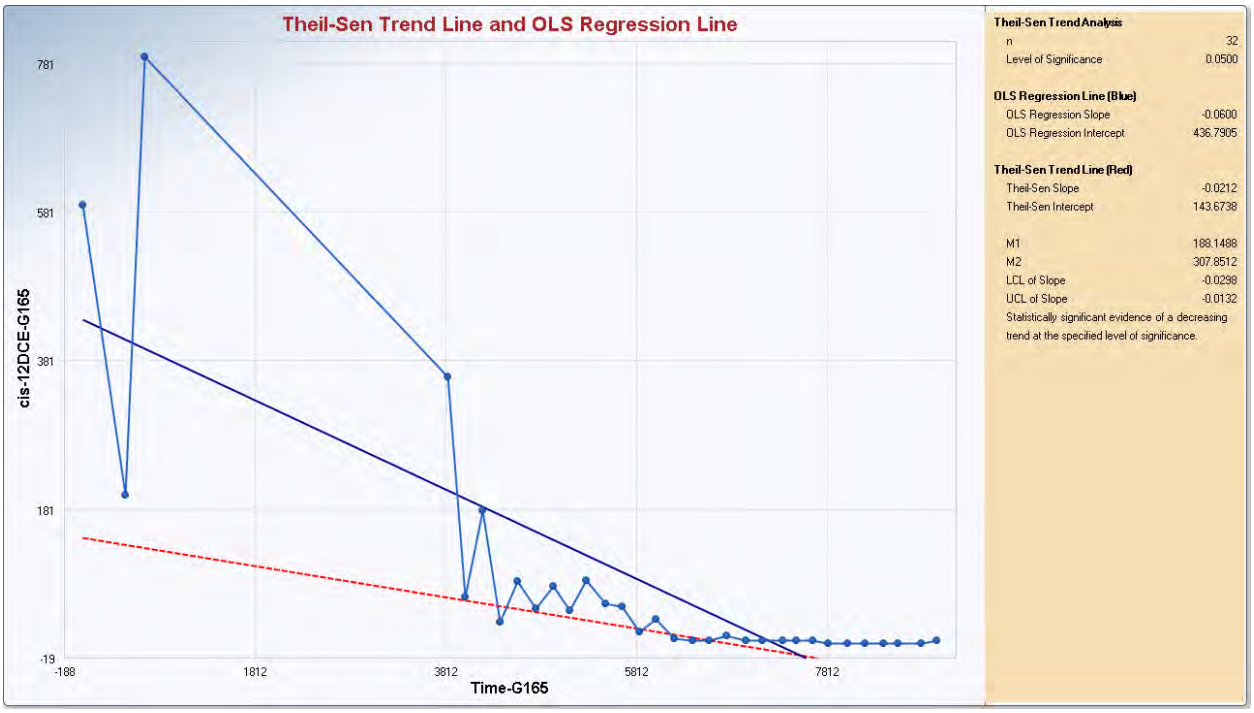
Trend Analysis (ProUCL)

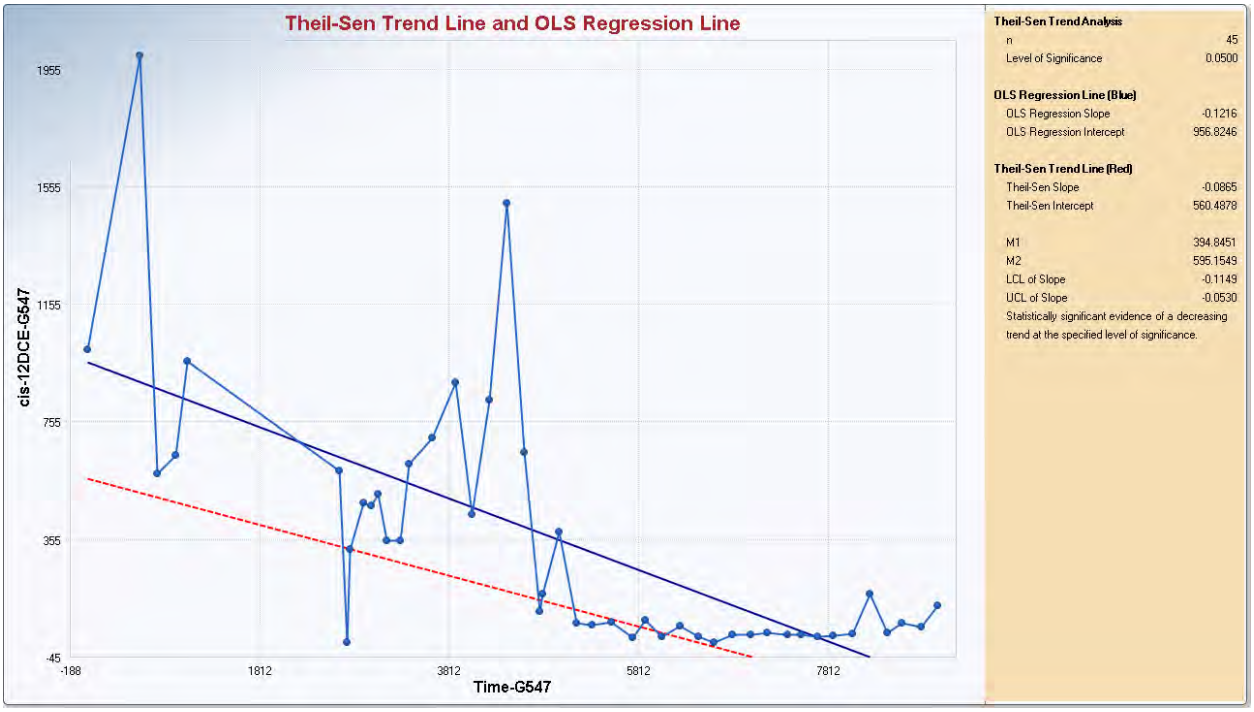

Theil-Sen Trend Line and OLS Regression Line
Benzene-G547
Time-G547
2937
2437
1937
1437
937
437
-63
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 69
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.2154
OLS Regression Intercept 1,584.5350
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.2061
Theil-Sen Intercept 1,313.3225
M1 983.8736
M2 1,362.1264
LCL of Slope -0.2446
UCL of Slope -0.1643
Statistically significant evidence of a decreasing trend at the specified level of significance.

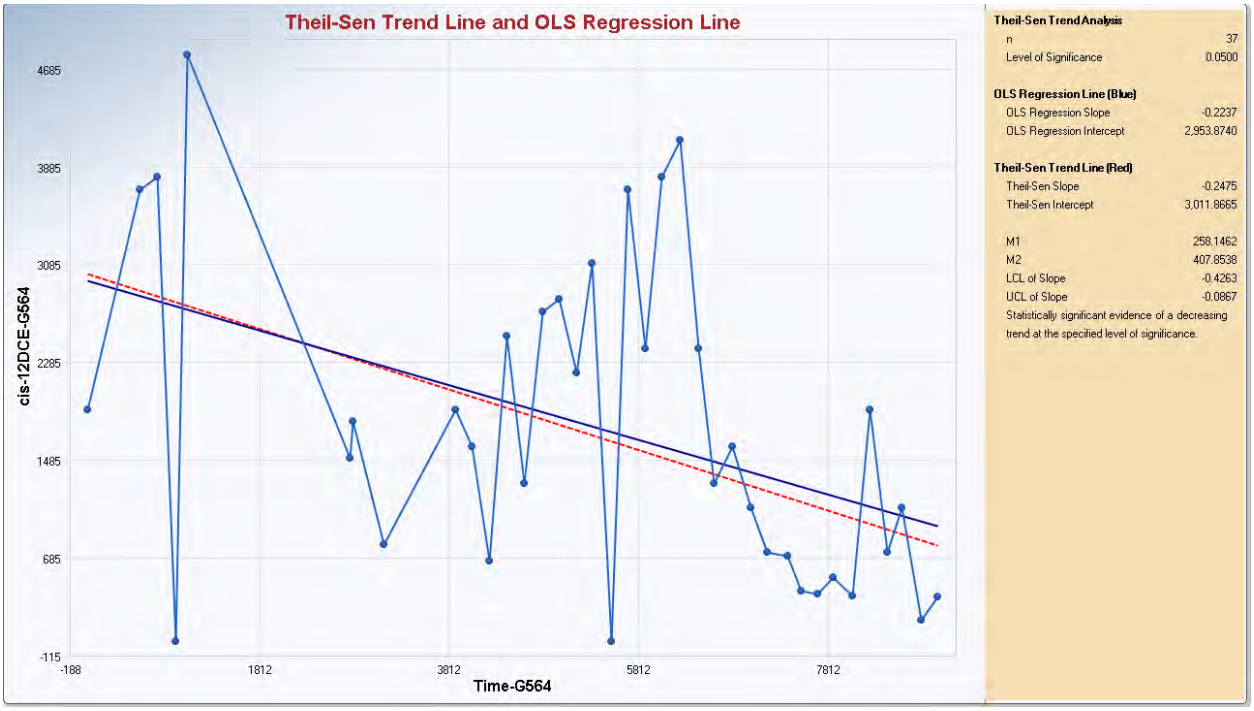

Theil-Sen Trend Line and OLS Regression Line
Benzene-G564
Time-G564
245
195
145
95
45
-5
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 53
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0120
OLS Regression Intercept 92.2717
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0093
Theil-Sen Intercept 63.3091
M1 561.5081
M2 816.4919
LCL of Slope -0.0120
UCL of Slope -0.0066
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
Benzene-G591
Time-G591
4680
3880
3080
2280
1480
680
-120
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 48
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0778
OLS Regression Intercept 749.0170
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0352
Theil-Sen Intercept 429.5177
M1 453.8330
M2 674.1670
LCL of Slope -0.0539
UCL of Slope -0.0149
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
Chloroform-G168
Time-G168
780
580
380
180
-20
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 79
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0538
OLS Regression Intercept 440.3670
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0426
Theil-Sen Intercept 403.9306
M1 1,309.0997
M2 1,771.9003
LCL of Slope -0.0528
UCL of Slope -0.0222
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
781
581
381
181
-19
cis-12DCE-G165
-188
1812
3812
5812
7812
Time-G165
Theil-Sen Trend Analysis
n 32
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0600
OLS Regression Intercept 436.7905
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0212
Theil-Sen Intercept 143.6738
M1 188.1488
M2 307.8512
LCL of Slope -0.0298
UCL of Slope -0.0132
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
1955
1555
1155
755
355
-45
cis-12DCE-G547
-188
1812
3812
5812
7812
Time-G547
Theil-Sen Trend Analysis
n 45
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.1216
OLS Regression Intercept 956.8246
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0865
Theil-Sen Intercept 560.4879
M1 394.8451
M2 595.1549
LCL of Slope -0.1149
UCL of Slope -0.0530
Statistically significant evidence of a decreasing trend at the specified level of significance.



Theil-Sen Trend Analysis

n	37
Level of Significance	0.0500

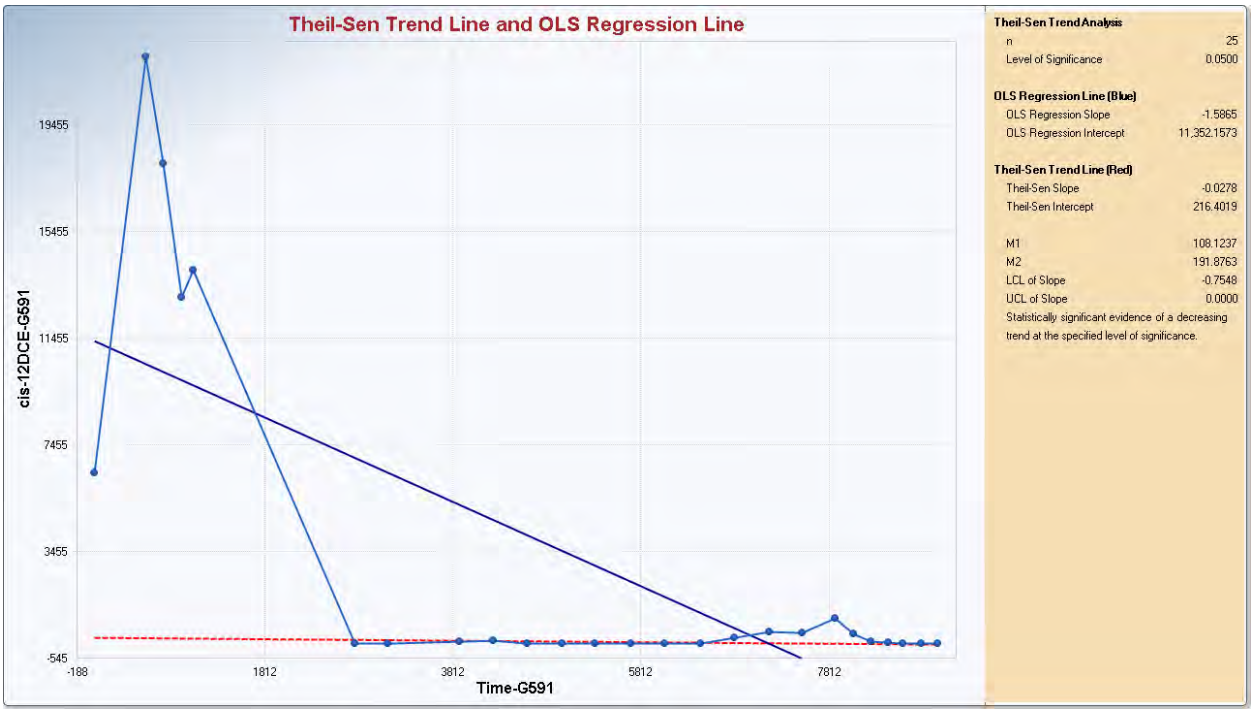
OLS Regression Line (Blue)

OLS Regression Slope	-0.2237
OLS Regression Intercept	2,953.8740

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.2475
Theil-Sen Intercept	3,011.8665
M1	258.1462
M2	407.8538
LCL of Slope	-0.4263
UCL of Slope	-0.0867

Statistically significant evidence of a decreasing trend at the specified level of significance.



Theil-Sen Trend Analysis

n	25
Level of Significance	0.0500

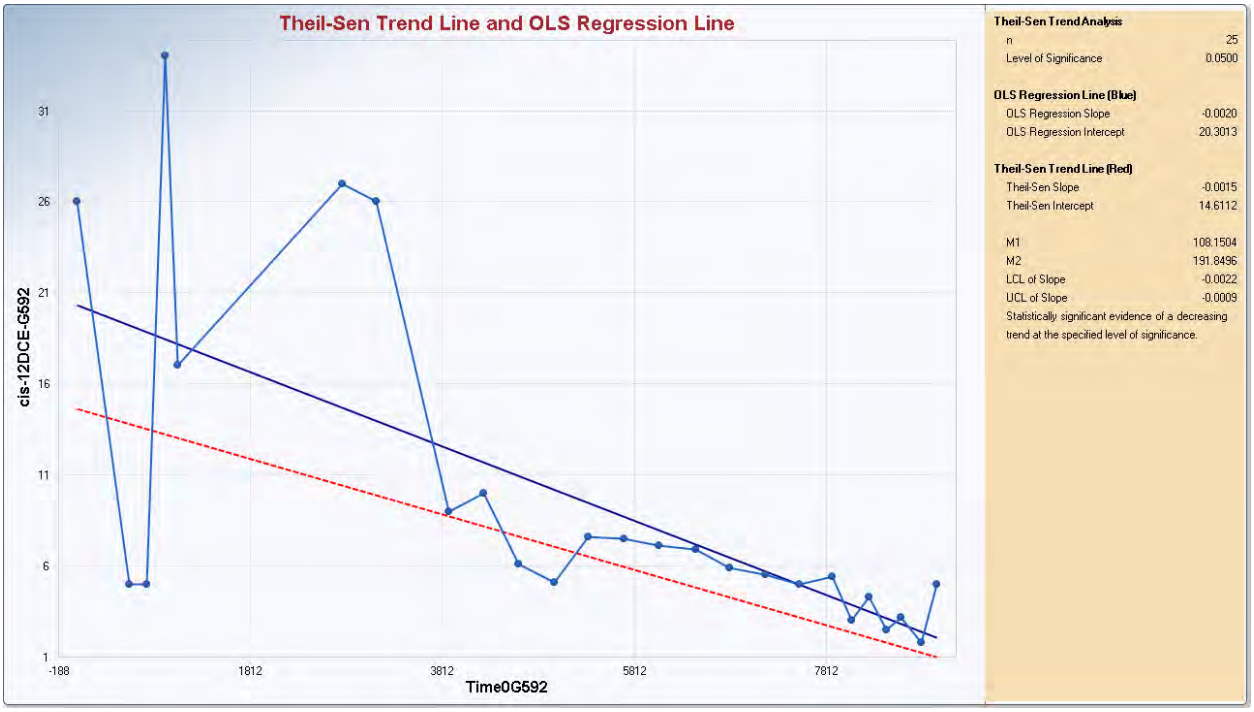
OLS Regression Line (Blue)

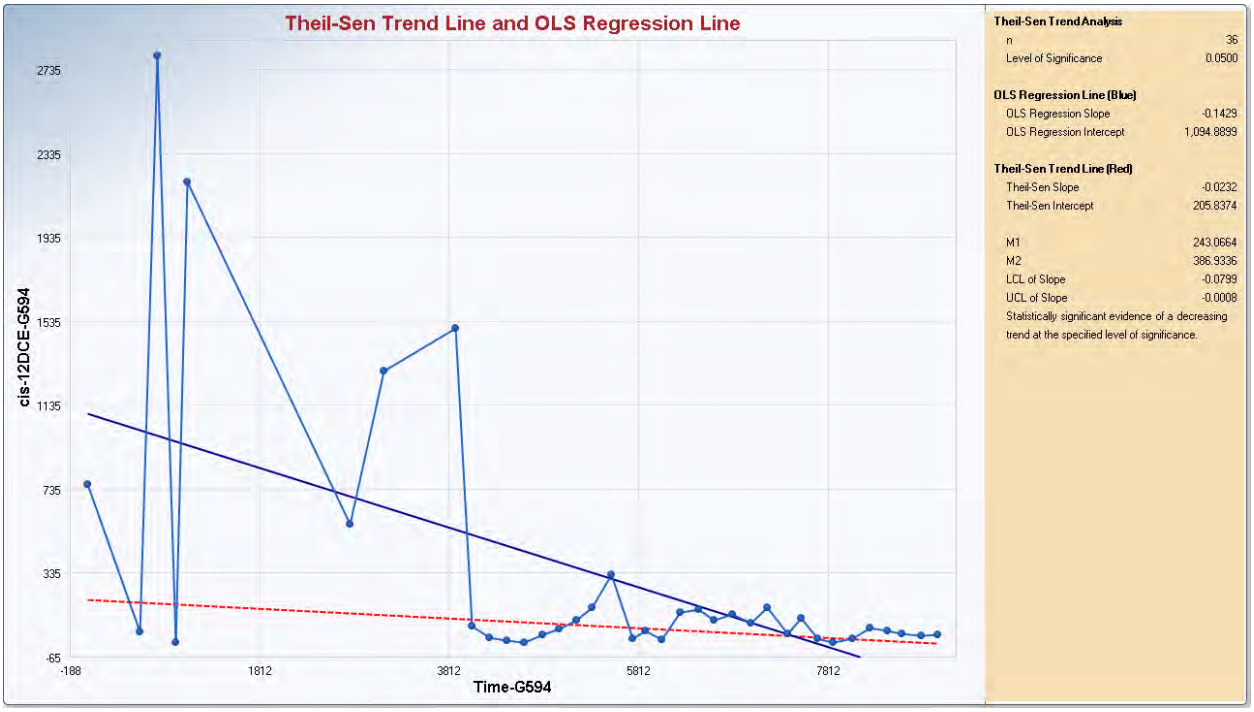
OLS Regression Slope	-1.5865
OLS Regression Intercept	11,352.1573

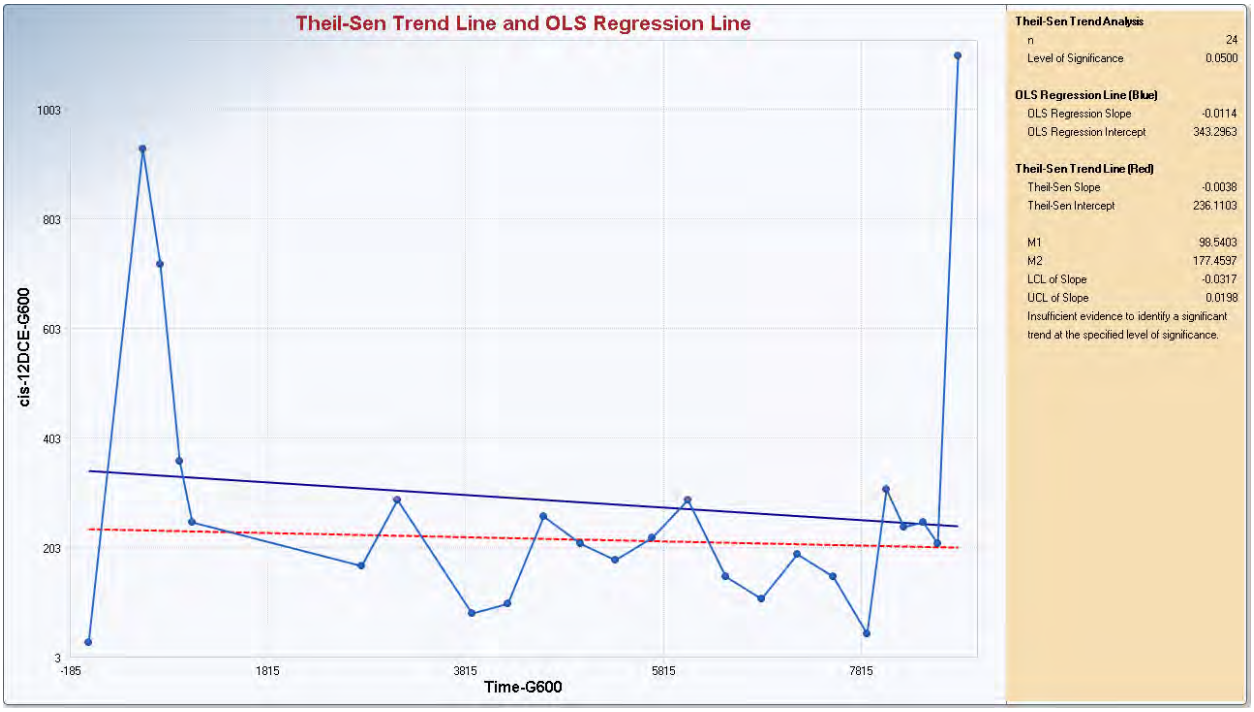
Theil-Sen Trend Line (Red)

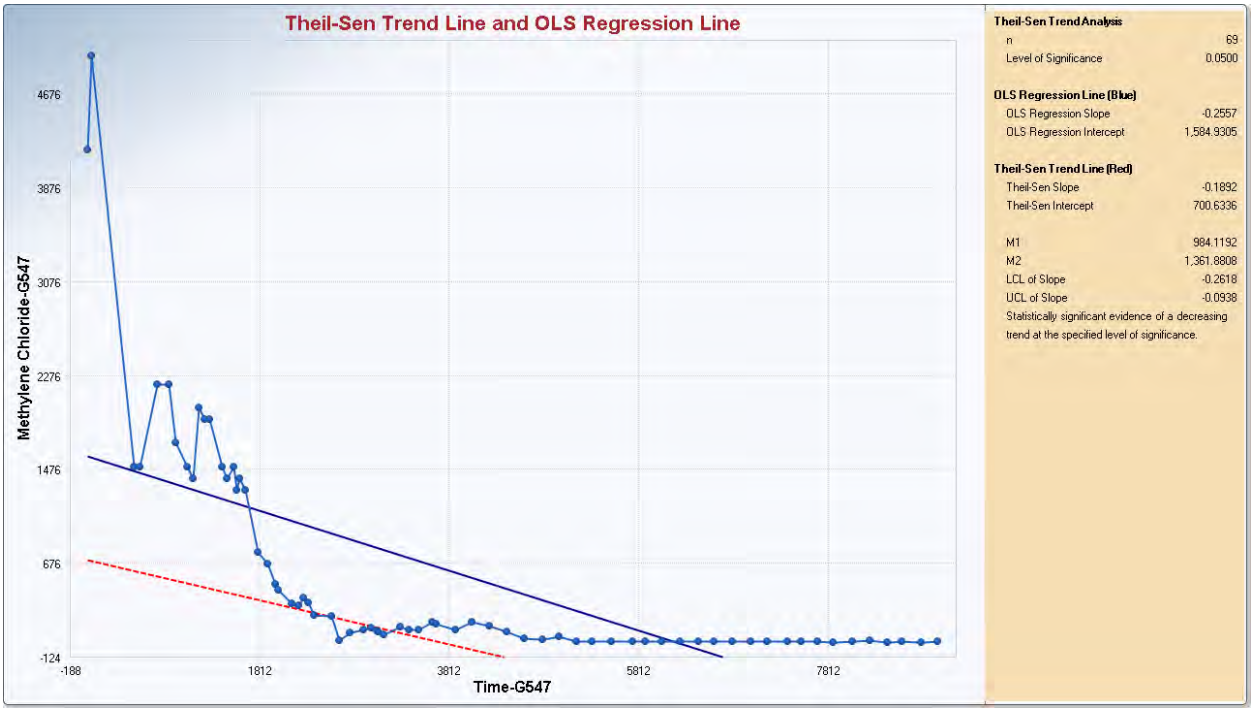
Theil-Sen Slope	-0.0278
Theil-Sen Intercept	216.4019
M1	108.1237
M2	191.8763
LCL of Slope	-0.7548
UCL of Slope	0.0000

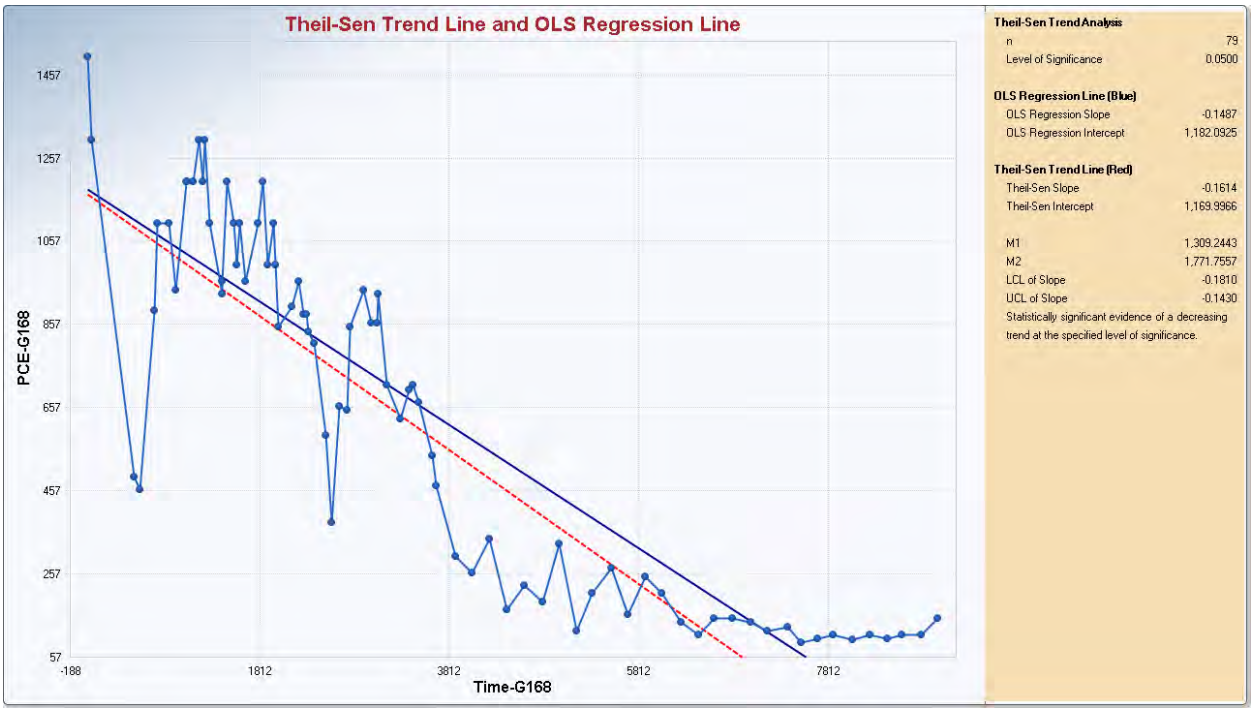
Statistically significant evidence of a decreasing trend at the specified level of significance.

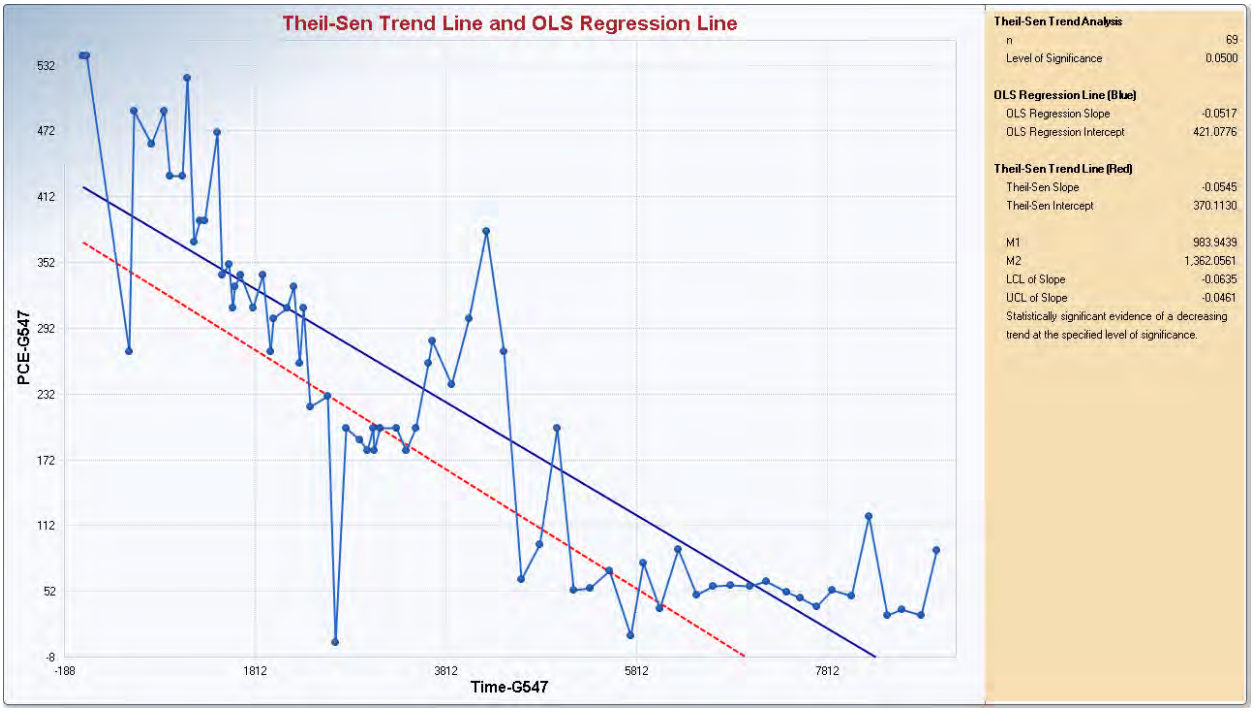

Theil-Sen Trend Line and OLS Regression Line
cis-12DCE-G592
Time0G592
31
26
21
16
11
6
1
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 25
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0020
OLS Regression Intercept 20.3013
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0015
Theil-Sen Intercept 14.6112
M1 108.1504
M2 191.8496
LCL of Slope -0.0022
UCL of Slope -0.0009
Statistically significant evidence of a decreasing trend at the specified level of significance.

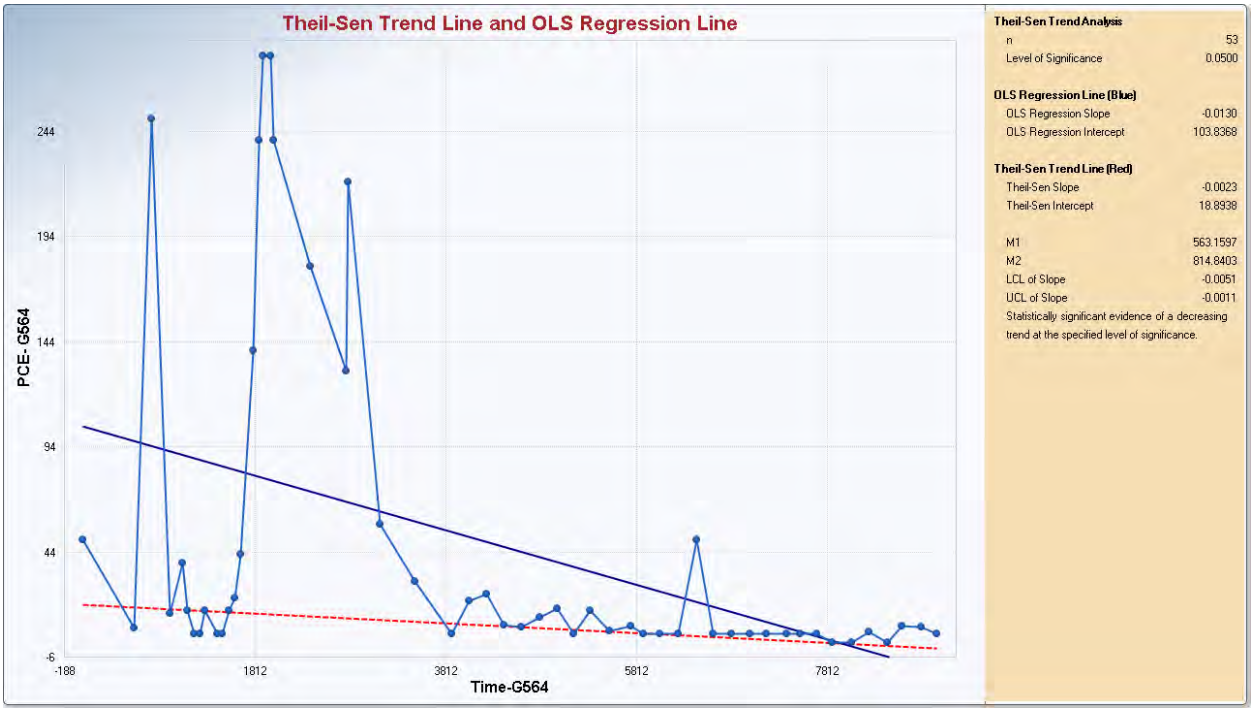

Theil-Sen Trend Line and OLS Regression Line
cis-12DCE-G594
Time-G594
2735
2335
1935
1535
1135
735
335
-65
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 36
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.1429
OLS Regression Intercept 1,094.8899
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0232
Theil-Sen Intercept 205.8374
M1 243.0664
M2 386.9336
LCL of Slope -0.0799
UCL of Slope -0.0008
Statistically significant evidence of a decreasing trend at the specified level of significance.

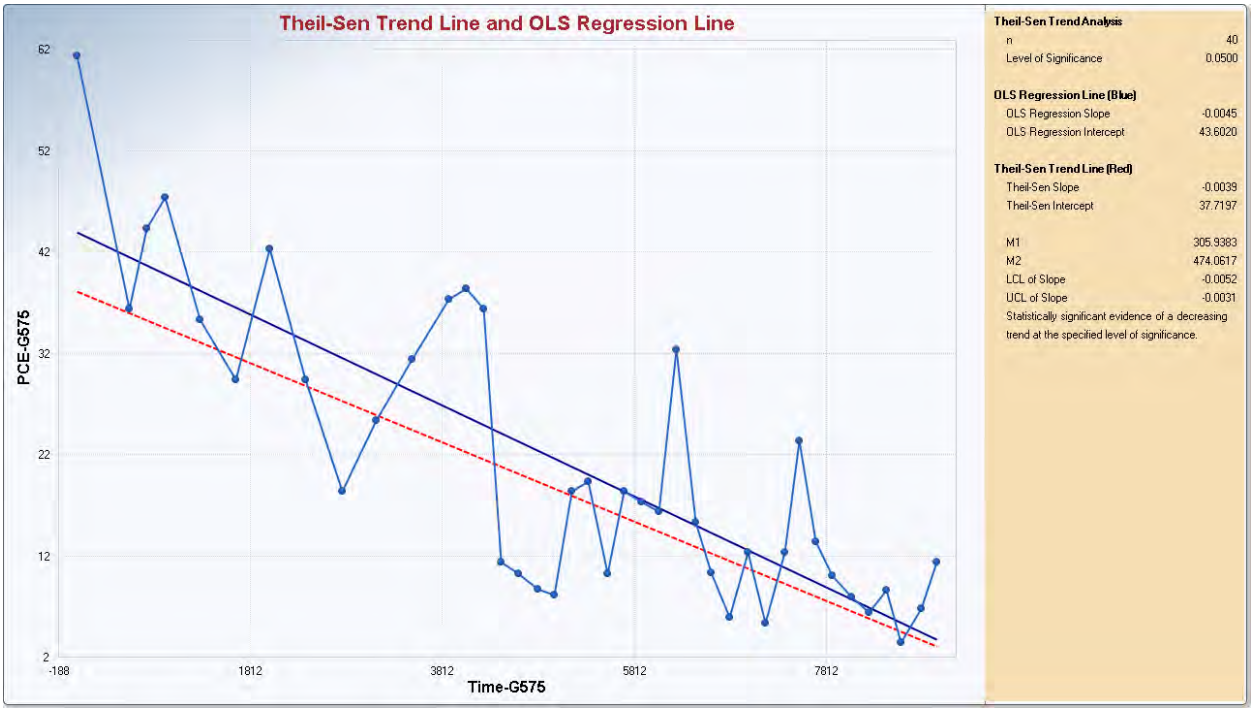

Theil-Sen Trend Line and OLS Regression Line
cis-12DCE-G600
1003
803
603
403
203
3
-185
1815
3815
5815
7815
Time-G600
Theil-Sen Trend Analysis
n 24
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0114
OLS Regression Intercept 343.2963
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0038
Theil-Sen Intercept 236.1103
M1 98.5403
M2 177.4597
LCL of Slope -0.0317
UCL of Slope 0.0198
Insufficient evidence to identify a significant trend at the specified level of significance.

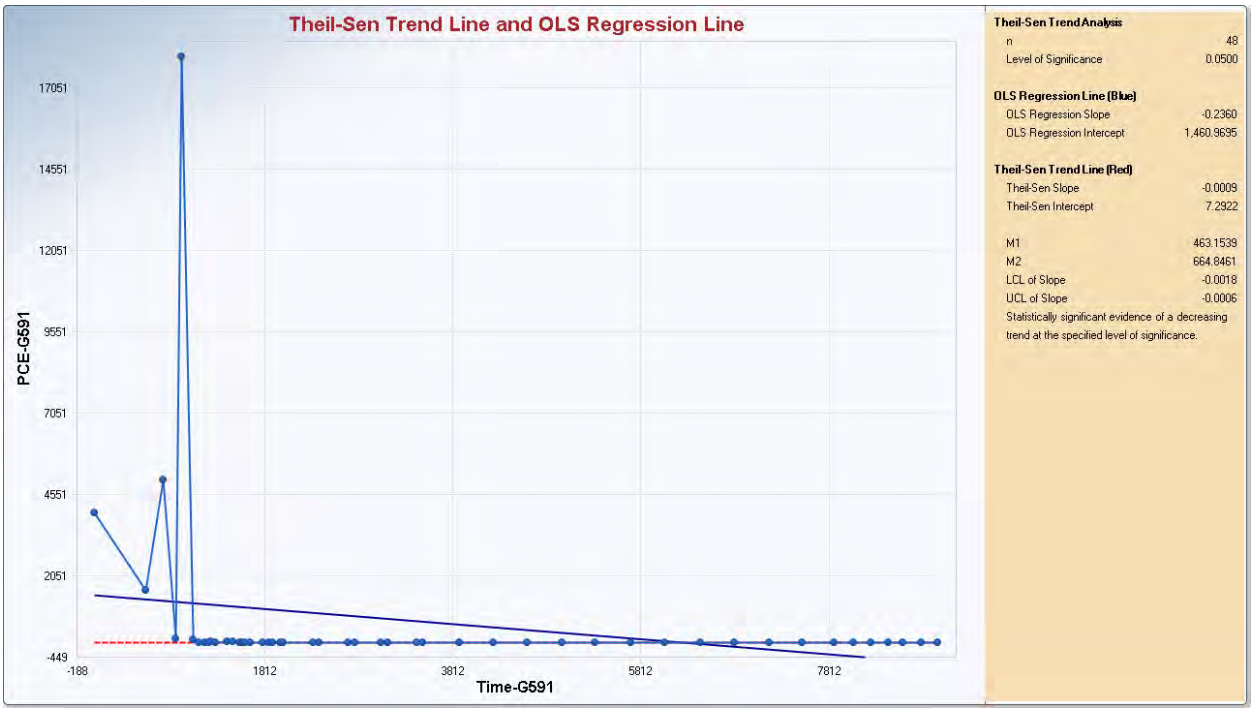

Theil-Sen Trend Line and OLS Regression Line
Methylene Chloride-G547
4676
3876
3076
2276
1476
676
-124
-188
1812
3812
5812
7812
Time-G547
Theil-Sen Trend Analysis
n 69
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.2557
OLS Regression Intercept 1,584.9305
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.1892
Theil-Sen Intercept 700.6336
M1 984.1192
M2 1,361.8808
LCL of Slope -0.2618
UCL of Slope -0.0938
Statistically significant evidence of a decreasing trend at the specified level of significance.

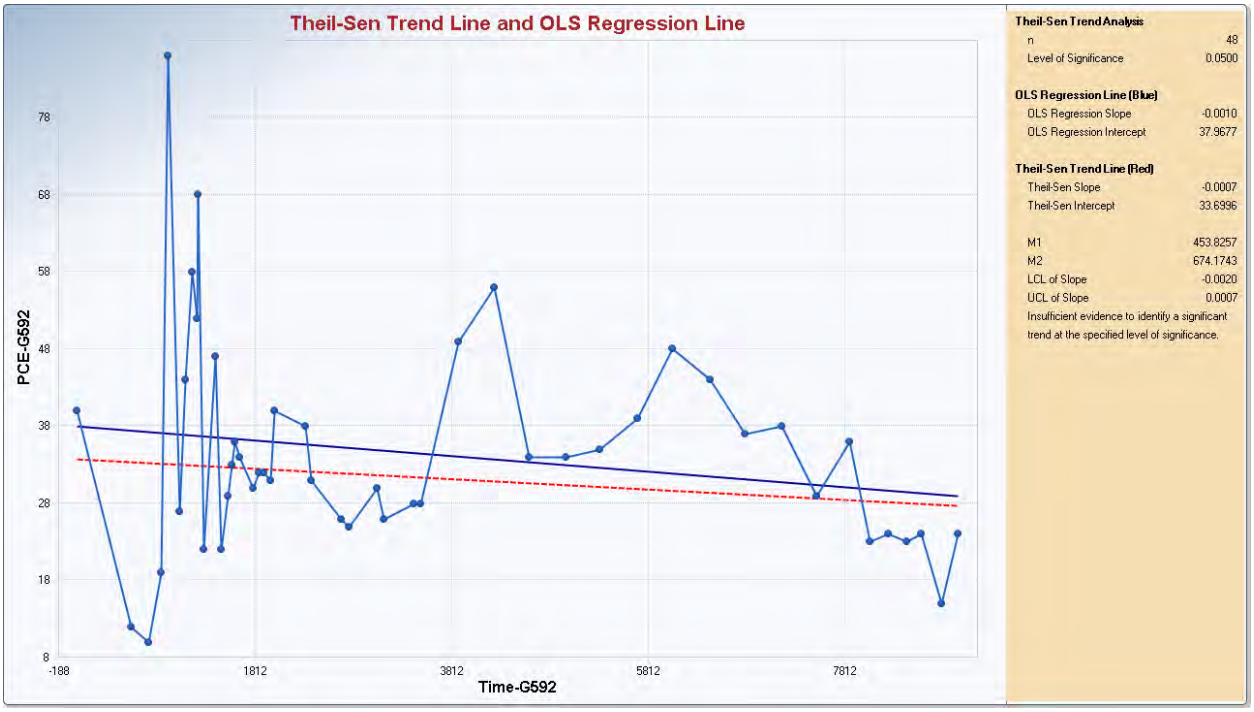

Theil-Sen Trend Line and OLS Regression Line
PCE-G168
Time-G168
1457
1257
1057
857
657
457
257
57
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 79
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.1487
OLS Regression Intercept 1,182.0925
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.1614
Theil-Sen Intercept 1,169.9966
M1 1,309.2443
M2 1,771.7557
LCL of Slope -0.1810
UCL of Slope -0.1430
Statistically significant evidence of a decreasing trend at the specified level of significance.

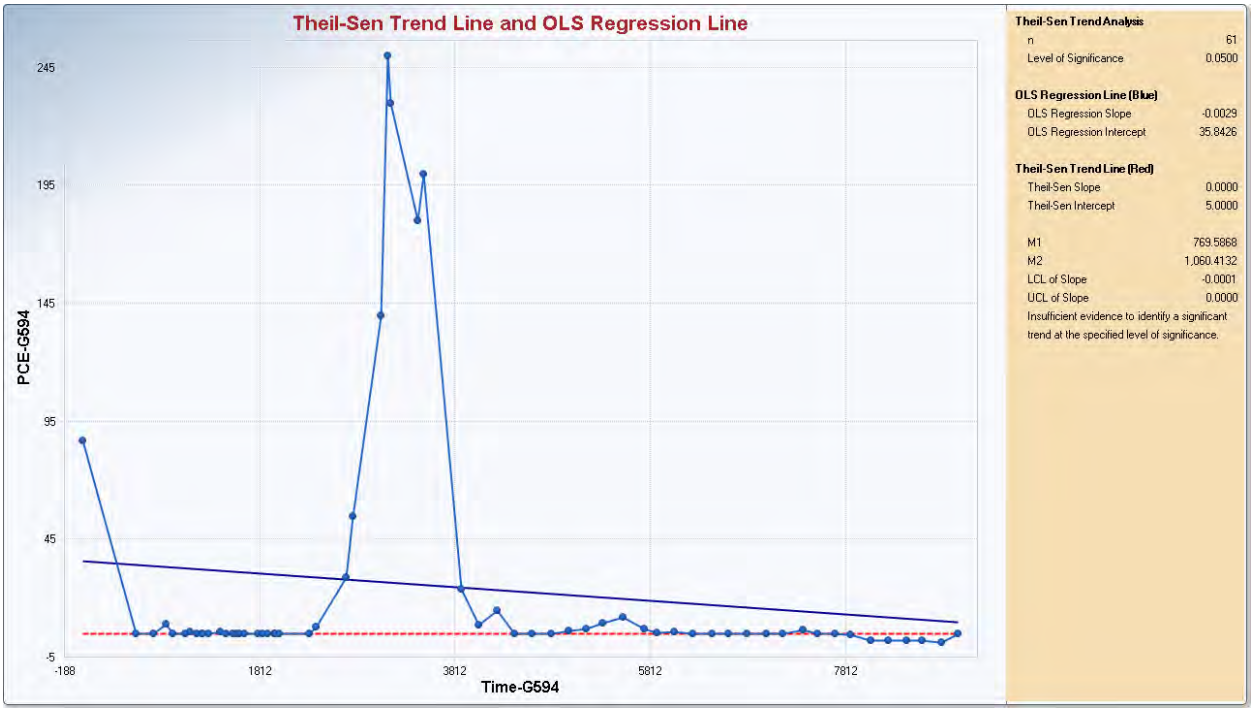

Theil-Sen Trend Line and OLS Regression Line
PCE-G547
Time-G547
532
472
412
352
292
232
172
112
52
-8
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 69
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0517
OLS Regression Intercept 421.0776
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0545
Theil-Sen Intercept 370.1130
M1 983.9439
M2 1,362.0561
LCL of Slope -0.0635
UCL of Slope -0.0461
Statistically significant evidence of a decreasing trend at the specified level of significance.

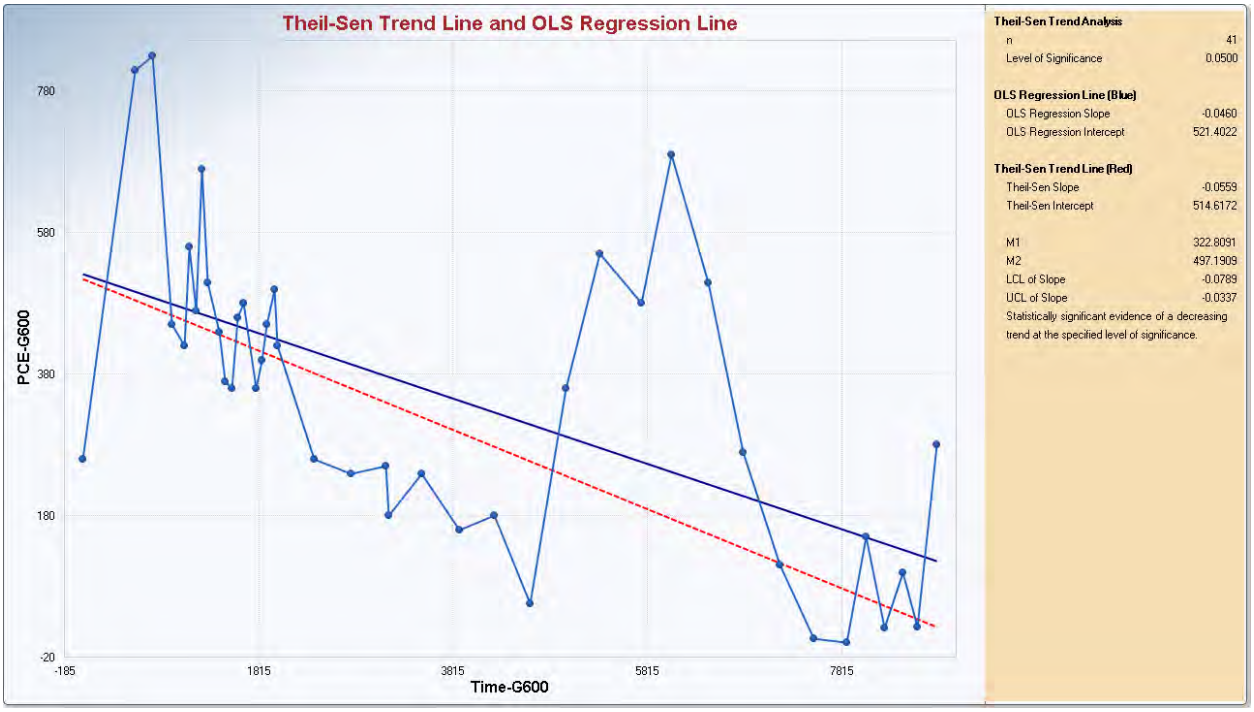

Theil-Sen Trend Line and OLS Regression Line
PCE- G564
244
194
144
94
44
-6
-188
1812
3812
5812
7812
Time-G564
Theil-Sen Trend Analysis
n 53
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0130
OLS Regression Intercept 103.8368
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0023
Theil-Sen Intercept 18.8938
M1 563.1597
M2 814.8403
LCL of Slope -0.0051
UCL of Slope -0.0011
Statistically significant evidence of a decreasing trend at the specified level of significance.

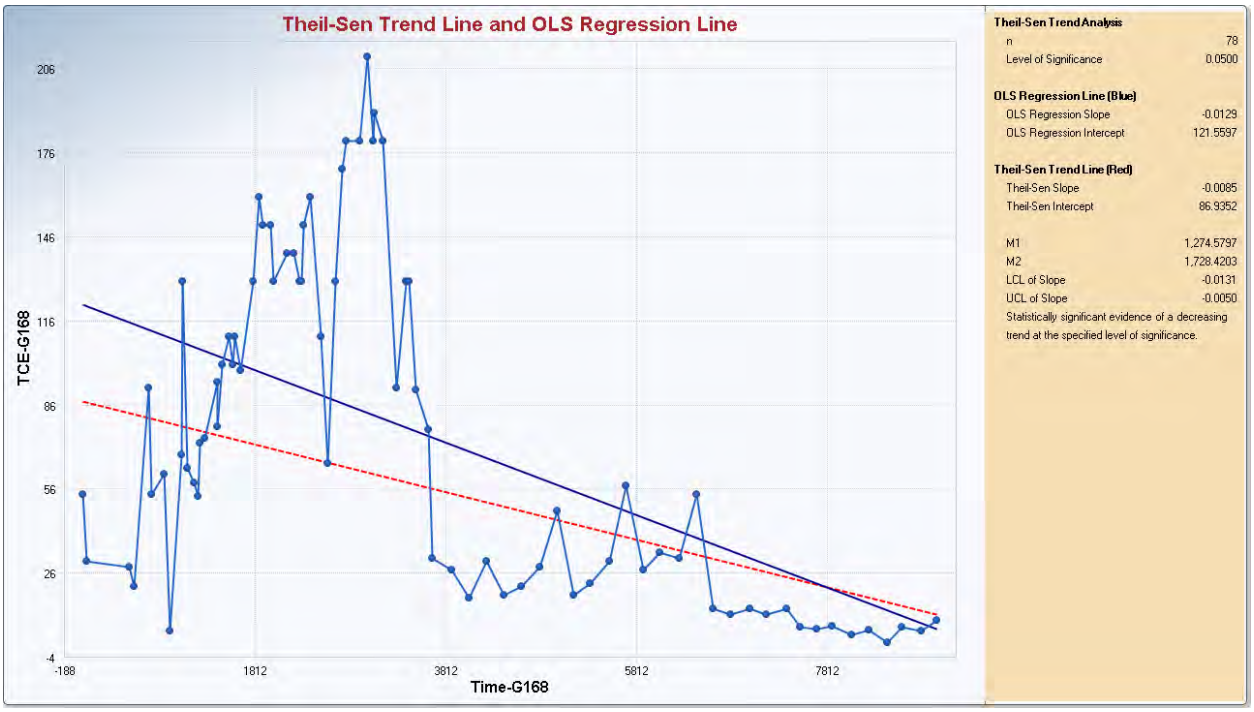

Theil-Sen Trend Line and OLS Regression Line
PCE-G575
62
52
42
32
22
12
2
-188
1812
3812
5812
7812
Time-G575
Theil-Sen Trend Analysis
n 40
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0045
OLS Regression Intercept 43.6020
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0039
Theil-Sen Intercept 37.7197
M1 305.9383
M2 474.0617
LCL of Slope -0.0052
UCL of Slope -0.0031
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
PCE-G591
Time-G591
17051
14551
12051
9551
7051
4551
2051
-449
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 48
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.2360
OLS Regression Intercept 1,460.9695
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0009
Theil-Sen Intercept 7.2922
M1 463.1539
M2 664.8461
LCL of Slope -0.0018
UCL of Slope -0.0006
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
PCE-G592
Time-G592
78
68
58
48
38
28
18
8
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 48
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0010
OLS Regression Intercept 37.9677
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0007
Theil-Sen Intercept 33.6996
M1 453.8257
M2 674.1743
LCL of Slope -0.0020
UCL of Slope 0.0007
Insufficient evidence to identify a significant trend at the specified level of significance.

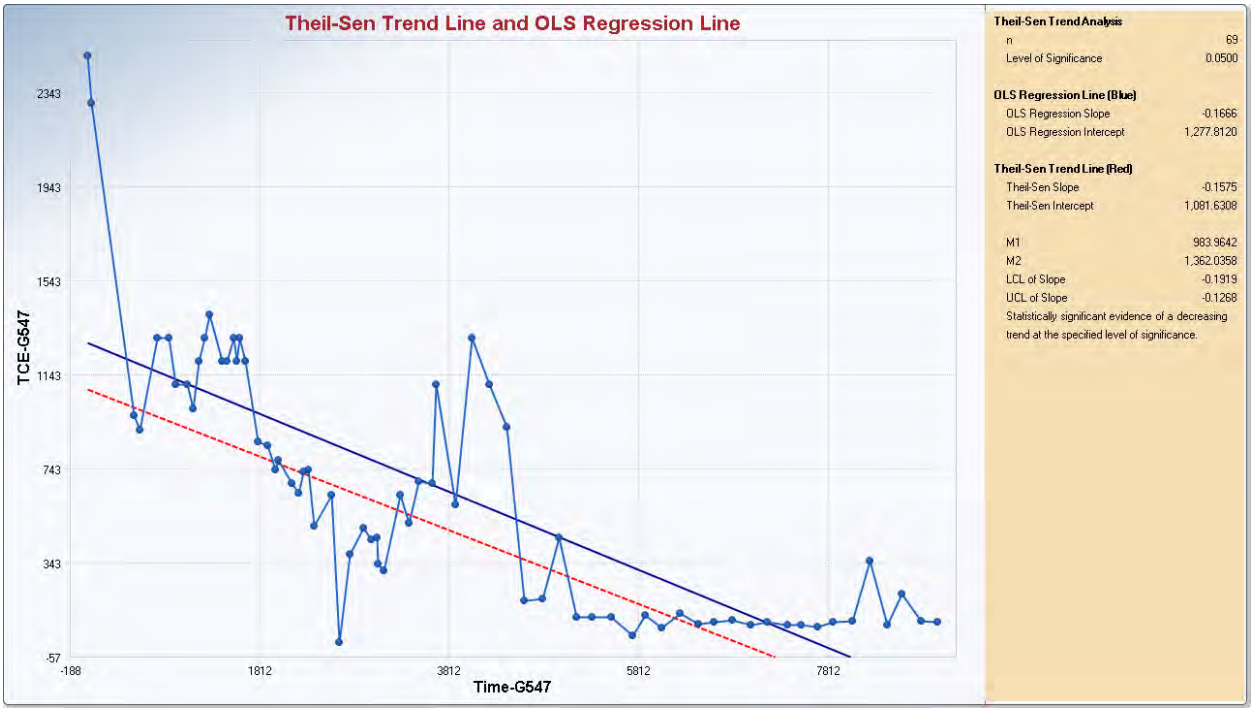

Theil-Sen Trend Line and OLS Regression Line
PCE-G594
Time-G594
245
195
145
95
45
-5
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 61
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0029
OLS Regression Intercept 35.8426
Theil-Sen Trend Line (Red)
Theil-Sen Slope 0.0000
Theil-Sen Intercept 5.0000
M1 769.5868
M2 1,060.4132
LCL of Slope -0.0001
UCL of Slope 0.0000
Insufficient evidence to identify a significant trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
PCE-G600
Time-G600
780
580
380
180
-20
-185
1815
3815
5815
7815
Theil-Sen Trend Analysis
n 41
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0460
OLS Regression Intercept 521.4022
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0559
Theil-Sen Intercept 514.6172
M1 322.8091
M2 497.1909
LCL of Slope -0.0789
UCL of Slope -0.0337
Statistically significant evidence of a decreasing trend at the specified level of significance.



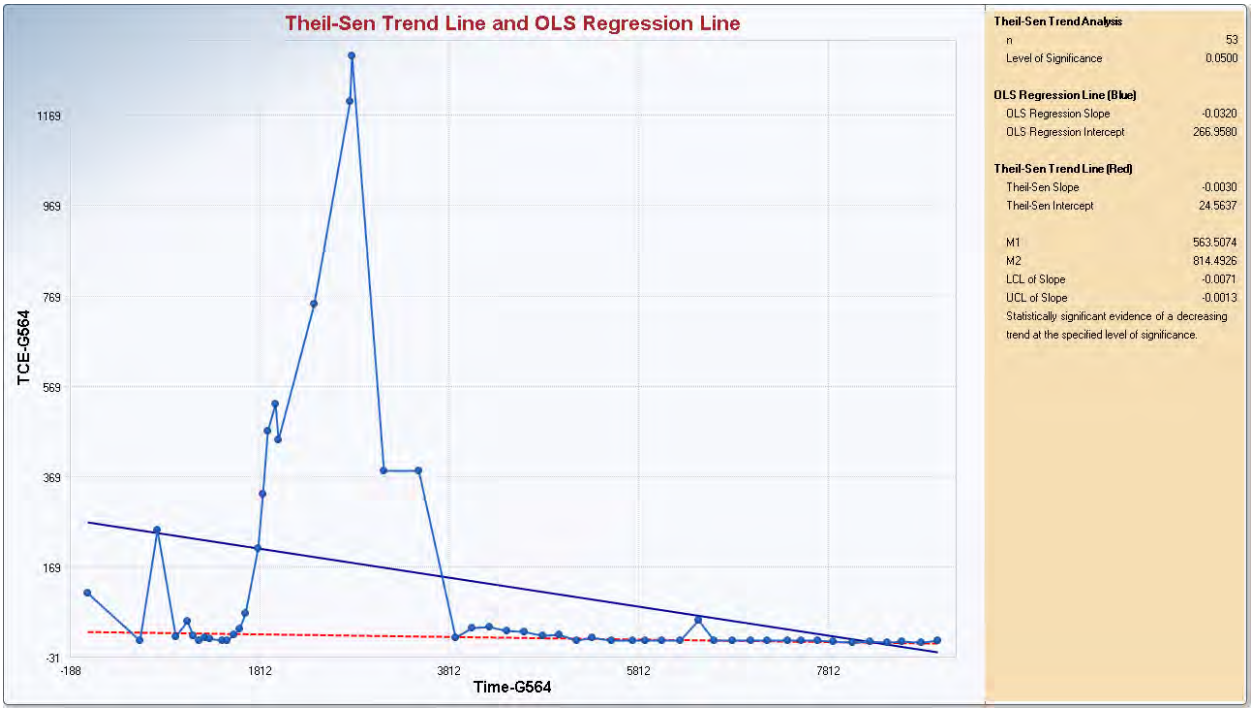
Theil-Sen Trend Analysis	
n	78
Level of Significance	0.0500
OLS Regression Line (Blue)	
OLS Regression Slope	-0.0129
OLS Regression Intercept	121.5597
Theil-Sen Trend Line (Red)	
Theil-Sen Slope	-0.0085
Theil-Sen Intercept	86.9352
M1	1,274.5797
M2	1,728.4203
LCL of Slope	-0.0131
UCL of Slope	-0.0050

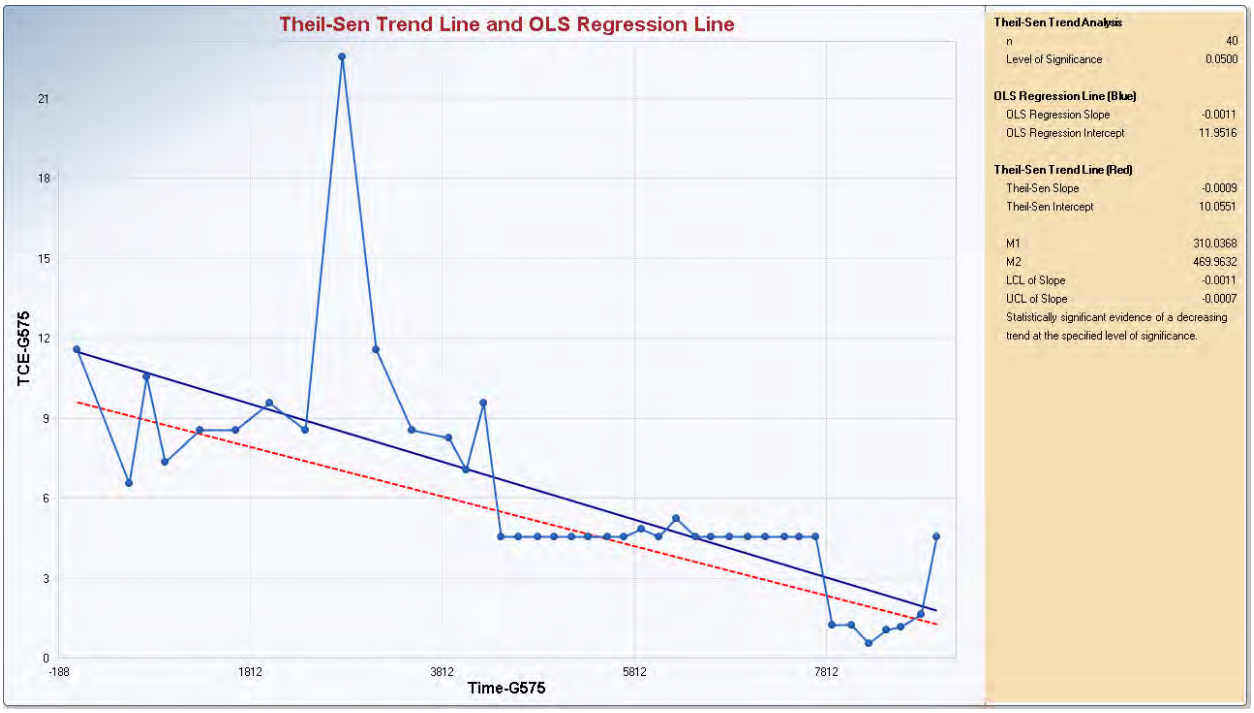
Statistically significant evidence of a decreasing trend at the specified level of significance.

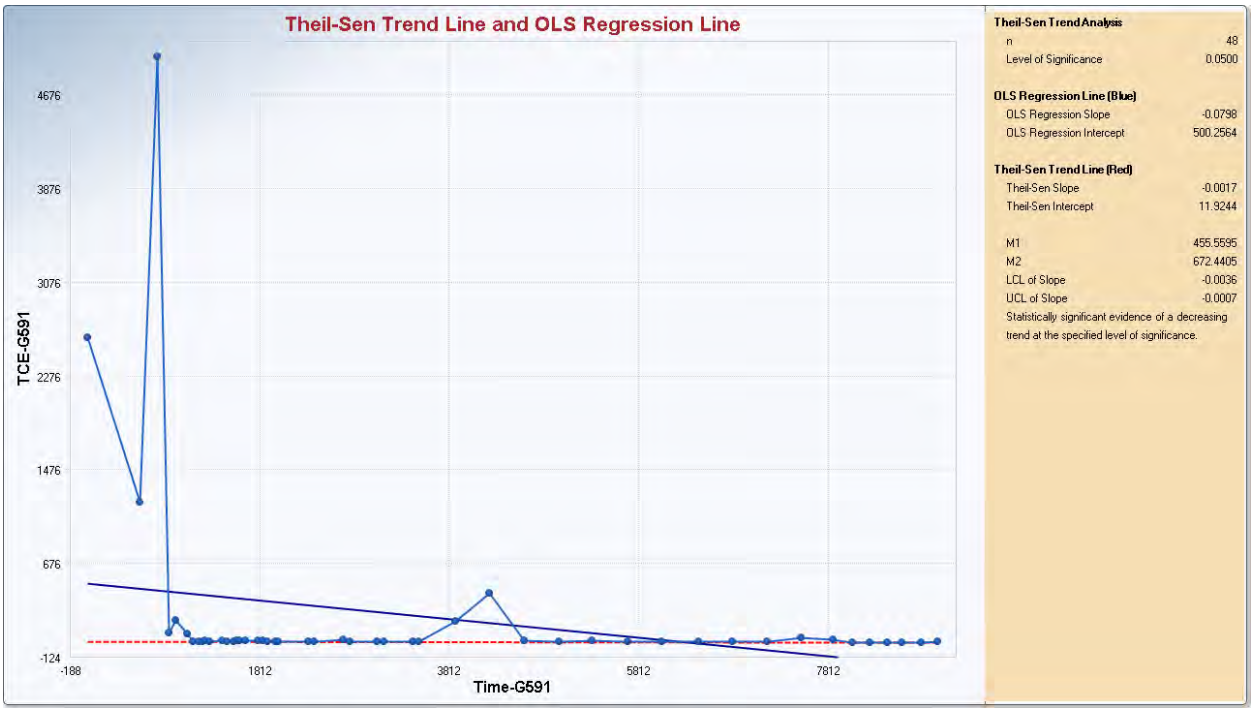


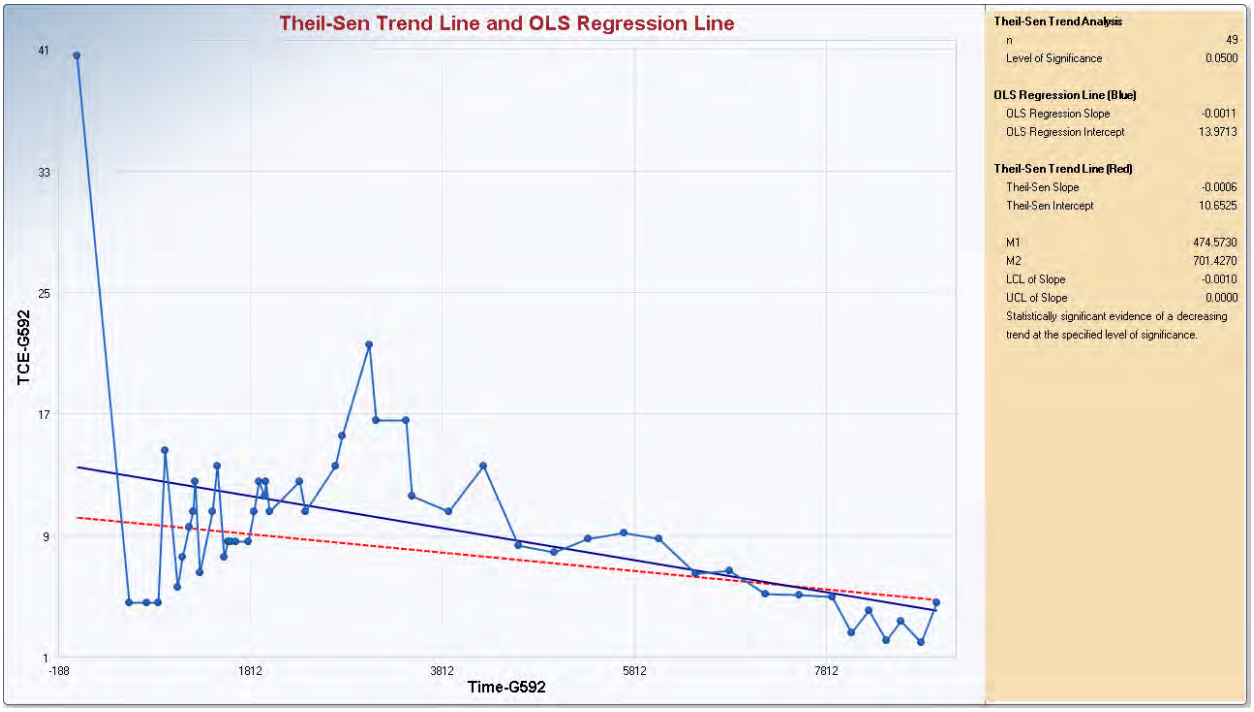
Theil-Sen Trend Analysis	
n	69
Level of Significance	0.0500
OLS Regression Line (Blue)	
OLS Regression Slope	-0.1666
OLS Regression Intercept	1,277.8120
Theil-Sen Trend Line (Red)	
Theil-Sen Slope	-0.1575
Theil-Sen Intercept	1,081.6308
M1	983.9642
M2	1,362.0358
LCL of Slope	-0.1919
UCL of Slope	-0.1268

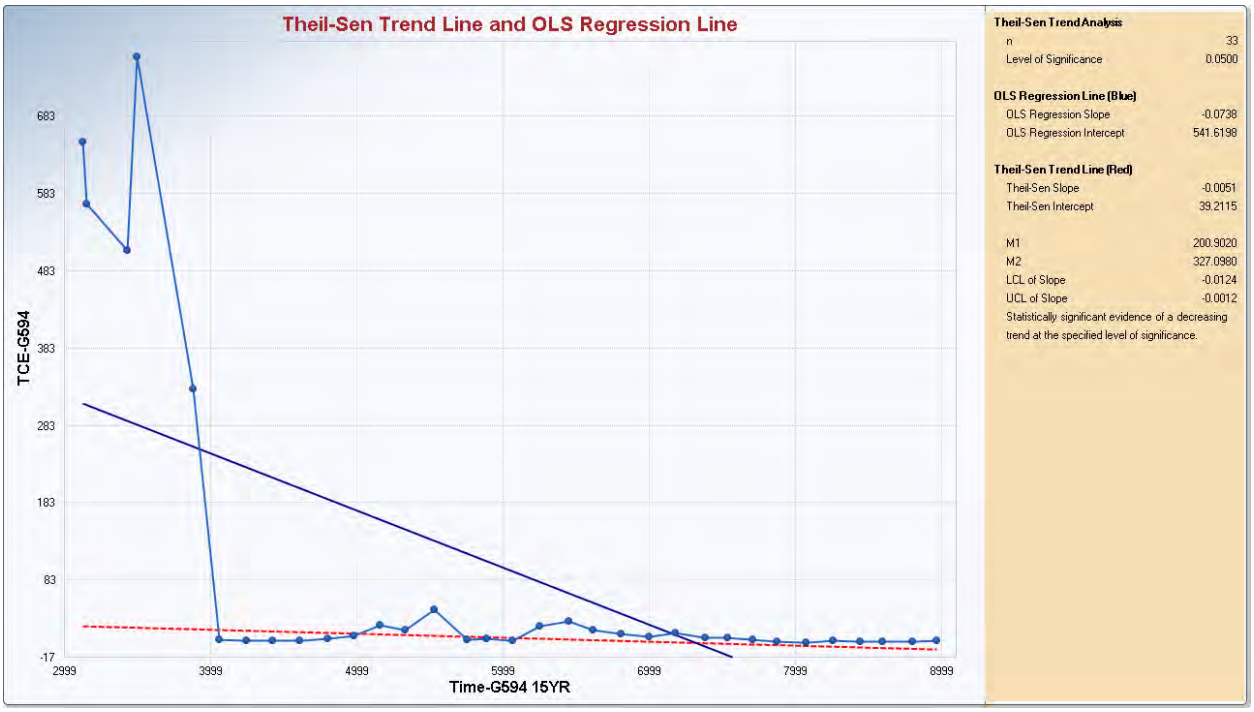
Statistically significant evidence of a decreasing trend at the specified level of significance.

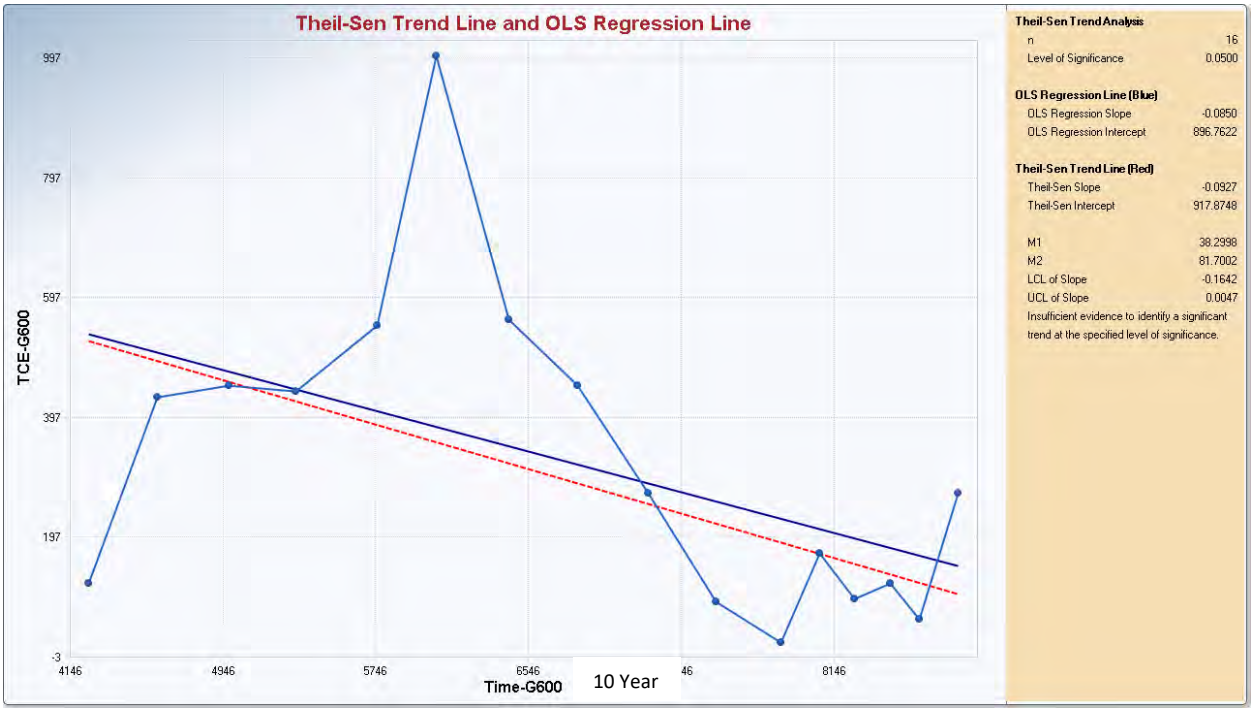

Theil-Sen Trend Line and OLS Regression Line
TCE-G564
Time-G564
1169
969
769
569
369
169
-31
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 53
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0320
OLS Regression Intercept 266.9580
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0030
Theil-Sen Intercept 24.5637
M1 563.5074
M2 814.4926
LCL of Slope -0.0071
UCL of Slope -0.0013
Statistically significant evidence of a decreasing trend at the specified level of significance.

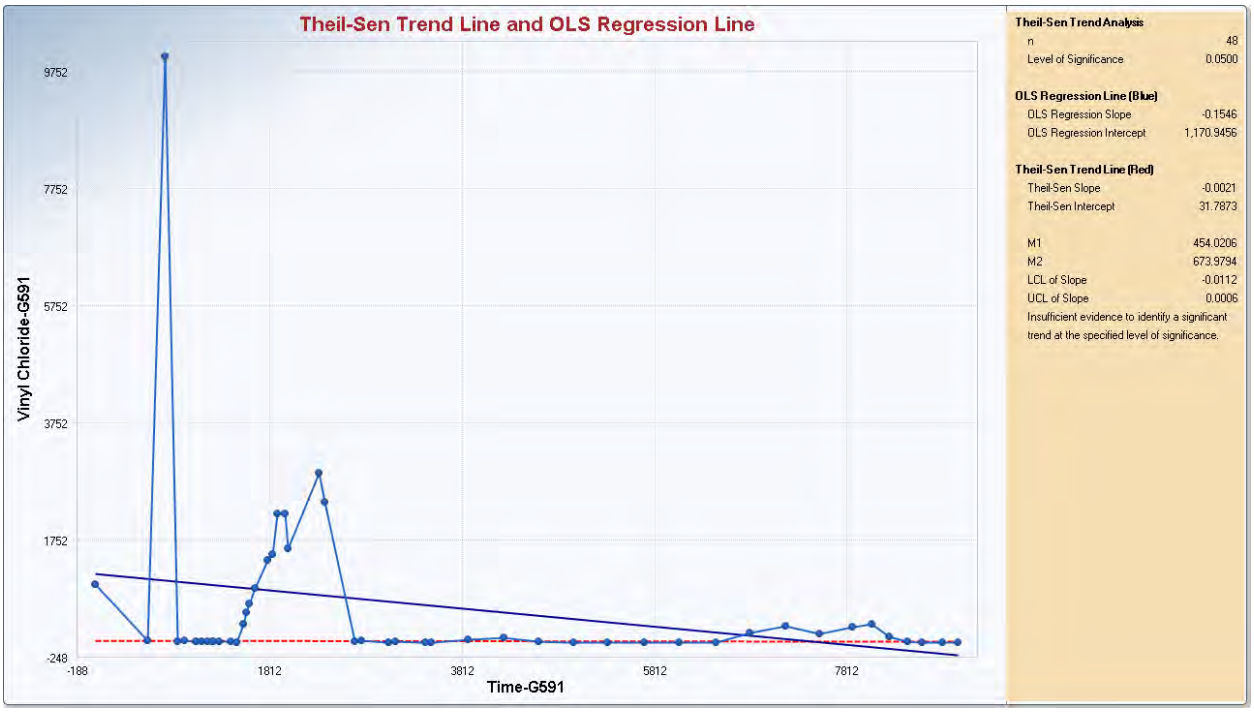

Theil-Sen Trend Line and OLS Regression Line
TCE-G575
Time-G575
21
18
15
12
9
6
3
0
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 40
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0011
OLS Regression Intercept 11.9516
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0009
Theil-Sen Intercept 10.0551
M1 310.0368
M2 469.9632
LCL of Slope -0.0011
UCL of Slope -0.0007
Statistically significant evidence of a decreasing trend at the specified level of significance.

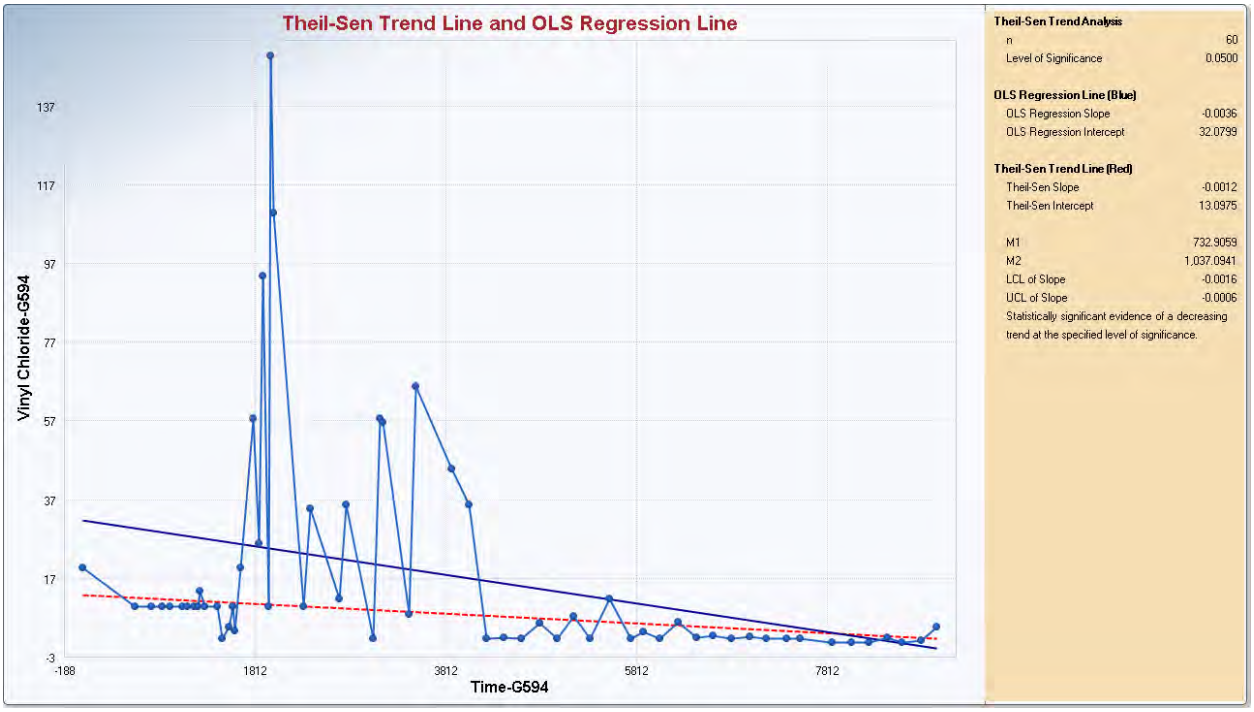

Theil-Sen Trend Line and OLS Regression Line
TCE-G591
Time-G591
4676
3876
3076
2276
1476
676
-124
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 48
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0798
OLS Regression Intercept 500.2564
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0017
Theil-Sen Intercept 11.9244
M1 455.5595
M2 672.4405
LCL of Slope -0.0036
UCL of Slope -0.0007
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
TCE-G592
Time-G592
41
33
25
17
9
1
-188
1812
3812
5812
7812
Theil-Sen Trend Analysis
n 49
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0011
OLS Regression Intercept 13.9713
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0006
Theil-Sen Intercept 10.6525
M1 474.5730
M2 701.4270
LCL of Slope -0.0010
UCL of Slope 0.0000
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
TCE-G694
683
583
483
383
283
183
83
-17
2999
3999
4999
5999
6999
7999
8999
Time-G594 15YR
Theil-Sen Trend Analysis
n 33
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0738
OLS Regression Intercept 541.6198
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0051
Theil-Sen Intercept 39.2115
M1 200.9020
M2 327.0980
LCL of Slope -0.0124
UCL of Slope -0.0012
Statistically significant evidence of a decreasing trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
TCE-G600
997
797
597
397
197
-3
4146
4946
5746
6546
8146
Time-G600
10 Year
Theil-Sen Trend Analysis
n 16
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0850
OLS Regression Intercept 896.7622
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0927
Theil-Sen Intercept 917.8748
M1 38.2998
M2 81.7002
LCL of Slope -0.1642
UCL of Slope 0.0047
Insufficient evidence to identify a significant trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
Vinyl Chloride-G591
9752
7752
5752
3752
1752
-248
-188
1812
3812
5812
7812
Time-G591
Theil-Sen Trend Analysis
n 48
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.1546
OLS Regression Intercept 1,170.9456
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0021
Theil-Sen Intercept 31.7873
M1 454.0206
M2 673.9794
LCL of Slope -0.0112
UCL of Slope 0.0006
Insufficient evidence to identify a significant trend at the specified level of significance.


Theil-Sen Trend Line and OLS Regression Line
Vinyl Chloride-G594
137
117
97
77
57
37
17
-3
-188
1812
3812
5812
7812
Time-G594
Theil-Sen Trend Analysis
n 60
Level of Significance 0.0500
OLS Regression Line (Blue)
OLS Regression Slope -0.0036
OLS Regression Intercept 32.0799
Theil-Sen Trend Line (Red)
Theil-Sen Slope -0.0012
Theil-Sen Intercept 13.0975
M1 732.9059
M2 1,037.0941
LCL of Slope -0.0016
UCL of Slope -0.0006
Statistically significant evidence of a decreasing trend at the specified level of significance.

APPENDIX C

Well Sampling Logs and Elevations

Spring 2023 Elevations

WELL #	ELEVATION TOP OF WELL	DEPTH TO BOTTOM OF WELL	ELEVATION OF WATER	WATER (ft BELOW LS)	ELEVATION BOTTOM OF WELL	DEPTH TO WATER	STICK UP
G-160	734.66	41.06	**731.61**	0.06	693.60	3.05	2.99
G162	719.56	29.30	**716.37**	0.20	690.26	3.19	2.99
G591	738.69	41.86	**715.80**	19.17	696.83	22.89	3.72
G592	738.06	35.66	**715.86**	19.58	702.40	22.20	2.62
G600	734.55	22.30	**713.85**	18.08	712.25	20.70	2.62
G-165	739.77	44.66	**736.43**	0.37	695.11	3.34	2.97
G-166	740.15	71.41	**728.70**	8.68	668.74	11.45	2.77
G-168	766.41	50.30	**734.76**	29.09	716.11	31.65	2.56
G547	740.41	44.21	**728.16**	9.64	696.20	12.25	2.61
G564	741.01	45.93	**719.10**	18.00	695.08	21.91	3.91
G575	747.72	46.52	**718.47**	26.60	701.20	29.25	2.65
G594	740.44	41.71	**718.64**	19.46	698.73	21.80	2.34
G211	726.55	42.60	**704.98**	19.17	686.51	21.57	2.40
G570	725.21	17.00	**720.76**	0.55	708.21	4.45	3.90

	Elevation Top of Marker	Elevation to Water	Depth To Water
S501	702.08	700.78	1.30

Spring 2023 Elevations

WELL #	ELEVATION TOP OF WELL	DEPTH TO BOTTOM OF WELL	ELEVATION OF WATER	WATER (ft BELOW LS)	ELEVATION BOTTOM OF WELL	DEPTH TO WATER	STICK UP
G-145	778.37	55.47	**735.52**	39.29	722.90	42.85	3.56
G-186	763.15	33.94	**754.77**	4.98	729.21	8.38	3.40
G-434	783.92	60.46	**749.95**	32.05	723.46	33.97	1.92
G-105	756.44	35.38	**737.69**	15.83	721.06	18.75	2.92
G-154	741.83	60.10	**734.98**	3.74	681.73	6.85	3.11
G-157	764.11	55.90	**735.30**	25.43	708.21	28.81	3.38
G-191	764.44	94.20	**729.82**	31.97	670.24	34.62	2.65
G-193	768.19	89.00	**747.31**	18.21	679.19	20.88	2.67
RIB-9	723.47	52.29	**708.89**	11.91	671.18	14.58	2.67
G-167	767.38	63.54	**734.38**	29.82	703.84	33.00	3.18
G212	713.25	44.09	**703.18**	6.99	669.16	10.07	3.08
G572	717.39	18.00	**704.10**	10.60	699.39	13.29	2.69
G573	711.92	21.03	**701.92**	7.68	690.89	10.00	2.32
G574	709.32	19.70	**701.24**	4.96	689.62	8.08	3.12
RIB-6	717.97	98.50	**702.88**	11.59	619.47	15.09	3.50
RIB11	718.06	53.21	**703.88**	10.97	664.85	14.18	3.21
G142	761.05	29.55	**755.40**	2.65	731.50	5.65	3.00
G-192	767.08	26.70	**754.68**	9.64	740.38	12.40	2.76
G148	734.36	34.76	**733.46**	-0.64	699.60	0.90	1.54
G149	738.93	30.63	**734.96**	1.97	708.30	3.97	2.00
G155	755.17	49.07	**735.17**	17.10	706.10	20.00	2.90
G156	758.53	46.13	**735.34**	20.34	712.40	23.19	2.85

Fall 2023 Elevations

WELL #	ELEVATION TOP OF WELL	DEPTH TO BOTTOM OF WELL	ELEVATION OF WATER	WATER (ft BELOW LS)	ELEVATION BOTTOM OF WELL	DEPTH TO WATER	STICK UP
G-160	734.66	41.06	**726.49**	5.18	693.60	8.17	2.99
G162	719.56	29.30	**713.96**	2.61	690.26	5.60	2.99
G591	738.69	41.86	**714.08**	20.89	696.83	24.61	3.72
G592	738.06	35.66	**714.11**	21.33	702.40	23.95	2.62
G600	734.55	22.30	**712.25**	19.68	712.25	22.30	2.62
G-165	739.77	44.66	**730.35**	6.45	695.11	9.42	2.97
G-166	740.15	71.41	**727.62**	9.76	668.74	12.53	2.77
G-168	766.41	50.30	**732.76**	31.09	716.11	33.65	2.56
G547	740.41	44.21	**725.61**	12.19	696.20	14.80	2.61
G564	741.01	45.93	**717.23**	19.87	695.08	23.78	3.91
G575	747.72	46.52	**716.61**	28.46	701.20	31.11	2.65
G594	740.44	41.71	**716.75**	21.35	698.73	23.69	2.34
G211	726.55	42.60	**703.87**	20.28	686.51	22.68	2.40
G570	725.21	17.00	**719.16**	2.15	708.21	6.05	3.90

	Elevation Top of Marker	Elevation to Water	Depth To Water
S501	702.08	700.46	1.62

Fall 2023 Elevations

WELL #	ELEVATION TOP OF WELL	DEPTH TO BOTTOM OF WELL	ELEVATION OF WATER	WATER (ft BELOW LS)	ELEVATION BOTTOM OF WELL	DEPTH TO WATER	STICK UP
G-145	778.37	55.47	**733.70**	41.11	722.90	44.67	3.56
G-186	763.15	33.94	**752.00**	7.75	729.21	11.15	3.40
G-434	783.92	60.46	**747.25**	34.75	723.46	36.67	1.92
G-105	756.44	35.38	**737.56**	15.96	721.06	18.88	2.92
G-154	741.83	60.10	**732.38**	6.34	681.73	9.45	3.11
G-157	764.11	55.90	**732.80**	27.93	708.21	31.31	3.38
G-191	764.44	94.20	**728.75**	33.04	670.24	35.69	2.65
G-193	768.19	89.00	**744.00**	21.52	679.19	24.19	2.67
RIB-9	723.47	52.29	**706.08**	14.72	671.18	17.39	2.67
G-167	767.38	63.54	**731.78**	32.42	703.84	35.60	3.18
G212	713.25	44.09	**701.55**	8.62	669.16	11.70	3.08
G572	717.39	18.00	**701.99**	12.71	699.39	15.40	2.69
G573	711.92	21.03	**699.53**	10.07	690.89	12.39	2.32
G574	709.32	19.70	**700.32**	5.88	689.62	9.00	3.12
RIB-6	717.97	98.50	**703.00**	11.47	619.47	14.97	3.50
RIB11	718.06	53.21	**701.71**	13.14	664.85	16.35	3.21
G142	761.05	29.55	**749.85**	8.20	731.50	11.20	3.00
G-192	767.08	26.70	**749.20**	15.12	740.38	17.88	2.76
G148	734.36	34.76	**731.21**	1.61	699.60	3.15	1.54
G149	738.93	30.63	**732.40**	4.53	708.30	6.53	2.00
G155	755.17	49.07	**732.62**	19.65	706.10	22.55	2.90
G156	758.53	46.13	**732.78**	22.90	712.40	25.75	2.85

APPENDIX D

Routine Inspection and Maintenance Report, Leachate Management

APPENDIX D.1

2023 Routine Inspection and Maintenance Report

Appendix D.1. 2023 Routine Inspection & Maintenance USEI

Routine Inspection and maintenance

- Facility inspections conducted include inspecting the physical integrity and condition of the boundary fence, stormwater drainage ditches, groundwater monitoring wells, leachate sumps, and the sites cover and slopes. Exception reports identify any deficiencies, including sinkholes, erosion, evidence of burrowing animals, and areas needing revegetation.
- During the growing season, the facility cover is mowed on average twice per year. Monitoring wells and leachate sumps are also cleaned using a “weed trimmer.”
- Leachate collection is conducted between August and October each year. Leachate and hazardous waste solids are shipped off site for disposal.

Weather and Vegetation:

- Total Rainfall during 2023 totaled 38.25 inches.
- Vegetation on the landfill cover is in good condition.

Landfill cover and runoff:

- Landfill cover, slopes, and runoff are in great condition.
- Ditches and stormwater drainage ditches are clear and properly sloped and prepared to handle runoff.

Chem Site Mowing:

- Twice in 2023

Chem Site Trimming:

- Twice in 2023

Leachate Collection Volume:

- From August 2023 through October 2023, 1,992 gallons of leachate was collected and shipped off site for disposal.
- 91 gallons of groundwater well purge water from the 2023 spring and fall Long-term Stewardship Program (LTSP) sampling was collected and shipped off site for disposal.
- 99.70 kilograms of hazardous waste solids from 2023 leachate collection operations were collected and shipped off site for disposal.

Monitoring wells and fence lines:

- Routine facility inspections noted that the chem site boundary fence is in good condition. (See note below)
- Monitoring wells located on the chem site are in excellent shape and locked with security seals.

Repairs or preventive maintenance completed on the chem site for 2023:

- No repairs needed this year.

APPENDIX D.2

Leachate Collection Volume

Leachate Totals

US Ecology Sheffield, Illinois Facility

Year	Amount of Leachate Pumped Gallons	Total Rainfall (inches) for the Year
1982	15,371	
1983	10,643	
1984	9,842	
1985	3,747	
1986	3,192	
1987	**1,137**	**Sump pumping was stopped early because of the RIFS and groundwater well installation**
1988	**1,541**	
1989	**2,180**	
1990	**2,304**	
1991	2,600	
1992	4,835	
1993	3,245	
1994	3,800	
1995	2,390	32.14
1996	2,133	30.62
1997	1,268	31.93
1998	1,123	45.73
1999	1,793	43.47
2000	1,980	37.10
2001	2,595	36.70
2002	1,715	35.97
2003	980	35.24
2004	1,080	34.44
2005	900	19.84
2006	990	37.11
2007	1,180	36.75
2008	1,550	49.20
2009	3,920	53.25
2010	2,580	34.25
2011	1,520	42.40
2012	1,280	28.97
2013	1,050	44.64
2014	1,000	43.47
2015	1,750	38.68
2016	3,223	39.87
2017	2,615	42.33
2018	3,611	49.15
2019	3686	41.92
2020	3528	36.89
2021	3591	44.06
2022	3271	39.80
2023	1,992	38.25
Total	124,731	

APPENDIX D.3

Leachate Disposal Manifest

131

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ILD 04-506-3450	1	309-854-1096	007910534 FLE

5. Generator's Name and Mailing Address
US Ecology Illinois, Inc.
PO Box 206
Sheffield, IL 61361
Generator's Phone: (815) 454-2342

Generator's Site Address (if different than mailing address)
13279-350 E Street
Sheffield, IL 61361

6. Transporter 1 Company Name: S.E.T. Environmental, Inc. — U.S. EPA ID Number: ILD 981957236

7. Transporter 2 Company Name: US ECOLOGY — U.S. EPA ID Number: UIK 593743838

8. Designated Facility Name and Site Address
US Ecology Texas
3277 County Road 69, Robstown, TX 78380
Facility's Phone: (361) 387-3518
U.S. EPA ID Number: TX 006945 2340

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA 3077 Hazardous Waste Solid N.O.S. (PCB) 9 PG III (F039)	1	DM	99.7	K	F039 OUTS 002H
	2.					
	3.					
	4.					

10 Day

14. Special Handling Instructions and Additional Information
1. 090070093-0
2. OUTS D02H

Out of Service Date: 10-02-2023

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Doug Long — Signature: Doug Long — Month 10 Day 06 Year 23

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Anthony Sacco — Signature: [signature] — Month 10 Day 16 Year 23
Transporter 2 Printed/Typed Name: Richard Alhagyes — Signature: [signature] — Month 11 Day 9 Year 23

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Robert Valen — Signature: [signature] — Month 11 Day 14 Year 23

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

ease print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ILD 04-506-3450
2. Page 1 of: 1
3. Emergency Response Phone: 309-854-1096
4. Manifest Tracking Number: 007910532 FLE

5. Generator's Name and Mailing Address
US Ecology Illinois, Inc.
PO Box 207
Sheffield, IL 61361
Generator's Phone: 815-454-2342

Generator's Site Address (if different than mailing address)
1327 350 E Street
Sheffield, IL 61361

6. Transporter 1 Company Name
S.E.T. Environmental, Inc.
U.S. EPA ID Number: ILD 981451256

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Veolia Environmental Facility
500 E. Keyston Road
Fordyce, AR 71923
Facility's Phone: (870) 352-2734
U.S. EPA ID Number: ARD 000754161

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA 3082 Hazardous Waste Liquid NOS (Leachate) 9 PGIII (F039)	8	TP	2083	G	F039 D011 3190
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. 479275
Out of Service Date 10/02/2023

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Doug Lang
Signature:
Month: 10 Day: 16 Year: 23

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Anthony Sacco
Signature:
Month: 10 Day: 16 Year: 23
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY | TRANSPORTER INT'L | GENERATOR

PA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY